

WASTE MANAGEMENT OF CANADA CORPORATION

WATFORD, ONTARIO

TWIN CREEKS ENVIRONMENTAL CENTRE:
2024 ANNUAL MONITORING REPORT
VOLUME 4 OF 5: AIR QUALITY MONITORING PROGRAM

RWDI #2402553.02

February 26, 2025

SUBMITTED TO

Angela McLachlan
Environmental Compliance Manager
amclachl@wm.com

**Waste Management of
Canada Corporation**
Twin Creeks Environmental Centre
R.R.#4 8039 Zion Line
Watford Ontario Canada N0M 2S0

T: 519.849.5810
F: 519.849.6816

SUBMITTED BY

Anthony Vanderheyden, B.A.Sc.
Project Manager
Anthony.Vanderheyden@rwdi.com

RWDI AIR Inc.
Consulting Engineers & Scientists
600 Southgate Drive
Guelph Ontario Canada N1G 4P6

T: 519.823.1311 x2059
F: 519.823.1316



TABLE OF CONTENTS

| | | |
|------------|---|-----------|
| 1 | INTRODUCTION..... | 1 |
| 2 | FACILITY DESCRIPTION..... | 1 |
| 3 | TOTAL HYDROCARBON “WALKOVER” SURVEY | 2 |
| 3.1 | Total Hydrocarbon Sampling Program..... | 2 |
| 3.2 | Reporting Requirements..... | 3 |
| 4 | FENCE LINE AMBIENT VOLATILE ORGANIC COMPOUNDS SAMPLING | 3 |
| 4.1 | VOC Sampling Program | 3 |
| 4.2 | Reporting Requirements..... | 5 |
| 5 | TOTAL SUSPENDED PARTICULATE SAMPLING..... | 6 |
| 5.1 | Total Suspend Particulate Sampling Program..... | 6 |
| 6 | METEOROLOGICAL CONDITIONS..... | 7 |
| 7 | COMPLAINTS..... | 7 |
| 8 | QUALITY ASSURANCE | 8 |
| 9 | CONCLUSIONS..... | 9 |
| 10 | STATEMENT OF LIMITATIONS..... | 10 |

LIST OF TABLES

(Within the Report)

| | | |
|---------------------|--|---|
| Table 4.1: | Summary of Target List for VOCs..... | 4 |
| Table 5.1.1: | Calculated Statistics for TCLS measured TSP Concentration (µg/m³)..... | 6 |



LIST OF APPENDICES

(After the Report)

| | |
|--------------------|---|
| Appendix A: | ECA, Monitoring Plan and MOE Acceptance Letter |
| Appendix A1: | Current Waste ECA Number A032203 |
| Appendix A2: | Air Quality Monitoring Plan |
| Appendix A3: | MOE Acceptance Letter for 12 Day Cycle |
| Appendix A4: | Current Air Quality Monitoring Plan |
| Appendix B: | Monitoring Plan Correspondence |
| Appendix B1: | Copy of MOE Correspondence |
| Appendix B2: | Copy of Site Plan Showing Sampling Locations |
| Appendix B3: | Copy of THC grid |
| Appendix C: | Copy of Summary Reports for THC “Walkabout” Surveys |
| Appendix C1: | Quarter 2 THC Survey Report |
| Appendix C2: | Quarter 4 THC Survey Report |
| Appendix D: | Copy of TVA 2024 Calibration Record |
| Appendix E: | Copy of Summary Report for VOC Ambient Fenceline Monitoring and Laboratory Report |
| Appendix E1: | Quarter 3 VOC Monitoring Report |
| Appendix E2: | VOC Laboratory Reports |
| Appendix F: | Copy of VOC Monitoring Field Notes |
| Appendix G: | Copy of Summary Reports for TSP and Metals Monitoring and Laboratory Reports |
| Appendix G1: | Quarter 1 TSP/Metals Report |
| Appendix G2: | Quarter 2 TSP/Metals Report |
| Appendix G3: | Quarter 3 TSP/Metals Report |
| Appendix G4: | Quarter 4 TSP/Metals Report |
| Appendix G5: | Laboratory Reports |
| Appendix H: | Copy of TSP and Metals Field Notes |
| Appendix I: | Copy of TSP Exceedance Notifications for 2024 |
| Appendix I1: | March 25 th , 2024 |
| Appendix I2: | June 2 nd , 2024 |
| Appendix I3: | June 11 th , 2024 |
| Appendix I4: | June 14 th , 2024 |
| Appendix I5: | September 18 th , 2024 |
| Appendix I6: | November 8 th , 2024 |
| Appendix J: | Copy of VOC Exceedance Notification for 2024 |
| Appendix J1: | October 10 th , 2024 |
| Appendix K: | Complaint Summary |
| Appendix L: | Copy of Meteorological Station Calibration Sheet |

1 INTRODUCTION

RWDI AIR Inc. (RWDI) was retained by Waste Management of Canada Corporation (WM) to compile the air quality monitoring reports from the 2024 monitoring program at the Twin Creeks Environmental Centre (TCEC), located in Watford, Ontario. The air quality monitoring program consisted of the following three (3) main sampling campaigns:

1. Landfill Gas Surface Monitoring – Total Hydrocarbons (THC);
2. Ambient Fenceline Volatile Organic Compound (VOC) Monitoring; and
3. Ambient Particulate Monitoring (Total Suspended Particulate Matter (TSP) and metals).

This Ambient Air Quality Monitoring Program (AAQMP) was completed in order to satisfy Condition 13.8 of the Amended Environmental Compliance Approval (ECA) No. A032203, dated December 16, 2023. Completion of an AAQMP is required under this condition, on an annual basis. A copy of the December 16, 2023 version of the Waste ECA is attached in **Appendix A1** of the Annual Report and the Ambient Air Quality Monitoring Plan (AAQMP) is attached in **Appendix A2**.

In 2011, the AAQMP was amended to include the provision of sampling for particulate and metals at a reduced frequency during the months of October to May (12-day cycle) and the continuation of the same sampling frequency from June to September (6-day cycle). The frequency of metal analysis followed that the highest filter TSP concentration out of every four samples per location was to be analyzed to provide better agreement with the AAQMP's schedule for metal analysis. The approval letter from the Ministry of the Environment, Conservation and Parks (MECP) (MOE, dated October 26, 2011) is provided in **Appendix A3**.

Consistent with the Waste ECA amendment dated September 8, 2017 and the AAQMP dated May 18, 2017, the sampling schedule for particulate and metals was switched to be run on a 6-day schedule from January 1 to May 31 and October 1 to December 31 of each year and run on a 3-day cycle from June 1 to September 30 of each year commencing December 1st of 2019. A copy of the most recently amended AAQMP can be found in **Appendix A4**.

2 FACILITY DESCRIPTION

The TCEC is a waste disposal facility (NAICS Code 562210, Waste Disposal and Treatment). This facility receives municipal, industrial, commercial and institutional wastes. The landfill cells are currently being constructed and will include a network of gas collection pipes, to be installed in the waste during construction. As the waste decays, gas that is roughly 50% methane and 50% carbon dioxide is generated. The landfill gas is drawn from the network of vertical and horizontal collection pipes within the existing and expansion site and sent to a fully enclosed landfill gas flare(s).

The construction of the vertical landfill gas wells and collection system on the existing site was finished in November of 2009. The construction of the landfill gas flaring plant began in July of 2009 and was commissioned in 2010. The system currently flares the landfill gas from the existing landfill as well as from the expansion site Area 1 and will progressively expand as the expansion phases of the landfill are completed. The number of flares required for the site will increase to meet the gas production as the amount of landfill gas increases.

3 TOTAL HYDROCARBON “WALKOVER” SURVEY

3.1 Total Hydrocarbon Sampling Program

The surface monitoring consisted of walking over the entire capped landfill, including the poplar system area, in a grid formation while using a handheld total hydrocarbon (THC) analyzer. The THC analyzer used during this monitoring program was a Thermo TVA 2020 Toxic Gas Analyzer. The analyzer was calibrated against U.S. EPA protocol methane gas standard and zeroed using ultra zero pure air. The instrument used had the following characteristics:

- A response time of at most 15 seconds;
- An accuracy of 3 percent or better;
- A minimum detectable limit of 5 ppmv (or lower); and
- A flame-out indicator, audible and visual.

The survey gathered THC measurement data at 7.6 centimeters (3 inches) or lower above the ground across the surface of the landfill. Only readings of 500 ppm or greater were noted during the monitoring survey since these readings are considered areas of concern and should help assist WM in determining landfill gas release points requiring remedial action. The surveys were completed when the wind conditions were calm (<8 km/h). There was no precipitation within 72 hours prior to testing and ambient temperatures were between 0 and 50 degrees Celsius.

Visual observations of “hotspots” or “breakout points”, that consisted of cracks, fissures, areas of bubbling surface water, and patches of dead (burned) vegetation on the mound, were also made. These areas were noted and sampled, if required.

Locations where the THC concentrations were 500 ppm or greater are marked by recording the UTM co-ordinates from a GPS and physically marked on the ground with a flag. WM is then notified of concentrations above 500 ppm. Ground repair work is coordinated by WM after notification. Once WM completes work on these locations, RWDI reexamines the site to verify that the leaks found during the survey have been repaired.

The grid spacing for the survey was agreed to by the MECP. A copy of the correspondence is provided in **Appendix B1**. The site plan is provided in **Appendix B2**, while the agreed-on grid spacing is available in **Appendix B3**.

3.2 Reporting Requirements

Two (2) “walkover” surveys were completed on areas of the landfill site that were covered with final cover in the Spring and Fall seasons. The surveys were completed on the following dates:

1. May 16, 2024; and
2. October 10, 2024.

In all of the surveys completed in 2024, the majority of the old landfill site was covered with vegetation including approximately half of the existing mound which has poplar trees. There were seven (7) location identified as requiring repairs during the May 16, 2024 THC survey. These locations were repaired on June 12 and June 13, 2024, and the verification monitoring was also completed on July 4, 2024. The follow-up survey results confirmed that the repairs were successful and that the ground level THC reading observed was less than the 500ppm target level after repair. During both the May 16 and July 4 surveys, the weather conditions were considered ideal.

There were four (4) locations identified as requiring repairs during the October 10, 2024 THC survey. These locations were repaired on October 16, 2024, and the verification monitoring was completed on November 2, 2024. The follow-up survey results confirmed that the repairs were successful and that the ground level THC reading observed was less than the 500ppm target level after repair. During both the October 10 and November 2 surveys, the weather conditions were considered ideal.

All THC concentrations measured are expressed as parts per million normalized to methane response. The surveys included the following information:

- Precise sampling locations shown on the site map;
- Identification of all data obtained in the field measurements; and
- Documentation of all remedial action.

Details regarding each of the sampling events are provided in **Appendix C1** for the May 16, 2024 walkover and **Appendix C2** for the October 10, 2024 walkover. The TVA calibration record is provided in **Appendix D**.

4 FENCE LINE AMBIENT VOLATILE ORGANIC COMPOUNDS SAMPLING

4.1 VOC Sampling Program

Volatile organic compounds (VOC's) sampling was completed through the months of July, August, September and October of 2024. A set of concurrent upwind and downwind samples were collected for each sampling date. No more than two (2) sets of samples were collected in any calendar month. Samples were only collected during operating hours. The samples were 24-hours in duration and were compared to Provincial Point of Impingement (POI) standards. In total there were five (5) sets of canisters collected during the sampling period for a total of ten (10) samples.

The VOC samples were collected in specially prepared pressure evacuated canisters, as specified in EPA Compendium Method TO-14/15. Mass flow controller units, approved for use by the MECP prior to testing, were used to maintain a constant flow rate. The canister pressure was slightly negative at the completion of each sample.

The samples were analyzed for the target list of compounds noted in the AAQMP. Compounds that are not typically found in the TO-14/15 scan, were assessed using an open scan and library search method. The VOC's examined are shown in the following table.

Table 4.1: Summary of Target List for VOCs

| CAS No. | Compound | CAS No. | Compound |
|------------|---------------------------------------|-------------------|---------------------------|
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 620-14-4/622-96-8 | m/p-Ethyl Toluene |
| 526-73-8 | 1,2,3-Trimethyl Benzene | 108-38-3/106-42-3 | m/p-Xylene |
| 95-63-6 | 1,2,4 Trimethyl Benzene | 535-77-3 | m-Cymene |
| 108-67-8 | 1,3,5-Trimethyl Benzene | 78-93-3 | MEK |
| 591-76-4 | 2-Methyl Hexane | 108-87-2 | Methyl Cyclohexane |
| 107-83-5 | 2-Methyl Pentane | 108-10-1 | MIBK |
| 78-78-4 | 2-Methyl Butane | 75-45-6 | Chlorodifluoromethane |
| 96-14-0 | 3-Methyl Pentane | 123-72-8 | n-Butanal |
| 589-34-4 | 3-Methyl Hexane | 91-20-3 | Naphthalene |
| 67-64-1 | Acetone | 111-84-2 | Nonane |
| 71-43-2 | Benzene | 611-14-3 | o-Ethyl Toluene |
| 123-86-4 | Butyl Acetate | 95-47-6 | o-Xylene |
| 124-18-5 | Decane | 109-66-0 | Pentane |
| 25915-78-0 | Dichlorodifluoromethane | 64-17-5 | Ethanol |
| 75-09-2 | Dichloromethane | 103-65-1 | Propyl Benzene |
| 100-41-4 | Ethyl Benzene | 100-42-5 | Styrene |
| 142-82-5 | Heptane | 127-18-4 | Tetrachloroethylene |
| 110-54-3 | Hexane | 108-88-3 | Toluene |
| 67-63-0 | Isopropyl Alcohol | 75-69-4 | Trichlorofluoromethane |
| 138-86-3 | Limonene | 79-01-6 | Trichloroethylene |
| 75-01-4 | Vinyl Chloride | 141-78-6 | Ethyl Acetate |
| 56-23-5 | Carbon Tetrachloride | 71-55-6 | 1,1,1-Trichloroethane |
| 67-66-3 | Chloroform | 75-35-4 | Vinylidene Chloride |
| 106-93-4 | Ethylene Dibromide | 540-59-0 | 1,2-Dichloroethene |
| 107-06-2 | Ethylene Dichloride | na | Total VOCs |
| 75-00-3 | Chloroethane | 78-92-2 | 2-Butanol |
| 75-00-2 | Methylene Chloride | 75-27-4 | Bromodichloromethane |
| 156-59-2 | 1,2-Dichloroethylene (cis) | 111-65-9 | Octane |
| 75-34-3 | 1,2-Dichloroethane | 79-34-5 | 1,1,2,2-Tetrachloroethane |
| 156-60-5 | 1,2-Dichloroethylene (trans) | 79-00-5 | 1,1,2-Trichloroethane |
| 108-90-7 | Chlorobenzene | 25321-22-6 | Dichlorobenzene |
| 74-87-3 | Chloromethane | 75-43-4 | Dichlorofluoromethane |

Note: na - no applicable CAS Number

The VOC samples were collected during periods of light wind conditions (less than 15 kilometers per hour) and during dry conditions (no measurable precipitation for 48 hours prior to sampling). The sample locations (upwind and downwind) were chosen based on the current meteorological conditions at the time of the sampling. The intent was to focus on downwind locations under poor atmospheric dispersion conditions where maximum fence line concentrations were likely.

As the MECP updates Point of Impingement Standards in the Province of Ontario, the measured values are compared to the most stringent limits applicable at the time of testing. For compounds that do not have a Point of Impingement Standard, the measured values are compared to the MECP's Jurisdictional Screening Levels (JSLs) or Ambient Air Quality Criteria (AAQCs). If no guidelines are available, the measured values are compared to the predicted concentrations approved under the latest ECA. In the event that a contaminant has a measurable concentration (above method detection limit) that is above a JSL or does not have a value listed in the above reference documents, WM will complete a Maximum Concentration Level (MCL) assessment using a qualified toxicologist to determine the appropriate criteria for comparison. The MCL assessment would also be provided to the MECP's Standards Development Branch (SDB), as well as the District Office, WPLC, WIFN and the Township, for review and comment. There were no measured contaminants that required an MCL assessment in 2024.

During the duration of the VOC sampling program, there were two (2) measured Chloroform concentrations in exceedance of the 24-hour AAQC (1 ug/m³). The exceedances occurred on October 10 with maximum Chloroform concentrations of 1.17 and 1.27 ug/m³ respectively at the locations of canister 8B and canister 8A. A copy of the exceedance notification for these events are provided in **Appendix J**.

4.2 Reporting Requirements

Samples were collected on the following dates:

1. July 4, 2024;
2. July 22, 2024;
3. August 13, 2024;
4. August 22, 2024;
5. September 12, 2024;
6. September 18, 2024;
7. October 10, 2024;

The VOC concentrations measured during this portion of the program were generally quite low. All concentrations measured were less than their respective air quality standards. The Q3 VOC monitoring report which includes sampling locations and meteorological conditions for each sampling period is summarized in **Appendix E1**. The VOC laboratory reports are included in **Appendix E2**. The VOC monitoring field notes are attached in **Appendix F**.

5 TOTAL SUSPENDED PARTICULATE SAMPLING

5.1 Total Suspend Particulate Sampling Program

Total Suspended Particulate (TSP) sampling was completed at three (3) fixed locations around the landfill footprint. Each sample location has two (2) High Volume Air samplers (Hi-Vols) which run from October to May on a 6-day cycle and from June to September on a 3-day cycle. Each sample period consists of a 24-hour (midnight to midnight) sample that operates in concurrence with the NAPS sampling schedule. The sampling for 2024 began on January 1, 2024 and concluded December 26, 2024. The locations are provided in **Appendix B2**. The samplers remain at the same locations approved by the MECP (Reference 43 and 44 Schedule “A” of ECA A032203).

High volume samplers (Hi-Vols) were installed at all sampling locations by the end of the 2009 program. Each location is equipped with two Hi-Vols. In 2011, the AAQMP was amended to allow for the Hi-Vols to be run at a twelve (12) day sample schedule for the remaining portion of the year. Consistent with the Waste ECA amendment dated September 8, 2017 and the AAQMP dated May 18, 2017, the sampling schedule was switched to be run on a 6-day schedule from January 1 to May 31 and October 1 to December 31 of each year and run on a 3-day cycle from June 1 to September 30 of each year commencing December 1, 2019.

A total of two hundred forty-six (246) samples were taken during the 2024 sampling program, with two hundred thirty-three (233) samples considered to be valid. Therefore 95% of the total samples taken were valid. Sample validity at the Southeast, Northeast and Western Stations were 91%, 96% and 96% respectively, and so the minimum 75% valid criteria was met. Lost samples during the 2024 monitoring program were due to minor equipment issues, wildlife issues or power related issues.

The individual results from the TSP sampling programs at three (3) fixed locations are provided in **Appendix G**. Field notes are attached in **Appendix H**. A summary of the calculated statistics for each of the locations is presented in **Table 5.1.1** below.

Table 5.1.1: Calculated Statistics for TCLS measured TSP Concentration ($\mu\text{g}/\text{m}^3$)

| Sample Locations | No. of Valid Samples | Measured TSP Concentration (µg/m³) | | | | | | | | No. of Events Above 24-hour AAQC ^[1] |
|------------------|----------------------|------------------------------------|----|----|----|----|-----|------|-----------------|---|
| | | Percentiles (%) | | | | | | Max. | Arithmetic Mean | |
| | | 10 | 30 | 50 | 70 | 90 | 99 | | | |
| Southeast | 75 | 10 | 16 | 19 | 28 | 50 | 174 | 284 | 29 | 2 |
| Northeast | 79 | 10 | 18 | 22 | 35 | 85 | 333 | 440 | 43 | 4 |
| Western | 79 | 14 | 22 | 28 | 39 | 63 | 131 | 161 | 36 | 2 |

Notes: Summary of TSP results included data from January 1 to December 26, 2024

[1] O.Reg.419 Schedule 3 Standard for TSP is $120 \mu\text{g}/\text{m}^3$ (based on a 24-hour averaging period)

There were eight (8) 24-hour samples that exceeded the O. Reg. 419 Schedule 3, standard of 120 ug/m³ for Total Suspended Particulate (TSP) during the 2024 sampling program. The exceedances occurred on March 25, June 5, June 11, June 14, September 18, and November 8 with maximum TSP concentrations of 122, 125, 284, 440, 161, 192, 303, and 135 ug/m³ respectively. Copies of the exceedance notifications for these events are provided in **Appendix I**.

Metal analysis was performed on the highest filter TSP concentration out of every four samples per location. Of the valid TSP samples available, sixty-three (63) were analyzed for airborne metals. All measured concentrations of metals were below their respective air quality standards, as outlined in O. Reg. 419.

Based on the predominant wind conditions measured on site during the working days, most of these TSP exceedances can be largely attributed to site construction activities such as excavation, soil hauling and drainage and stone stockpiling with contributions from off-site activities.

Watering activities for dust suppression were carried out on each of these days, as required, by WM, the Cell earthworks contractor, and the contractor working on the landfill gas collection system.

6 METEOROLOGICAL CONDITIONS

The meteorological station was located at the top of the existing landfill until the construction on the perimeter roads within the facility bounds was completed. The station was then moved to its permanent location on November 6, 2010, near the office building by the main entrance. In March 2011, the meteorological station was automated and connected to the Envision weather monitoring system. This system allows WM to monitor weather conditions in real time and provides automated alerts, such as wind speed, precipitation, etc. The station consists of a thirty (30) foot aluminum tower, a RM Young wind head to measure wind speed and direction and a Rimco 8020 heated tipping bucket to measure precipitation. The meteorological tower was calibrated on December 18, 2024 with all instruments meeting calibration criteria. Attached in **Appendix L** is a copy of the meteorological station calibration data sheet. Measurements are recorded using a Campbell Scientific CR300 datalogging system.

Wind measurements, gathered from the on-site meteorological station, were used to assess whether measured concentrations were upwind or downwind of the landfill operations during each event for THC surveys, VOC samples and particulate samples.

7 COMPLAINTS

Where complaints were received during the 2024 monitoring period, Waste Management completed the required steps in response, including notification to the MECP and other stakeholders, as required in compliance with Condition 11 of the Waste ECA. This included logging the complaint, completing the appropriate investigation into the potential source of the complaint, any required corrective action or mitigation and complainant follow up, as well as filing a formal complaint log (**Complaint Log**).

The **Complaint Logs**, which detail the above-noted steps are summarized in **Appendix K**, as well as themselves included in **Appendix P of Volume 2** of the 2024 Annual Monitoring Report.

In 2024, WM received a total of 16 odour complaints. Of the complaints received, they represented a total of 15 complaint driven odour events which occurred on 14 separate days. Of these odour events, 12 were documented from discrete physical locations such as a residence or commercial building. The other three (3) odour events represented transient (driving or walking) occurrences in which the complainant observed an odour while driving or walking in different areas (e.g. in town in Watford or near Highway 402). Two (2) of the odour complaints were observed to not be downwind of the Site and therefore were likely a result of off-site source(s). A breakdown of the number of odour complaints received by WM on a quarterly basis during the 2024 operating period is presented in **Appendix K**. Additionally, **Appendix K** details the investigation steps taken, and where applicable any corrective measures implemented in response to the noted complaint.

As denoted in **Appendix K**, the greatest number of odour complaints received by WM in 2024 was during the second quarter operating period. WM reviewed the odour related complaints that were received during the 2024 operating period to assess for any trends and to identify corrective actions, as required.

8 QUALITY ASSURANCE

A number of quality assurance measures have been implemented for the THC, VOC and TSP monitoring programs.

Calibrations and/or bump tests of the TVA-2020 unit were completed prior to and following each THC walkover event to ensure that the instrument was measuring properly.

The stainless-steel VOC sampling canisters, provided by Bureau Veritas (BV), were used within 30 days of being received. The sampling inlets consisted of a stainless steel sintered in-line filter, followed by a stainless steel ¼" line to a stainless-steel vacuum gauge, before being attached to the stainless-steel canister. Prior to use, the inlet filter apparatuses were heated using a portable torch to ensure that they were clean. In addition to this, the vacuum gauge was monitored during each VOC sampling event to ensure that the canister remained at a slightly negative pressure (-10" to -5") to avoid any potential for contamination. The sample locations were chosen based on meteorological conditions at the time of sampling. The canisters were couriered to Bureau Veritas within a few days of sampling and sample Chain of Custody forms were submitted with the samples.

The Hi-Vol filters were retrieved from their sampling locations shortly after the samples were completed. The filters were removed, tagged and stored in RWDI's Watford office until the end of the month for submission to BV. Reference blank filters for TSP and metals were submitted to BV every submission. The Hi-Vol calibration setpoints were audited in the field once per quarter, with on and off pressures being recording before and after every sample.

9 CONCLUSIONS

The 2024 air quality monitoring program completed at the TCEC included two (2) Total Hydrocarbon “Walkover” Surveys, five (5) sets of ambient volatile organic compound fence line samples and two hundred forty-six (246) total suspended particulate samples, collected from January 1 to December 26, 2024. Two hundred thirty-three (233) of these samples were deemed valid, and a total of sixty-two (62) were analyzed for airborne metals content.

There were seven (7) locations identified as requiring repairs during the May 16, 2024 THC survey. The location was repaired on June 12 and 13, 2024, and the verification monitoring was also completed on July 4, 2024. The follow-up survey confirmed that the repairs were successful and that the ground level THC readings observed were less than the 500ppm target level after repair. There were four (4) locations identified as requiring repairs during the October 10, 2024 THC survey. RWDI provided oversight of the repair work on October 16, 2024 and the follow-up survey was completed on November 2, 2024 which confirmed the repairs were successful with the ground level THC readings observed were less than the 500ppm target level after repair.

All of the VOC concentrations measured in 2024 were less than their applicable Air Quality standards except for the two (2) measured Chloroform concentrations in exceedance of the 24-hour AAQC (1 ug/m^3), both occurred on October 10, 2024.

There were eight (8) 24-hour samples that exceeded the O. Reg. 419 Schedule 3, standard of 120 ug/m^3 for Total Suspended Particulate (TSP) during the 2024 sampling program. The exceedances occurred on March 25, June 5, June 11, June 14, September 18, and November 8 with maximum TSP concentrations of 122, 125, 284, 440, 161, 192, 303, and 135 ug/m^3 respectively. Notifications of the exceedances were submitted to the MECP within the allowable time after receiving results from the lab (BV). All concentrations of airborne metals were below their respective air quality standards, as outlined in Ontario Regulation 419 for the 2024 monitoring period.

WM has taken steps to improve the effectiveness of the dust management practices used at the TCEC by increasing watering activities with the approval of an amendment to their PTTW application in November 2021. Through close cooperation with RWDI and earthworks contractors, this will facilitate the implementation of best practices designed to minimize dust generation.

10 STATEMENT OF LIMITATIONS

This report entitled “Twin Creeks Environmental Centre: 2024 Annual Monitoring Report”, dated February 26, 2025 was prepared by RWDI AIR Inc. (“RWDI”) for Waste Management of Canada Corporation (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). This report was prepared using scientific principles, published methodologies and professional judgment in assessing available information and data. The findings presented within this document are based on available data within the limits of the existing information, budgeted scope of work, and schedule. The conclusions contained in this report are based on the information available to RWDI when this report was prepared; subsequent changes made by the Client after the date of this report have not been reflected in the conclusions.

This report was prepared for the exclusive use of Waste Management of Canada Corporation and the MECP. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. RWDI accepts no responsibility for damages, if any, suffered by any third party as result of decisions made or actions based on this report.

A large decorative graphic on the left side of the page, featuring a blue triangle at the top left and a large, light gray curved shape that dominates the lower half of the page.

APPENDIX A

The graphic for Appendix A1 features a large, light gray circular shape on the right side of the page. On the left, a blue triangular shape is partially visible, with a white curved line separating it from the gray circle. The text 'APPENDIX A1' is centered in the white space between the blue triangle and the gray circle.

APPENDIX A1

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A032203

Issue Date: December 16, 2023

Waste Management of Canada Corporation
5768 Nauvoo Rd
Warwick, Ontario
N0M 2S0

Site Location: Twin Creeks Environmental Centre
5768 Nauvoo Rd Watford
Warwick Township, County of Lambton
N0M 2S0

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the use and operation of a 101.8 hectare waste disposal site (landfill) within a total site area of 301 hectares.

For the purpose of this environmental compliance approval, the following definitions apply:

"Agricultural Waste" for the purposes of this ECA, is defined as municipal yard waste, wood chips, food waste and minimal amounts of solid manure which would only be accepted or used for the purpose of seeding or operating an active aerobic compost pile and does not include liquid manure;

"AQMP " means an Air Quality Monitoring Program;

"Construction Phase " is defined as the period of time from the start of construction of Phase 1 of the expanded landfill to the date of first receipt of waste in Phase 1;

"Contaminating Lifespan" refers to the period of time, after closure until the site finally produces contaminants at concentrations below levels which have unacceptable health or environmental effects;

"Crown " means Her Majesty the Queen in the Right of Ontario;

"Director " means any Ministry employee appointed in writing by the Minister pursuant to section 5 of the EPA as a Director for the purposes of Part II.1 of the EPA;

“District Manager ” means the District Manager in the Ministry of the Environment, Conservation and Parks Sarnia District Office;

“District Office ” means the Ministry of the Environment, Conservation and Parks Sarnia District Office;

“EA” refers to the document titled “Warwick Landfill Expansion Environmental Assessment” , dated September 2005, which includes Discussion Papers 1 through 9 included in the Appendices A to F of the Environmental Assessment. EA also includes responses from the Owner dated:

1. March 10, 2006 “Waste Unit’s Final Comments Dated March 8, 2006”
2. February 14, 2006 “Leachate Recirculation”
3. February 14, 2006 “Response to February 1, 2006 Correspondence”
4. January 13, 2006 “Waste Management Response to Comments received from Warwick Landfill Expansion EA” including attachments entitled:
 - i. Response to the Township of Warwick;
 - ii. Response to Thomson Rogers;
 - iii. Table of responses to various agencies, public and First Nations Submissions;
 - iv. Landfill Gas Assessment, Warwick Landfill Baseline Conditions Report prepared by RWDI dated January 12, 2006;
 - v. Memo dated March 10, 2006;
 - vi. June 12, 2006 “Response to May 1, 2006 Ministry Review ”;

“EAA” refers to the Ontario Environmental Assessment Act, R.S.O. 1990, c.E.18, as amended;

"Environmental Compliance Approval" or "ECA" or "Approval" means this entire provisional Environmental Compliance Approval document, issued in accordance with Section 20.2 of the EPA , and includes any schedules to it, the application and the supporting documentation listed in schedule "A";

“Environmental Inspector” refers to the individual employed by the Ministry of the Environment, Conservation and Parks to inspect the Site;

"EPA " means Environmental Protection Act , R.S.O. 1990, c.E.19, as amended;

“EPB” refers to the Environmental Permissions Branch of the Ministry of the Environment, Conservation and Parks;

"Hydraulic Trap" indicates a situation where hydraulic gradients from the surrounding soil are inward toward the landfill waste and associated leachate collection system;

"Mini-Transfer Area" means the mini-transfer public convenience drop-off area as described and identified in the June 2009 Development & Operations Report that is identified in Item 59 of Schedule "A" and whose location is identified as "Expansion Mini-Transfer" in figure MT2 that is contained in the 2009 Development & Operations Report;

“MECP” or “Ministry” refers to the Ontario Ministry of the Environment, Conservation and Parks;

"Operation Phase" is defined as the period of time from the date that Phase 1 of the expanded landfill area first receives waste until the landfill site reaches final capacity;

“Operator ” has the same meaning as “operator” as defined in s.25 of the EPA;

“Owner ” means Waste Management of Canada Corporation and its successors and assigns;

"O. Reg. 101/94" means Ontario Regulation 101/94 as amended;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

“PA ” means the Pesticides Act , R.S.O. 1990, c.P.11, as amended;

"Preparation Report" refers to a report documenting that the subsequent stage of the landfill has been constructed in accordance with the approved design plans and specifications;

“Poplar System” is the irrigation area located on top of the cap of the Existing Site (old landfill) that is used for the phytoremediation of leachate that is generated at the Site per Items 63 through 65 of Schedule “A” and Figure 2 of Item 16 on Schedule "A";

“Poplar Plantation” is the irrigation area located on native soil to the south of the Site that is used for the phytoremediation of irrigation liquid that satisfies the Effluent Limit criteria per the OWRA Section Approval for the Site, Item 39 of Schedule “A”, and Appendix N11 of Item 30 on Schedule "A";

"Provincial Officer" means any person designated in writing by the Minister as a provincial officer pursuant to section 5 of the OWRA or section 5 of the EPA or section 17 of PA;

"PWQO" refers to the Provincial Water Quality Objectives;

"Recyclable Waste" means waste that are glass, plastic, aluminium or steel cans, gypsum wallboard, newspapers, cardboard and/or other materials for which there is a secured market;

“Regional Director” refers to the Director of the Ministry of the Environment’s Southwestern Regional Office;

"Regulation 232 " or "Reg. 232" or "O. Reg. 232/98" means Ontario Regulation 232/98 (Landfilling Sites) made under the EPA, as amended;

"Regulation 347 " or "Reg. 347 " or "O. Reg. 347" means Regulation 347, R.R.O. 1990, made under the EPA, as amended;

“Site” refers to the Twin Creeks Landfill Site and lands owned by the Owner described as:

Firstly, Part of Lots 19 and 20, Concession 3, S.E.R., and Part of Lot 20, 21 and 22, Concession 4, S.E.R. and Part of the Road Allowance between Lots 21 and 22, Concession 4, S.E.R., shown as Parts 1, 2 and 3 on Plan 25R-9125 and Part 2 on Plan 25R-1903, Save and Except Part 1 on Plan 25R-6184, Township of Warwick, County of Lambton; and

Secondly, Part of Lot 20, Concession 3 S.E.R., shown as Part 1 on Plan 25R-6184, Township of Warwick, County of Lambton;

"Traditional agricultural crop production" means standard crop production, nursery and horticultural crops, agro-forestry, conservation uses but not greenhouses or any accessory agricultural buildings and structures;

"Undertaking" refers to the proposed undertaking as described in the Warwick Landfill Expansion Environmental Assessment;

"WIFN" refers to Walpole Island First Nation; and

"WPLC" refers to the Warwick Public Liaison Committee.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1.0 GENERAL

Compliance

- 1.1 This Approval revokes all previous Approvals and Notices of Amendment issued under Part V of the Environmental Protection Act for this Site. The approval given herein, including the terms and conditions set out, replaces all previously issued Approvals and related terms and conditions under Part V of the Act for this Site.
- 1.2 The Owner and Operator shall ensure compliance with all the conditions of this Approval and shall ensure that any person authorized to carry out work on or operate any aspect of the Site is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 1.3 Any person authorized to carry out work on or operate any aspect of the Site shall comply with the conditions of this Approval.

In Accordance

- 1.4 Except as otherwise provided by this Approval, the Site shall be designed, developed, built, operated and maintained in accordance with the documentation listed in the attached Schedule "A".
- 1.5 (a) Construction and installation of aspects described in Schedule "A" must be completed within 5 years of the later of:
1. the date this Approval is issued; or
 2. if there is a hearing or other litigation in respect of the issuance of this Approval, the date that this hearing or litigation is disposed of, including all appeals.
- (b) Notwithstanding Condition 1.5(a), ongoing constructed aspects that are pertinent to the Major Works identified in Conditions 4.1 to 4.7 including the landfill liner, landfill capping, landfill gas management infrastructure, leachate collection and recirculation infrastructure shall be constructed in accordance with the documentation in the attached Schedule "A" that pertain to the final design of the Site.
- (c) This Approval ceases to apply in respect of the aspects of the Site that have not been constructed or installed before the later of the dates identified in Conditions 1.5(a).

Interpretation

- 1.6 Where there is a conflict between a provision of any document listed in Schedule "A" in this Approval, and the conditions of this Approval, the conditions in this Approval shall take precedence.
- 1.7 Where there is a conflict between the application and a provision in any document listed in Schedule "A", the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and the Ministry approved the amendment.
- 1.8 Where there is a conflict between any two documents listed in Schedule "A", the document bearing the most recent date shall take precedence.
- 1.9 The conditions of this Approval are severable. If any condition of this Approval, or the application of any condition of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

Other Legal Obligations

- 1.10 The issuance of, and compliance with, this Approval does not:
- (a) relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; and
 - (b) limit in any way the authority of the Ministry to require certain steps be taken or to require the Owner and Operator to furnish any further information related to compliance with this Approval.

- (c) The Owner shall ensure that:
 - (i) all equipment discharging to atmosphere are approved under Section 9 of the ECA where applicable; and
 - (ii) all effluent is discharged in accordance with the OWRA where applicable.

Adverse Effect

- 1.11 The Owner and Operator shall take steps to minimize and ameliorate any adverse effect on the natural environment or impairment of water quality resulting from the present, past and historical operations at the Site. Such steps may include accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
- 1.12 Despite an Owner, Operator, or any other person fulfilling any obligations imposed by this Approval, the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the adverse effect to the natural environment or impairment of water quality.
- 1.13 At no time shall the Owner or Operator allow the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.

Change of Ownership

- 1.14 The Owner shall notify the Director, in writing, and forward a copy of the notification to the District Manager, within 30 days of the occurrence of any changes in the following information:
 - (a) the ownership of the Site;
 - (b) the Operator of the Site;
 - (c) the address of the Owner or Operator; and
 - (d) the partners, where the Owner or Operator is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R. S. O. 1990, c. B.17, shall be included in the notification.
- 1.15 No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance and sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out.
- 1.16 In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

Registration on Title Requirement

- 1.17 Prior to dealing with the property in any way, the Owner shall provide a copy of this Approval and any amendments, to any person who acquires an interest in the property as a result of the dealing.
- 1.18 (a) If not already completed, within ninety (90) calendar days from the date of issuance of this

Approval, the Owner shall submit to the Director a completed Certificate of Requirement which shall include:

- (i) a plan of survey prepared, signed and sealed by an Ontario Land Surveyor, which shows the area of the Site where waste has been and is to be deposited at the Site;
 - (ii) proof of ownership of the Site;
 - (iii) a letter signed by a member of the Law Society of Upper Canada or other qualified legal practitioner acceptable to the Director, verifying the legal description provided in the Certificate of Requirement;
 - (iv) the legal abstract of the property; and
 - (v) any supporting documents including a registerable description of the Site.
- (b) If not already completed, within fifteen (15) calendar days of receiving a Certificate of Requirement authorized by the Director, the Owner shall:
- (i) register the Certificate of Requirement in the appropriate Land Registry Office on the title to the property; and
 - (ii) submit to the Director and the District Manager, written verification that the Certificate of Requirement has been registered on title.

Registration on Title Requirement - Contaminant Attenuation Zone (CAZ)

- 1.19 If not already completed, or if required at any time, within thirty (30) calendar days from the date of establishing a contaminant attenuation zone (CAZ) (overburden and/or bedrock aquifers) in either fee simple or by way of a groundwater easement, the Owner shall submit to the Director a completed Certificate of Requirement which shall include:
- (a) If rights are obtained in fee simple, the Owner shall provide:
 - (i) documentation evidencing ownership of the CAZ obtained in compliance with Regulation 232, as amended;
 - (ii) a completed Certificate of Requirement and supporting documents containing a registerable description of the CAZ; and
 - (iii) a letter signed by a member of the Law Society of Upper Canada; or other qualified legal practitioner acceptable to the Director, verifying the legal description of the CAZ.
 - (b) within fifteen (15) calendar days of receiving a Certificate of Requirement signed or authorized by the Director, the Owner shall:
 - (i) register the Certificate of Requirement in the appropriate Land Registry Office on the title to the property; and
 - (ii) submit to the Director and the District Manager, a written verification that the Certificate of Requirement has been registered on title.
 - (c) If rights are obtained by way of a groundwater easement, the Applicant shall:
 - (i) provide a copy of the agreement for the easement;
 - (ii) provide a plan of survey signed and sealed by an Ontario Land Surveyor for the CAZ; and
 - (iii) submit proof of registration on title of the groundwater easement to the Director and District Manager;
 - (d) The Owner shall not amend, or remove, or consent to the removal of the easement or CAZ from title without the prior written consent of the Director.

Certificate of Withdrawal of Requirement

- 1.20 If the Applicant wants to withdraw the Certificate of Requirement, the Applicant shall:
- (a) submit to the Director, a request for a Certificate of Withdrawal of Requirement; and its supporting documents, outlining the reasons for the Withdrawal of the Requirement.
 - (b) submit to the Director:
 - (i) a plan of survey of the area where waste was deposited signed and sealed by an Ontario Land Surveyor and for the Site or CAZ;
 - (ii) the legal abstract of the Site or CAZ – or area where waste was deposited;
 - (iii) completed Certificate of Withdrawal of Requirement containing a registerable description of the Site or CAZ or area where waste was deposited; and
 - (iv) a letter signed by a member of the Law Society of Upper Canada or other qualified legal practitioner acceptable to the Director verifying the legal description of the Certificate of Withdrawal of Requirement.
 - (c) within fifteen (15) calendar days of receiving a Certificate of Withdrawal of Requirement authorized by the Director, the Applicant shall:
 - (i) register the Certificate of Withdrawal of Requirement in the appropriate Land Registry Office on the title to the Site or CAZ or area where waste was deposited; and
 - (ii) submit to the Director and District Manager a copy of the registered document together with a copy of the PIN Abstract confirming the registration.

Inspections by the Ministry

- 1.21 No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, the PA, the SDWA or the NMA, of any place to which this Approval relates, and without limiting the foregoing:
- (a) to enter upon the premises where the approved works are located, or the location where the records required by the conditions of this Approval are kept;
 - (b) to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
 - (c) to inspect the Site, related equipment and appurtenances;
 - (d) to inspect the practices, procedures, or operations required by the conditions of this Approval; and
 - (e) to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the EPA, the OWRA, the PA, the SDWA or the NMA.

Information and Record Retention

- 1.22
- (a) Except as authorized in writing by the Director, all records required by this Approval shall be retained at the Site for a minimum of two (2) years from their date of creation.
 - (b) The Owner shall retain all documentation listed in Schedule “A” for as long as this Approval is valid.
 - (c) All information and logs required in Condition 9.1 shall be kept at the Site until they are included in the Annual Report.

- (d) The Owner shall retain employee training records as long as the employee is working at the Site.
- (e) The Owner shall make all of the above documents available for inspection upon request of Ministry staff.

- 1.23 The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action under this Approval or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:
- (a) an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Approval or any statute, regulation or other legal requirement; and
 - (b) acceptance by the Ministry of the information's completeness or accuracy.

- 1.24 The Owner shall ensure that a copy of this Approval, in its entirety and including all its Notices of Amendment, and documentation listed in Item #1 of Schedule "A", are retained at the Site or the Owner's office at all times.

- 1.25 Any information related to this Approval and contained in Ministry files may be made available to the public in accordance with the provisions of the Freedom of Information and Protection of Privacy Act, RSO 1990, CF-31.

2.0 FINANCIAL ASSURANCE

- 2.1 a. The Financial Assurance shall be submitted as required to the Director, Financial Assurance as defined in Section 131 of the Environmental Protection Act. The Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the analysis, closure, ongoing and long-term monitoring and reporting, post-closure maintenance and care of the Site.
1. On the following dates, the Owner shall ensure the maximum amount of financial assurance has been submitted to the Director in a form acceptable to the Director as follows:
- | Payment Date | Amount |
|---------------------|-----------------|
| By March 31, 2021 | \$32,459,985.00 |
| By March 31, 2022 | \$35,256,829.00 |
| By March 31, 2023 | \$37,164,501.00 |
| By March 31, 2024 | \$39,434,722.00 |
- b. Commencing on March 31, 2024 and on a four year basis thereafter, the Owner shall provide to the Director a re-evaluation of the amount of the Financial Assurance to facilitate the actions required under Condition 2.1.a. The re-evaluation shall include an assessment based on any new information relating to the environmental conditions of the Site and shall include the costs of additional monitoring and/or implementation of alternative measures required by the Director upon review of the annual reports. The Financial Assurance must be submitted to the Director within thirty (30) days of written acceptance of the re-evaluation by the Director; and
- c. The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion. If any Financial Assurance is scheduled to expire or notice is

received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial Assurance at least sixty (60) days before the Financial Assurance terminates, the Owner shall forthwith replace the Financial Assurance with cash.

3.0 WARWICK PUBLIC LIAISON COMMITTEE and FIRST NATIONS

WPLC

- 3.1 The Owner shall continue and maintain the WPLC. The WPLC shall serve as a focal point for dissemination, review and exchange of information and monitoring results relevant to the operation of the undertaking. In addition, the purpose of the WPLC will be to provide community review of the development, operation (current and proposed) and ongoing monitoring, closure and post-closure care related to the landfill Site.
- 3.2 The general mandate of the WPLC shall include:
- a. Review operations and provide regular input to the Owner with respect to all matters pertaining to landfill Site operation, including issues pertaining to ongoing operations, monitoring, the need for contingency plans or remedial measures, response to community complaints, the need for changes to the ECA , post-closure monitoring and maintenance, and development of the proposed end use for the landfill Site;
 - b. Review operational and monitoring reports;
 - c. Consider and make recommendations to the Owner regarding outside consulting advice in respect of the landfill Site;
 - d. Facilitate ongoing dialogue between the Owner, the Environmental Inspector and the community, including residents and businesses in the immediate vicinity of the landfill Site;
 - e. Provide reports regularly to the community on the activities of the WPLC, the landfill operations and landfill related issues and seek public input on these activities and issues;
 - f. Monitor the Owner's complaint response program and make recommendations to the Owner with respect to this program; and
 - g. Provide recommendations to the Owner with respect to unresolved complaints.
- 3.3 The WPLC shall not exercise any supervisory, regulatory, approval, legal or other decision making role with respect to the operations (current and proposed) at the Site.
- 3.4 The Owner shall provide for the administrative costs of operating the WPLC, including the cost of meeting places and clerical services.
- 3.5 The WPLC shall operate under a Terms of Reference of the committee. Suggestions to revise the WPLC Terms of Reference may be made at any meeting that a quorum is present. No changes to the Terms of Reference can be made until the committee members mutually agree to changes. Any changes shall be provided to the Ministry for information purposes.
- 3.6 The Community members shall be appointed by the WPLC. The community member positions are intended to be available to individuals that are not members of groups already represented on the

WPLC and have an interest in the operation of the landfill. The WPLC shall encourage individuals who reside in close proximity to the landfill to participate. A community member is defined as a taxpayer and/or resident of Warwick Township.

- 3.7 The function of the Ministry member will be to provide advice, information and input to other members as required.
- 3.8 The WPLC shall determine the appropriate meeting frequency and review it on an annual basis.
- 3.9 Minutes and agendas of meetings shall be printed and distributed as per the mailing list on a timely basis.
- 3.10 The WPLC shall have reasonable access to the Site and its landfill related facilities for the purpose of carrying out its objective and mandate and the Owner's consultants' reports relating to Site operations shall be provided to the WPLC.
- 3.11 The Owner shall provide the WPLC with access to the Owner's consultants as required and consultants reports in accordance with protocols agreed to between the Owner and the WPLC.
- 3.12 Unless disclosure would be contrary to the Freedom of Information and Protection of Privacy Act ,the WPLC, the Township of Warwick and Walpole Island First Nation are to be provided all formal submissions and correspondence related to the site operations by the Owner at the same time as these items are submitted to the Ministry, the Township of Warwick Council or any other body.
- 3.13 The Owner shall allow access to the landfill site during normal operating hours, to enable any individual member of the WPLC and member of the public recommended by local representatives on the WPLC, to observe operations. An individual member of the WPLC must contact the operator to arrange for a Site pass, be accompanied by an operators representative at all times and follow all safety procedures.
- 3.14 All recommendations made to the Owner with respect to ongoing landfill operations, monitoring and the implementation of contingency measures shall be discussed at joint meetings between representatives of the Owner and the WPLC. The purpose of these meetings will be to arrive at an agreement between the Owner and WPLC with respect to implementation of the recommendations.
- 3.15 The Owner will disclose all monitoring results to the WPLC and deliver to the WPLC all documents and information (except as may be privileged) relevant to the operation of the landfill.

First Nation and Township of Warwick Consultation

- 3.16 During the process of submission of an application to amend any approvals for the Site, the Owner shall:
 - a. discuss with WIFN and the Township of Warwick (Township) the proposed application prior to submission of the WIFN application to the Director;

- b. provide the same documents to WIFN and Township that are provided to the Director in respect of the amendments; and
- c. provide the Director, either prior to or at the same time of application submission, with a statement how WIFN and Township comments were considered by the Owner.

4.0 CONSTRUCTION, INSTALLATION and PLANNING

Major Works

4.1 For the purposes of this ECA the following are Major Works:

- a. gas management system;
- b. leachate collection system; and
- c. liner.

- 4.2
- a. A final detailed design shall be prepared for each Major Work to be constructed at the Site consistent with the conceptual design of the Site as presented in the Supporting Documentation, specifically Items 66, 67, and 68 of Schedule "A".
 - b. Geonet may substitute a component of the 0.3 metres of granular in the secondary drainage layer in accordance with Items 54 to 57 inclusive on Schedule "A". The Owner shall ensure that the Quality Assurance/Quality Control procedure detailed in Item 57 of Schedule "A" is followed during installation of the geonet material.

4.3 The final detailed design of each Major Work shall include the following:

- a. design drawings and specifications;
- b. a detailed quality assurance / quality control (QA/QC) program for construction of the major work, including necessary precautions to avoid disturbance to the underlying soils; and
- c. details on the monitoring, maintenance, repair and replacement of the engineered components of the major work, if any.

4.4 Any design optimization or modification that is inconsistent with the conceptual design shall be clearly identified, along with an explanation of the reasons for the change.

4.5 The final detailed design of each Major Work shall be submitted to the Director and copied to the District Manager.

4.6 Each major work shall be constructed in accordance with the approved final detailed design and the QA/QC procedures shall be implemented as proposed by the Owner. Any significant variances from the conceptual design for the Site as detailed in Items 66, 67 and 68 of Schedule "A" shall be subject to approval by the Director.

- 4.7 As-built drawings for all Major Works shall be retained on Site and made available to Ministry staff for inspection.

Subsequent Stages

- 4.8 At least six (6) months prior to the anticipated completion of landfilling in each stage of the Site , a final detailed design for the subsequent stage shall be submitted to the Director. Any significant variances from the conceptual design for the Site as detailed in Items 66, 67 and 68 of Schedule "A" shall be subject to approval by the Director.
- 4.9 No person shall deposit any waste at the subsequent stage until a written Preparation Report in accordance with O. Reg. 232/98, Section 19 has been submitted to the Director and District Manager documenting that:
- a. all construction;
 - b. QA/QC activities;
 - c. Site conditions; and,
 - d. all details of the construction of the Site;

are in accordance with the approved design plans and specifications.

- 4.10 Approval to proceed with landfilling or construction of each subsequent stage shall be dependent on groundwater, air quality and surface water monitoring results acceptable to the Director. If monitoring results are not acceptable to the Director then remedial action must be taken and completed before landfilling may proceed in the subsequent stage.

Geotechnical Engineer

- 4.11 A qualified professional geotechnical engineer shall inspect the excavation and construction underlying the Site and provide a report addressing whether the construction proceeded in accordance with approved detailed design plans, specifications and QA/QC procedures. The report shall be included in the Preparation Reports for each stage of the landfill.

Environmental Inspector

- 4.12 In accordance with conditions 18 and 19 of the EA approval dated January 15, 2007 known as Item 1 on Schedule "A", the Owner shall provide funding to the Ministry for the provision of an Environmental Inspector to inspect the Site, at any reasonable time on such terms and conditions, as deemed appropriate by the District Manager of the District Office and outlined in a written agreement with the Owner. Within the agreement, the Owner shall commit to providing, as a minimum, the following:
- a. Adequate office facilities, communication equipment, and means of transportation for the Environmental Inspector; and,
 - b. Reimbursement to the MECP semi-annually for the costs and associated expenses of the

Environmental Inspector.

- 4.13 The Owner shall provide funding for an Environmental Inspector on Site based on the following:
- a. Construction Phase/Operations Phase- Full-time, on-Site inspector with the inspector being on Site a full day each day for five (5) days per calendar week for the first two years of the operation phase.
- 4.14
- a. Every two (2) years commencing on February 1, 2012, the Owner shall prepare and submit a report to the District Manager detailing the status and need for a Environmental Inspector based on discussions with the Township of Warwick, WIFN and the WPLC regarding the inspection frequency for the Environmental Inspector. The inspection frequency of the Environmental Inspector shall remain as per the requirements outlined in Condition 4.13 during the operation phase until a decision is made by the District Manager on the appropriate inspection frequency.
 - b. Notwithstanding Conditions 4.12 to 4.14 (1) and 15.3, inclusive, the Environmental Inspector's duties may, in consultation with the Owner, be increased, reduced, suspended or terminated on such terms and conditions as deemed appropriate by the District Manager and, for greater certainty, the District Manager may require an Environmental Inspector to be on-Site for up to seven days per week in cases of apparent significant non-compliance with the conditions of the EA approval or any approval issued for the Site under the EPA until such non-compliance is resolved.

5.0 OTHER WORKS

Berm Construction

- 5.1 All berm slopes associated with this approval shall be no greater than 3:1.

Diversion Area

- 5.2 The diversion area will be located to the east of the treated leachate storage lagoons.

Cell 12

- 5.3
- a. Cell 12 will be used as a monofil of contaminated soils until redeveloped and incorporated into the Expansion Site in accordance with Items 66 through 68 of Schedule "A".
 - b. The management of the Cell 12 monofill shall be in accordance with the procedures and practices consistent with other previous monofill operations at the Site.

Landscape

- 5.4 The Owner shall ensure the landscape plan is carried out in accordance with Item 72 and 80 of Schedule "A", as amended from time to time.

6.0 GENERAL OPERATIONS

Proper Operation

- 6.1 The Site shall be properly operated and maintained at all times. All waste shall be managed and disposed of in accordance with the EPA , Regulation 347 , Regulation 232 , and the requirements of this ECA. At no time shall the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.
- 6.2 The Owner shall ensure that the MECP's Guideline B-7, Reasonable Use Concept, is applied at the Site boundaries.
- 6.3
- a. Landfilling operations shall be conducted in accordance with Items 66 through 71 of Schedule "A" attached to this ECA.
 - b. The Owner shall ensure the operations and procedures manual for the the Site includes discussions on the following items:
 - a. Health and safety;
 - b. Operation and maintenance of the Site;
 - c. Waste disposal area and development;
 - d. Nuisance management;
 - e. Leachate management;
 - f. Landfill gas management;
 - g. Surface water/Storm water management;
 - h. Inspections and monitoring;
 - i. Contingency plans and emergency procedures;
 - j. Complaints; and,
 - k. Reporting and record keeping.
 - c. The operations and procedures manual shall be:
 - a. retained at the Site;
 - b. reviewed on an annual basis and updated by the Owner as required; and
 - c. be available for inspection by Ministry staff.

Waste Type

- 6.4 Only the following types of waste shall be accepted at the Site:
- a. municipal, industrial, commercial and institutional solid non-hazardous waste generated within the Province of Ontario, including non-hazardous contaminated soil.

Capacity

- 6.5 The Owner shall only accept and deposit waste at the Site as long as there is available capacity as defined by the final contours for the Site approved by this ECA . The approval permits disposal of waste at the Site to fill an air space of 26,508,000 cubic metres (including waste, daily and interim cover material). This capacity includes the capacity of the existing and expansion landfill areas.

Yearly Waste Limit

- 6.6
- a. The Owner can receive up to a maximum of 1,400,000 tonnes per year of waste including contaminated soil for disposal at the Site.
 - b. The amount of tire shred that may be received to process is 7,160 tonnes/year.
 - c. Up to a maximum of 100 tonnes per day of solid non-hazardous waste, white goods and metals, recyclable waste, wood waste, and leaf and yard waste that are deposited by the public using small vehicles at the Mini-Transfer Area of the Site may be transferred from the Site by a waste hauler or waste haulers that has an ECA to another waste disposal site.

Service Area

- 6.7 Only waste that is generated in the Province of Ontario shall be accepted at the Site.

Landfilling of Sludge

- 6.8 A thickness of at least 2 metres of compacted waste and cover material shall be maintained between any landfilled sludge (solid non-hazardous as per Reg. 347) and the granular leachate collection layer.

Asbestos Waste

- 6.9 Any waste that is considered asbestos waste shall be handled in accordance with Section 17 of O. Reg. 347 as amended from time to time.
- 6.10 A suitable sized excavation for the asbestos waste shall be made by the Owner in a location away from the active landfilling face.
- 6.11 All asbestos waste shall be inspected to ensure that the asbestos waste is properly bagged or contained and free from puncture, tears or leaks.
- 6.12 The asbestos waste shall be placed in the excavation to avoid damage to the containers and to prevent dust and spillage.
- 6.13 Upon completion of the unloading and deposition of the asbestos in the excavation, at least 125 centimetres of cover or waste material shall be placed over the asbestos.

- 6.14 All asbestos waste shall be deposited to a level no higher than 1.25 metres below the general elevation of the disposal area to ensure that daily cover material removal in the future does not encounter the asbestos waste.

Waste Limits

- 6.15 No waste, including daily cover, intermediate cover or final cover layer, shall be landfilled outside the limits of the base and final cover contours presented in Items 66 through 71 of Schedule "A" (the Development and Operations Plan) attached to this ECA .

Site Use

- 6.16 The area inside the fencing indicated in Appendix N18 of Item 30 of Schedule "A" shall be used for waste disposal purposes only. The remainder of the Site outside the fenced area shall be used for traditional agricultural crop production only.

Waste Inspection

- 6.17 All loads of waste must be properly inspected by trained Site personnel prior to disposal at the Site and waste vehicles must be diverted to appropriate areas for waste disposal.

Waste Deposit

- 6.18 The Owner shall deposit waste in a manner that minimizes exposure area at the landfill working face and waste shall be compacted before cover is applied.

Burning Waste Prohibited

- 6.19 Burning of waste at the Site is prohibited.

Signage

- 6.20 A sign shall be maintained at the main entrance/exit to the Site on which is legibly displayed the following information:
- a. the name of the Site and Owner;
 - b. the number of the ECA;
 - c. the name of the Operator;
 - d. the normal hours of operation;
 - e. the allowable and prohibited waste types;
 - f. a warning against unauthorized access;
 - g. the telephone number to which complaints may be directed;
 - h. a twenty-four (24) hour emergency telephone number (if different from above); and
 - i. a warning against dumping outside the Site.

- 6.21 The Owner shall install and maintain signs to direct vehicles to working face and recycling areas.
- 6.22 The Owner shall maintain signs at recycling depot informing users what materials are acceptable and directing users to appropriate storage area.

Hours of Operation

- 6.23 Waste shall only be accepted at the Site during the following time periods:
 - a. 7 AM to 7 PM - Monday to Saturday.
- 6.24 On-site equipment used for daily Site preparation and closing activities shall only be used during:
 - a. 6 AM to 8 PM - Monday to Saturday.
- 6.25 With prior written approval of the District Manager, the time periods may be extended to accommodate seasonal or unusual quantities of waste or such factors as determined to be reasonable to the District Manager.
- 6.26 The Owner may provide limited hours of operation provided that the hours are posted at the landfill gate and that suitable notice is provided to the public of any change in operating hours.
- 6.27 Upon reasonable notice to the District Manager, contingency actions may take place outside normal hours of operation. Emergency response may occur at any time as required.

Site Security

- 6.28 During non-operating hours, the Site entrance and exit gates shall be locked and the Site shall be secured against access by unauthorized persons.

Fencing

- 6.29 The entire area as shown in Figure 12 in Item 66 of Schedule "A" shall be fenced by the Owner with a 6 foot high wire woven highway-type paige fence.

Site Access

- 6.30 Access to and exit from the Site for the transportation of waste shall under normal circumstances be permitted from County Road 79.

Access Roads

- 6.31 a. On-Site roads shall be provided and maintained in a manner that vehicles hauling waste to and on the Site may travel readily and safely on any operating day. During winter months, when the Site is in operation, roads must be maintained to ensure safe access to the landfill working face.

- b. Access roads must be clear of mud, ice and debris which may create hazardous conditions.

Vermin, Dust, Litter, Odour, Noise, Traffic

- 6.32 The Site shall be operated and maintained such that vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance.

Scavenging

- 6.33 The Owner shall ensure that there is no scavenging as defined in O. Reg. 347 at the Site.

Dust

- 6.34 The Owner shall control fugitive dust emissions from on Site sources including but not limited to on-Site roads, stockpiled cover material and, closed landfill area prior to seeding especially during times of dry weather conditions. If necessary, major sources of dust shall be treated with water and/or dust suppression materials to minimize the overall dust emissions from the Site.
- 6.35 Dust shall be managed as per the Best Management Practices Plan (Dust) prepared by RWDI listed as Item 83 in Schedule "A".

Litter Control

- 6.36 The Owner shall take all practical steps to prevent escape of litter from the Site. All loose, windblown litter shall be collected and disposed of at the landfill working face.
- 6.37 Litter pickup will occur at least weekly on the Owner's property during all weather conditions.
- 6.38 The Owner will respond to litter complaints within one (1) business day of the complaint being received.
- 6.39 Litter shall be managed in accordance with the Best Management Practices plan prepared by RWDI listed as Item 25 on Schedule "A".

Odour

- 6.40 Odour shall be managed in accordance with the Best Management Practices Plan (Odour) prepared by RWDI listed as Item 84 in Schedule "A".

Noise

- 6.41 The Owner shall comply with noise criteria in MECP Guideline entitled "Noise Guidelines for Landfill Sites" dated October 1998 as amended from time to time and the Site shall comply with the limits set in Publication NPC205. Bird bangers may be used at the Site for gull control provided that they produce

reference impulsive sound not exceeding 125 dBAI at 5 metres from the bird banger.

- 6.42 Noise monitoring at the Site shall be undertaken by the Owner as per the document entitled "Environmental Noise Monitoring Program for the Warwick Landfill", dated June 15, 2007 prepared by Aercoustics Engineering Limited listed as Item 73 on Schedule "A".

Alteration of Best Management Plans for Odour, Dust and Litter

- 6.43 The Owner shall use the Best Management Plans (BMP's) for dust, odour and litter at the Site in accordance with the applicable Conditions approved by this ECA. The Owner may submit changes in writing to the Director for approval to amend the BMP(s). At the same time any changes to the BMP's are submitted to the Director, the Owner shall provide the proposed changes to the BMP's to the Township of Warwick, WPLC and WIFN.

Surface Water

- 6.44 The Owner shall take all appropriate measures to minimize surface water from coming in contact with waste. Temporary berms and ditches shall be constructed around active waste disposal areas to prevent extraneous surface water from coming in contact with the active working face.
- 6.45 The Owner shall not discharge surface water to receiving water bodies without an approval under the EPA.
- 6.46 If surface water ponding occurs in any surface water ditches having a drainage slope less than 0.5%, the Owner shall regrade the ditches.

Application of Cover Material

- 6.47 Cover material shall be applied as follows:
- a. Daily Cover - At the end of each working day, the entire working face shall be covered with a minimum thickness of 150 mm of soil cover or an approved alternative cover material;
 - b. Intermediate Cover - In areas where landfilling has been temporarily discontinued for six (6) months or more, a minimum thickness of 300 mm of soil cover or an approved alternative cover material shall be placed;
 - c. Final Cover - In areas where landfilling has been completed to final contours, a minimum 1.85 metre thick layer of final cover soil shall be placed. Fill areas shall be progressively completed and rehabilitated as landfill development reaches final contours; and
 - d. Topsoil - In areas where landfilling has been completed to final contours and where final cover has been placed, a minimum 0.15 metres thick layer of topsoil shall be placed.

Cover Materials Allowed

- 6.48 The following materials, in the corresponding thickness, may be used as an alternative to soil as a daily and intermediate cover:
- a. Contaminated soil that satisfies the Schedule IV Toxicity Characteristic Leaching Procedure (TCLP) criteria as outlined in O. Reg. 347 as amended from time to time;
 - b. Wood chips (daily);
 - c. Automobile Shredder Residue (ASR) (daily); or
 - d. Tarps (daily).
- 6.49 The use of any other alternative materials as daily or intermediate cover material is subject to approval by the Director.
- 6.50 Use of alternative daily or intermediate cover materials shall be discontinued within two (2) working days of receipt of written notification from the District Manager, stating that the use of the alternative daily or intermediate cover materials at the Site has proven to be environmentally unsuitable.

Automobile Shredder Residue as Daily Cover

- 6.51
- a. Automobile Shredder Residue (ASR) may be used as a daily cover at the Site on an on-going basis from the issuance of this Approval.
 - b. The Owner shall cease the use of ASR if written notification is received from the District Manager indicating that there are environmental concerns due to the use of ASR as daily cover based on the testing of the ASR required by Condition 6.52.
 - c. The Owner may re-commence the use of ASR upon the Owner submitting an action plan that is acceptable to the District Manager that can address the environmental concerns which were raised due to the the use of ASR as daily cover.
- 6.52 Automobile Shredder Residue samples of the daily cover material are to be taken on semi-annual basis (Spring and Fall) and submitted for analysis of O. Reg. 347 Schedule IV Inorganics, VOC's, and PAH's. Automobile Shredder Residue is to conform with the specifications of a non-hazardous waste under O. Reg. 347 as amended from time to time. Semi-Annually testing results are to be submitted to the District Manager upon receipt. The frequency of O. Reg. 347 testing of the daily cover material can be reduced subject to approval of the District Manager.

Contaminated Soil as Daily or Intermediate Cover

- 6.53 Contaminated soil equal to or below 10% of the TCLP value and/or 0.4 mg/L benzene may be landfilled in Cells 8, 10 and/or 12.
- 6.54 If confirmatory testing of the contaminated soil to be landfilled in Cells 8, 10 and/or 12 indicates an

exceedance of 10% of the TCLP value and/or 0.4 mg/L of benzene, but satisfies the TCLP criteria as in O.Reg. 347, the soil may be used as daily and/or intermediate cover, and or landfilled as waste.

- 6.55 If the contaminated soil received at the Site does not meet the TCLP value, the contaminated soil shall be classified as a hazardous waste and shall be disposed of at a site that is approved to receive and dispose of hazardous waste.
- 6.56 Contaminated soil that satisfies the TCLP criteria may be used as daily and/or intermediate cover in the Expansion Site of the landfill. Contaminated soils may not be used on outside slopes which drain into the surface water system.
- 6.57 Contaminated soil used for daily and/or intermediate cover shall be sampled on a quarterly basis and submitted for analysis of O.Reg. 347 Schedule IV Inorganics, VOCs, PAHs and PCBs. Quarterly testing results shall be included in the annual report. The frequency of O. Reg. 347 testing of the cover material may be reduced subject to agreement of the District Manager.
- 6.58 Contaminated soil for use as daily cover and/or intermediate cover shall be stockpiled in areas of the Site that have a leachate collection system installed below.
- 6.59 Surface water run off from the contaminated soils stockpile which exceeds the Provincial Water Quality Objectives shall not be discharged through the surface water management system.
- 6.60 The Owner must ensure that measures are in place for the on Site treatment and disposal of any contaminated run off from the contaminated soils stockpile.
- 6.61 Prior to receipt at the Site, each source of contaminated soils which are to be used as daily or intermediate cover shall be tested to determine if the soils meet the criteria in this ECA and a copy of the test results shall be kept in the daily records for the Site as required.

7.0 SITE OPERATIONS

Landfill Reclamation

- 7.1 The Owner shall restrict stockpiling of contaminated soil from Cells 8, 10 and 12 to sections of the landfill footprint that have a liner and leachate collection system.

Waste Processing and Composting

- 7.2 Waste Processing and composting is allowed at the location outlined in Item 49 on Schedule "A" subject to the following conditions:
 - a. Prior to the commencement of any waste processing or composting operations at the Site, the Owner shall ensure that air (Section 9 EPA) and noise approvals are obtained;
 - b. Prior to the start of composting operations at the Site, the Owner shall submit to the District

- Manager a contingency plan for any odour problems that may occur;
- c. The total combined amount of waste that may be received at the Site for processing and composting shall not exceed 36,000 tonnes per year and the maximum daily amount to be received at the Site shall not exceed 700 tonnes per day;
- d. The amount of waste that may be received at the Site for composting shall not exceed 7,500 tonnes per year;
- e. Material acceptable for processing and composting at the site shall include leaf, yard, agricultural waste, concrete, asphalt, wood and tires;
- f. The bins for diversion shall be emptied on an as needed basis to prevent odours and operational problems. The Ministry may at any time instruct that a bin be emptied;
- g. The Owner shall ensure that waste processing and composting is undertaken in a safe manner, and that all waste is properly handled, processed and contained so as not to pose any threat to the general public and site personnel;
- h. All noise generating processing activities in the waste diversion area including concrete/asphalt/crushing, wood chipping and tire shredding shall only occur between 07:00 to 19:00; and
- i. Any runoff that comes into contact with waste in the waste processing/composting area shall be managed in such a fashion to ensure compliance with Condition 8.5 of this ECA.

7.3 The Owner shall ensure that composting at the Site is undertaken in accordance with O.Reg 101/94 as amended from time to time and the Ministry document entitled "Interim Guidelines for the Production and Use of Aerobic Compost in Ontario " dated November 2004 as amended from time to time and the following requirements:

- a. Only leaf and yard waste, Agricultural Waste as defined in Item 3 in Schedule "A" and wood (not including painted or treated wood or laminated wood) may be accepted at the compost area.
- b. Leaf and yard waste is defined as waste consisting of natural Christmas trees and other plant materials but not tree limbs or other woody materials in excess of seven (7) centimetres in diameter.
- c. The composting site shall only receive material for composting from May 1st to November 1st each year.
- d. Leaf and yard waste, Agricultural Waste and wood may not be stored for more than four (4) days before it is composted.
- e. During composting, the Owner shall provide the composting mass with adequate ventilation to ensure that aerobic conditions are maintained.
- f. Cured compost must be analyzed for the parameters listed in Table 1 of O.Reg. 101/94 and shall not be removed from the Site unless it has been sampled and analyzed.
- g. Cured compost is defined as meeting the specifications in Sections 7.2 to 7.5 inclusive of the Interim Guidelines for the Production and Use of Aerobic Compost in Ontario" dated November 2004 as amended from time to time and can be used on an unrestricted basis.
- h. Compost is designated a waste if the compost contains a substance listed in Table 1 of O. Reg. 101/94 that has a concentration greater than the concentration listed in Column 2.
- i. Controlled compost is defined as compost that is designated a waste under the previous condition but has concentrations less than the concentrations listed in Column 3 of Table 1

in O. Reg. 101/94.

- j. Controlled compost may not be removed from the site except for direct shipment to the intended user.
- k. Material from the composting process that fails to meet the "Interim Guidelines for the Production and Use of Aerobic Compost in Ontario" dated November 2004 shall be deemed to be a waste under O. Reg. 347 and shall be disposed of accordingly.
- l. The person to whom controlled compost is shipped shall be given a copy of the chemical analysis of the compost and a notice that states that the compost is controlled compost and that sets out the terms and conditions of the compost's exemption from Part V of the EPA. A copy of this notice shall be kept on file at the Site.
- m. The District Manager may at any time and at his absolute discretion instruct that any or all of the waste materials from the composting or processing operations or the processed waste from the composting or processing operations to be either landfilled or directed to be utilized for specific uses and in specific locations.

7.4 Record keeping for the composting operation shall be kept as follows:

- a. Records about each composting mass shall be kept including temperatures of the mass, when the temperatures were measured, when the mass was turned, information about the curing process and details about significant problems that occurred during composting or curing. This information shall be kept at the Site for at least three years after the mass was cured;
- b. Records shall be kept of the analyses of compost. Any laboratory records shall be kept as part of the record. A record of an analysis shall be kept for at least three years after the analysis is performed; and
- c. A record shall be kept of the name, address and telephone number of each person to whom controlled compost is shipped. The record shall be kept for at least ten (10) years after the shipment.

Tire Shred

7.5 The management and placement of tire shreds at the Site shall be in accordance with the Fire Protection and Prevention Act as follows:

- a. No individual tire shred pile shall be more than 3 metres in height and 100 square metres in area. Six (6) metres of space shall be provided between all piles. Fifteen (15) metres is to be provided from property lines and thirty (30) metres shall be provided from tree lines;
- b. A buffer of 4.5 metres is to be provided for grass or weeds from the edge of the tire pile to the edge of the pad.
- c. A firebreak of 22 metres shall be provided between the two areas of 16 piles each.

7.6 If the total stockpiled tire shreds exceeds 300 cubic metres, the storage period shall not exceed 90 (ninety) days.

- 7.7 The total amount of tire shreds stored on Site shall be recorded in a log book and made available to the Ministry for inspection.

Backup Power

- 7.8 The Owner shall maintain adequate backup power at the Site in order to ensure scale facility and landfill gas blower on site continue to operate and are not damaged due to an extended power outage. A power supply connection at each leachate collection pumping station shall be maintained by the Owner that will permit a portable generator to be connected during a power outage.

Landfill Gas

- 7.9 All buildings are to be free of any landfill gas accumulation. The Owner shall provide adequate ventilation systems to relieve landfill gas accumulations in buildings if necessary.

Landfill Gas Management

- 7.10 The Owner shall, manage landfill gas in accordance with Items 66 through 68, Items 75 through 77, and Item 81 of Schedule "A" and based on the landfill gas management system constructed under the authority of the EPA Approval issued which may be amended or replaced from time to time.

Cleaning of Leachate Collection System

- 7.11 The leachate collection system piping for each stage of the landfill shall be inspected annually for the first five years after waste placement and then as often as future inspections indicate to be necessary. Additionally, leachate collection pipes must be cleaned whenever an inspection indicates that cleaning is necessary.
- 7.12 In areas where leachate collection pipe slopes are less than 0.5%, the leachate collection pipes shall be inspected semi-annually for the first three (3) years after waste placement and then as often as future inspections indicate to be necessary. Additionally, leachate collection pipes must be cleaned whenever an inspection indicates that cleaning is necessary. After the three (3) year period, inspection and cleaning of the leachate collection pipes shall be in accordance with the previous condition.

Leachate Collection System

- 7.13 All leachate collection pipes for Cell 12 shall be sloped at a minimum of 0.5%.
- 7.14 The Owner shall install 250 mm diameter perforated leachate collection pipes with perforations located at the 10:30, 4:30, 1:30 and 7:30 positions.
- 7.15 The stone for the leachate collection system shall have the following specifications:
- a. D85 shall be greater than 37 mm where D85 is described as the stone diameter such that,

- when measured by weight, 85% of the stones in the layer have a smaller diameter;
- b. D10 shall be greater than 19 mm where D10 is the stone diameter such that, when measured by weight, 10% of the stones in the layer have a smaller diameter;
- c. D60/D10 shall be less than 2; and,
- d. One per cent (1%) of the stones may pass a #200 sieve.

- 7.16 A minimum of 50 mm of stone shall be placed below the leachate collection pipes and a minimum of 250 mm of stone shall be placed above any leachate collection pipes.
- 7.17 The Owner shall ensure that the leachate collection system is constructed under the supervision of a qualified consultant.

Hydraulic Trap

- 7.18 The Owner shall ensure that a hydraulic trap is developed and maintained beneath the Expansion Area and shall ensure that a maximum leachate head of 300 mm on the landfill liner is not exceeded.

Renewable Natural Gas (RNG) Facility

- 7.19 The Renewable Natural Gas Facility shall be constructed and operated in accordance with Items 88 to 89 in Schedule A.
- 7.20 The Owner shall ensure that the flares of the RNG facility have adequate capacity to handle all the landfill gas collected, and the blowers shall be able to draw a vacuum of no less than 100 inches of water column.
- 7.21 The Owner shall ensure that the capacity of the landfill gas blower/flare facility and the RNG facility be assessed each time of the gas collection system expansion. The owner shall upgrade the landfill gas blower/flare facility or the RNG facility, if necessary, to ensure there is adequate capacity to handle the expected maximum landfill gas flow.
- 7.22 Prior to the operation of the RNG facility, the Owner shall ensure that the following documents are updated and training provided to employees involved in the RNG operation:
- a. the Best Management Practices Plan for odour in accordance with Item 90 of Schedule A;
 - b. the Operation and Maintenance Manual for the RNG facility.
- 7.23 The Owner shall maintain daily operational record of the RNG facility at the site, and ensure the following information for the RNG facility are included in the annual report:
- a. the total amount of landfill gas processed at the RNG facility;
 - b. the total amount of processed renewable natural gas sent to the off-site network;
 - c. the total amount of off-specification landfill gas that was flared;
 - d. a summary of the RNG facility operational disruptions and the response;
 - e. a summary of adverse effects such as odour, spills, fire emergency, etc., and the remediation

- implemented; and
- f. an assessment of the adequacy of the RNG facility treatment capacity and the need for system upgrade.

8.0 LEACHATE MANAGEMENT

Leachate Recirculation

- 8.1 Prior to implementing the leachate recirculation program , a report on the moisture content of the incoming waste and the actual field capacity of the waste in situ shall be submitted to the Director.
- 8.2 The Director may at any time, terminate leachate recirculation at the Site if, in the Ministry's opinion, adverse effects on the environment are observed.
- 8.3 Before starting leachate recirculation, the Owner shall provide to the Director a monitoring program to ascertain the effectiveness of the leachate recirculation process.
- 8.4 Leachate recirculation shall not occur in any above grade locations until final cover has been installed on exterior side slopes.

Leachate Management Plan

- 8.5 The Owner's leachate management plan shall not include any direct discharge of leachate or treated leachate from the Site, even as a contingency option, to surface waters, including Bear Creek. The Owner shall not discharge leachate or treated leachate to surface waters, including Bear Creek from the Site.

Leachate Treatment Plant

- 8.6 (1) (a) Within a minimum of three (3) years prior to closure of the landfill Site, the Owner shall ensure that a leachate treatment system is installed and operational at the Site.
- (b) Leachate from the Site not sent to the operational drip irrigation area(s) approved under Condition 8.7 shall be disposed of off-Site at a location approved by the District Manager until the leachate treatment system required by Condition 8.6 (1)(a) is approved and operational.
- (c) Any waste from the leachate treatment system that is to be disposed of in the landfill must be classified as a solid non-hazardous waste.
- (d) The Owner shall implement all items within the document entitled Leachate Management Framework, listed as Item 86 in Schedule "A". These items include new and existing leachate monitor locations (wells, mini piezometers, and sump), leachate monitoring, leachate level reporting, Leachate Management Plan by March 31, 2020 and updated

every 3 years, and the Leachate Treatment Facility Study to be completed at least 7 years prior to closure of the landfill.

- (2) As part of the financial assurance calculation in Section 2.0, the Owner shall provide to the Director for approval, a detailed financial assurance plan including the cost of leachate transportation and disposal for the landfill site during the period preceding the initiation of the leachate treatment system. In addition, the Owner shall provide to the Director for approval a financial assurance plan detailing the capital cost of the on-Site leachate treatment system.

Phytoremediation of Leachate - Existing and Proposed Poplar Plantations

8.7 On-Site phytoremediation may occur at the Poplar System and Poplar Plantation in accordance with the following conditions:

- a. The Owner shall ensure that there is a 100 metre grassed buffer at all times from the Poplar Plantation to the Kersey drain.
- b. Irrigation of leachate onto either the Poplar Plantation or the Poplar System shall not occur in the following instances:
 - i. Between the dates of October 16 to April 30;
 - ii. On frozen or snow covered ground conditions;
 - iii. Under conditions that will cause ponded water or runoff;
 - iv. Conditions where surface water ponding within the area is occurring;
 - v. Where no poplar trees are currently planted;
 - vi. In areas within a drip irrigation area where trees have been harvested more than a frequency greater than every other tree;
 - vii. In areas within a drip irrigation area that has been fully harvested clear of trees and the trees have not started to coppice.
- c. If weather forecasts indicate a rainfall storm greater than 12.5 mm/hour will occur, the Owner shall within 1 hour before the storm, shut off all irrigation of the poplar forest.
- d. Irrigation zones shall be individually assessed by the Owner for suitability of irrigation after rainfall events greater than 12.5 mm.
- e. Records shall be kept for the Poplar System and Poplar Plantation areas as follows:
 - i. quantities and dates of application of pesticides and herbicides;
 - ii. inspection notes regarding tree growth rates and health;
 - iii. inspection notes regarding condition and growth of underlying vegetative landfill cover (ie grass);
 - iv. observed pooling and/or runoff of irrigated liquid;
 - v. observations of any odours; and,
 - vi. weather conditions records as may be obtained from the nearest Environment Canada Weather Office which may include daily high and low temperatures, wind velocity and direction, and precipitation quantities.

- f. Irrigation onto either the Poplar System or the Poplar Plantation shall be as follows:
- i. Detailed records shall be kept of the quantities of irrigation liquid that are applied, including the dates of application onto either drip irrigation area;
 - ii. Operations in a given drip irrigation area must immediately stop if contamination problems in surface water or groundwater, which are attributable to the operation of the noted drip irrigation area, are found to be occurring. Recommencement of operations may proceed only upon further written notification of the District Manager;
 - iii. Operations of a given drip irrigation area must be discontinued immediately if operation of the noted drip irrigation area causes surface runoff from the footprint area or if operations cause surface ponding within the drip irrigation area; operations cannot be restarted during that application day and can only be restarted after surface ponding has evaporated or infiltrated or conditions causing the runoff or ponding have been rectified;
 - iv. If there are any stoppages of operations under the requirements of items ii) or iii) above, then the District Manager shall be notified immediately; and,
 - v. If odours attributable to one of the drip irrigation areas become a problem at the site, then the District Manager shall be so informed in writing and the operation of the noted drip irrigation area shall be stopped pending further instructions from the District Manager;
- g. (1) Monitoring of the drip irrigation Poplar System and the Poplar Plantation shall be in accordance with Items 63 through 65 of Schedule "A".
- (2) Monitoring frequencies and analyses for the following items shall be as follows:
- i. Daily inspections for ponded water or saturated soil during irrigation;
 - ii. Monthly testing of irrigation liquid quality during the irrigation season;
 - iii. Soil samples should be taken annually from grade to a depth of 0.6 m minimum and 0.9 m maximum;
 - iv. Annual soil analyses shall be conducted annually per Section 3.1 of Item 63 of Schedule "A", in addition to pH, electrical conductivity, cation exchange capacity, and sodium absorption ratio;
 - v. Leaf Tissue analyses once per year in the fall; and
 - vi. Crop inspection once per year in the fall.
- h. Reporting on the drip irrigation areas shall be part of the annual monitoring report for the Site and shall include but not be limited to the following:
- i. results and an analysis of the results of the monitoring programs for the drip irrigation areas;
 - ii. assessment of the results of the vegetation as related to the stated objectives for the Poplar System and Poplar Plantation facilities construction and operations;

- iii. assessment of the need to change the monitoring program for the drip irrigation areas and a recommendation of the required changes;
 - iv. tabulation and assessment of the volumes of leachate produced by the landfill, and those volumes which may be applied to the existing drip irrigation areas;
 - v. a report on operational problems identified during the operation of the drip irrigation areas and a discussion of each problem and details of what was done to rectify each problem;
 - vi. a Site plan which shows the location of the areas planted with both trees and grass cover and the vegetation used on those areas;
 - vii. an assessment of the monitoring results pertaining to the use of trees as vegetation on the final cover.
- i. The Director retains the right to request that the Owner conduct additional studies, suspend operations or require the Owner to provide additional methods to handle leachate at the Site in addition to or as a replacement to the drip irrigation areas.
- j. If the Director requests removal of the drip irrigation areas, the Owner shall:
 - i. remove the irrigation equipment and the trees from the noted drip irrigation area. For the Poplar System, removal of trees shall include removal of tree stumps and most roots, excavate the trench to the maximum depth of root depth penetration on each tree row, and then replace, remould and recompact the excavated material;
 - ii. the landfill cover shall be restored to the same condition as it was in prior to commencement of the Poplar System and a blend of suitable grasses shall be seeded as necessary; and,
 - iii. within 6 months of completion of the noted drip irrigation area closure activities, submit to the Director a report outlining the work that has been completed.
- k. Electrical conductivity of the shallow soil (maximum depth of 0.15 m) beneath the drip irrigation areas shall be monitored on a weekly basis during irrigation.
- l. If salt levels are building up in the soil or additional irrigation with leachate is found to be detrimental to the health of the poplars, the leachate application rate shall be reduced or terminated.

Wood Waste and Leaf Litter

- m. Any wood waste or leaf litter that is produced in the Poplar System or Poplar Plantation shall be managed in accordance with Item 63 of Schedule "A".

Other Items

- n. (1) Drip irrigation rates for the Poplar Plantation shall be no greater than the rate specified

in the EPA approval for the Site.

- (2) Drip irrigation rates for the Poplar System shall be no greater than the rates noted in Item 63 of Schedule "A".
- o. No drip irrigation shall occur within fifty (50) metres of any surface watercourse or drain.
- p. (1) Leachate to be used for drip irrigation on the Poplar Plantation shall not exceed the treated leachate effluent criteria specified in the EPA approval for applicable industrial sewage works for the Site.
- (2) Leachate to be used for drip irrigation on the Poplar System shall not exceed the treated leachate effluent criteria specified in the Item 63 through 65 in Schedule "A".
- q. The use of the Poplar Plantation to manage irrigation leachate will not be permitted without first providing the District Manager with at least two (2) months written notice of the anticipated irrigation liquid application date. The use of surface water to encourage tree growth will be permitted and will not be considered as irrigation liquid.
- r. Monitoring and the associated reporting for the Poplar Plantation will commence at least two (2) months prior to irrigation liquid application and continue until two (2) years after cessation of irrigation liquid application to the Poplar Plantation.

Leachate Storage Tanks

- s. The leachate storage tanks shall be inspected by a licenced plumber on an annual basis.
- t. The leachate storage tanks shall be cleaned and sediment removed at least once every two (2) years.

9.0 INSPECTIONS AND RECORDS

Inspections

9.1 The Owner shall inspect the Site monthly for the following items but not limited to these items:

- a. Erosion rills;
- b. General settlement areas or depressions;
- c. Shear and tension cracks;
- d. Condition of surface water drainage works;
- e. Erosion and sedimentation in surface water drainage system;
- f. Presence of any ponded water;
- h. Adequacy of cover material;
- i. Evidence of vegetative stress, distressed poplars or side slope plantings;
- j. Condition of groundwater monitoring wells and gas wells;

- k. Presence of insects, vermin, rodents and scavenging animals;
- l. Condition of fence surrounding the Site; and
- m. General Site appearance.

9.2 The Owner shall inspect the Site weekly for presence of leachate seeps.

Daily Inspections and Log Book

9.3 An inspection of the entire Site and all equipment on the Site shall be conducted each day the Site is in operation to ensure that the site is being operated in compliance with this ECA . Any deficiencies discovered as a result of the inspection shall be remedied immediately, including temporarily ceasing operations at the Site if needed.

9.4 A record of the inspections shall be kept in a daily log book or a dedicated electronic file that includes:

- i. the name and signature of person that conducted the inspection;
- ii. the date and time of the inspection;
- iii. the list of any deficiencies discovered;
- iv. the recommendations for remedial action; and
- v. the date, time and description of actions taken.

9.5 A record shall be kept in a daily log book of all refusal of waste shipments, the reason(s) for refusal, and the origin of the waste, if known.

Monthly Records

9.6 Monthly Site inspection records in the form of a written log or a dedicated electronic file shall include but not be limited to the following:

- a. the type, geographic source, date and time of arrival, hauler, and quantity (tonnes) of all waste received at the Site;
- b. the area of the Site in which waste disposal operations are taking place;
- c. a calculation of the total quantity (tonnes) of waste received at the Site during each operating day and each operating week;
- d. Results of any test done to determine the acceptability of waste at the Site;
- e. A reference for each load of solid non-hazardous industrial waste received, to the client and type of solid non-hazardous industrial waste;
- f. the amount of any leachate removed, or treated and discharged from the Site;
- g. a record of litter collection activities and the application of any dust suppressants;
- h. a record of the daily inspections;
- i. a description of any out-of-service period of any control, treatment, disposal or monitoring facilities, the reasons for the loss of service, and action taken to restore and maintain service;
- j. type and amount of daily, intermediate and final cover used;
- k. maintenance and repairs performed on equipment employed at the Site;

- l. complaints received and actions taken to resolve them;
- m. emergency situations and actions taken to resolve them; and
- n. any other information required by the District Manager.

9.7 The Owner shall maintain on record at the Site for each client disposing of solid non-hazardous waste at the Site, a description of each type of solid non-hazardous waste received from the client and documentation to demonstrate that the Owner has taken reasonable care to ensure that waste classified as either hazardous or liquid industrial waste under O. Reg. 347 as amended from time to time, is not disposed of at the Site.

Record Retention

- 9.8 Except as authorized in writing by the Director, all records required by this ECA shall be retained at the Site for a minimum of two (2) years from their date of creation.
- 9.9 The Owner shall retain all documentation listed in Schedule "A" for as long as this ECA is valid.
- 9.10 All monthly Site inspection records are to be kept at the Site until they are included in the Annual Report.
- 9.11 The Owner shall retain employee training records as long as the employee is working at the Site.
- 9.12 The Owner shall make all of the above documents available for inspection upon request of Ministry staff.
- 9.13 The Owner shall retain, either on-Site or in another location and notify the District Manager of this location, copies of the annual reports referred to in the preceding condition and any associated documentation of compliance monitoring activities and shall continue to do so for a period of at least two (2) years after the closure of the Site.

10.0 TRAINING

Employees and Training

- 10.1 A training plan for all employees that operate any aspect of the Site shall be developed and implemented by the Operator . Only trained employees shall operate any aspect of the Site or carry out any activity required under this ECA . Employees must provide proof of training to the Ministry upon request. For the purpose of this ECA "trained" means knowledgeable either through instruction or practice in:
- a. the relevant waste management legislation including EPA, O. Reg. 347 and O. Reg. 232/98 , regulations and guidelines;
 - b. major environmental and occupational health and safety concerns pertaining to the waste to be handled;

- c. the proper handling of wastes;
- d. the management procedures including the use and operation of equipment for the processes and wastes to be handled;
- e. the emergency response procedures;
- f. the specific written procedures for the control of nuisance conditions;
- g. the terms, conditions and operating requirements of this ECA; and
- h. proper inspection, receiving and recording procedures and the activities to be undertaken during and after a load rejection.

11.0 COMPLAINTS PROCEDURES

- 11.1 If at any time, the Owner receives complaints regarding the operation of the Site , the Owner shall respond to these complaints according to the following procedure:
- a. The Owner shall record and number each complaint, either electronically or in a log book, and shall include the following information: the nature of the complaint, the name, address and the telephone number of the complainant if the complainant will provide this information, the time and date of the complaint, specific details of operations that were occurring, any changers from normal operations, types of waste loads (including source) and other on Site activities;
 - b. The Owner, upon notification of the complaint, shall initiate appropriate steps to determine all possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant; and
 - c. The Owner shall complete and retain on-Site a report written within one (1) week of the complaint date, listing the actions taken to resolve the complaint and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents.
- 11.2 The Owner shall designate a person to receive any complaints and to respond with a written notice of action as soon as possible. The Owner shall post the Site complaints procedure at the Site entrance. All complaints and the Owner's actions taken to remedy the complaints must be summarized in the Annual Report.
- 11.3 The Company shall notify the District Manager, Township of Warwick and WIFN, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
- 1. this Approval number;
 - 2. a description of the nature of the complaint;
 - 3. the time and date of the incident to which the complaint relates.
- 11.4 The Company shall report all environmental complaints to the WPLC at the next WPLC meeting.

12.0 EMERGENCY SITUATIONS

- 12.1 In the event of a fire or discharge of a contaminant to the environment, Site staff shall contact the MECP Spills Action Centre (1-800-268-6060) and the District Office of the MECP forthwith.
- 12.2 The Owner shall submit to the District Manager a written report within three (3) days of the spill or incident, outlining the nature of the incident, remedial measures taken and measures taken to prevent future occurrences at the Site.
- 12.3 The Owner shall ensure that adequate fire fighting and contingency spill clean up equipment is available in accordance with Item 66 of Schedule "A" and that emergency response personnel are familiar with its use and location.

13.0 MONITORING

Groundwater Monitors

- 13.1 The Owner shall ensure all groundwater monitoring wells are properly capped, locked and protected from damage.
- 13.2 In areas where landfilling is to proceed around monitoring wells, the wells must be decommissioned in accordance with O. Reg. 903 as amended from time to time and then replaced when waste placement and capping is completed.
- 13.3 Any groundwater monitoring wells included in the monitoring program shall be assessed, repaired, replaced or decommissioned as required.
- 13.4 The Owner shall repair or replace any monitoring well which is destroyed or in any way made inoperable for sampling such that no more than one sampling event is missed.
- 13.5 All monitoring wells that are no longer required as part of the groundwater monitoring program shall be decommissioned in accordance with good standard practice that will prevent contamination through the abandoned well and in accordance with O. Reg. 903. A report on the decommissioning shall be provided in the annual monitoring report for the period during which the well was decommissioned.

Monitoring Program

- 13.6 Monitoring programs shall be carried out for groundwater, surface water, landfill gas in accordance with the Environmental Monitoring Plan, as amended from time to time listed as Item 39 and Appendix H of Item 68 of Schedule "A". Surface water will also be evaluated as per Item 91 of Schedule "A".
- 13.7 The Owner shall ensure that Biochemical Oxygen Demand, Total Suspended Solids, Total coliform, Fecal coliform and E. Coli are added to the parameter list to be sampled for surface water station SS19.

- 13.8 Air Quality, Dust, Hydrocarbon, and Volatile Organic Carbon monitoring shall be undertaken in accordance with Item 85 in Schedule "A".
- 13.9 Air quality monitoring shall be in accordance with the canister method (USEPA TO-14/15) .
- 13.10 Noise monitoring shall be undertaken by the Owner at the Site in accordance with Item 28 on Schedule "A" including any noise monitoring in response to noise complaints.
- 13.11 No alterations to the groundwater, air quality, noise or surface water monitoring programs shall be implemented prior to receiving written approval from the District Manager. The Owner shall give all requests to the Township of Warwick, the WPLC and WIFN at the same time or prior to the time that such request is made to the District Manager.

14.0 CONTINGENCY PLANS AND TRIGGER MECHANISMS

Hydraulic Containment

- 14.1 If the leachate level elevation in any of the pumping stations wells listed below rise above their respective trigger level, the Owner shall take additional groundwater levels within four (4) weeks as detailed in Figure 2 of Item 39 and Appendix H of Item 68 of Schedule "A".

Monitoring location Trigger Leachate Elevation (mASL)

PS1 232.7
PS3 232.6
PS5 232.8
PS7 233.4

The assessment process for leachate levels is detailed in Figure 2 of Appendix H of Item 68 on Schedule "A".

Groundwater Quality

- 14.2 The trigger concentration for groundwater quality shall be 80% of the Guideline B-7 values for parameters that have an Ontario Drinking Water Quality Standards value.
- 14.3 Groundwater chemical concentrations must be assessed with the trigger concentrations within six (6) weeks of sample collection.
- 14.4 The assessment process for groundwater quality is detailed in Figure 3 of Item 39 and Appendix H of Item 68 of Schedule "A".

Surface Water Quality

- 14.5 The trigger mechanisms for surface water quality shall be one of the following:

- a. Where off Site surface water quality satisfies the Ministry's PWQO, the respective PWQO shall be used as a trigger concentration; or
- b. Where the background surface water quality naturally exceeds the PWQO, the background concentration should be considered in evaluating and updating the trigger concentration.

14.6 Surface water quality results will be assessed in accordance with the requirements established under the Industrial Sewage Works component of the EPA approval for the Site.

14.7 The assessment process for surface water quality is detailed in Figure 4 of Appendix H of Item 68 in Schedule "A".

Landfill Gas

14.8 If landfill gas concentrations exceed 10% LEL, the Owner shall undertake additional monitoring, assess the source and pathway of methane to determine if the elevated concentrations are landfill related.

14.9 If the elevated concentrations are landfill related, the Owner shall undertake contingency measures.

General Contingency Measures

14.10 In the event a result of a monitoring test exceeds the trigger mechanisms detailed above, the Owner shall:

- a. notify the District Manager, the WPLC, WIFN and the Township of Warwick of any trigger level exceedances within twenty four (24) hours of receipt of the results;
- b. conduct an investigation into the cause of the adverse result and submit a report to the District Manager that includes an assessment of whether contingency measures need to be carried out;
- c. if contingency measures are needed, submit detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures, and a schedule as to when these measures will be implemented, to the Director and notify District Manager; and
- d. implement the required contingency measures upon approval by the Director.

15.0 REPORTING

Semi Annual Volume Determination

15.1 The Owner shall undertake semi-annual air space surveys of the bottom and top waste contours to determine the estimated air space used for waste disposal in the prior six months. The air space survey shall include daily cover material and shall take into account settlement. The first air space survey shall be undertaken by no later than February 2012 with an air space survey being completed semi-annually

after the completion of the first air space survey, until landfill Site closure.

- 15.2 Wastes which the Owner has been ordered to dispose of at the Site by any ministry, department or agency of the federal or Provincial Crown shall be excluded from the air space survey calculations.
- 15.3 Each air space survey shall be conducted by an Ontario Land Surveyor or other qualified consultant and such air space survey shall be provided to the District Manager. The Owner shall keep a copy of each air space survey on-Site and make them available to MECP personnel upon request.

Quarterly Monitoring Reports

- 15.4 The Owner shall submit quarterly monitoring reports to the Township of Warwick, WIFN, District Manager and the WPLC within sixty (60) days of the end of the calendar quarterly reporting period starting September 30, 2012.
- 15.5 Each report will include the following:
- a. a summary of monitoring activities and results;
 - b. a summary of any exceedences and related operator responses;
 - c. any complaints received and operator response;
 - d. a summary of mitigation activities for noise, dust, litter, air quality or other taken during the quarter in accordance with the Best Management Practices;
 - e. any proposed improvements to monitoring or operating procedures; and
 - f. any implemented improvements to monitoring or operating procedures that have been identified to address or reduce impacts.

Annual Report

- 15.6 A written report on the development, operation and monitoring of the Site , shall be completed annually (the "Annual Report"). The Annual Report shall be submitted to the Regional Director , the District Manager, the Township of Warwick, WIFN, and the WPLC, by March 31st of each year, and shall cover the 12 month period preceding December 31st.
- 15.7 The Annual Report shall include the following:
- a. the results and an interpretive analysis of the results of all leachate, groundwater, surface water and landfill gas monitoring, including an assessment of the need to amend the monitoring programs;
 - b. an assessment of the operation and performance of all engineered facilities, the need to amend the design or operation of the Site, and the adequacy of and need to implement the contingency plans;
 - c. an assessment of the effectiveness of the Poplar Plantation and the Poplar System for leachate;
 - d. an assessment of the effectiveness of the on Site leachate treatment facility;
 - e. Site plans showing the existing contours of the Site;

- f. areas of landfilling operation during the reporting period;
- g. areas of intended operation during the next reporting period;
- h. areas of excavation during the reporting period;
- i. the progress of final cover, vegetative cover, and any intermediate cover application;
- j. previously existing site facilities;
- k. facilities installed during the reporting period;
- l. Site preparations and facilities planned for installation during the next reporting period;
- m. calculations of the volume of waste, daily and intermediate cover, and final cover deposited or placed at the Site during the reporting period and a calculation of the total volume of Site capacity used during the reporting period;
- n. a calculation of the remaining capacity of the Site, an estimate of the remaining Site life and a comparison of actual capacity used to approved Site capacity;
- o. a summary of the quantity of any leachate or pre-treated leachate removed from the Site or leachate treated and discharged from the Site;
- p. a summary of the weekly, maximum daily and total annual quantity (tonnes) of waste received at the Site;
- q. a summary of any complaints received and the responses made;
- r. a discussion of any operational problems encountered at the Site and corrective action taken;
- s. an update summary of the amount of financial assurance which has been provided to the Director;
- t. a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903;
- u. any other information with respect to the site which the District Manager or Regional Director may require from time to time;
- v. a statement of compliance with all conditions of this ECA and other relevant Ministry requirements, guidelines and regulations;
- w. summary of inspections undertaken at the Site;
- x. a summary of recycling, processing and composting efforts undertaken including the amount of recyclable received, amount of processed material and composted material each year;
- y. any changes in operations, equipment or procedures employed at the Site; and
- z. recommendations regarding any proposed changes in operations of the Site.

16.0 SITE CLOSURE

Closure Plan

- 16.1 At least two (2) years prior to closure or when 90% of the site capacity is reached, whichever comes first, the Owner shall submit to the Director for approval, with copies to the District Manager, the Township of Warwick, WIFN and the WPLC, a detailed Site closure plan pertaining to the termination of landfilling operations at this Site, post-closure inspection, maintenance and monitoring, and end use. The plan shall include the following:

- a. a plan showing Site appearance after closure;
- b. a description of the proposed end use of the Site;
- c. a description of the procedures for closure of the Site, including:
 - i.) advance notification of the public of the landfill closure;
 - ii) posting of a sign at the Site entrance indicating the landfill is closed and identifying any alternative waste disposal arrangements;
 - iii) completion, inspection and maintenance of the final cover and landscaping;
 - iv) site security;
 - v) removal of unnecessary landfill-related structures, buildings and facilities; and
 - vi) final construction of any control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
- d. a schedule indicating the time-period for implementing sub-conditions i) to vi) above.
- e. descriptions of the procedures for post-closure care of the Site, including:
 - i.) operation, inspection and maintenance of the control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
 - ii) record keeping and reporting; and
 - iii) complaint contact and response procedures;
- f. an assessment of the adequacy of and need to implement the contingency plans for leachate and methane gas;
- g. an updated estimate of the contaminating life span of the Site , based on the results of the monitoring programs to date; and
- h. an update of the cost estimates for financial assurance and the amount which has been provided to the Director to date.

16.2 The Site shall be closed in accordance with the closure plan as approved by the Director.

End Use

16.3 The Owner shall consult with affected stakeholders on the proposed end uses as committed to in Item 35 of Schedule "A" prior to the submission of its closure report under the EPA. The proposed end use activities should be consistent with the types of activities consulted upon during the EA.

Closure of the Site

16.4 Upon closure of the Site, the following features will be inspected, recorded on a quarterly basis and maintained as required on a seasonal basis:

- a. evidence of settlement;
- b. possible leachate seeps and springs;
- c. cover soil integrity;
- d. vegetative cover;

- e. surface water drainage works;
- f. erosion and sediment in surface water drainage system; and
- g. groundwater monitoring wells.

- 16.5 A vegetative cover consisting of vegetation that is suited to local conditions and that is capable with minimal care of providing vigorous, plentiful cover no later than its 3rd growing season shall be established over all completed areas to control erosion and maximize evapotranspiration. The Owner shall complete planting as soon as possible after reaching final contours.
- 16.6 If weather conditions do not allow timely placement of final and vegetative cover, silt curtains shall be employed to minimize silt loadings to surface water bodies.

SCHEDULE “A”

1. Document entitled “Environmental Assessment Act Section 9 Notice of Approval to Proceed with the Undertaking” , Re: An Environmental Assessment for Warwick Landfill Expansion, Waste Management of Canada Corporation, EA File Number: EA-02-08-02-03, dated January 15, 2007.
2. Application for a Provisional Certificate of Approval for the Warwick Landfill, dated March 27, 2006.
3. Document entitled “Development and Operations Plans Warwick Landfill Expansion Volume 1 of 2” dated March 2006 prepared by Henderson, Paddon and Associates Limited.
4. Document entitled “Development and Operations Plans Warwick Landfill Expansion Volume 2 of 2” dated March 2006 prepared by Henderson, Paddon and Associates Limited.
5. Document entitled “Assessment of Geotechnical Design Requirements New Landfill Facility Warwick, Ontario” prepared by Alston Associates Inc., dated July 31, 2006.
6. Document entitled “2006 Poplar System Monitoring Report Warwick Landfill Site Township of Warwick Ontario” prepared by Jagger Hims Limited, dated January 2007.
7. Document entitled “Warwick Landfill Expansion Contaminating Lifespan Review” prepared by Jagger Hims Limited, dated March 2006.
8. Drawing No. 105716-111 entitled “ Proposed Final Contours and Stormwater Management Plan” prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
9. Drawing No. 105716-112 entitled “ Landfill Bottom Contours (Top of Primary Gravel)” prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
10. Drawing No. 105716-113 entitled “Landfill Perimeter Sections” prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
11. Drawing No. 105716-114 entitled “ Landfill Perimeter Sections” prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
12. Drawing No. 105716-115 entitled “Leachate Collection Sump Details” prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
13. Drawing No. 105716-116 entitled “Proposed Primary Leachate Collection System” prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
14. Drawing No. 105716-117 entitled “Proposed Secondary Leachate Collection System” prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
15. Drawing No. 105716-118 entitled “Landfill Sections” prepared by Henderson Paddon and Associates

Limited, dated February 24, 2006.

16. Drawing No. 105716-119 entitled "Landfill Perimeter Sections" prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
17. Drawing No. 105716-120 entitled " Landfill Perimeter Sections" prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
18. Drawing No. 105716-125 entitled "Details and Sections" prepared by Henderson Paddon and Associates Limited, dated February 24, 2006.
19. Letter dated April 16, 2007 from Frank Ford, Henderson Paddon and Associated Limited to Wilf Ruland, Citizens Environmental Consulting.
20. Letter dated May 2, 2007 from Frank Ford, Henderson Paddon and Associated Limited to Wilf Ruland, Citizens Environmental Consulting.
21. Letter dated June 1, 2007 from Greg Washuta, P. Eng., M. Eng., Senior Waste Engineer, Ministry of the Environment to Reid Cleland, Waste Management of Canada Corporation.
22. Drawing No. 106716-127A entitled "Plough Furrow Surface Water Distribution Warwick Landfill" prepared by Henderson Paddon and Associates Limited, dated March 21, 2007.
23. Drawing No. 106716-F215 entitled "Proposed Mini-Transfer Area" prepared by Henderson Paddon and Associates Limited, dated March 29, 2007.
24. Report entitled "Best Management Practices Plan (Dust) Warwick Landfill Watford, Ontario " prepared by RWDI Air Inc., dated December 11, 2007.
25. Report entitled "Best Management Practices Plan (Litter) Warwick Landfill Watford, Ontario " prepared by RWDI Air Inc., dated December 11, 2007.
26. Report entitled "Best Management Practices Plan (Odour) Warwick Landfill Watford, Ontario " prepared by RWDI Air Inc., dated December 11, 2007.
27. Document entitled "Appendix F Air Quality Monitoring Plan and Letter", prepared by RWDI, dated November 29, 2007.
28. Document entitled "Environmental Noise Monitoring Program for the Warwick Landfill" , prepared by Aeroustics Engineering Limited, dated November 21, 2007.
29. Document entitled "Proposed Expansion of WM Warwick Landfill Predicted Noise Impact" , prepared by Aeroustics Engineering Limited, dated June 15, 2007.
30. Document entitled "Application for Approval of ECA of Approval A032203 Warwick Township

County of Lambton MOE. Reference No. 0539-6N7TRY Part 1 of 2" , dated July 13, 2007, prepared by Henderson Paddon and Associates Limited.

31. Document entitled "Application for Approval of ECA of Approval A032203 Warwick Township County of Lambton MOE. Reference No. 0539-6N7TRY Part 2 of 2- Financial Assurances" , dated August 22, 2007, prepared by Henderson Paddon and Associates Limited.
32. Letter dated July 27, 2007 from Dan Toner, Assistant Director, Laboratory Services Branch to Tesfaye Gebrezghi, Supervisor- Waste Unit, MOE.
33. Table 6.1 entitled "Phasing-Analysis for Leachate Quantities WM- Warwick Landfill Expansion" prepared by Henderson Paddon and Associates Ltd., dated August 17, 2007.
34. Letter dated August 20, 2007 from John DeYoe, RWDI to Frank Ford, Henderson Paddon and Associates Limited.
35. Discussion Paper 9 entitled "Impact Management Plan" and all Appendices dated October 2005 prepared by Waste Management of Canada Corporation.
36. Letter Report and attachments dated May 10, 2001 from Frank C. Ford of Henderson, Paddon Environmental to Mark Turner, Environmental Assessment and Approvals Branch.
37. Development and Operations Report - Canadian Waste Services Inc. - Warwick Landfill, Warwick Township - Revised, dated October 1997, prepared by Henderson Paddon Environmental Inc.
38. Consolidated Report Leachate Management Plan - Canadian Waste Services Inc. - Warwick Landfill - Warwick Township dated July 2001 prepared by Henderson Paddon Environmental Inc.
39. Environmental Monitoring Plan - Warwick Landfill - Township of Warwick, Ontario dated December 2007, prepared by Jagger Hims Limited.
40. Letter dated October 11, 2007 from Brad Bergeron, RWDI to Greg Washuta, Senior Waste Engineer, Ministry of the Environment.
41. Report entitled "Stormwater Management Plan Poplar Irrigation Area Warwick Landfill Expansion Watford, Ontario" dated December 2007, prepared by Henderson Paddon Environmental Inc.
42. Letter dated November 21, 2007 from Kevin Smith, Aercoustics Engineering Limited to Wayne Jenken, Waste Management of Canada Corporation.
43. E-mail and attachments dated February 12, 2008 from Brad Bergeron, RWDI Air Inc. to Greg Washuta, Senior Waste Engineer, EAAB, MOE.
44. E-mail and attachments dated January 29, 2008 from Brad Bergeron RWDI Air Inc. to Greg Washuta, Senior Waste Engineer, EAAB, MOE.

45. Letter dated March 3, 2008 from Wayne Jenken, Landfill Engineer, WMCC to Ian Parrott, Manager, ECA of Approval Review Section, EAAB, MOE.
46. Letter dated June 13, 2008 from Frank Ford, Senior Environmental Engineer, Henderson Paddon and Associates Limited to Greg Washuta, P. Eng., Senior Waste Engineer, Waste Unit, EAAB, MOE.
47. Application for a Provisional Certificate of Approval for a Waste Disposal Site for the Twin Creeks Landfill Site, signed and dated December 11, 2008.
48. Letter dated December 11, 2008 from Reid Cleland, District Landfill Manager, WMCC to Doris Dumais, Approvals Director, EAAB, MOE.
49. Report entitled "Cell 12 Project and Changes Affecting The Warwick Landfill Expansion" and attached appendices, created by Henderson Paddon & Associates Limited, dated August 2008.
50. Application for a Provisional Certificate of Approval for a Waste Disposal Site for the Twin Creeks Landfill Site, dated August 11, 2008.
51. Letter dated December 18, 2008 from Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE to Reid Cleland, District Landfill Manager, WMCC.
52. Letter dated December 18, 2008 from Wayne Jenken, Landfill Engineer, WMCC to Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE.
53. Letter dated December 18, 2008 from Jason Balsdon and Brent Langille, Jagger Hims Limited to Wayne Jenken, Landfill Engineer, WMCC.
54. Application for a Provisional Certificate of Approval for a Waste Disposal Site for Waste Management of Canada Corporation's Twin Creeks Landfill Site, signed and dated January 16, 2009.
55. Report and Appendix A entitled "Waste Management of Canada Corporation Twin Creeks Landfill Use of Geonet for Secondary Drainage Layer" prepared by Henderson Paddon and Associates, dated January 2009.
56. Letter dated March 18, 2009 from Greg Washuta Senior Waste Engineer, Waste Unit, EAAB, MOE to Reid Cleland, Landfill Manager, WMCC.
57. Letter report and appendices A, B and C dated April 9, 2009 from Jeff Armstrong, Genivar Consultants LP to Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE.
58. Application for a Waste Disposal Site Certificate of Approval dated April 28, 2009 and signed by Reid Cleland, District Manager, Waste Management of Canada Corporation.
59. Report produced by Genivar Consultants LP entitled "Development & Operations Report for a Waste

Transfer Station Application" dated June 2009.

60. November 24, 2009 e-mail from Jeff Armstrong of Genivar Consultants LP to Jim Chisholm, Senior Review Engineer with the Ministry of Environment indicating that the application is for an existing mini transfer area but flexibility is being applied for to direct the waste collected at this area to alternate waste disposal sites.
61. November 24, 2009 e-mail from Jim Chisholm, Senior Review Engineer with the Ministry of Environment to Jeff Armstrong, Genivar Consultants LP, requesting information about how the Mini-Transfer Area already located at the landfill is covered by the existing Certificate of Approval and the December 21, 2009 e-mail response from Jeff Armstrong to Jim Chisholm to his November 24, 2009 e-mail, outlining that the Mini-Transfer Area is covered by the 1997 Design and Operation Report that is identified in Item 37 and attached page 7-4 of the report in which Section 7.8 dealt with the Mini-Transfer Area.
62. January 24, 2011, 12:11PM, e-mail from Wayne Jenken, Area Landfill Engineer, Waste Management of Canada Corporation to Jim Chisholm, Senior Review Engineer with the Ministry of Environment indicating that the original Mini Transfer Area moved to the new location on November 2009 and that the old location for the Mini Transfer Area has been removed. The e-mail also made suggested changes to a draft of the Notice.
63. Document entitled "Twin Creeks Landfill - Expansion of Poplar Cap Irrigation System for Existing Waste Disposal Area January 2010" prepared for Waste Management of Canada Corporation by Genivar Consultants LP dated January 2010.
64. Letter dated November 2, 2010 addressed to Mr. Reid Cleland, Waste Management of Canada Corporation from Mr. Greg Washuta, Ministry of the Environment providing comments and requesting additional information on MOE Reference File No. 1486-829MCN.
65. Document entitled "Twin Creeks Landfill, Watford, ON 091-13089-00 (91730R) - Application for Approval for Expansion of Poplar Plantation (South Fill Area) - Response to MOE Comments Letter dated November 2, 2010" prepared for Waste Management of Canada Corporation by Genivar Consultants LP dated December 2, 2010.
66. Report entitled "Development and Operations Plan - Warwick Landfill Expansion - Volume 1 of 3" prepared for WMCC by Henderson Paddon & Associates dated March 2008.
67. Report entitled "Development and Operations Plan - Warwick Landfill Expansion - Volume 2 of 3" prepared for WMCC by Henderson Paddon & Associates dated March 2008.
68. Report entitled "Development and Operations Plan - Warwick Landfill Expansion - Monitoring Plans - Volume 3 of 3" prepared for WMCC by Henderson Paddon & Associates dated March 2008.
69. Letter dated May 6, 2009 addressed to Mr. Reid Cleland, WMCC from Mr. Greg Washuta, Ministry of the Environment providing ministry review comments on the Development and Operations Plan

70. Letter dated August 19, 2009 addressed to Mr. Reid Cleland, WMCC from Mr. Greg Washuta, Ministry of the Environment providing comments from the Township of Warwick, Walpole Island First Nation and the Warwick Public Liaison Committee on the Development and Operations Plan
71. Letter dated November 12, 2009 addressed to Mr. Greg Washuta, Ministry of the Environment from Mr. Wayne Jenken, WMCC.
72. Drawing set entitled "Twin Creeks Landfill - Landscaping and Signage Detail Construction Drawings" prepared by Schollen & Company Inc. and dated July 4, 2008. The drawing set consists of the following:
- i. Cover page entitled "Twin Creeks Landfill - Landscaping and Signage Detail Construction Drawings" prepared by Schollen & Company Inc. and dated July 4, 2008;
 - ii. Drawing No. L-1 entitled "Landscape Plan - Screening Berm";
 - iii. Drawing No. L-1A entitled "Landscape Detail at Intersections - Screening Berm"
 - iv. Drawing No. L-2 entitled "Landscape Plan - Screening Berm";
 - v. Drawing No. L-3 entitled "Landscape Plan - Screening Berm & Area F";
 - vi. Drawing No. L-4 entitled "Landscape Plan - Screening Berm";
 - vii. Drawing No. L-5 entitled "Landscape Plan - Screening Berm and Area G (North)";
 - viii. Drawing No. L-6 entitled "Landscape Plan - Screen Planting Area G (South)";
 - viii. Drawing No. L-7 entitled "Landscape Plan - Screen Planting and Creek Area A and Area B";
 - ix. Drawing No. L-8 entitled "Landscape Plan - Screen Planting Areas C, D and E";
 - x. Drawing No. L-9 entitled "Landscape Plan - Restoration Planting Area H";
 - xi. Drawing No. LD-1 entitled "Landscape Detail Plan";
 - xii. Drawing No. LD-2 entitled "Landscape Notes and Master Plant List"; and
 - xiii. Drawing No. LD-3 entitled "Signage Details";
73. Application for a Certificate of Approval for a Waste Disposal Site dated April 6, 2011 submitted by Waste Management of Canada Corporation for Provisional Certificate of Approval No. A032203 requesting approval for use of an alternative daily cover material and amended Best Management Practices for Odour.. The supporting documentation for the application included the following:
- i. Cover letter dated April 7, 2011 addressed to Mr. Tes Gebrezghi, Ministry of the Environment from Mr. Reid Cleland, Waste Management of Canada Corporation;
 - ii. Report entitled "Best Management Practices Plan (Odour) Warwick Landfill" prepared for Waste Management of Canada Corporation by RWDI Air Inc. (Project No. 1100800) dated April 7, 2011;
 - iii. Letter dated March 24, 2011 addressed to Mr. Wayne Jenken, Waste Management of Canada Corporation from Mr. Peter Pickfield, Garrod Pickfield; and
 - iv. Email dated March 22, 2011 at 3:32 p.m. sent to Mr. Peter Pickfield, Garrod Pickfield from Mr. Wayne Jenken.
74. Letter dated October 4, 2011 addressed to Mr. Tesfaye Gebrezghi, Ministry of the Environment from

Mr. Reid Cleland, Waste Management of Canada requesting an amendment to Condition 167 (a). The supporting documentation attached to the letter included the following:

- a. Application for a Certificate of Approval for a Waste Disposal Site dated October 4, 2011;
- b. Provisional Certificate of Approval A032203 Notice No. 7 dated June 1, 2011;
- c. Letter from Wayne Jenken, WMCC to Don Bruder, Township of Warwick dated February 23, 2011;
- d. Letter from Wayne Jenken, WMCC to Don Bruder, Township of Warwick dated May 26, 2011;
- e. Letter from Peter Pickfield, Garrod Pickfield LLP to Reid Cleland, WMCC dated September 14, 2011;
- f. Letter from Wayne Jenken, WMCC to Dean Jacobs, Walpole Island First Nations dated July 14, 2011;
- g. Email from Kent Hunter, Neegan Burnside to Wayne Jenken dated September 19, 2011 at 3:54 p.m.;
- g. Email from Wayne Jenken, WMCC to Kent Hunter, Neegan Burnside dated September 20, 2011 at 1:52 p.m.;
- h. Email from Kent Hunter, Neegan Burnside to Wayne Jenken dated September 27, 2011 at 10:23 a.m.;
- i. WPLC meeting minutes dated September 15, 2011; and
- j. WPLC meeting minutes dated April 7, 2011.

75. Letter dated May 22, 2012 addressed to Ms. Agatha Garcia Wright, Director, Ministry of the Environment from Mr. Wayne Jenken, Waste Management of Canada Corporation requesting amendment to Condition No. 7.10 (Landfill Gas Management). The letter included the following supporting documentation:

- i. Letter report entitled "Early Vertical Gas Well Collection System" dated May 2012 and addressed to Mr. Reid Cleland, Waste Management of Canada Corporation from Mr. Frank Ford, GENIVAR Inc.;
- ii. Drawings No. 102 and G111 - Landfill Gas Collection System;
- iii. Landfill Gas Headers, Gas Building with Blowers and Landfill Gas Flaring System Design Drawings and Design and Operations Plan for Modifications;
- iv. Description of Phase 1 of the Gas Collection System;
- v. Revised Section 4.7 of the Design and Operations Plan;
- vi. Application to Amend Environmental Compliance Approval No. A032203 and supporting documents;
- vii. Consultation Summary and Records with Stakeholders; and
- viii. Design Drawings for Amended Landfill Gas Management System.

76. Letter dated July 26, 2012 addressed to Mr. Reid Cleland, Waste Management of Canada Corporation from Mr. Dale Gable, Ministry of the Environment requesting additional information on the location of the proposed gas extraction wells.

77. Letter dated August 9, 2012 addressed to Mr. Dale Gable, Ministry of the Environment from Mr. Frank

Ford, GENIVAR Inc. providing details on the location of the gas wells.

78. Letter Report dated May 9, 2012 addressed to Ms. Agatha Garcia Wright, Director, Ministry of the Environment from Mr. Wayne Jenken, Waste Management of Canada requesting Conditions 6.48 to 6.61 be amended. The letter report included the following Sections:
- i. Environmental Compliance Approval application signed by Reid Cleland, WMCC and dated May 9, 2012;
 - ii. Proof of legal name and zoning;
 - iii. Record of consultation with Township of Warwick;
 - iv. Record of consultation with Walpole First Island First Nation; and
 - v. Record of consultation with WPLC.
79. Letter report dated September 26, 2012 addressed to Ms. Agatha Garcia-Wright. Director, Environmental Approvals Branch, Ministry of the Environment from Mr. Philip Janisse and Mr. Brent Langille, RWDI Inc. requesting the time frame for the use of ASR be extended and the sampling frequency for the ASR be reduced.
80. Letter dated October 15, 2012 and supporting drawings addresses to Ms. Agatha Garcia-Wright. Director, Environmental Approvals Branch, Ministry of the Environment from Mr. Wayne Jenken, Waste Management of Canada Corporation detailing the proposed changes to the landscape plan for the Site. The supporting drawings include the following drawing prepared by Schollen and Company Inc (Contract No. 27007) dated June 2012:
- i. Cover page entitled "Twin Creeks Landfill Expansion - Landscape and Details Drawings" dated June 29, 2012
 - ii. Drawing No. L-1 entitled "Landscape Plan - Screening Berm";
 - iii. Drawing L-1A entitled "Landscape Detail at Intersections - Screening Berms";
 - iv. Drawing L-2 entitled "Landscape Plan - Screening Berm";
 - v. Drawing L-3 entitled "Landscape Plan - Screening Berm and Area F";
 - vi. Drawing L-4 entitled "Landscape Plan - Screening Berm";
 - vii. Drawing L-5 entitled "Landscape Plan - Screening Berm and Area G";
 - viii. Drawing L-6 entitled "Landscape Plan - Area G Planting Area";
 - ix. Drawing L-7 entitled "Landscape Plan - Area A and Area B Screen Planting and Creek";
 - x. Drawing L-8 entitled "Landscape Plan - Area C, D and E Screen Planting";
 - xi. Drawing L-9 entitled "Landscape Plan - Area H Restoration Planting";
 - xii. Drawing LD-1 entitled "Landscape Detail Plan";
 - xiii. Drawing LD-2 entitled "Landscape Notes and Master Plant List";
 - xiv. Drawing LD-3 entitled "Signage Details";
 - xv. Drawing LD-4 entitled "Details"; and
 - xvi. Drawing LD-5 entitled "Details".
81. Letter dated November 13, 2013 addressed to Agatha Garcia-Wright, Director, Ministry of the Environment from Wayne Jenken, Waste Management of Canada Corporation requesting amendment to Condition 8.6 (a). The following supporting documentation was attached to the memorandum.

- i. Amended Environmental Compliance Approval Number A032203 issued December 13, 2011
 - ii. Amended Environmental Compliance Approval Number A032203 Notice No. 1 issued February 29, 2012
 - iii. Application to Amend Environmental Compliance Approval No. A032203 with Signature of Reid Cleland in Section 1.4
 - iv. Record of Consultations with Stakeholders
82. Application package dated May 4, 2016 and received on May 16, 2016 including all subsequently submitted supporting documentation and drawings, including the amendment to the D&O plan and associated drawings.
83. Report titled "Twin Creeks Landfill Site: Best Management Practices Plan (Dust) - Version 7" prepared by RWDI Air Inc., dated May 19, 2017.
84. Report titled "Twin Creeks Landfill Site: Best Management Practices Plan (Odour) - Version 8" prepared by RWDI Air Inc., dated May 19, 2017.
85. Report titled "Twin Creeks Landfill Site: Ambient Air Quality Monitoring Plan (Revision #3)" prepared by RWDI Air Inc., dated May 18, 2017.
86. "WM Twin Creeks Landfill Site, Leachate Management Framework" prepared by HDR, dated November 29, 2017.
87. Application for a an amendment to ECA No. A032203 to provide detailed design for the construction of Cell 4 in response to Condition 4.8. Signed by Reid Cleland and dated October 16, 2018. The supporting documentation for the application included the drawing set titled "Waste Management of Canada Corporation, Twin Creeks Landfill Expansion, Warwick Township, Landfill Base Preparation Cell 4." Prepared by WSP Group, October, 2018. The drawing set consists of the following:
- i. Drawing No. 106716P-400 - "Title Sheet";
 - ii. Drawing No. 106716P-401 - "March 2018 Existing Conditions Plan;
 - iii. Drawing No. 106716P-402 - "Cell 4 - Bottom of Excavation - West";
 - iv. Drawing No. 106716P-403 - "Cell 4 - Bottom of Excavation - East";
 - v. Drawing No. 106716P-404 - "Cell 4 - Top of Primary Clay Liner - West";
 - vi. Drawing No. 106716P-405 - "Cell 4 - Top of Primary Clay Liner - East";
 - vii. Drawing No. 106716P-406 - "Cell 4 - Temporary Clay Seal - West";
 - vii. Drawing No. 106716P-407 - "Cell 4 - Temporary Clay Seal - East";
 - viii. Drawing No. 106716P-408 - "Cell 4 - Section and Details";
 - ix. Drawing No. 106716P-409 - "Cell 4 - Section and Details";
 - x. Drawing No. 106716P-410 - "Cell 4 - Section and Details";
 - xi. Drawing No. 106716P-411 - "Cell 4 - Pumping Station PS5/PS6 Plans and Sections";
 - xii. Drawing No. 106716P-412 - "Cell 4 - Pumping Station PS5/PS6 Plans and Sections";
 - xiii. Drawing No. 106716P-413 - "Cell 4 - Sections and Details"; and

88. Environmental Compliance Approval Application signed by Wayne Jenken dated April 28, 2023, for establishment of a Renewable Natural Gas Facility at the Site.
89. Report entitled "Twin Creeks Environmental Centre Renewable Natural Gas Facility Design and Operations Report" dated April 28, 2023 prepared by WSP.
90. Report entitled "Twin Creeks Landfill: Best Management Practices Plan (Odour) - Version 9" dated November 17, 2023 prepared by RWDI.
91. Letter dated February 27, 2014 from Mike Moroney, District Manager of MECP to Angela McLachlan, Environmental Compliance Manager, Twin Creeks Landfill, WMCC.

The reasons for the imposition of these terms and conditions are as follows:

Conditions 1.1, 1.2, 1.3, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.14, 1.15, 1.23, and 1.24 are to clarify the legal rights and responsibilities of the Owner and Operator under this Approval.

Conditions 1.4 and 1.5 are to ensure that the Site is designed, operated, monitored and maintained in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.

Condition 1.12 is to ensure that the Site is operated under the corporate name which appears on the application form submitted for this approval and to ensure that the Director is informed of any changes.

Condition 1.14 is to restrict potential transfer or encumbrance of the Site without the approval of the Director and to ensure that any transfer of encumbrance can be made only on the basis that it will not endanger compliance with this Approval.

Conditions 1.15 and 1.16 are to ensure that the successor is aware of its legal responsibilities.

Conditions 1.17, 1.18, 1.19, and 1.20 clarify that the Part II.1 Director is an individual with authority pursuant to Section 197 of the Environmental Protection Act to require registration on title and provide any person with an interest in property before dealing with the property in any way to give a copy of the Approval to any person who will acquire an interest in the property as a result of the dealing.

Condition 1.21 is to ensure that appropriate Ministry staff has ready access to the Site for inspection of facilities, equipment, practices and operations required by the conditions in this Approval. This Condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the Act, the OWRA, the PA, the NMA and the SDWA.

Condition 1.25 clarifies what information may be subject to the Freedom of Information Act.

Condition 2.1 is to require Financial Assurance for this company to ensure that sufficient funds are available to the Ministry to clean up the Site in the event that the Owner is unable or unwilling to do so.

Conditions 3.1 to 3.15 inclusive are necessary in order to establish a forum for the exchange of information and public dialogue on activities to be carried out at the landfill site. Open communication with the public and local authorities is important in helping to maintain high standards for site operation and environmental protection.

Condition 3.16 has been included in order to ensure that consultation with First Nations is undertaken during the submission of any application to amend any approval required by the Ministry.

Conditions 4.1 to 4.6 inclusive, 4.8, and 4.9 is to ensure that the Site is designed, constructed and operated in an environmentally acceptable manner, based on the conceptual design and operations for the Site.

Condition 4.7 is to ensure the availability of as-built drawings for inspection and information purposes.

Condition 4.10 has been specifically included to allow for optimization of design for subsequent stages based on operating experience and monitoring results and to ensure that any necessary remedial action is undertaken before landfilling may proceed in the next stage.

Condition 4.11 has been included to ensure that the site has been constructed in accordance with the approved design plans, specifications and QA/QC procedures and to ensure that there is not an adverse impact on the environment.

Condition 4.12 is to ensure that there is a person, reporting directly to the Ministry, with associated costs reimbursed by the Owner, who is responsible for inspecting the Site, based on the requirements in this ECA of Approval to ensure that the Site is operated in an environmentally acceptable manner.

Conditions 4.13, 4.14, 15.1, 15.2 and 15.3 is to specify the amount of days the environmental inspector is required to be on site based on the conditions in this approval and in accordance with the previously approved EA for the site.

Condition 5.1 is to ensure safe side slopes of the berm.

The reason for Condition 5.2 is to approve the diversion area based on the information submitted. This is ensure the protection of the environment and the public.

Condition 5.3 is to approve the use of Cell 12 for contaminated soil.

Condition 5.4 is to ensure the Owner carries out the landscape plan based on the submitted information.

Conditions 6.1 and 6.18 are included in order to ensure that waste disposal at the site is undertaken in accordance with applicable Ministry of the Environment regulations and guidelines. Compliance with these regulations and guidelines will ensure that the site does not cause and adverse effect on the environment.

Conditions 6.4 and 6.7 is to specify the approved areas from which waste may be accepted at the Site and the

types and amounts of waste that may be accepted for disposal at the Site, based on the Owner's application and supporting documentation.

Condition 6.5 is to specify restrictions on the extent of landfilling at this Site based on the Owner's application and supporting documentation. These limits define the approved volumetric capacity of the site. Approval to landfill beyond these limits would require an application with supporting documentation submitted to the Director.

Condition 6.6 specifies the maximum amount of waste that may be received at the site based on the previously approved Environmental Assessment for the site.

Condition 6.8 has been inserted to minimize the potential for clogging of the drainage layer and to minimize temperature effects on the leachate collection system. Failure to maintain the specified minimum thickness of waste and cover material may result in a decrease in the service life of the drainage layer.

Conditions 6.9 to 6.14 inclusive have been included in order to ensure asbestos waste is handled and disposed of in accordance with O. Reg. 347 as amended from time to time. Proper handling and disposal of asbestos waste ensures that the asbestos waste does not cause an adverse impact on the environment and also does not affect human health.

Condition 6.16 is needed to make certain that uses at the site are for waste disposal purposes only and not any other uses which may cause an adverse impact on the environment and human health.

Condition 6.17 is necessary in order to ensure that all waste loads are inspected and waste that is disposed of at the site is in accordance with the terms and conditions in this ECA of Approval.

Condition 6.19 is to ensure that open burning of municipal waste is not permitted because of concerns with air emissions, smoke and other nuisance affects, and the potential fire hazard.

Conditions 6.20 through 6.22 inclusive are to ensure that users of the Site are fully aware of important information and restrictions related to Site operations under this ECA of Approval.

Conditions 6.23 to 6.27 inclusive are to specify the normal hours of operation for the landfill Site and a mechanism for amendment of the hours of operation.

Conditions 6.28 to 6.30 inclusive are to specify site access to/from the Site and to ensure the controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no site attendant is on duty.

Condition 6.31 is needed in order to make certain that the waste received at the site is in accordance with the ECA and O. Reg. 347.

Condition 6.32 has been included is to ensure that access roads are clear and do not pose a safety hazard to the general public.

Condition 6.33 is for the protection of public health and safety and minimization of the potential for damage to environmental control, monitoring and other works at the landfill Site. Scavenging is the uncontrolled removal of material from waste at a landfill site.

Conditions 6.34 to 6.40 inclusive are to ensure that the Site is operated, inspected and maintained in an environmentally acceptable manner and does not result in a hazard or nuisance to the natural environment or any person.

Condition 6.41 is to ensure that noise from or related to the operation of the landfill is kept to within Ministry limits and does not result in a hazard or nuisance to any person.

Condition 6.42 is included to ensure that noise monitoring is undertaken in accordance with the noise monitoring program prepared and to ensure that an independent acoustic audit is completed in accordance with the Ministry's requirements.

Condition 6.43 is to clarify when the Best Management Plans can be amended and the mechanism for amending the Best Management Plans.

Condition 6.44 is to ensure that appropriate measures are taken in order to prevent surface water from contacting waste so as not to cause an adverse effect on the environment.

Conditions 6.45 and 7.18 is to specify other approvals required for works and activities related to the operation of this Site as a landfill.

Condition 6.46 has been included is in order to prevent ponding in on site ditches and any adverse impact on the environment and human health.

Condition 6.47 is to ensure that landfilling operations are conducted in an environmentally acceptable manner. Daily and intermediate cover is used to control potential nuisance effects, to facilitate vehicle access on the site, and to ensure an acceptable site appearance is maintained. The proper closure of a landfill site requires the application of a final cover which is aesthetically pleasing, controls infiltration, and is suitable for the end use planned for the site.

Condition 6.48 to 6.61 inclusive is to specify the approval requirements for use of alternative cover material at the Site.

Condition 7.1 is necessary so that runoff from contaminated soils does not create and adverse impact on the environment.

Conditions 7.2 and 7.3 are included in order to ensure that the composting and processing operations at the site are conducted in a fashion in accordance with Ministry's regulations, guidelines and so as not to pose a threat to human health or the environment.

Conditions 7.4, 9.3, 9.4, 9.5, 9.6 and 9.7 are to provide for the proper assessment of effectiveness and efficiency of site design and operation, their effect or relationship to any nuisance or environmental impacts, and the

occurrence of any public complaints or concerns. Record keeping is necessary to determine compliance with this ECA of Approval, the EPA and its regulations.

Conditions 7.5 and 7.6 inclusive have been included are to ensure tire shred storage in accordance with the Fire Protection and Prevention Act and to protect the natural environment.

Condition 7.7 is to ensure that backup power is available so that all facilities remain operational during a power disruption thus preventing any adverse impacts on the environment.

Condition 7.8 has been inserted in order to ensure that concentrations of landfill gas do not pose a hazard to human health or the environment.

Condition 7.9 is to ensure that landfill gas is built and managed in accordance with the Ministry's requirement and regulation.

Condition 7.10 is needed in order to ensure that an adequate landfill gas management system is installed at the site in order to protect human health and the environment.

Conditions 7.11 and 7.12 are to minimize the potential for clogging of leachate collection pipes and to ensure effective operation of the leachate collection system components for as long as they are required. Failure to clean out these components on a regular basis may result in a decrease in their service lives. Regular cleaning of the leachate collection pipes is especially important during stages of landfilling when the level of both organic and inorganic constituents in the leachate is high and, consequently, the potential for clogging due to encrustation is greatest. As the landfill reaches the more stable methane producing stage, pipe cleaning may be required less frequently.

Condition 7.13 has been added to ensure adequate flow of leachate in the leachate collection pipes.

Conditions 7.14 to 7.17 are to ensure that the leachate collection system is designed and built in accordance with Regulations and the ministry's requirements.

Condition 7.18 is included is in order to prevent off site migration of leachate which may cause an adverse effect on the environment.

Condition 7.19 is to approve the proposed Renewable Natural Gas facility for processing of the landfill gas and converting into quality natural gas.

Conditions 7.20 and 21 are to ensure the RNG facility has adequate capacity and the operation of the landfill gas collection system is not impacted.

Condition 7.22 is to ensure the RNG facility is properly operated and does not result in any unacceptable impacts to the environment.

Condition 7.23 is to ensure operational record of the RNG facility is maintained for evaluation of the system performance and identification of improvement measures.

Conditions 8.1 to 8.4 inclusive are needed to ensure leachate recirculation is undertaken in accordance with the ministry's requirements and leachate recirculation does not pose an adverse impact on the environment.

Condition 8.5 is in accordance with EA condition 22 and protects the natural environment from any impacts due to discharge of raw or treated leachate to adjacent creeks.

Condition 8.6 is to ensure that a fully functional leachate treatment system is in place on site prior to waste placement.

Condition 8.7 clarifies the responsibilities of the owner, the requirements of the ministry, the authority of the Ministry and protects the natural environment and human health.

Conditions 9.1 and 9.2 are needed to ensure regular inspections of the site are conducted in order to protect the natural environment.

Conditions 9.8 to 9.12 inclusive is to ensure that accurate waste records are maintained to ensure compliance with the conditions in this ECA of Approval (such as fill rate, site capacity, record keeping, annual reporting, and financial assurance requirements), the EPA and its regulations.

Conditions 9.13, 15.4, 15.5 and 15.6 are to ensure that regular review of site development, operations and monitoring data is documented and any possible improvements to site design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.

Condition 10.1 is to ensure that the Site is supervised and operated by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person.

Conditions 11.1, 11.2, 11.3 and 11.4 is to establish a forum for the exchange of information and public dialogue on activities carried out at the landfill Site. Open communication with the public and local authorities is important in helping to maintain high standards for site operation and environmental protection.

Conditions 12.1 and 12.2 are to ensure that the Ministry is informed of any spills or fires at the Site and to provide public health and safety and environmental protection.

Condition 12.3 is contained in the ECA to guarantee that appropriate measures are taken by the County to prevent future occurrences of spills or fires at the site and to protect public health and safety and the environment.

Conditions 13.1 to 13.5 inclusive are to ensure protection of the natural environment and the integrity of the groundwater monitoring network.

Conditions 13.6 through 13.11 inclusive are to demonstrate that the landfill site is performing as designed and the impacts on the natural environment are acceptable. Regular monitoring allows for the analysis of trends over time and ensures that there is an early warning of potential problems so that any necessary remedial/contingency

action can be taken.

Conditions 14.1 through 14.10 inclusive are to ensure that the Owner follows a plan with an organized set of procedures for identifying and responding to unexpected but possible problems at the Site. A remedial action / contingency plan is necessary to ensure protection of the natural environment. A leachate contingency plan is a specific requirement of Reg. 232.

Conditions 16.1 and 16.2 are to ensure that final closure of the Site is completed in an aesthetically pleasing manner and to ensure the long-term protection of the natural environment.

Condition 16.3 ensures proper public consultation about the end use of the Site is undertaken and that the end use activities are consistent with those identified during the EA process.

Conditions 16.4 to 16.6 ensure that certain activities are undertaken upon closure of the site in order to ensure that the closed site does not affect the natural environment.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A032203 issued on February 4, 2023

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the *Environmental Bill of Rights*, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar*

The Minister of the Environment,

The Director appointed for the purposes of
Part II.1 of the *Environmental Protection Act*

Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

and

Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca**

This instrument is subject to Section 38 of the *Environmental Bill of Rights*, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <https://ero.ontario.ca/>, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.

DATED AT TORONTO this 16th day of December, 2023



Mohsen Keyvani, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

RL/

c: District Manager, MECP Sarnia
Cristina Olarte, WSP

The background of the page features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'APPENDIX A2' is centered within the gray area.

APPENDIX A2

WASTE MANAGEMENT OF CANADA CORPORATION

WATFORD, ONTARIO

TWIN CREEKS LANDFILL SITE: AMBIENT AIR QUALITY MONITORING PLAN [REVISION #3]

RWDI #1600984

May 18, 2017

SUBMITTED TO

Wayne Jenken
Area Landfill Engineer
wjenken@wm.com

**Waste Management of Canada
Corporation | Twin Creeks Landfill**
8039 Zion Line
Watford, Ontario N0M 2S0

T: 519.849.5810
C: 519.381.3017
F: 519.849.6816

SUBMITTED BY

Brad Bergeron, A.Sc.T., d.E.T.
Senior Project Manager | Principal
Brad.Bergeron@rwdi.com

**RWDI AIR Inc.
Consulting Engineers & Scientists**
600 Southgate Drive
Guelph, Ontario N1G 4P6

T: 519.823.1311, ext. 2428
F: 519.823.1316



TABLE OF CONTENTS

1 **TOTAL HYDROCARBON “WALKABOUT” SURVEY.....1**

2 **DUST MONITORING3**

2.1 Additional Dust Monitoring Provisions..... 5

3 **VOC MONITORING.....5**

4 **COMPLAINT RECORDING PROCESS.....7**

5 **REFERENCES.....8**

LIST OF TABLES

Table 1: List of Monitored VOCs.....5

LIST OF FIGURES

Figure 1: Walkabout Pattern.....2

Figure 2: Dust Monitor Locations.....4



1 TOTAL HYDROCARBON “WALKABOUT” SURVEY

The “Walkabout” survey will consist of a grid survey of the entire landfill mound using a handheld THC analyzer (FID). A portable FID will be used throughout the surveys. The FID will be calibrated using a methane gas standard and zeroed using ultra zero pure air. The instrument used will have the following characteristics:

- a response time of no greater than 15 seconds
- an accuracy of 3 percent or better
- a minimum detectable limit of 5 ppmv (or lower)
- a flame-out indicator, audible and visual

The “Walkabout” survey will be completed in a grid like formation gathering data at 7.6 cm or lower (3 inches or lower) above the ground. “Hotspots” of “breakout points” consisting of cracks, fissures, areas of bubbling surface water, or patches of dead (brunt) vegetation on the mound will be visually observed and notes for THC concentrations exceeding 500 ppm (methane). The “walkabout” surveys should be completed at winds less than 8 kilometers per hour (5 miles per hour) and during dry conditions (no measurable precipitation for the proceeding 72 hours prior to sampling). In addition, for the instantaneous readings, the surveys should be completed when the ambient temperatures are within 0 to 50 degrees Celsius.

THC concentrations 500 ppm or greater should be considered of concern during the instantaneous measurements. Therefore, THC concentrations less than 500 ppm will not be noted during the survey. Locations where the THC concentrations are 500 ppm or greater should assist WMI in determining all potential and existing landfill gas release points that require remedial action.

All THC concentrations measured will be expressed as methane on the calibration standard used. After the ‘hotspot’ or “breakout points” are fixed, documentation of the corrective actions taken as well as confirmation of adequate actions taken (THC concentrations less than 500 ppm) will be presented to the MOECC. The “walkabout” survey will include the following:

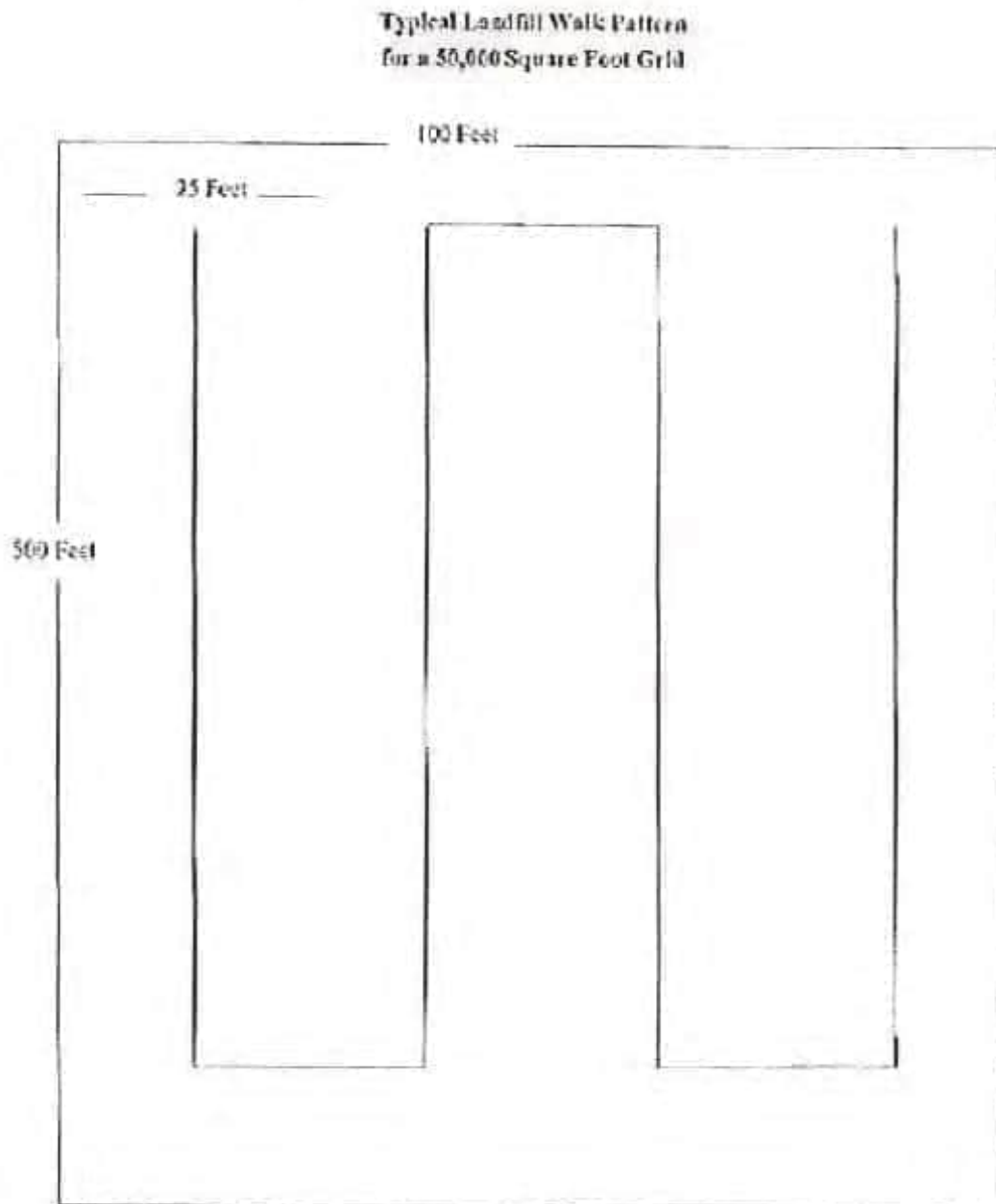
- precise locations of all sampling sites on the site map
- identification of all data obtained in the field measurements
- documentation of all remedial action

The “walkabout” survey should be done in the spring and the early fall. The measured areas should include areas where landfill cover is complete. Problem areas identified should be repaired within two (2) months of identification. Once repairs are completed, a follow-up survey on the specific locations will be completed to validate success of the remediation action(s). The process is important in minimizing odour and VOC emissions.

The “Walkabout” surveys will be performed twice per year or in response to otherwise unexplained odour events. As outlined in the Odour Best Management Practices Plan, routine visual inspections of the landfill cap integrity will also occur on a monthly basis to identify possible problem areas.

Figure 1 includes the walkabout pattern.

Figure 1: Walkabout Pattern





2 DUST MONITORING

The monitoring for Total Suspended Particulate (TSP) will be completed on an on-going basis at three locations around the landfill footprint. The TSP monitor locations are shown in **Figure 2**.

Total Suspended Particulate samples will be taken on a six-day interval during the months of October through May and samples will be taken on a three-day interval during the months of June through September. The sampling will be in concurrence with the U.S EPA National Air Pollutant Surveillance (NAPS) monitoring schedule. The sampling will include the entire year (sampling during 12 months per year). In addition, the analysis for airborne metals will be completed for 11 of the collected TSP samples per station (total of 33 metal samples per year). For each of the 11 sets of samples collected, the particulate analysis will be completed prior to the metal analysis and the highest particulate loaded filters from each station will undergo the analysis for airborne metals.

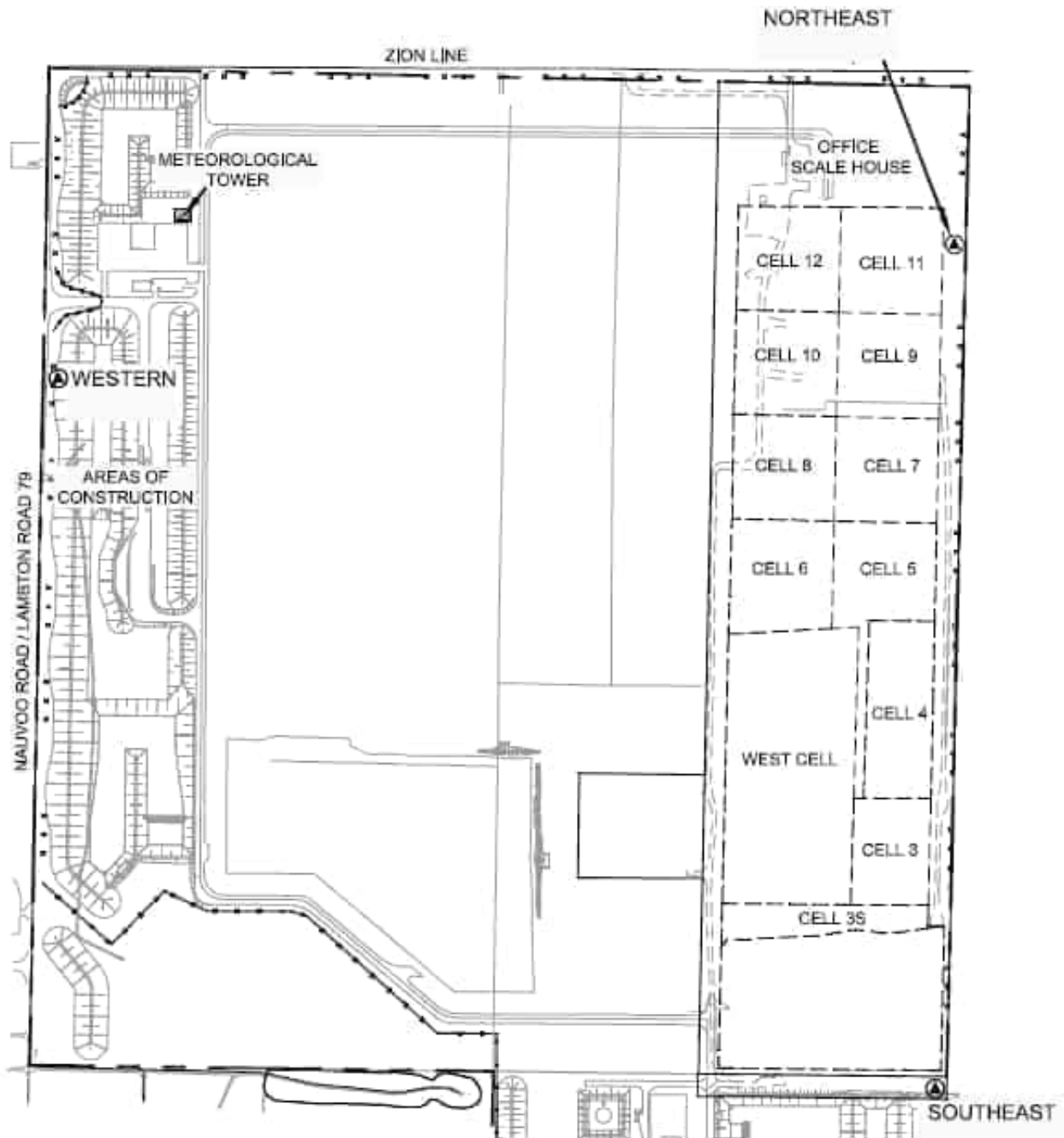
The monitoring method will comply with the metals specified by U.S. EPA Method 10-2. The 24-hour samples would be collected on standard hi-volume air samplers. The station siting requirements and sampling procedures will follow the most recent version of the U.S. EPA methods as well as the Ministry of the Environment's Operations Manual for Point Source Air Quality Monitoring as approved by the MOECC at the onset on the monitoring. The U.S. EPA methods are referenced in the MOECC document as appropriate reference methods to follow for air quality monitoring programs.

The results will be presented in quarterly summary letters and an annual report. The report will include the data in tabular format with a description of the program, quality assurance documentation, details regarding data recovery, abnormal site conditions, etc. As well, any days when the ambient air quality criterion for TSP was exceeded would be reported to the District MOECC office within two (2) weeks of receiving results. In order to enhance the notification of elevated TSP Levels, WM will copy the Township of Warwick on any future elevated TSP level reporting provided to the MOECC.

As part of the dust control strategy, the shift supervisor will be responsible to see that a record of roadway sweeping and watering is maintained. The control measure will be initiated whenever a visible plume behind vehicles is longer than $\frac{1}{4}$ the length of the vehicle. These logs will be kept on-site for a period of not less than two (2) years and will be made available for inspection should the MOECC wish to see them.

When the facility receives a complaint, the shift supervisor will see that the relevant information is recorded, including any remedial action taken as a result of the complaint. A sample complaint log sheet is included in the Best Management Practices Plan (Dust).

Figure 2: Dust Monitor Locations





2.1 Additional Dust Monitoring Provisions

As discussed with stakeholders during the consultation for the annual fill rate increase for the site, the following provisions were made for additional monitoring to be completed under specific conditions. The following notes the agreed to provisions for the additional monitoring. This provision will also be included in the Dust Best Management Practices Plan (BMPP). In the event that the provisions are triggered, WM will prepare an updated Air Quality Monitoring Plan to layout the specific agreed to monitoring at the time the additional monitoring provision is required.

As agreed to with stakeholders, in the event that 2 measured exceedances (trigger), that can be attributed to WM operations, in any quarter (excluding periods when on-site cell construction is occurring) occurs, WM is committing to reviewing the data with the Township of Warwick. Upon confirmation that the exceedances can be attributed to WM operations, and are not related to cell construction, WM will complete the installation of continuous dust monitors.

If continuous dust monitors are to be installed, WM will work with the Township of Warwick to update the following documents:

- Air Quality Monitoring Plan – updated for equipment change as well as trigger for shorter duration alerts to be issued to WM as warnings for higher dust levels; and
- Best Management Practices Plan (Dust) – to be updated to link dust alerts to dust control initiatives.

3 VOC MONITORING

It is proposed that monitoring for VOC's be conducted through the summer months, with samples to be taken in upwind and downwind pairs, during normal operating hours of the landfill. There would be a total of 5 sample pairs taken between June and September. No more than two (2) samples will be collected in any calendar month. The samples will be 24-hours in duration and compared to their respective Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List.

The samples will be collected and analyzed using methods defined in U.S. EPA Method TO-14/15. Vinyl chloride is of particular concern with these types of samples and vinyl chloride will be analyzed in selective ion mode (SIM). Sampling for VOC samples will be collected during periods of light wind conditions (less than 15 kilometers per hour) and during dry conditions (no measureable precipitation for the proceeding 48 hours prior to sampling). The list of VOC's monitored is presented in Table 1.



Table 1: List of Monitored VOCs

| CAS No. | Compound | CAS No. | Compound |
|------------|---------------------------------------|-------------------|------------------------|
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 620-14-4/622-96-8 | m/p-Ethyl Toluene |
| 526-73-8 | 1,2,3-Trimethyl Benzene | 108-38-3/106-42-3 | m/p-Xylene |
| 95-63-6 | 1,2,4 -Trimethyl Benzene | 535-77-3 | m-Cymene |
| 108-67-8 | 1,3,5 -Trimethyl Benzene | 78-93-3 | MEK |
| 591-76-4 | 2-Methyl Hexane | 108-87-2 | Methyl Cyclohexane |
| 107-83-5 | 2-Methyl Pentane | 108-10-1 | MIBK |
| 78-78-4 | 2-Methyl Butane | 75-45-6 | Chlorodifluoromethane |
| 96-14-0 | 3-Methyl Pentane | 123-72-8 | n-Butanol |
| 589-34-4 | 3-Methyl Hexane | 91-20-3 | Naphthalene |
| 67-64-1 | Acetone | 111-84-2 | Nonane |
| 71-43-2 | Benzene | 611-14-3 | o-Ethyl Toluene |
| 123-86-4 | Butyl Acetate | 95-47-6 | o-Xylene |
| 124-18-5 | Decane | 109-66-0 | Pentane |
| 25915-78-0 | Dichlorodifluoromethane | 64-17-5 | Ethanol |
| 75-09-2 | Dichloromethane | 103-65-1 | Propyl Benzene |
| 100-41-4 | Ethyl Benzene | 100-42-5 | Styrene |
| 142-82-5 | Heptane | 127-18-4 | Tetrachloroethylene |
| 110-54-3 | Hexane | 108-88-3 | Toluene |
| 67-63-0 | Isopropyl Alcohol | 75-69-4 | Trichlorofluoromethane |
| 138-86-3 | Limonene | 79-01-6 | Trichloroethylene |
| 75-01-4 | Vinyl Chloride | 141-78-6 | Ethyl Acetate |
| 56-23-5 | Carbon Tetrachloride | 71-55-6 | 1,1,1-Trichloroethane |
| 67-66-3 | Chloroform | 75-35-4 | Vinylidene Chloride |
| 106-93-4 | Ethylene Dibromide | 540-59-0 | 1,2-Dichloroethene |
| 107-6-2 | Ethylene Dichloride | Na | Total VOCs |

As the MOECC updates Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List in the Province of Ontario, the measured values will be compared to the most stringent limits available at the time of testing. For compounds that do not have Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List, the measured values will be compared to the predicated concentrations provided and approved by the MOECC for the Section 9 EPA approval supporting documentation to demonstrate compliance. As all compounds identified without Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List are subject to review by the MOECC's Standard Development Branch, these levels should be considered acceptable.



4 COMPLAINT RECORDING PROCESS

Waste Management of Canada has outlined Best Practices Plans of Odour, Litter and Dust. Within each plan the procedures for outlining the responsibilities and recordkeeping. For further details, please refer to the most recent versions of the Best Management Practices Plan. [1,2,3]. Please note that like this air quality monitoring plan, the Best Management Plans are intended to be updates to endure continuous improvements are being documented at the site.



5 REFERENCES

1. RWDI AIR Inc. Best Management Practices Plan (Odour), Twin Creeks Landfill Site, Watford, ON – Revision 7, dated May 18, 2017.
2. RWDI AIR Inc. Best Management Practices Plan (Dust), Twin Creeks Landfill Site, Watford, ON – Revision 5, dated May 18, 2017.
3. RWDI AIR Inc. Best Management Practices Plan (Litter), Twin Creeks Landfill Site, Watford, ON – Revision 4, dated December 11, 2007.



RWDI aims to accommodate. If you require this document in a different format in order to aid accessibility, please contact the sender of this document, email solutions@rwdi.com or call +1.519.823.1311

The graphic for Appendix A3 features a large, light gray circular shape on the right side of the page. To its left, a blue curved shape follows the arc of the gray circle, creating a layered effect. The text 'APPENDIX A3' is centered within the gray area.

APPENDIX A3

Ministry of the Environment
Sarnia District Office
1094 London Road
Sarnia, ON N7S 1P1
Tel: 519 336-4030
Fax: 519-336-4280

Ministère de l'Environnement
Sarnia District Office
1094, chemin London
Sarnia, ON N7S 1P1
Tel: 519 336-4030
Fax: 519 336-4280



October 26, 2011

To:

Michael Hirlehey, C.E.T.
District Manager, SW Ontario Landfills
Waste Management
5768 Nauvoo Rd., Watford, Ontario N0M 2S0

Dear Mr. Hirlehey

RE: Request to revise Air Quality Monitoring Plan – Twin Creeks Landfill

The Ministry of the Environment has reviewed the request, dated September 26, 2011, submitted by Wayne Jenken, Area Landfill Engineer on behalf of Waste Management of Canada Corporation for an amendment to the Ambient Air Quality Monitoring Plan, dated November 29, 2007, for monitoring of total suspended particulate matter (TSP) and metals during construction and operation of the Twin Creeks Landfill. This request was submitted in accordance with Condition 186 of Amended Provisional Certificate of Approval A032203, dated February 13, 2008. The proposed changes to Schedule A, Item 27 "Air Quality Monitoring Plan and Letter" are as follows:

It is proposed that monitoring for Total Suspended Particulate (TSP) be done on an on-going basis at three locations around the landfill footprint. It is proposed that samples be taken on a twelve day interval during the months of October through May and that samples be taken on a six day interval during the months of June through September. No other changes are proposed to the AAQMP.

The proposed changes as outlined above have been determined to be acceptable, Waste Management of Canada Corporation is hereby approved to revise Schedule A, Item 27, to the document entitled "Ambient Air Quality Monitoring Plan Revision #1".

Should you have any questions, or concerns, please do not hesitate to contact Environmental Officer, Mike Close at (519) 383-3771 or via e-mail at Mike.Close@ontario.ca.

Yours truly,

Mark Dunn
District Manager
Sarnia/Windsor District Office

The graphic for Appendix A4 features a large, light gray circle on the right side of the page. A blue curved shape, resembling a quarter-circle, is positioned on the left, partially overlapping the gray circle. The text 'APPENDIX A4' is centered within the gray area.

APPENDIX A4

WASTE MANAGEMENT OF CANADA CORPORATION

WATFORD, ONTARIO

TWIN CREEKS LANDFILL SITE: AMBIENT AIR QUALITY MONITORING PLAN [REVISION #3]

RWDI #1600984

May 18, 2017

SUBMITTED TO

Wayne Jenken
Area Landfill Engineer
wjenken@wm.com

**Waste Management of Canada
Corporation | Twin Creeks Landfill**
8039 Zion Line
Watford, Ontario N0M 2S0

T: 519.849.5810
C: 519.381.3017
F: 519.849.6816

SUBMITTED BY

Brad Bergeron, A.Sc.T., d.E.T.
Senior Project Manager | Principal
Brad.Bergeron@rwdi.com

**RWDI AIR Inc.
Consulting Engineers & Scientists**
600 Southgate Drive
Guelph, Ontario N1G 4P6

T: 519.823.1311, ext. 2428
F: 519.823.1316



TABLE OF CONTENTS

1 **TOTAL HYDROCARBON “WALKABOUT” SURVEY.....1**

2 **DUST MONITORING3**

2.1 Additional Dust Monitoring Provisions..... 5

3 **VOC MONITORING.....5**

4 **COMPLAINT RECORDING PROCESS.....7**

5 **REFERENCES.....8**

LIST OF TABLES

Table 1: List of Monitored VOCs.....5

LIST OF FIGURES

Figure 1: Walkabout Pattern.....2

Figure 2: Dust Monitor Locations.....4



1 TOTAL HYDROCARBON “WALKABOUT” SURVEY

The “Walkabout” survey will consist of a grid survey of the entire landfill mound using a handheld THC analyzer (FID). A portable FID will be used throughout the surveys. The FID will be calibrated using a methane gas standard and zeroed using ultra zero pure air. The instrument used will have the following characteristics:

- a response time of no greater than 15 seconds
- an accuracy of 3 percent or better
- a minimum detectable limit of 5 ppmv (or lower)
- a flame-out indicator, audible and visual

The “Walkabout” survey will be completed in a grid like formation gathering data at 7.6 cm or lower (3 inches or lower) above the ground. “Hotspots” of “breakout points” consisting of cracks, fissures, areas of bubbling surface water, or patches of dead (brunt) vegetation on the mound will be visually observed and notes for THC concentrations exceeding 500 ppm (methane). The “walkabout” surveys should be completed at winds less than 8 kilometers per hour (5 miles per hour) and during dry conditions (no measurable precipitation for the proceeding 72 hours prior to sampling). In addition, for the instantaneous readings, the surveys should be completed when the ambient temperatures are within 0 to 50 degrees Celsius.

THC concentrations 500 ppm or greater should be considered of concern during the instantaneous measurements. Therefore, THC concentrations less than 500 ppm will not be noted during the survey. Locations where the THC concentrations are 500 ppm or greater should assist WMI in determining all potential and existing landfill gas release points that require remedial action.

All THC concentrations measured will be expressed as methane on the calibration standard used. After the ‘hotspot’ or “breakout points” are fixed, documentation of the corrective actions taken as well as confirmation of adequate actions taken (THC concentrations less than 500 ppm) will be presented to the MOECC. The “walkabout” survey will include the following:

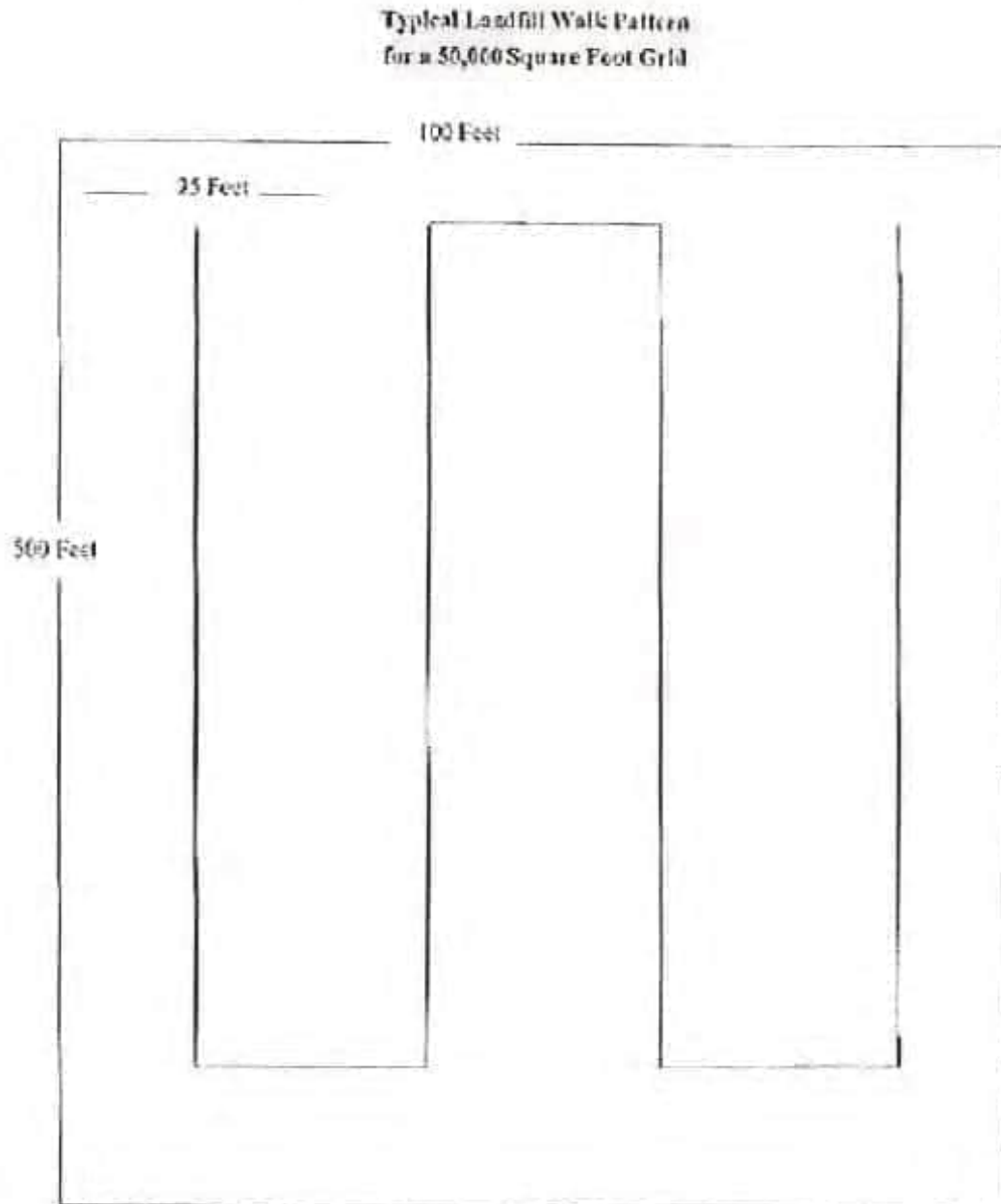
- precise locations of all sampling sites on the site map
- identification of all data obtained in the field measurements
- documentation of all remedial action

The “walkabout” survey should be done in the spring and the early fall. The measured areas should include areas where landfill cover is complete. Problem areas identified should be repaired within two (2) months of identification. Once repairs are completed, a follow-up survey on the specific locations will be completed to validate success of the remediation action(s). The process is important in minimizing odour and VOC emissions.

The “Walkabout” surveys will be performed twice per year or in response to otherwise unexplained odour events. As outlined in the Odour Best Management Practices Plan, routine visual inspections of the landfill cap integrity will also occur on a monthly basis to identify possible problem areas.

Figure 1 includes the walkabout pattern.

Figure 1: Walkabout Pattern





2 DUST MONITORING

The monitoring for Total Suspended Particulate (TSP) will be completed on an on-going basis at three locations around the landfill footprint. The TSP monitor locations are shown in **Figure 2**.

Total Suspended Particulate samples will be taken on a six-day interval during the months of October through May and samples will be taken on a three-day interval during the months of June through September. The sampling will be in concurrence with the U.S EPA National Air Pollutant Surveillance (NAPS) monitoring schedule. The sampling will include the entire year (sampling during 12 months per year). In addition, the analysis for airborne metals will be completed for 11 of the collected TSP samples per station (total of 33 metal samples per year). For each of the 11 sets of samples collected, the particulate analysis will be completed prior to the metal analysis and the highest particulate loaded filters from each station will undergo the analysis for airborne metals.

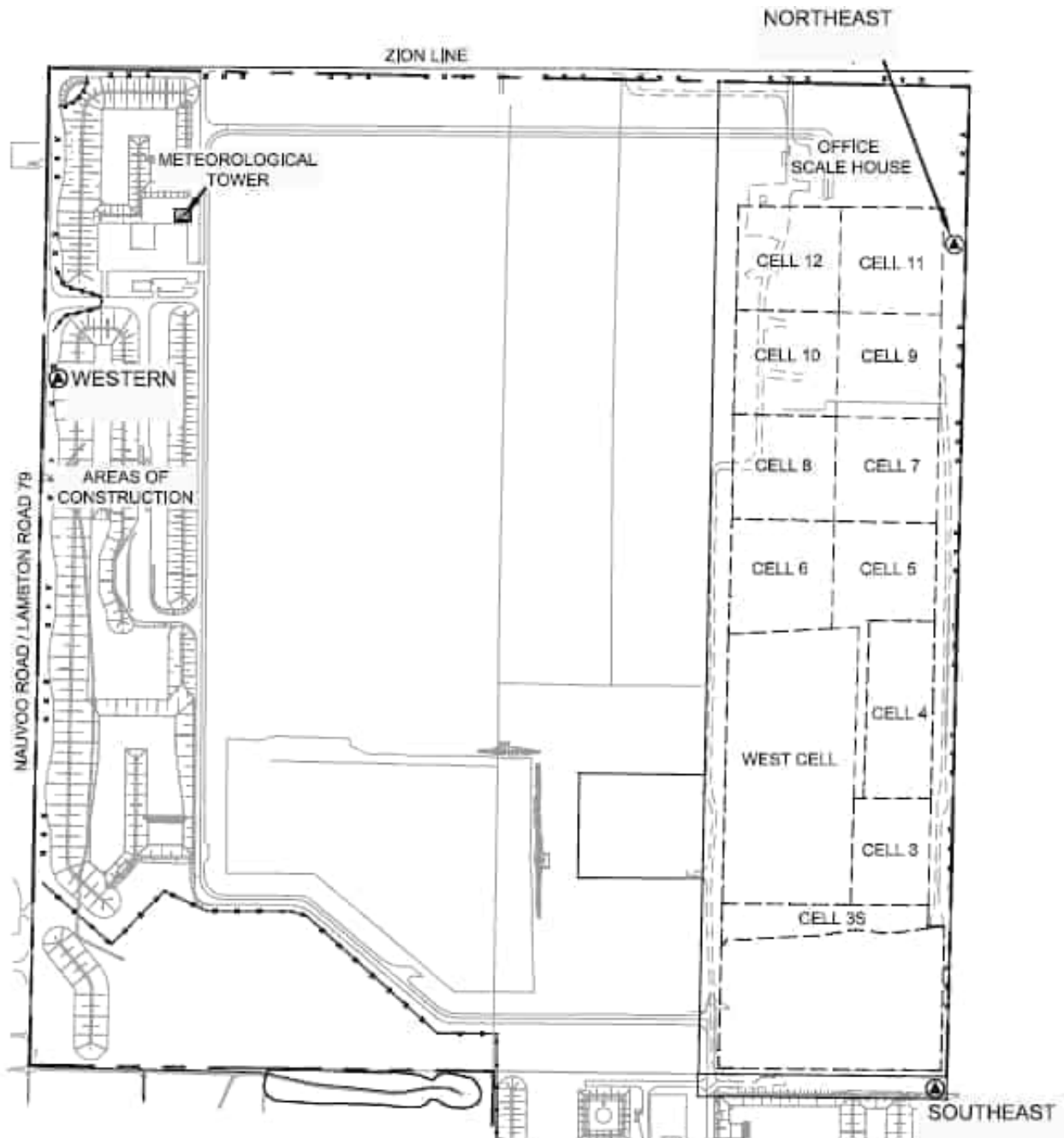
The monitoring method will comply with the metals specified by U.S. EPA Method 10-2. The 24-hour samples would be collected on standard hi-volume air samplers. The station siting requirements and sampling procedures will follow the most recent version of the U.S. EPA methods as well as the Ministry of the Environment's Operations Manual for Point Source Air Quality Monitoring as approved by the MOECC at the onset on the monitoring. The U.S. EPA methods are referenced in the MOECC document as appropriate reference methods to follow for air quality monitoring programs.

The results will be presented in quarterly summary letters and an annual report. The report will include the data in tabular format with a description of the program, quality assurance documentation, details regarding data recovery, abnormal site conditions, etc. As well, any days when the ambient air quality criterion for TSP was exceeded would be reported to the District MOECC office within two (2) weeks of receiving results. In order to enhance the notification of elevated TSP Levels, WM will copy the Township of Warwick on any future elevated TSP level reporting provided to the MOECC.

As part of the dust control strategy, the shift supervisor will be responsible to see that a record of roadway sweeping and watering is maintained. The control measure will be initiated whenever a visible plume behind vehicles is longer than $\frac{1}{4}$ the length of the vehicle. These logs will be kept on-site for a period of not less than two (2) years and will be made available for inspection should the MOECC wish to see them.

When the facility receives a complaint, the shift supervisor will see that the relevant information is recorded, including any remedial action taken as a result of the complaint. A sample complaint log sheet is included in the Best Management Practices Plan (Dust).

Figure 2: Dust Monitor Locations





2.1 Additional Dust Monitoring Provisions

As discussed with stakeholders during the consultation for the annual fill rate increase for the site, the following provisions were made for additional monitoring to be completed under specific conditions. The following notes the agreed to provisions for the additional monitoring. This provision will also be included in the Dust Best Management Practices Plan (BMPP). In the event that the provisions are triggered, WM will prepare an updated Air Quality Monitoring Plan to layout the specific agreed to monitoring at the time the additional monitoring provision is required.

As agreed to with stakeholders, in the event that 2 measured exceedances (trigger), that can be attributed to WM operations, in any quarter (excluding periods when on-site cell construction is occurring) occurs, WM is committing to reviewing the data with the Township of Warwick. Upon confirmation that the exceedances can be attributed to WM operations, and are not related to cell construction, WM will complete the installation of continuous dust monitors.

If continuous dust monitors are to be installed, WM will work with the Township of Warwick to update the following documents:

- Air Quality Monitoring Plan – updated for equipment change as well as trigger for shorter duration alerts to be issued to WM as warnings for higher dust levels; and
- Best Management Practices Plan (Dust) – to be updated to link dust alerts to dust control initiatives.

3 VOC MONITORING

It is proposed that monitoring for VOC's be conducted through the summer months, with samples to be taken in upwind and downwind pairs, during normal operating hours of the landfill. There would be a total of 5 sample pairs taken between June and September. No more than two (2) samples will be collected in any calendar month. The samples will be 24-hours in duration and compared to their respective Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List.

The samples will be collected and analyzed using methods defined in U.S. EPA Method TO-14/15. Vinyl chloride is of particular concern with these types of samples and vinyl chloride will be analyzed in selective ion mode (SIM). Sampling for VOC samples will be collected during periods of light wind conditions (less than 15 kilometers per hour) and during dry conditions (no measureable precipitation for the proceeding 48 hours prior to sampling). The list of VOC's monitored is presented in Table 1.



Table 1: List of Monitored VOCs

| CAS No. | Compound | CAS No. | Compound |
|------------|---------------------------------------|-------------------|------------------------|
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 620-14-4/622-96-8 | m/p-Ethyl Toluene |
| 526-73-8 | 1,2,3-Trimethyl Benzene | 108-38-3/106-42-3 | m/p-Xylene |
| 95-63-6 | 1,2,4 -Trimethyl Benzene | 535-77-3 | m-Cymene |
| 108-67-8 | 1,3,5 -Trimethyl Benzene | 78-93-3 | MEK |
| 591-76-4 | 2-Methyl Hexane | 108-87-2 | Methyl Cyclohexane |
| 107-83-5 | 2-Methyl Pentane | 108-10-1 | MIBK |
| 78-78-4 | 2-Methyl Butane | 75-45-6 | Chlorodifluoromethane |
| 96-14-0 | 3-Methyl Pentane | 123-72-8 | n-Butanol |
| 589-34-4 | 3-Methyl Hexane | 91-20-3 | Naphthalene |
| 67-64-1 | Acetone | 111-84-2 | Nonane |
| 71-43-2 | Benzene | 611-14-3 | o-Ethyl Toluene |
| 123-86-4 | Butyl Acetate | 95-47-6 | o-Xylene |
| 124-18-5 | Decane | 109-66-0 | Pentane |
| 25915-78-0 | Dichlorodifluoromethane | 64-17-5 | Ethanol |
| 75-09-2 | Dichloromethane | 103-65-1 | Propyl Benzene |
| 100-41-4 | Ethyl Benzene | 100-42-5 | Styrene |
| 142-82-5 | Heptane | 127-18-4 | Tetrachloroethylene |
| 110-54-3 | Hexane | 108-88-3 | Toluene |
| 67-63-0 | Isopropyl Alcohol | 75-69-4 | Trichlorofluoromethane |
| 138-86-3 | Limonene | 79-01-6 | Trichloroethylene |
| 75-01-4 | Vinyl Chloride | 141-78-6 | Ethyl Acetate |
| 56-23-5 | Carbon Tetrachloride | 71-55-6 | 1,1,1-Trichloroethane |
| 67-66-3 | Chloroform | 75-35-4 | Vinylidene Chloride |
| 106-93-4 | Ethylene Dibromide | 540-59-0 | 1,2-Dichloroethene |
| 107-6-2 | Ethylene Dichloride | Na | Total VOCs |

As the MOECC updates Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List in the Province of Ontario, the measured values will be compared to the most stringent limits available at the time of testing. For compounds that do not have Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List, the measured values will be compared to the predicated concentrations provided and approved by the MOECC for the Section 9 EPA approval supporting documentation to demonstrate compliance. As all compounds identified without Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List are subject to review by the MOECC's Standard Development Branch, these levels should be considered acceptable.



4 COMPLAINT RECORDING PROCESS

Waste Management of Canada has outlined Best Practices Plans of Odour, Litter and Dust. Within each plan the procedures for outlining the responsibilities and recordkeeping. For further details, please refer to the most recent versions of the Best Management Practices Plan. [1,2,3]. Please note that like this air quality monitoring plan, the Best Management Plans are intended to be updates to endure continuous improvements are being documented at the site.



5 REFERENCES

1. RWDI AIR Inc. Best Management Practices Plan (Odour), Twin Creeks Landfill Site, Watford, ON – Revision 7, dated May 18, 2017.
2. RWDI AIR Inc. Best Management Practices Plan (Dust), Twin Creeks Landfill Site, Watford, ON – Revision 5, dated May 18, 2017.
3. RWDI AIR Inc. Best Management Practices Plan (Litter), Twin Creeks Landfill Site, Watford, ON – Revision 4, dated December 11, 2007.



RWDI aims to accommodate. If you require this document in a different format in order to aid accessibility, please contact the sender of this document, email solutions@rwdi.com or call +1.519.823.1311

A decorative background graphic featuring a large, light gray circular shape on the right side of the page. On the left side, there is a blue triangular shape pointing towards the center, separated from the gray circle by a thin white curved line.

APPENDIX B

The graphic for Appendix B1 features a large, light gray circle on the right side of the page. A blue curved shape, resembling a quarter-circle, is positioned on the left, partially overlapping the gray circle. The text 'APPENDIX B1' is centered within the gray area.

APPENDIX B1

Brad Bergeron - Fwd: RE: Warwick Landfill Question

From: Brad Bergeron
Subject: Fwd: RE: Warwick Landfill Question

>>> Brad Bergeron 1/29/2008 9:43 AM >>>
Greg,

In response to your questions from Jan. 24, 2008, below is the additional information for clarification.

Q1) Additional clarification regarding the 50,000 square foot grid.

A1) As defined in the method the 50,000 square foot grid shall be used and a walk pattern shall be implemented. The figure for the grid spacing and typical walking pattern is outlined in Figure 2 attached. Basically, a 500 feet by 100 feet grid is defined. A walking pattern of approximately 25 feet is used along the 500 feet length and repeat over the width of 100 ft. (See attachment). During this walking pattern visual observations are made for distressed vegetation and cracks or seeps in the cover and if areas are identified the observer would complete measurements at these "hotspots".

Q2) Please provide further clarification and rationale for the particulate sampler locations.

A2) The attachment "sampler locations_windrose.pdf" outlines the proposed locations of the samplers and the windrose from London (Station 61444). The Northeast location was chosen to measure particulate from the site under the Southwest wind conditions and closest area to nearby residences, while the Northwest and Southwest locations were chosen to monitor particulate concentrations from the roadways under Westerly winds and from the site during easterly winds.

Please feel free to give me a call if you have any questions (519) 823-1311 ext 2428.

Thanks
Brad

Brad Bergeron, A.Sc.T.
Project Manager/Associate
RWDI AIR Inc.
Consulting Engineers & Scientists
Tel: (519) 974-7384 (Windsor)
Tel: (519) 823-1311 ext 2428 (Guelph)
Fax: (519) 823-1316
Email: brad.bergeron@rwdi.com
Website: <http://www.rwdi.com>

>>> "Washuta, Greg (ENE)" <Greg.Washuta@ontario.ca> 01/24/08 2:37 pm >>>
Brad

There are still some concerns from our air reviewer regarding the information provided. Please see below -thanks

Original comment - They not the survey will take place in a "grid" but do not give it's size. This should be specified and some rationale for their choice included

Response from air reviewer

not addressed - the document they sent makes reference to a figure which they did not provide

in his note he says "At a minimum, an individually identified 50,000 square foot grid"

what does this mean

I would take it to mean that the grid has a 50000 foot spacing (clearly ridiculous) or that each grid square is

50000 sq feet which is about 225 foot on a side (more probable). 225 feet between readings seems a bit much to me though I confess it is outside my area of expertise. Consider however, how strong would a leak have to be to give you a downwind reading of 500 ppm if it were 200 feet away ?

Dust

Original Comment - It is difficult to assess the placement of the particulate samplers without a map

Air reviewer response - partially addressed - windrose but no map and windrose. They do not offer any rationale for the locations - I would like to know how they were chosen.

Sincerely,

Greg Washuta, P. Eng.

Senior Waste Engineer

Waste Unit, Environmental Assessment & Approvals Branch

Ministry of the Environment

2 St. Clair Avenue West, Floor 12A

Toronto, Ontario

M4V 1L5

(416) 314-5138

(416) 314-8452

greg.washuta@ontario.ca

Sincerely,

Greg Washuta, P. Eng.

Senior Waste Engineer

Waste Unit, Environmental Assessment & Approvals Branch

Ministry of the Environment

2 St. Clair Avenue West, Floor 12A

Toronto, Ontario

M4V 1L5

(416) 314-5138

(416) 314-8452

greg.washuta@ontario.ca

-----Original Message-----

From: Brad Bergeron [<mailto:Brad.Bergeron@rwdi.com>]

Sent: January 7, 2008 9:28 AM

To: Washuta, Greg (ENE)

Cc: Brad Bergeron; WJenken@wm.com

Subject: Fwd: Warwick Landfill Question

Hi Greg, please let me know that you have received it ok.

Brad

Brad Bergeron, A.Sc.T.

Project Manager/Associate

RWDI AIR Inc.

Consulting Engineers & Scientists

Tel: (519) 974-7384 (Windsor)

Tel: (519) 823-1311 ext 2428 (Guelph)

Fax: (519) 823-1316

Email: brad.bergeron@rwdi.com

Website: <http://www.rwdi.com>

>>> Brad Bergeron 12/20/07 2:43 pm >>>

Greg,

As per our discussion, please find the windrose and portion of the South Coast Air Quality Management District Rule 1150.1.

The meteorological data set is from the MOE Regional set from 1996 to 2000.

As for the THC Survey, attached is a blurb from the South Coast Rule 1150.1 that outlines the concentration and sampling grid. A copy of the relevant sections of the method are attached as well.

A limit of 500 ppm for instantaneous measurements is specified in Rule 1150.1. At a minimum, an individually identified 50,000 square foot grid

shall be used and a walk pattern shall be implemented including areas where visual observations elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover.

Any questions, please feel free to contact me at 519-823-1311 ext 2428.

Brad

Brad Bergeron, A.Sc.T.

Project Manager/Associate

RWDI AIR Inc.

Consulting Engineers & Scientists

Tel: (519) 974-7384 (Windsor)

Tel: (519) 823-1311 ext 2428 (Guelph)

Fax: (519) 823-1316

Email: brad.bergeron@rwdi.com

Website: <http://www.rwdi.com>

Celebrating Excellence Since 1972. For more information, please visit www.rwdi.com/35th_anniversary/.

Reputation Resources Results

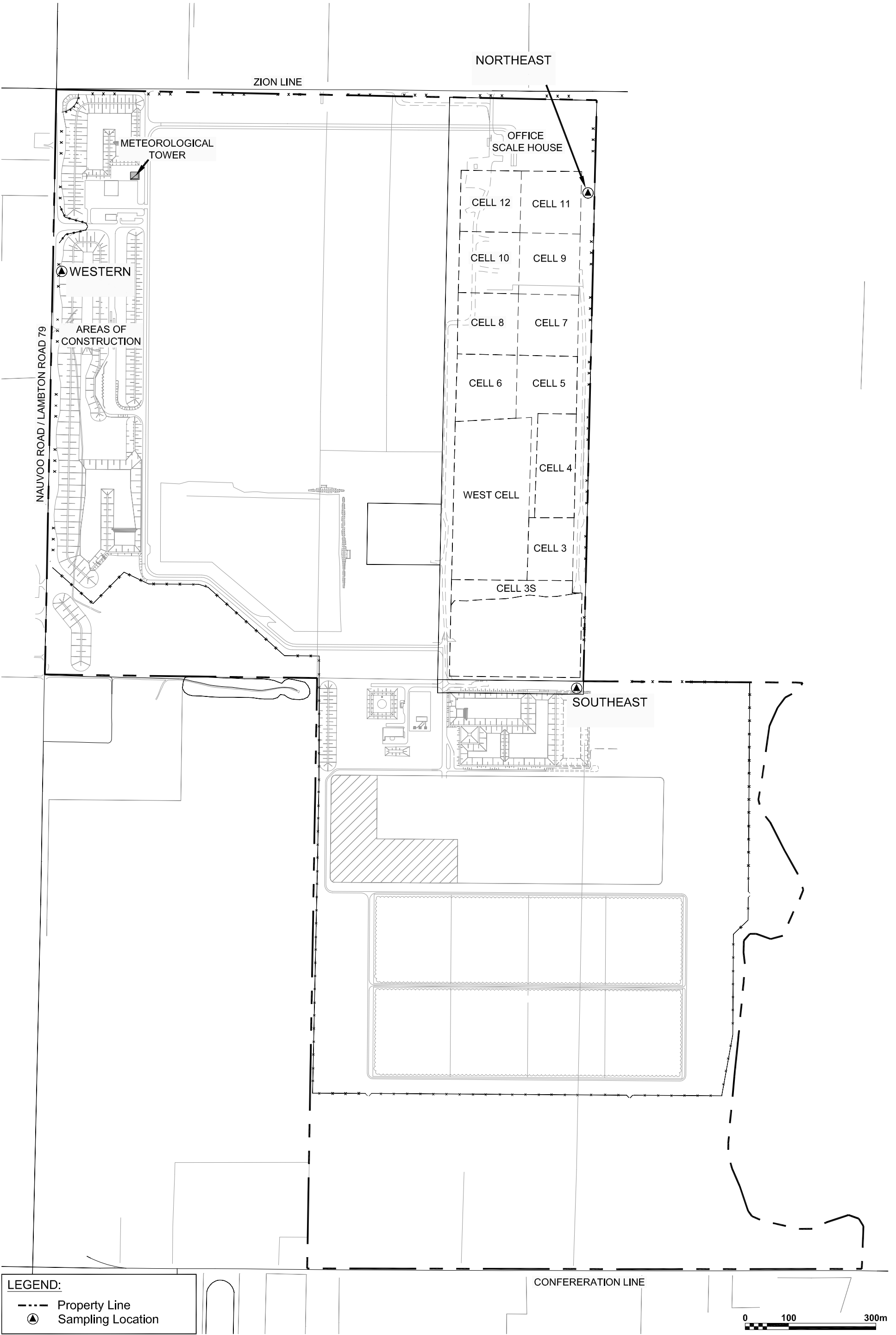
<http://www.rwdi.com>

This communication is intended for the sole use of the party to whom it is addressed and may contain information that is privileged and/or confidential. Any other distribution, copying or disclosure is strictly prohibited. If you have received this e-mail in error, please notify us immediately by telephone and delete the message without retaining any hard or electronic copies of same.

RWDI scans outgoing emails for viruses, but makes no warranty as to their absence in this email or attachments.

The background of the page features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'APPENDIX B2' is centered within the gray area.

APPENDIX B2



The graphic for Appendix B3 features a large, light gray circular shape on the right side of the page. To its left, a blue curved shape follows the arc of the gray circle, creating a layered effect. The text 'APPENDIX B3' is centered within the gray area.

APPENDIX B3

**Typical Landfill Walk Pattern
for a 50,000 Square Foot Grid**

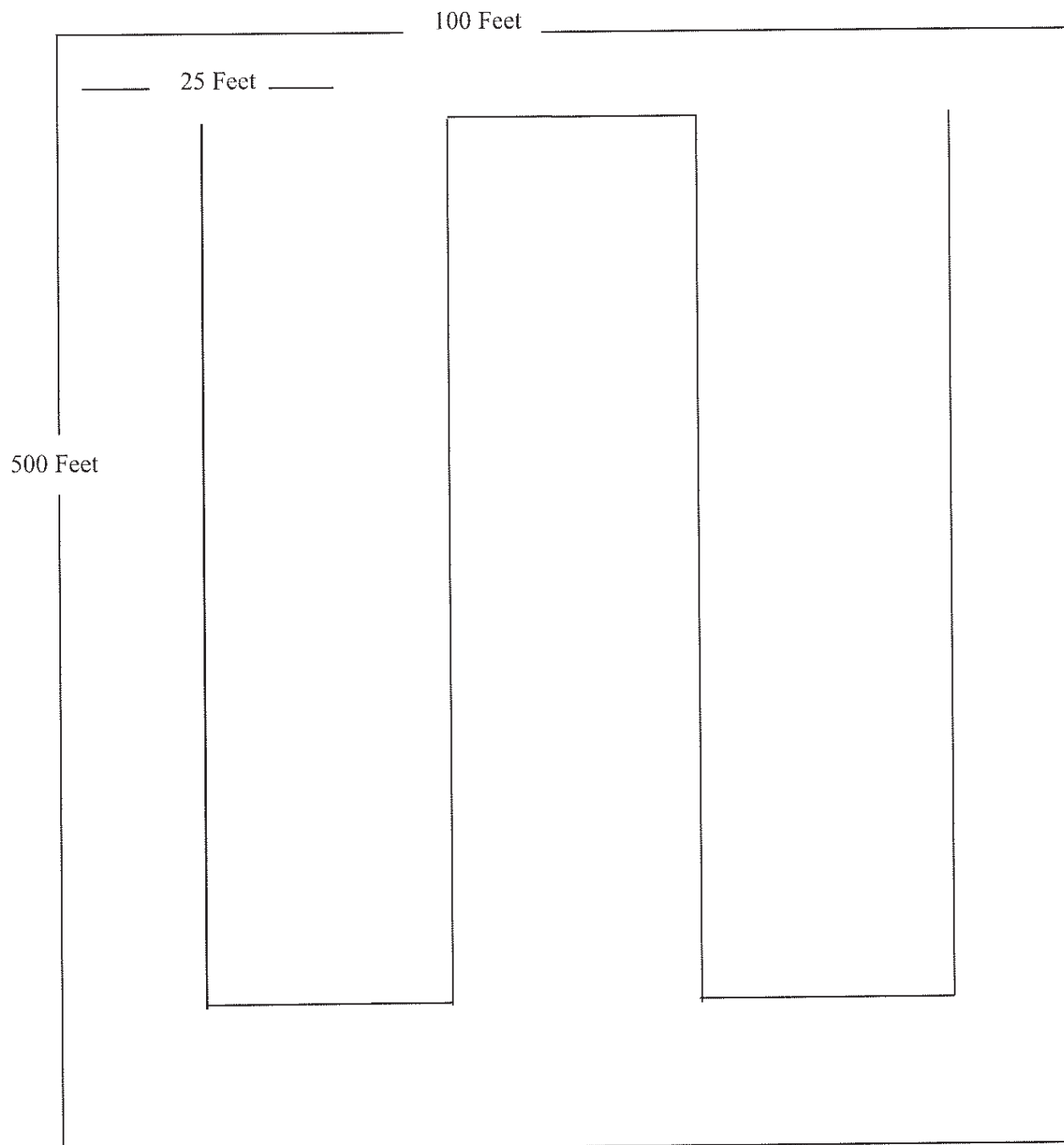


Figure 2

A decorative background graphic featuring a large, light gray circular shape on the right side of the page. On the left, there is a blue triangular shape that is partially cut off by the edge of the page. A white curved line separates the blue triangle from the gray circle.

APPENDIX C

The background of the page features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'APPENDIX C1' is centered within the gray circle.

APPENDIX C1



4510 Rhodes Drive, Unit 530
Windsor, ON N8W 5K5
Canada

Tel: +1.519.823.1311
Fax: +1.519.823.1316
E-mail: solutions@rwdi.com

August 16, 2024

Ms. Angela McLachlan
Environmental Compliance Manager
Waste Management of Canada Corporation
Twin Creeks Environmental Centre
5768 Nauvoo Road (Watford)
Warwick Township, County of Lambton N0M 2S0
E: amclachl@wm.com

**Re: Second Quarter Total Hydrocarbon Surface Monitoring | Spring Sampling
Twin Creeks Environmental Centre – Watford, Ontario
RWDI Reference No. 2402553.02**

Dear Ms. McLachlan,

RWDI AIR Inc. (RWDI) was retained by the Waste Management of Canada Corporation (WM) to conduct the Total Hydrocarbon (THC) surface monitoring program for the Twin Creeks Environmental Centre (TCEC). The monitoring program consists of two walkovers: one in the spring and one in the fall. The TCEC is located at 5768 Nauvoo Road, Watford, Ontario. The spring survey was completed as approved by the Ontario Ministry of the Environment, Conservation and Parks (MECP), under Amended Environmental Compliance Approval Number A032203, dated December 16, 2023 (Waste ECA), under Terms and Conditions 13.8 and 13.9. On-site monitoring activities for the spring walk-over took place on May 16, 2024.

SAMPLING METHODOLOGY

The sampling program consisted of a walk-over survey of the entire final capped landfill area. The monitoring was completed using a handheld Total Hydrocarbon (THC) analyzer. The purpose of this monitoring was to determine if there were areas of elevated THC concentrations. Elevated THC concentrations are indicators of areas where landfill gas may be escaping. The THC analyzer used was a Thermo TVA 2020 Toxic Gas Analyzer. The analyzer response was calibrated against U.S. EPA protocol methane gas. An instrument baseline was established (zeroed) using ultra zero-pure air. The monitoring was completed in a 25-foot grid formation. The analyzer measured the THC levels at approximately 5 cm above the ground. This is the protocol agreed to by the Ministry of Environment during the review of the Ambient Air Quality Monitoring Plan (AAQMP). Measurements were taken along the grid pattern, unless “hotspots” were identified. “Hotspots” are identified as areas of visual stress (dead or no vegetation, or cracks in the cap surface). These “hotspots” were measured in addition to the points along the grid pattern.



Any areas or points exhibiting THC readings higher than 500 ppm were noted and marked. These points were marked by recording the UTM co-ordinates from a GPS and physically marked with a flag placed on the landfill.

RESULTS

RWDI representatives walked over the entire capped portion of the Existing Landfill waste mound. During the survey the wind conditions were light and primarily from the E. The meteorological conditions from the on-site meteorological station for the 72 hours preceding the survey and during the survey are presented in **Attachment A**. There was no significant rainfall for the preceding 72 hours before the May 16, 2024 sampling date. These conditions are acceptable for the monitoring.

Most of the Existing Landfill cap is well covered with vegetation, including approximately half of the area, which was planted with poplar trees. WM completed the installation of the vertical gas collection system for the Existing Landfill in 2009. The collection system has been tied into the landfill gas flare system that is now in operation.

Findings from the inspection indicated that the final landfill cap coupled with the landfill gas extraction system for the Existing Landfill is generally effective at preventing landfill gas from escaping the waste mound at unacceptable levels. There were seven (7) detected 500 ppm exceedances during this survey. Further details of the exceedance locations and concentrations can be found in the attached summary.

DISCUSSION

On May 16, 2024, the THC walkover monitoring program was successful in identifying seven (7) areas, over the entire capped area of the Existing Landfill, which required repair. RWDI provided oversight of the repair work on June 12 and June 13, 2024. Verification monitoring was completed on July 4, 2024 in order to verify the repairs in a close timeline to when they were completed. The results showed that six (6) of the seven (7) repaired areas were below walkover exceedance criteria and no leaks persisted. Following the walkover on July 4, 2024, repairs to the remaining area of exceedance were completed. It was noted that this final repair covered an approximate 5m by 5m area in NE section of a large patch. A final walkover was completed at this location on July 5, 2024 and the results concluded this area was now below exceedance criteria and no leaks persisted. It is noted that based on historical annual walkover surveys, repairs to small areas of the final cap are periodically required. The results indicate that the cover maintenance program is effective and should be continued.



Angela McLachlan – Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2402553.02
AUGUST 16, 2024

Please feel free to contact us with any questions or comments that you may have with respect to this submission.

Yours very truly,

RWDI

A handwritten signature in black ink, appearing to read 'Khalid Hussein', is written over the RWDI logo.

Khalid Hussein, P.Eng.
Project Manager

KAMH/hta

Attach.

STATEMENT OF LIMITATIONS

This report entitled Second Quarter Total Hydrocarbon Surface Monitoring| Spring Sampling: Twin Creeks Environmental Centre – Watford, ON: RWDI Project #2402553.02 dated August 16, 2024 was prepared by RWDI AIR Inc. (“RWDI”) for Waste Management of Canada Corporation (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). This report was prepared using scientific principles, published methodologies and professional judgment in assessing available information and data. The findings presented within this document are based on available data within the limits of the existing information, budgeted scope of work, and schedule. The conclusions contained in this report are based on the information available to RWDI when this report was prepared; subsequent changes made by the Client after the date of this report have not been reflected in the conclusions.

This report was prepared for the exclusive use of Waste Management of Canada Corporation and the MECP. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. RWDI accepts no responsibility for damages, if any, suffered by any third party as result of decisions made or actions based on this report.

A large, light gray circular shape is positioned on the right side of the page. A blue curved shape, resembling a quarter-circle, is located in the top-left corner, partially overlapping the gray circle. The word 'TABLES' is centered within the gray circle.

TABLES

RWDI AIR Inc. Field Data Sheet

Surface Monitoring Survey

Location: Twin Creeks

Job #: 2402553

Date: May 16, 2024

Time: 9:00 AM

| UTM - Zone 17T | | | | |
|----------------|---------|----------|-----------|--------------------------|
| Grid ID | Easting | Northing | THC (ppm) | Comments |
| 1 | 429469 | 4758548 | 1650 | Black cap/pipe |
| 2 | 429445 | 4758112 | 1890 | Manhole |
| 3 | 429350 | 4758673 | 2557 | Crack in clay |
| 4 | 429346 | 4758676 | 1375 | Crack in clay |
| 5 | 429351 | 4758687 | 1426 | Crack in clay |
| 6 | 429418 | 4758190 | 2972 | EW0012, small black pipe |
| 7 | 429474 | 4758745 | 1100 | Crack in clay |

Verification Monitoring Survey

Location: Twin Creeks

Job #: 2402553

Date: July 4, 2024

Time: 8:30 AM

| UTM - Zone 17T | | | | |
|----------------|---------|----------|-----------|---------------------|
| Grid ID | Easting | Northing | THC (ppm) | Comments |
| 1 | 429469 | 4758548 | 0.5 | Repair Successful |
| 2 | 429445 | 4758112 | 3.6 | Repair Successful |
| 3 | 429350 | 4758673 | 15 | Repair Successful |
| 4 | 429346 | 4758676 | 67 | Repair Successful |
| 5 | 429351 | 4758687 | 1600 | Repair Unsuccessful |
| 6 | 429418 | 4758190 | 0.7 | Repair Successful |
| 7 | 429474 | 4758745 | 14.8 | Repair Successful |

Verification Monitoring Survey

Location: Twin Creeks

Job #: 2402553

Date: July 5, 2024

Time: 9:00 AM

| UTM - Zone 17T | | | | |
|----------------|---------|----------|-----------|-------------------|
| Grid ID | Easting | Northing | THC (ppm) | Comments |
| 5 | 429351 | 4758687 | 16.7 | Repair Successful |

The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT A' is centered within the gray circle.

ATTACHMENT A

Twin Creeks Landfill Meteorological Data - Fall Walkover

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|-----------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 5/13/2024 9:00 | 16.3 | 18 | 32 | SSW (206) | 84 | 0 |
| 5/13/2024 10:00 | 17.8 | 20 | 32 | SW (218) | 77 | 0 |
| 5/13/2024 11:00 | 20.2 | 21 | 37 | SW (234) | 69 | 0 |
| 5/13/2024 12:00 | 22.6 | 20 | 33 | SW (231) | 65 | 0 |
| 5/13/2024 13:00 | 24.4 | 22 | 35 | WSW (243) | 58 | 0 |
| 5/13/2024 14:00 | 25.6 | 25 | 39 | SW (232) | 51 | 0 |
| 5/13/2024 15:00 | 25.8 | 25 | 36 | SSW (199) | 48 | 0 |
| 5/13/2024 16:00 | 25.6 | 26 | 39 | SW (228) | 46 | 0 |
| 5/13/2024 17:00 | 25.5 | 27 | 41 | SW (225) | 42 | 0 |
| 5/13/2024 18:00 | 24.8 | 21 | 40 | SW (223) | 44 | 0 |
| 5/13/2024 19:00 | 23.7 | 16 | 30 | S (178) | 47 | 0 |
| 5/13/2024 20:00 | 22 | 12 | 23 | NNW (341) | 56 | 0 |
| 5/13/2024 21:00 | 18.4 | 10 | 19 | ENE (60) | 76 | 0 |
| 5/13/2024 22:00 | 16.8 | 8 | 13 | ENE (77) | 78 | 0 |
| 5/13/2024 23:00 | 16.9 | 9 | 13 | ENE (61) | 79 | 0 |
| 5/14/2024 0:00 | 16.3 | 6 | 12 | ESE (108) | 84 | 0 |
| 5/14/2024 1:00 | 15.5 | 7 | 10 | E (82) | 87 | 0 |
| 5/14/2024 2:00 | 14.6 | 7 | 10 | NNE (12) | 90 | 0 |
| 5/14/2024 3:00 | 14.2 | 4 | 9 | NE (41) | 91 | 0 |
| 5/14/2024 4:00 | 13.8 | 4 | 10 | NNW (344) | 93 | 0 |
| 5/14/2024 5:00 | 13.1 | 6 | 14 | N (1) | 98 | 0 |
| 5/14/2024 6:00 | 10.8 | 8 | 16 | N (353) | 97 | 0 |
| 5/14/2024 7:00 | 10.8 | 7 | 15 | NNW (330) | 89 | 0 |
| 5/14/2024 8:00 | 11.4 | 9 | 15 | NNE (17) | 86 | 0 |
| 5/14/2024 9:00 | 13.2 | 9 | 16 | NNW (339) | 89 | 0 |
| 5/14/2024 10:00 | 13.8 | 11 | 23 | N (353) | 84 | 0 |
| 5/14/2024 11:00 | 15.3 | 14 | 22 | NNE (13) | 81 | 0 |
| 5/14/2024 12:00 | 16.6 | 18 | 27 | NE (42) | 64 | 0 |
| 5/14/2024 13:00 | 17.3 | 15 | 26 | NNW (338) | 62 | 0 |
| 5/14/2024 14:00 | 17.4 | 18 | 30 | NW (320) | 61 | 0 |
| 5/14/2024 15:00 | 16.6 | 16 | 28 | NW (321) | 59 | 0 |
| 5/14/2024 16:00 | 17 | 15 | 26 | NNE (17) | 54 | 0 |
| 5/14/2024 17:00 | 17.4 | 14 | 23 | NNW (347) | 58 | 0 |
| 5/14/2024 18:00 | 16.7 | 12 | 21 | WNW (300) | 67 | 0 |
| 5/14/2024 19:00 | 13.9 | 11 | 18 | NW (320) | 77 | 0 |
| 5/14/2024 20:00 | 11.8 | 9 | 18 | NW (316) | 84 | 0 |
| 5/14/2024 21:00 | 11 | 7 | 17 | NNW (333) | 89 | 0 |
| 5/14/2024 22:00 | 10.7 | 7 | 12 | N (352) | 90 | 0 |
| 5/14/2024 23:00 | 10.8 | 7 | 15 | N (7) | 91 | 0 |

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|-----------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 5/15/2024 0:00 | 11 | 7 | 14 | N (6) | 91 | 0 |
| 5/15/2024 1:00 | 10.9 | 7 | 12 | NNE (13) | 93 | 0 |
| 5/15/2024 2:00 | 10.6 | 5 | 12 | NNE (29) | 94 | 0 |
| 5/15/2024 3:00 | 10.6 | 6 | 13 | NNE (29) | 94 | 0 |
| 5/15/2024 4:00 | 10.7 | 6 | 11 | N (350) | 94 | 0 |
| 5/15/2024 5:00 | 10.7 | 6 | 12 | NNE (23) | 92 | 0 |
| 5/15/2024 6:00 | 10.6 | 4 | 9 | NE (38) | 87 | 0 |
| 5/15/2024 7:00 | 11.4 | 6 | 10 | N (11) | 86 | 0 |
| 5/15/2024 8:00 | 13.6 | 6 | 10 | ENE (67) | 82 | 0 |
| 5/15/2024 9:00 | 15.2 | 8 | 14 | N (3) | 75 | 0 |
| 5/15/2024 10:00 | 16.5 | 10 | 16 | NNE (17) | 74 | 0 |
| 5/15/2024 11:00 | 17.8 | 10 | 17 | NE (34) | 73 | 0 |
| 5/15/2024 12:00 | 19.2 | 12 | 21 | NW (326) | 72 | 0 |
| 5/15/2024 13:00 | 19.6 | 13 | 27 | NW (313) | 66 | 0 |
| 5/15/2024 14:00 | 18.6 | 23 | 33 | NW (315) | 69 | 0 |
| 5/15/2024 15:00 | 17.9 | 24 | 35 | NW (310) | 68 | 0 |
| 5/15/2024 16:00 | 17.4 | 20 | 34 | NNW (345) | 65 | 0 |
| 5/15/2024 17:00 | 17.6 | 18 | 30 | NNW (330) | 62 | 0 |
| 5/15/2024 18:00 | 16.3 | 18 | 28 | NW (314) | 68 | 0 |
| 5/15/2024 19:00 | 14.8 | 15 | 24 | NW (308) | 74 | 0 |
| 5/15/2024 20:00 | 13.3 | 12 | 22 | NW (306) | 77 | 0 |
| 5/15/2024 21:00 | 12.5 | 13 | 20 | NW (305) | 79 | 0 |
| 5/15/2024 22:00 | 11.8 | 8 | 14 | NNE (15) | 80 | 0 |
| 5/15/2024 23:00 | 11 | 6 | 11 | NNW (335) | 86 | 0 |
| 5/16/2024 0:00 | 10.3 | 4 | 8 | WNW (300) | 90 | 0 |
| 5/16/2024 1:00 | 10.4 | 5 | 8 | NW (305) | 91 | 0 |
| 5/16/2024 2:00 | 10.7 | 4 | 8 | NW (319) | 91 | 0 |
| 5/16/2024 3:00 | 10.6 | 3 | 8 | NNE (28) | 92 | 0 |
| 5/16/2024 4:00 | 10.6 | 1 | 4 | N (354) | 93 | 0 |
| 5/16/2024 5:00 | 10.5 | 3 | 7 | ENE (60) | 94 | 0 |
| 5/16/2024 6:00 | 10.6 | 3 | 6 | ESE (117) | 95 | 0 |
| 5/16/2024 7:00 | 11.8 | 3 | 6 | WSW (246) | 94 | 0 |
| 5/16/2024 8:00 | 14 | 1 | 3 | W (271) | 91 | 0 |
| 5/16/2024 9:00 | 17.7 | 2 | 9 | ESE (122) | 83 | 0 |
| 5/16/2024 10:00 | 19.2 | 5 | 14 | E (81) | 75 | 0 |
| 5/16/2024 11:00 | 20.3 | 6 | 13 | E (98) | 74 | 0 |

The background of the page features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'APPENDIX C2' is centered within the gray circle.

APPENDIX C2



4510 Rhodes Drive, Unit 530
Windsor, ON N8W 5K5
Canada

Tel: +1.519.823.1311
Fax: +1.519.823.1316
E-mail: solutions@rwdi.com

November 5, 2024

Ms. Angela McLachlan
Environmental Compliance Manager
Waste Management of Canada Corporation
Twin Creeks Environmental Centre
5768 Nauvoo Road (Watford)
Warwick Township, County of Lambton N0M 2S0
E: amclachl@wm.com

**Re: Fourth Quarter Total Hydrocarbon Surface Monitoring | Fall Sampling
Twin Creeks Environmental Centre – Watford, Ontario
RWDI Reference No. 2402553.02**

Dear Ms. McLachlan,

RWDI AIR Inc. (RWDI) was retained by the Waste Management of Canada Corporation (WM) to conduct the Total Hydrocarbon (THC) surface monitoring program for the Twin Creeks Environmental Centre (TCEC). The monitoring program consists of two walkovers: one in the spring and one in the fall. The TCEC is located at 5768 Nauvoo Road, Watford, Ontario. The fall survey was completed as approved by the Ontario Ministry of the Environment, Conservation and Parks (MECP), under Amended Environmental Compliance Approval Number A032203, dated December 16, 2023 (Waste ECA), under Terms and Conditions 13.8 and 13.9. On-site monitoring activities for the fall walk-over took place on October 10, 2024.

SAMPLING METHODOLOGY

The sampling program consisted of a walk-over survey of the entire final capped landfill area. The monitoring was completed using a handheld Total Hydrocarbon (THC) analyzer. The purpose of this monitoring was to determine if there were areas of elevated THC concentrations. Elevated THC concentrations are indicators of areas where landfill gas may be escaping. The THC analyzer used was a Thermo TVA 2020 Toxic Gas Analyzer. The analyzer response was calibrated against U.S. EPA protocol methane gas. An instrument baseline was established (zeroed) using ultra zero-pure air. The monitoring was completed in a 25-foot grid formation. The analyzer measured the THC levels at approximately 5 cm above the ground. This is the protocol agreed to by the Ministry of Environment during the review of the Ambient Air Quality Monitoring Plan (AAQMP). Measurements were taken along the grid pattern, unless “hotspots” were identified. “Hotspots” are identified as areas of visual stress (dead or no vegetation, or cracks in the cap surface). These “hotspots” were measured in addition to the points along the grid pattern.



Any areas or points exhibiting THC readings higher than 500 ppm were noted and marked. These points were marked by recording the UTM co-ordinates from a GPS and physically marked with a flag placed on the landfill.

RESULTS

RWDI representatives walked over the entire capped portion of the Existing Landfill waste mound. During the survey the wind conditions were light and primarily from the south-southwest. The meteorological conditions from the on-site meteorological station for the 72 hours preceding the survey and during the survey are presented in **Attachment A**. There was no significant rainfall for the preceding 72 hours before the October 10, 2024, sampling date. These conditions are acceptable for the monitoring.

Most of the Existing Landfill cap is well covered with vegetation, including approximately half of the area, which was planted with poplar trees. WM completed the installation of the vertical gas collection system for the Existing Landfill in 2009. The collection system has been tied into the landfill gas flare system that is now in operation.

Findings from the inspection indicated that the final landfill cap coupled with the landfill gas extraction system for the Existing Landfill is generally effective at preventing landfill gas from escaping the waste mound at unacceptable levels. There were four (4) detected 500 ppm exceedances during the October 10 survey. Further details of the exceedance locations and concentrations can be found in the attached summary.

DISCUSSION

On October 10, 2024, the THC walkover monitoring program was successful in identifying four (4) areas, over the entire capped area of the Existing Landfill, which required repair. RWDI provided oversight of the repair work on October 16, 2024. Verification monitoring was completed on November 2, 2024 in order to verify the repairs in a close timeline to when they were completed. The results showed that four (4) of the four (4) repaired areas were below walkover exceedance criteria and no leaks persisted. It is noted that based on historical annual walkover surveys, repairs to small areas of the final cap are periodically required. The results indicate that the cover maintenance program is effective and should be continued.



Angela McLachlan – Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2402553.02
November 5, 2024

Please feel free to contact us with any questions or comments that you may have with respect to this submission.

Yours very truly,

RWDI

A handwritten signature in black ink, appearing to read 'Khalid Hussein', is written over the RWDI logo.

Khalid Hussein, P.Eng.
Project Manager

KAMH/klm

Attach.

STATEMENT OF LIMITATIONS

This report entitled Fourth Quarter Total Hydrocarbon Surface Monitoring| Fall Sampling: Twin Creeks Environmental Centre – Watford, ON: RWDI Project #2402553.02 dated November 5, 2024 was prepared by RWDI AIR Inc. (“RWDI”) for Waste Management of Canada Corporation (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). This report was prepared using scientific principles, published methodologies and professional judgment in assessing available information and data. The findings presented within this document are based on available data within the limits of the existing information, budgeted scope of work, and schedule. The conclusions contained in this report are based on the information available to RWDI when this report was prepared; subsequent changes made by the Client after the date of this report have not been reflected in the conclusions.

This report was prepared for the exclusive use of Waste Management of Canada Corporation and the MECP. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. RWDI accepts no responsibility for damages, if any, suffered by any third party as result of decisions made or actions based on this report.

A large decorative graphic on the left side of the page, featuring a blue triangle at the top left and a large, light gray curved shape that dominates the lower half of the page.

TABLES

RWDI AIR Inc. Field Data Sheet

Surface Monitoring Survey

Location: Twin Creeks

Job #: 2402553

Date: October 10, 2024

Time: 9:30 AM

| UTM - Zone 17T | | | | |
|----------------|---------|----------|-----------|---------------|
| Grid ID | Easting | Northing | THC (ppm) | Comments |
| 1 | 429429 | 4758070 | 1300 | Crack in clay |
| 2 | 429459 | 4758232 | 750 | Crack in clay |
| 3 | 429458 | 4758269 | 1255 | Crack in clay |
| 4 | 429454 | 475868 | 480 | Crack in clay |

Verification Monitoring Survey

Location: Twin Creeks

Job #: 2402553

Date: November 2, 2024

Time: 9:55 AM

| UTM - Zone 17T | | | | |
|----------------|---------|----------|-----------|-------------------|
| Grid ID | Easting | Northing | THC (ppm) | Comments |
| 1 | 429429 | 4758070 | 1.2 | Repair Successful |
| 2 | 429459 | 4758232 | 0 | Repair Successful |
| 3 | 429458 | 4758269 | 7 | Repair Successful |
| 4 | 429454 | 475868 | 0 | Repair Successful |

A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

ATTACHMENT A

Twin Creeks Landfill Meteorological Data - Fall Walkover

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|-----------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 7/10/2024 9:00 | 12 | 20 | 32 | NW (316) | 72 | 0 |
| 7/10/2024 10:00 | 12.2 | 19 | 31 | WNW (300) | 71 | 0 |
| 7/10/2024 11:00 | 12.9 | 24 | 37 | WNW (303) | 62 | 0 |
| 7/10/2024 12:00 | 13.6 | 23 | 38 | NW (309) | 58 | 0 |
| 7/10/2024 13:00 | 14 | 21 | 35 | WNW (301) | 57 | 0 |
| 7/10/2024 14:00 | 14.4 | 16 | 30 | WNW (291) | 56 | 0 |
| 7/10/2024 15:00 | 15.3 | 15 | 26 | WNW (303) | 53 | 0 |
| 7/10/2024 16:00 | 15.7 | 16 | 27 | W (278) | 47 | 0 |
| 7/10/2024 17:00 | 15.9 | 14 | 27 | W (279) | 43 | 0 |
| 7/10/2024 18:00 | 15.2 | 7 | 14 | WNW (287) | 49 | 0 |
| 7/10/2024 19:00 | 13 | 4 | 7 | SW (218) | 62 | 0 |
| 7/10/2024 20:00 | 11.7 | 5 | 7 | SW (227) | 60 | 0 |
| 7/10/2024 21:00 | 11 | 8 | 11 | SW (218) | 61 | 0 |
| 7/10/2024 22:00 | 10.1 | 6 | 9 | SW (214) | 64 | 0 |
| 7/10/2024 23:00 | 9.1 | 7 | 11 | SW (226) | 68 | 0 |
| 8/10/2024 0:00 | 8.5 | 8 | 13 | W (272) | 73 | 0 |
| 8/10/2024 1:00 | 7.9 | 8 | 12 | WSW (247) | 78 | 0 |
| 8/10/2024 2:00 | 7.8 | 6 | 9 | WSW (240) | 80 | 0 |
| 8/10/2024 3:00 | 7.9 | 6 | 9 | WSW (237) | 83 | 0 |
| 8/10/2024 4:00 | 8 | 7 | 9 | SW (226) | 83 | 0 |
| 8/10/2024 5:00 | 7.1 | 7 | 11 | WSW (238) | 89 | 0 |
| 8/10/2024 6:00 | 6.4 | 7 | 10 | SW (236) | 91 | 0 |
| 8/10/2024 7:00 | 6.3 | 6 | 8 | SW (228) | 94 | 0 |
| 8/10/2024 8:00 | 7.4 | 7 | 10 | SW (236) | 92 | 0 |
| 8/10/2024 9:00 | 9.7 | 7 | 12 | W (261) | 89 | 0 |
| 8/10/2024 10:00 | 13 | 10 | 17 | WNW (285) | 83 | 0 |
| 8/10/2024 11:00 | 14.8 | 17 | 29 | WNW (282) | 54 | 0 |
| 8/10/2024 12:00 | 15.5 | 20 | 32 | NW (310) | 46 | 0 |
| 8/10/2024 13:00 | 15.9 | 18 | 35 | NW (311) | 48 | 0 |
| 8/10/2024 14:00 | 16.2 | 18 | 34 | NNW (341) | 48 | 0 |
| 8/10/2024 15:00 | 15.5 | 16 | 31 | N (0) | 69 | 0 |
| 8/10/2024 16:00 | 13.9 | 10 | 23 | NNE (29) | 72 | 0 |
| 8/10/2024 17:00 | 14 | 11 | 21 | NNE (17) | 70 | 0 |
| 8/10/2024 18:00 | 12.9 | 4 | 12 | NNE (26) | 74 | 0 |
| 8/10/2024 19:00 | 11.7 | 4 | 7 | ENE (66) | 78 | 0 |
| 8/10/2024 20:00 | 10.8 | 5 | 7 | E (96) | 85 | 0 |
| 8/10/2024 21:00 | 10.4 | 5 | 7 | ESE (110) | 84 | 0 |
| 8/10/2024 22:00 | 9.2 | 5 | 7 | NE (45) | 91 | 0 |
| 8/10/2024 23:00 | 8.4 | 4 | 6 | ESE (108) | 88 | 0 |

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|------------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 9/10/2024 0:00 | 8.7 | 4 | 6 | E (101) | 86 | 0 |
| 9/10/2024 1:00 | 7.6 | 3 | 8 | NW (318) | 94 | 0 |
| 9/10/2024 2:00 | 7.3 | 4 | 7 | WSW (239) | 93 | 0 |
| 9/10/2024 3:00 | 7.4 | 7 | 9 | WSW (241) | 90 | 0 |
| 9/10/2024 4:00 | 7.1 | 5 | 7 | WSW (240) | 88 | 0 |
| 9/10/2024 5:00 | 6.4 | 6 | 8 | SW (232) | 86 | 0 |
| 9/10/2024 6:00 | 5.7 | 9 | 15 | WSW (247) | 87 | 0 |
| 9/10/2024 7:00 | 5.2 | 10 | 13 | WSW (245) | 89 | 0 |
| 9/10/2024 8:00 | 6.1 | 8 | 12 | SW (215) | 87 | 0 |
| 9/10/2024 9:00 | 9.5 | 14 | 29 | WNW (292) | 86 | 0 |
| 9/10/2024 10:00 | 11.6 | 25 | 40 | WNW (288) | 64 | 0 |
| 9/10/2024 11:00 | 12.3 | 28 | 50 | WNW (301) | 58 | 0 |
| 9/10/2024 12:00 | 12.8 | 30 | 47 | WNW (290) | 57 | 0 |
| 9/10/2024 13:00 | 13.1 | 27 | 47 | WNW (299) | 57 | 0 |
| 9/10/2024 14:00 | 13.2 | 25 | 40 | NW (317) | 55 | 0 |
| 9/10/2024 15:00 | 13.2 | 25 | 41 | NNW (335) | 59 | 0 |
| 9/10/2024 16:00 | 13.5 | 24 | 36 | NW (325) | 54 | 0 |
| 9/10/2024 17:00 | 13.3 | 19 | 32 | NW (315) | 56 | 0 |
| 9/10/2024 18:00 | 12.4 | 13 | 27 | NNW (348) | 69 | 0 |
| 9/10/2024 19:00 | 10.7 | 7 | 16 | N (349) | 77 | 0 |
| 9/10/2024 20:00 | 9.8 | 8 | 16 | NNE (26) | 77 | 0 |
| 9/10/2024 21:00 | 8.2 | 7 | 16 | NNE (33) | 79 | 0 |
| 9/10/2024 22:00 | 7.8 | 6 | 10 | E (91) | 80 | 0 |
| 9/10/2024 23:00 | 6.7 | 4 | 6 | ESE (117) | 85 | 0 |
| 10/10/2024 0:00 | 6.2 | 4 | 8 | S (175) | 90 | 0 |
| 10/10/2024 1:00 | 6.3 | 4 | 8 | SSW (195) | 87 | 0 |
| 10/10/2024 2:00 | 5.3 | 3 | 6 | E (80) | 93 | 0 |
| 10/10/2024 3:00 | 4.9 | 2 | 6 | SW (231) | 95 | 0 |
| 10/10/2024 4:00 | 5.5 | 2 | 4 | SSW (206) | 94 | 0 |
| 10/10/2024 5:00 | 5.1 | 0 | 2 | ENE (69) | 94 | 0 |
| 10/10/2024 6:00 | 4.4 | 0 | 3 | E (84) | 95 | 0 |
| 10/10/2024 7:00 | 4.5 | 0 | 1 | SE (125) | 94 | 0 |
| 10/10/2024 8:00 | 6.7 | 0 | 2 | SSW (202) | 92 | 0 |
| 10/10/2024 9:00 | 9.2 | 2 | 5 | E (94) | 81 | 0 |
| 10/10/2024 10:00 | 10.4 | 3 | 9 | ENE (61) | 69 | 0 |
| 10/10/2024 11:00 | 11.3 | 7 | 18 | NW (308) | 67 | 0 |

A large decorative graphic on the left side of the page, featuring a blue triangle at the top left and a large, light gray curved shape that dominates the lower half of the page.

APPENDIX D

Thermo

SCIENTIFIC

| Model TVA2020 Customer Quality Assurance Data | |
|---|--------------|
| Calibration Technician | PK |
| Date | 4/4/2023 |
| Model | FID |
| Serial Number | 202023036567 |
| Battery Date Code | 3822006 |
| Firmware Ver | 58S |
| Hydrogen Pressure Setting (PSI) | 10 |

| |
|---|
| Calibration & Linearity Performed using Methane (FID) and Isobutylene (PID) |
| All Methane Sample Gas Concentrations are +/-1% Max Tolerance, NIST Traceable |
| All Isobutylene Sample Gas Concentrations are +/-2% Max Tolerance, NIST Traceable |

| Performance Test | Sample Gas Conc | Meas Units | Allowable Tolerance | Instrument Reading |
|--------------------------------------|-----------------|------------|---------------------|--------------------|
| Pressure Gauge Zero Offset | N/A | PSI | 0/+1 | 0 |
| FID Detector | | | | |
| FID Zero Lin Chk (Zero Cal) | <0.1 THC | PPM | +/- 1PPM | -0.1 |
| 500 PPM Me Linearity (FID Span Cal) | 500 | PPM | +/- 10% | 501.0 |
| 10 PPM Me Linearity (FID) | 10.01 | PPM | +/- 10% | 9.8 |
| 10KPPM Me Linearity (FID) | 9997 | PPM | +/- 10% | 9680.0 |
| PID Detector (Option) | | | | |
| PID Zero Lin Chk (Zero Cal) | <0.1 THC | PPM | +/- 1PPM | N/A |
| 100 PPM Iso Linearity (PID Span Cal) | 100.3 | PPM | +/- 20% | N/A |
| 5 PPM Iso Linearity (PID) | 5 | PPM | +/- 20% | N/A |
| 500 PPM Iso Linearity (PID) | 500.2 | PPM | +/- 20% | N/A |

Test Operator Signature: _____

ALL MEASUREMENT STANDARDS ARE CALIBRATED AT SCHEDULED INTERVALS BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) OR AGAINST CERTIFIED STANDARDS WHICH ARE TRACEABLE TO NIST.

A decorative background graphic featuring a large, light gray circular shape on the right side of the page. On the left side, there is a blue triangular shape pointing towards the center, separated from the gray circle by a thin white curved line.

APPENDIX E

The graphic for Appendix E1 features a large, light gray circular shape on the right side of the page. On the left, a blue triangular shape is partially visible, with a white curved line separating it from the gray circle. The text 'APPENDIX E1' is centered in the white space between the blue triangle and the gray circle.

APPENDIX E1



600 Southgate Drive
Guelph, ON N1G 4P6
Canada

Tel: +1.519.823.1311
Fax: +1.519.823.1316
E-mail: solutions@rwdi.com

November 25, 2024

Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
Twin Creeks Environmental Centre
8039 Zion Line
Watford, ON N0M 2S0
E: amclachl@wm.com

**Re: Third Quarter (Q3) TCLF Ambient Volatile Organic Compound Sampling Report
Twin Creeks Environmental Centre | Watford, ON
RWDI Reference No. 2303459.02**

Dear Ms. McLachlan,

RWDI AIR Inc. (RWDI) was retained by Waste Management of Canada Corporation (WM) to conduct an ambient air monitoring program (AAQMP) at the Twin Creeks Environmental Centre, located in Watford, Ontario. This report outlines the fence line Volatile Organic Compound (VOCs) samples collected during July to September 2024 as outlined in the Ambient Air Quality Monitoring Plan dated May 18, 2017. Results from the Particulate Matter sampling is provided under separate cover. VOC sampling is part of the requirements under Amended Environmental Compliance Approval Number A032203, dated December 16, 2023 (Waste ECA), under Terms and Conditions 13.8 and 13.9.

SAMPLING METHODOLOGY

The VOC samples were collected in specially prepared canisters as specified in EPA Compendium Method TO-14/15. Mass flow controller units approved for use by the MECP were used to maintain a constant flow rate. The samples were collected over a 24-hour duration. The mass flow controllers are equipped with stainless steel sintered filters and stainless-steel pressure gauges to ensure that the canisters remained under slightly negative pressure at the completion of each testing period. The target list of compounds noted in the Air Quality Monitoring Plan was analyzed. Compounds that are not typically found in the TO-14/15 scan were assessed using an open scan and library search method for compound identification. Only compounds that were identified were included in the laboratory report; otherwise, all parameters not found are referenced in the note section of the laboratory reports. Samples taken on July 22 - 23, August 13 - 14 and August 22 - 23, 2024 were invalid due to incorrect sample placement, as a result additional samples were taken on September 18 - 19 and October 10 - 11, 2024.

A set of upwind and downwind samples were collected on July 4 - 5, September 12 - 13, September 18 - 19, September 19 - 20, and October 10 - 11, 2024. The sample locations for these events are presented in **Figures 1-5**. Samples were collected under light wind conditions. Windroses that displays the wind speed and direction during each sampling event are also provided in **Figures 1-5**.



Light winds are generally associated with higher ambient concentration due to reduced atmospheric dispersion of pollutants. The samples were analyzed using the method defined in the U.S. EPA Method TO-14/15 for Summa Canisters. Vinyl Chloride is of particular concern in this type of monitoring program and was analyzed in selective ion mode (SIM). A list of the target VOCs can be found in **Attachment A**. Samples were submitted to Bureau Veritas located in Mississauga, Ontario and ALS Environmental located in Waterloo, Ontario for analysis. Meteorological conditions for wind speed and direction, temperature, and rain fall were collected from the on-site meteorological station. Please refer to the figure for the meteorological station location. A summary of weather data from the sampling date and two (2) days prior are provided in **Attachment B**.

RESULTS

All measured concentrations of the eight (8) sample sets taken in the third quarter were below their respective air quality standards. The following compounds were detected in the upwind samples.

- 2-Propanone
- Benzene
- Chloroform
- Chloromethane
- Dichlorodifluoromethane
- Ethylbenzene
- Hexane
- Methyl Ethyl Ketone
- Stryene
- Tetrachloroethylene
- Total Xylenes
- Toluene
- Trichlorofluoromethane
- Vinyl Chloride

The following compounds were detected in the downwind samples.

- 1,2-Dichloroethane
- 2-Propanol
- 2-Propanone
- Benzene
- Chloroform
- Chloromethane
- Cyclohexane
- Dichlorodifluoromethane
- Ethylbenzene
- Heptane
- Hexane
- Methyl Ethyl Ketone
- Propene
- Styrene
- Tetrachloroethylene
- Tetrahydrofuran
- Toluene
- Total Xylenes
- Trichloroethylene
- Trichlorofluoromethane
- Vinyl Chloride

The highest downwind concentration, when compared to its respective air quality standard is Chloroform with a value of $1.17 \mu\text{g}/\text{m}^3$ or 117% of its standard. The highest upwind concentration, when compared to its respective air quality standard is also Chloroform with a value of $1.27 \mu\text{g}/\text{m}^3$ or 127% of its standard. Please refer to **Table 1** for all applicable values and standards.

Some of the contaminants of interest are not found within the laboratory analysis for TO-14/15. As such, all samples are screened using a library search for the remaining contaminants of interest. In these sampling events, no detectable levels were found for the following compounds: 1,2,3-Trimethylbenzene, 2-Methylhexane, 2-Methylpentane, 2-Methylbutane, 3-Methylpentane, 3-Methylhexane, Butyl Acetate, Pentane, Decane, Limonene, m/p Ethyl Toluene, m-Cymene, Methyl Cyclohexane, Chlorodifluoromethane, n-Butanal, Nonane, o-Ethyl Toluene, Propylbenzene, 2-Butanol, and Octane. All laboratory reports will be provided in the Annual Report.



Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2303459.02
November 25, 2024

CLOSING

We trust that this 2024 third quarter ambient VOC monitoring report for the Twin Creeks Environmental Centre is satisfactory for your current requirements. Please feel free to contact us with any questions or comments that you may have with respect to this submission.

Yours very truly,

RWDI AIR Inc.

A handwritten signature in black ink, appearing to read 'Khalid Hussein', enclosed in a thin black rectangular border.

Khalid Hussein, P.Eng.
Project Manager

KAMH/tmg

Attach.



Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2303459.02
November 25, 2024

GENERAL STATEMENT OF LIMITATIONS

This report entitled "Third Quarter (Q3) TCLF Ambient Volatile Organic Compound Sampling Report", dated November 25, 2024, was prepared by RWDI AIR Inc. ("RWDI") for Waste Management of Canada Corporation ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). This report was prepared using scientific principles, published methodologies and professional judgment in assessing available information and data. The findings presented within this document are based on available data within the limits of the existing information, budgeted scope of work, and schedule. The conclusions contained in this report are based on the information available to RWDI when this report was prepared; subsequent changes made by the Client after the date of this report have not been reflected in the conclusions.

This report was prepared for the exclusive use of Waste Management of Canada Corporation and the MECP. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. RWDI accepts no responsibility for damages, if any, suffered by any third party as result of decisions made or actions based on this report.

A large decorative graphic on the left side of the page, featuring a blue triangle at the top left and a large, light gray curved shape that dominates the lower half of the page.

TABLES

Table 1: TWIN CREEKS LANDFILL SITE - 24 HOUR VOLATILE
ORGANIC COMPOUNDS SAMPLING RESULTS

| Sample Date | | | July 4-5, 2024 | | | | September 12-13, 2024 | | | |
|-------------------------------------|-------------------|---|----------------|----------------------|---------------|----------------------|-----------------------|----------------------|---------------|----------------------|
| Sample ID | | | 1A | | 1B | | 5A | | 5B | |
| Sample Location (Upwind/Downwind) | | | Upwind | | Downwind | | Upwind | | Downwind | |
| Sample Duration (min) | | | 1440 | | 1440 | | 1440 | | 1440 | |
| Initial Canister Pressure ("Hg) | | | -28 | | -28 | | -29.5 | | -29 | |
| Final Canister Pressure ("Hg) | | | -7.5 | | -5.5 | | -9.4 | | -9.0 | |
| Parameter | CAS Number | Reportable | Concentration | | Concentration | | Concentration | | Concentration | |
| | | Detection Limit (ug/m ³) | (ppb) | (ug/m ³) | (ppb) | (ug/m ³) | (ppb) | (ug/m ³) | (ppb) | (ug/m ³) |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.69 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 71-55-6 | 0.55 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.69 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 79-00-5 | 0.55 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 75-34-3 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethylene | 75-35-4 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trichlorobenzene | 120-82-1 | 3.71 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 95-63-6 | 2.46 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 95-50-1 | 0.60 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloroethane | 107-06-2 | 0.40 | ND | ND | ND | ND | ND | ND | 0.12 | 0.49 |
| 1,2-Dichloropropane | 78-87-5 | 0.46 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorotetrafluoroethane | 76-14-2 | 1.19 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3,5-Trimethylbenzene | 108-67-8 | 2.46 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Butadiene | 106-99-0 | 1.11 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 541-73-1 | 2.40 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dichlorobenzene | 106-46-7 | 0.60 | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dioxane | 123-91-1 | 3.60 | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,2,4-Trimethylpentane | 540-84-1 | 0.93 | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Propanol | 67-63-0 | 2.46 | ND | ND | ND | ND | ND | ND | 1.3 | 3.19 |
| 2-Propanone | 67-64-1 | 1.42 | 4.06 | 9.64 | 4.71 | 11.18 | 2.3 | 5.46 | 6.88 | 16.33 |
| 4-Ethyltoluene | 622-96-8 | 2.46 | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzene | 71-43-2 | 0.32 | ND | ND | ND | ND | ND | ND | 0.23 | 0.73 |
| Benzyl chloride | 100-44-7 | 2.59 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromodichloromethane | 75-27-4 | 1.34 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 75-25-2 | 2.07 | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromomethane | 74-83-9 | 0.39 | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 75-15-0 | 1.56 | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Tetrachloride | 56-23-5 | 0.63 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 108-90-7 | 0.46 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroethane | 75-00-3 | 0.79 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 67-66-3 | 0.49 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloromethane | 74-87-3 | 0.62 | 0.45 | 0.93 | 0.45 | 0.93 | 0.41 | 0.85 | 0.44 | 0.91 |
| cis-1,2-Dichloroethylene | 156-59-2 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.45 | ND | ND | ND | ND | ND | ND | ND | ND |
| Cyclohexane | 110-82-7 | 0.69 | ND | ND | ND | ND | ND | ND | 0.31 | 1.07 |
| Dibromochloromethane | 124-48-1 | 1.70 | ND | ND | ND | ND | ND | ND | ND | ND |
| Dichlorodifluoromethane (FREON 12) | 75-71-8 | 0.98 | 0.66 | 3.24 | 0.56 | 2.75 | 0.49 | 2.41 | 0.74 | 3.63 |
| Ethanol (ethyl alcohol) | 64-17-5 | 1.88 | 8.2 | 15.44 | 7.4 | 13.93 | 7 | 13.18 | 15.2 | 28.62 |
| Ethyl Acetate | 141-78-6 | 3.60 | ND | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 100-41-4 | 0.43 | 0.12 | 0.52 | 0.11 | 0.48 | ND | ND | 0.46 | 2.00 |
| Ethylene Dibromide | 106-93-4 | 0.77 | ND | ND | ND | ND | ND | ND | ND | ND |
| Heptane | 142-82-5 | 1.23 | ND | ND | ND | ND | ND | ND | 0.69 | 2.83 |
| Hexachlorobutadiene | 87-68-3 | 5.33 | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexane | 110-54-3 | 0.70 | ND | ND | ND | ND | ND | ND | 0.7 | 2.47 |
| Methyl Butyl Ketone (2-Hexanone) | 591-78-6 | 4.09 | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 78-93-3 | 0.59 | 1.42 | 4.18 | 1.16 | 3.42 | 0.41 | 1.21 | 5.79 | 17.06 |
| Methyl Isobutyl Ketone | 108-10-1 | 0.82 | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl t-butyl ether (MTBE) | 1634-04-4 | 0.72 | ND | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride(Dichloromethane) | 75-09-2 | 2.08 | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 91-20-3 | 1.05 | ND | ND | ND | ND | ND | ND | ND | ND |
| o-Xylene | 95-47-6 | 0.43 | ND | ND | ND | ND | ND | ND | 0.49 | 2.13 |
| p+m-Xylene | 106-42-3/108-38-3 | 0.87 | 0.31 | 1.34 | 0.25 | 1.08 | ND | ND | 1.28 | 5.55 |
| Propene | 115-07-1 | 1.63 | ND | ND | ND | ND | ND | ND | 5.55 | 9.54 |
| Styrene | 100-42-5 | 0.43 | ND | ND | ND | ND | ND | ND | 0.17 | 0.72 |
| Tetrachloroethylene | 127-18-4 | 0.68 | ND | ND | ND | ND | ND | ND | 0.17 | 1.15 |
| Tetrahydrofuran | 109-99-9 | 1.18 | ND | ND | ND | ND | ND | ND | 0.42 | 1.24 |
| Toluene | 108-88-3 | 0.38 | 0.59 | 2.22 | 0.47 | 1.77 | 0.1 | 0.38 | 1.94 | 7.30 |
| Total Xylenes | 1330-20-7 | 1.30 | 0.31 | 1.34 | ND | ND | ND | ND | 1.77 | 7.68 |
| trans-1,2-Dichloroethylene | 156-60-5 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.45 | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethylene | 79-01-6 | 0.54 | ND | ND | ND | ND | ND | ND | 0.12 | 0.64 |
| Trichlorofluoromethane (FREON 11) | 75-69-4 | 1.12 | 0.73 | 4.10 | 0.4 | 2.25 | 0.21 | 1.18 | 0.58 | 3.26 |
| Trichlorotrifluoroethane | 76-13-1 | 1.15 | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Acetate | 108-05-4 | 0.70 | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Bromide | 593-60-2 | 0.87 | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Chloride | 75-01-4 | 0.05 | 0.06 | 0.15 | 0.05 | 0.13 | ND | ND | 0.19 | 0.49 |

Notes: ND - not detected, below method detection limit
MAV - Monitoring Assessment Values
JSL - Jurisdictional Screening Levels
[1] O. Reg. 419/05
[2] Target List VOC item found using library search

Table 1: TWIN CREEKS LANDFILL SITE - 24 HOUR VOLATILE
ORGANIC COMPOUNDS SAMPLING RESULTS

| Sample Date | | | September 18-19, 2024 | | | | September 19-20, 2024 | | | | September 24, 2024 | |
|-------------------------------------|-------------------|---|-----------------------|----------------------|---------------|----------------------|-----------------------|----------------------|---------------|----------------------|--------------------|----------------------|
| Sample ID | | | 6A | | 6B | | 7A | | 7B | | Blank | |
| Sample Location (Upwind/Downwind) | | | Upwind | | Downwind | | Upwind | | Downwind | | Blank | |
| Sample Duration (min) | | | 1437 | | 1441 | | 1440 | | 1439 | | 1440 | |
| Initial Canister Pressure ("Hg) | | | -28.5 | | -30 | | -29.5 | | -28.5 | | -29.5 | |
| Final Canister Pressure ("Hg) | | | -5.1 | | -7.7 | | -6.1 | | -8.1 | | -6.3 | |
| Parameter | CAS Number | Reportable | Concentration | | Concentration | | Concentration | | Concentration | | Concentration | |
| | | Detection Limit (ug/m ³) | (ppb) | (ug/m ³) | (ppb) | (ug/m ³) | (ppb) | (ug/m ³) | (ppb) | (ug/m ³) | (ppb) | (ug/m ³) |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.69 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 71-55-6 | 0.55 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.69 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 79-00-5 | 0.55 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 75-34-3 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethylene | 75-35-4 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trichlorobenzene | 120-82-1 | 3.71 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 95-63-6 | 2.46 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 95-50-1 | 0.60 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloroethane | 107-06-2 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloropropane | 78-87-5 | 0.46 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorotetrafluoroethane | 76-14-2 | 1.19 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3,5-Trimethylbenzene | 108-67-8 | 2.46 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Butadiene | 106-99-0 | 1.11 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 541-73-1 | 2.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dichlorobenzene | 106-46-7 | 0.60 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dioxane | 123-91-1 | 3.60 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,2,4-Trimethylpentane | 540-84-1 | 0.93 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Propanol | 67-63-0 | 2.46 | ND | ND | 1.2 | 2.95 | ND | ND | ND | ND | 1.8 | 4.42 |
| 2-Propanone | 67-64-1 | 1.42 | 1.78 | 4.22 | 4.28 | 10.16 | 2.95 | 7.00 | 4.19 | 9.95 | 11.6 | 27.53 |
| 4-Ethyltoluene | 622-96-8 | 2.46 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzene | 71-43-2 | 0.32 | ND | ND | 0.16 | 0.51 | ND | ND | 0.16 | 0.51 | 0.12 | 0.38 |
| Benzyl chloride | 100-44-7 | 2.59 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromodichloromethane | 75-27-4 | 1.34 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 75-25-2 | 2.07 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Bromomethane | 74-83-9 | 0.39 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 75-15-0 | 1.56 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Tetrachloride | 56-23-5 | 0.63 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 108-90-7 | 0.46 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroethane | 75-00-3 | 0.79 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 67-66-3 | 0.49 | ND | ND | ND | ND | ND | ND | ND | ND | 0.18 | 0.88 |
| Chloromethane | 74-87-3 | 0.62 | 0.38 | 0.78 | 0.46 | 0.95 | 0.41 | 0.85 | 0.45 | 0.93 | ND | ND |
| cis-1,2-Dichloroethylene | 156-59-2 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.45 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Cyclohexane | 110-82-7 | 0.69 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibromochloromethane | 124-48-1 | 1.70 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dichlorodifluoromethane (FREON 12) | 75-71-8 | 0.98 | 0.48 | 2.36 | 0.7 | 3.44 | 0.48 | 2.36 | 0.56 | 2.75 | ND | ND |
| Ethanol (ethyl alcohol) | 64-17-5 | 1.88 | 8.2 | 15.44 | 19.6 | 36.90 | 2.9 | 5.46 | 11.5 | 21.65 | 53.6 | 100.91 |
| Ethyl Acetate | 141-78-6 | 3.60 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 100-41-4 | 0.43 | ND | ND | 0.26 | 1.13 | ND | ND | 0.18 | 0.78 | 0.15 | 0.65 |
| Ethylene Dibromide | 106-93-4 | 0.77 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Heptane | 142-82-5 | 1.23 | ND | ND | 0.39 | 1.60 | ND | ND | ND | ND | ND | ND |
| Hexachlorobutadiene | 87-68-3 | 5.33 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexane | 110-54-3 | 0.70 | ND | ND | 0.42 | 1.48 | ND | ND | ND | ND | 0.58 | 2.04 |
| Methyl Butyl Ketone (2-Hexanone) | 591-78-6 | 4.09 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl Ethyl Ketone (2-Butanone) | 78-93-3 | 0.59 | 0.51 | 1.50 | 3.16 | 9.31 | 0.32 | 0.94 | 2.22 | 6.54 | ND | ND |
| Methyl Isobutyl Ketone | 108-10-1 | 0.82 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl t-butyl ether (MTBE) | 1634-04-4 | 0.72 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride(Dichloromethane) | 75-09-2 | 2.08 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 91-20-3 | 1.05 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| o-Xylene | 95-47-6 | 0.43 | ND | ND | 0.2 | 0.87 | ND | ND | 0.15 | 0.65 | 0.18 | 0.78 |
| p+m-Xylene | 106-42-3/108-38-3 | 0.87 | ND | ND | 0.68 | 2.95 | ND | ND | 0.45 | 1.95 | 0.33 | 1.43 |
| Propene | 115-07-1 | 1.63 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Styrene | 100-42-5 | 0.43 | ND | ND | ND | ND | ND | ND | ND | ND | 0.29 | 1.23 |
| Tetrachloroethylene | 127-18-4 | 0.68 | ND | ND | ND | ND | ND | ND | ND | ND | 0.43 | 2.91 |
| Tetrahydrofuran | 109-99-9 | 1.18 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 108-88-3 | 0.38 | 0.11 | 0.41 | 1.23 | 4.63 | 0.13 | 0.49 | 0.9 | 3.39 | 0.8 | 3.01 |
| Total Xylenes | 1330-20-7 | 1.30 | ND | ND | 0.88 | 3.82 | ND | ND | 0.59 | 2.56 | 0.51 | 2.21 |
| trans-1,2-Dichloroethylene | 156-60-5 | 0.40 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.45 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethylene | 79-01-6 | 0.54 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichlorofluoromethane (FREON 11) | 75-69-4 | 1.12 | 0.21 | 1.18 | 0.57 | 3.20 | 0.2 | 1.12 | 0.31 | 1.74 | ND | ND |
| Trichlorotrifluoroethane | 76-13-1 | 1.15 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Acetate | 108-05-4 | 0.70 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Bromide | 593-60-2 | 0.87 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Chloride | 75-01-4 | 0.05 | ND | ND | 0.04 | 0.10 | ND | ND | 0.11 | 0.28 | ND | ND |

Notes: ND - not detected, below method detection limit
MAV - Monitoring Assessment Values
JSL - Jurisdictional Screening Levels
[1] O. Reg. 419/05
[2] Target List VOC item found using library search

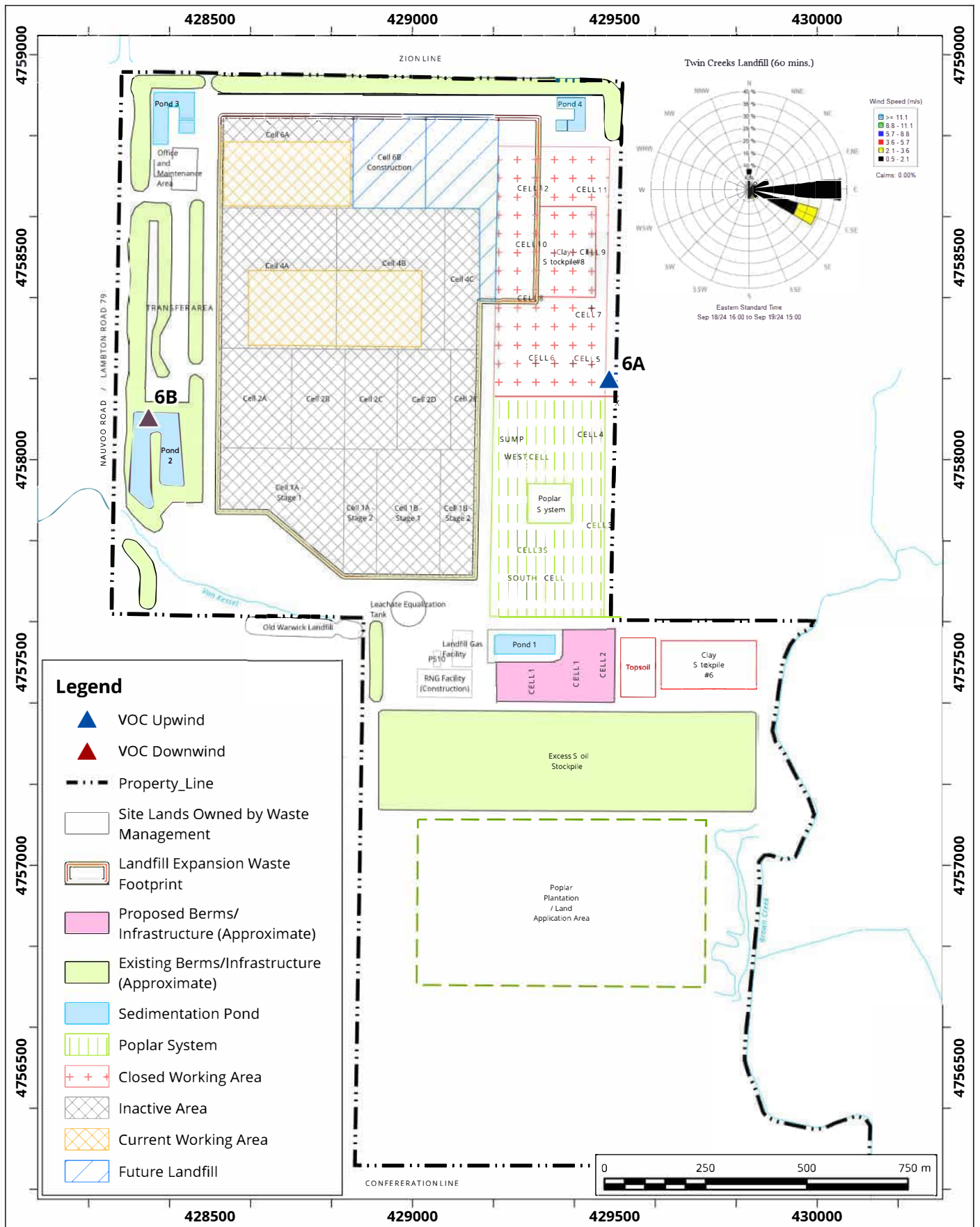
Table 1: TWIN CREEKS LANDFILL SITE - 24 HOUR VOLATILE
ORGANIC COMPOUNDS SAMPLING RESULTS

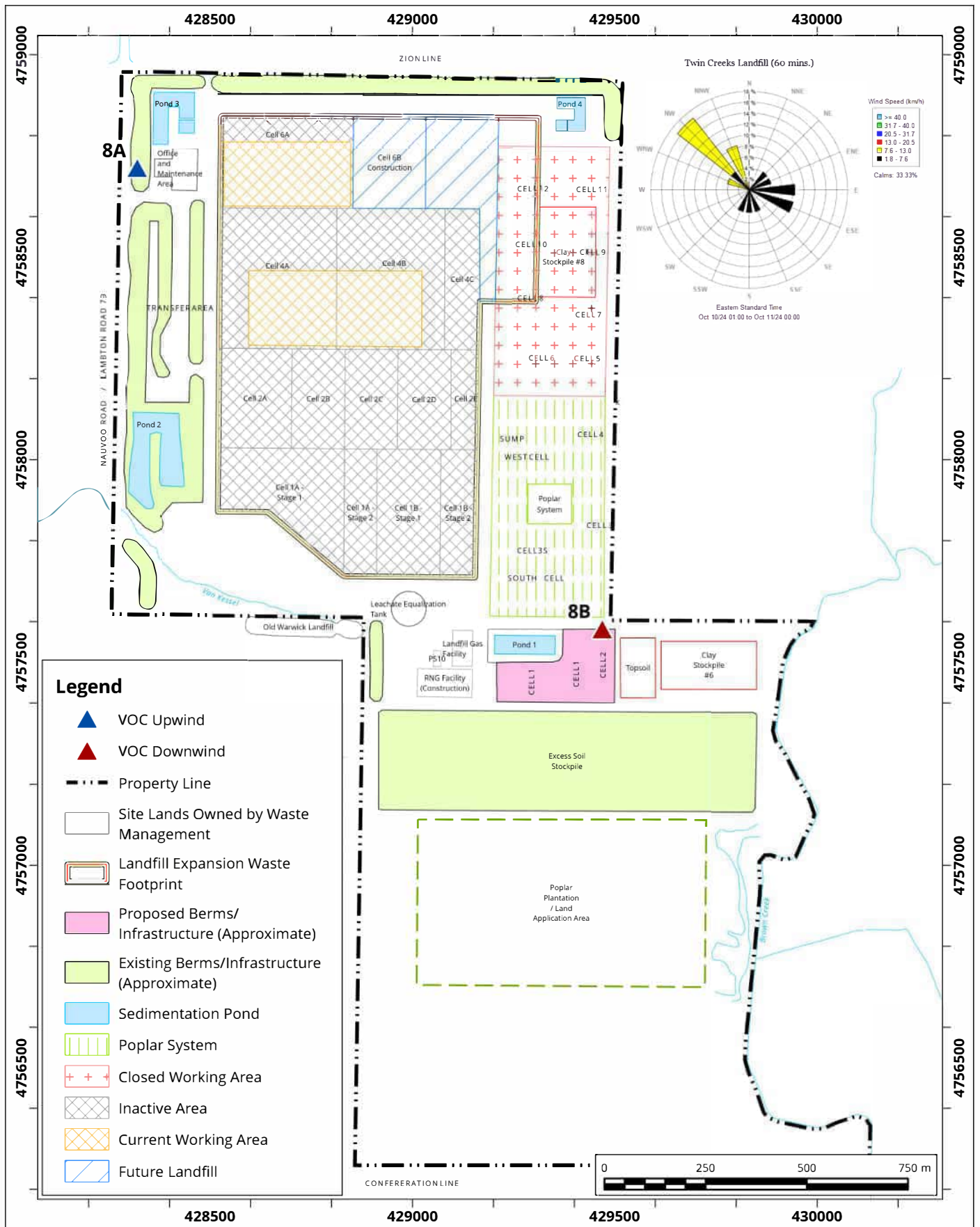
| Sample Date | | | October 10-11, 2024 | | | | | | | | |
|-------------------------------------|-------------------|----------------------|---------------------|----------------------|---------------|----------------------|----------------------|------------------------|-------------------------|-------------------|---------------------|
| Sample ID | | | 8A | | 8B | | | | | | |
| Sample Location (Upwind/Downwind) | | | Upwind | | Downwind | | | | | | |
| Sample Duration (min) | | | 1440 | | 1440 | | | | | | |
| Initial Canister Pressure ("Hg) | | | -29 | | -29 | | | | | | |
| Final Canister Pressure ("Hg) | | | -7.5 | | -8.3 | | | | | | |
| Parameter | CAS Number | Reportable | Concentration | | Concentration | | Maximum | Maximum | Air Quality | Percent of | Percent of |
| | | Detection Limit | (ppb) | (ug/m ³) | (ppb) | (ug/m ³) | Concentration Upwind | Concentration Downwind | Standard ^[1] | Standard (Upwind) | Standard (Downwind) |
| | | (ug/m ³) | | | | | (ug/m ³) | (ug/m ³) | (ug/m ³) | (%) | (%) |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.69 | ND | ND | ND | ND | - | - | 0.5 (JSL) | - | - |
| 1,1,1-Trichloroethane | 71-55-6 | 0.55 | ND | ND | ND | ND | - | - | 115,000 | - | - |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.69 | ND | ND | ND | ND | - | - | 0.1 (JSL) | - | - |
| 1,1,2-Trichloroethane | 79-00-5 | 0.55 | ND | ND | ND | ND | - | - | 0.3 (JSL) | - | - |
| 1,1-Dichloroethane | 75-34-3 | 0.40 | ND | ND | ND | ND | - | - | 165 | - | - |
| 1,1-Dichloroethylene | 75-35-4 | 0.40 | ND | ND | ND | ND | - | - | 10 | - | - |
| 1,2,4-Trichlorobenzene | 120-82-1 | 3.71 | ND | ND | ND | ND | - | - | 400 | - | - |
| 1,2,4-Trimethylbenzene | 95-63-6 | 2.46 | ND | ND | ND | ND | - | - | 220 | - | - |
| 1,2-Dichlorobenzene | 95-50-1 | 0.60 | ND | ND | ND | ND | - | - | - | - | - |
| 1,2-Dichloroethane | 107-06-2 | 0.40 | ND | ND | ND | ND | - | 0.49 | 2 | - | 24.26% |
| 1,2-Dichloropropane | 78-87-5 | 0.46 | ND | ND | ND | ND | - | - | 2400 | - | - |
| 1,2-Dichlorotetrafluoroethane | 76-14-2 | 1.19 | ND | ND | ND | ND | - | - | 700000 | - | - |
| 1,3,5-Trimethylbenzene | 108-67-8 | 2.46 | ND | ND | ND | ND | - | - | 220 | - | - |
| 1,3-Butadiene | 106-99-0 | 1.11 | ND | ND | ND | ND | - | - | 10 (MAV) | - | - |
| 1,3-Dichlorobenzene | 541-73-1 | 2.40 | ND | ND | ND | ND | - | - | 50 (JSL) | - | - |
| 1,4-Dichlorobenzene | 106-46-7 | 0.60 | ND | ND | ND | ND | - | - | 95 | - | - |
| 1,4-Dioxane | 123-91-1 | 3.60 | ND | ND | ND | ND | - | - | 3500 | - | - |
| 2,2,4-Trimethylpentane | 540-84-1 | 0.93 | ND | ND | ND | ND | - | - | 1750 (JSL) | - | - |
| 2-Propanol | 67-63-0 | 2.46 | ND | ND | ND | ND | - | 3.19 | 7300 | - | 0.04% |
| 2-Propanone | 67-64-1 | 1.42 | 15.0 | 35.60 | 31.6 | 75.00 | 35.60 | 75.00 | 11880 | 0.30% | 0.63% |
| 4-Ethyltoluene | 622-96-8 | 2.46 | ND | ND | ND | ND | - | - | 625 (JSL) | - | - |
| Benzene | 71-43-2 | 0.32 | 0.13 | 0.41 | 0.14 | 0.45 | 0.41 | 0.73 | 2.3 | 18.04% | 31.92% |
| Benzyl chloride | 100-44-7 | 2.59 | ND | ND | ND | ND | - | - | 0.1 (JSL) | - | - |
| Bromodichloromethane | 75-27-4 | 1.34 | ND | ND | ND | ND | - | - | 350 (JSL) | - | - |
| Bromoform | 75-25-2 | 2.07 | ND | ND | ND | ND | - | - | 55 | - | - |
| Bromomethane | 74-83-9 | 0.39 | ND | ND | ND | ND | - | - | 1350 | - | - |
| Carbon Disulfide | 75-15-0 | 1.56 | ND | ND | ND | ND | - | - | 330 | - | - |
| Carbon Tetrachloride | 56-23-5 | 0.63 | ND | ND | ND | ND | - | - | 2.4 | - | - |
| Chlorobenzene | 108-90-7 | 0.46 | ND | ND | ND | ND | - | - | - | - | - |
| Chloroethane | 75-00-3 | 0.79 | ND | ND | ND | ND | - | - | 5600 | - | - |
| Chloroform | 67-66-3 | 0.49 | 0.26 | 1.27 | 0.24 | 1.17 | 1.27 | 1.17 | 1 | 126.84% | 117.09% |
| Chloromethane | 74-87-3 | 0.62 | 0.39 | 0.80 | 0.46 | 0.95 | 0.93 | 0.95 | 320 | 0.29% | 0.30% |
| cis-1,2-Dichloroethylene | 156-59-2 | 0.40 | ND | ND | ND | ND | - | - | 105 | - | - |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.45 | ND | ND | ND | ND | - | - | 2.25 (JSL) | - | - |
| Cyclohexane | 110-82-7 | 0.69 | ND | ND | ND | ND | - | 1.07 | 6100 | - | 0.02% |
| Dibromochloromethane | 124-48-1 | 1.70 | ND | ND | ND | ND | - | - | 0.2 (JSL) | - | - |
| Dichlorodifluoromethane (FREON 12) | 75-71-8 | 0.98 | 0.48 | 2.36 | 0.48 | 2.36 | 3.24 | 3.63 | 500000 | 0.00% | 0.00% |
| Ethanol (ethyl alcohol) | 64-17-5 | 1.88 | 46.7 | 87.92 | 42.5 | 80.02 | 87.92 | 80.02 | - | - | - |
| Ethyl Acetate | 141-78-6 | 3.60 | ND | ND | ND | ND | - | - | - | - | - |
| Ethylbenzene | 100-41-4 | 0.43 | ND | ND | ND | ND | 0.52 | 2.00 | 1000 | 0.05% | 0.20% |
| Ethylene Dibromide | 106-93-4 | 0.77 | ND | ND | ND | ND | - | - | 3 | - | - |
| Heptane | 142-82-5 | 1.23 | ND | ND | ND | ND | - | 2.83 | 11000 | - | 0.03% |
| Hexachlorobutadiene | 87-68-3 | 5.33 | ND | ND | ND | ND | - | - | 0.225 (JSL) | - | - |
| Hexane | 110-54-3 | 0.70 | 0.27 | 0.95 | 0.33 | 1.16 | 0.95 | 2.47 | 7500 | 0.01% | 0.03% |
| Methyl Butyl Ketone (2-Hexanone) | 591-78-6 | 4.09 | ND | ND | ND | ND | - | - | 150 (JSL) | - | - |
| Methyl Ethyl Ketone (2-Butanone) | 78-93-3 | 0.59 | 0.85 | 2.50 | 0.89 | 2.62 | 4.18 | 17.06 | 1000 | 0.42% | 1.71% |
| Methyl Isobutyl Ketone | 108-10-1 | 0.82 | ND | ND | ND | ND | - | - | 1200 | - | - |
| Methyl t-butyl ether (MTBE) | 1634-04-4 | 0.72 | ND | ND | ND | ND | - | - | 7000 | - | - |
| Methylene Chloride(Dichloromethane) | 75-09-2 | 2.08 | ND | ND | ND | ND | - | - | 220 | - | - |
| Naphthalene | 91-20-3 | 1.05 | ND | ND | ND | ND | - | - | 22.5 | - | - |
| o-Xylene | 95-47-6 | 0.43 | 0.11 | 0.48 | ND | ND | 0.48 | 2.13 | - | - | - |
| p+m-Xylene | 106-42-3/108-38-3 | 0.87 | 0.23 | 1.00 | 0.21 | 0.91 | 1.34 | 5.55 | - | - | - |
| Propene | 115-07-1 | 1.63 | ND | ND | ND | ND | - | 9.54 | 4000 | - | 0.24% |
| Styrene | 100-42-5 | 0.43 | 0.14 | 0.60 | 0.12 | 0.51 | 0.60 | 0.72 | 400 | 0.15% | 0.18% |
| Tetrachloroethylene | 127-18-4 | 0.68 | 0.4 | 2.71 | 0.41 | 2.78 | 2.71 | 2.78 | 360 | 0.75% | 0.77% |
| Tetrahydrofuran | 109-99-9 | 1.18 | ND | ND | ND | ND | - | 1.24 | 93000 | - | 0.00% |
| Toluene | 108-88-3 | 0.38 | 0.62 | 2.33 | 0.6 | 2.26 | 2.33 | 7.30 | 2000 | 0.12% | 0.37% |
| Total Xylenes | 1330-20-7 | 1.30 | 0.34 | 1.48 | ND | ND | 1.48 | 7.68 | 730 | 0.20% | 1.05% |
| trans-1,2-Dichloroethylene | 156-60-5 | 0.40 | ND | ND | ND | ND | - | - | 105 | - | - |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.45 | ND | ND | ND | ND | - | - | 22.5 (JSL) | - | - |
| Trichloroethylene | 79-01-6 | 0.54 | ND | ND | ND | ND | - | 0.64 | 12 | - | 5.37% |
| Trichlorofluoromethane (FREON 11) | 75-69-4 | 1.12 | 0.21 | 1.18 | 0.21 | 1.18 | 4.10 | 3.26 | 6000 | 0.07% | 0.05% |
| Trichlorotrifluoroethane | 76-13-1 | 1.15 | ND | ND | ND | ND | - | - | 800000 | - | - |
| Vinyl Acetate | 108-05-4 | 0.70 | ND | ND | ND | ND | - | - | 1000 (JSL) | - | - |
| Vinyl Bromide | 593-60-2 | 0.87 | ND | ND | ND | ND | - | - | 15 (JSL) | - | - |
| Vinyl Chloride | 75-01-4 | 0.05 | ND | ND | ND | ND | 0.15 | 0.49 | 1 | 15.32% | 48.53% |

Notes: ND - not detected, below method detection limit
MAV - Monitoring Assessment Values
JSL - Jurisdictional Screening Levels
[1] O. Reg. 419/05
[2] Target List VOC item found using library search

A decorative graphic on the left side of the page. It features a solid blue right-angled triangle in the top-left corner. A large, light-grey circle with a thin white border overlaps the triangle and extends across the middle and bottom of the page. The word 'FIGURES' is centered within the grey circle.

FIGURES





A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

ATTACHMENT A

Summary of Target List for VOCs

| CAS No. | Compound | CAS No. | Compound |
|------------|---------------------------------------|-------------------|---------------------------|
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 620-14-4/622-96-8 | m/p-Ethyl Toluene |
| 526-73-8 | 1,2,3-Trimethyl Benzene | 108-38-3/106-42-3 | m/p-Xylene |
| 95-63-6 | 1,2,4 Trimethyl Benzene | 535-77-3 | m-Cymene |
| 108-67-8 | 1,3,5-Trimethyl Benzene | 78-93-3 | MEK |
| 591-76-4 | 2-Methyl Hexane | 108-87-2 | Methyl Cyclohexane |
| 107-83-5 | 2-Methyl Pentane | 108-10-1 | MIBK |
| 78-78-4 | 2-Methyl Butane | 75-45-6 | Chlorodifluoromethane |
| 96-14-0 | 3-Methyl Pentane | 123-72-8 | n-Butanal |
| 589-34-4 | 3-Methyl Hexane | 91-20-3 | Naphthalene |
| 67-64-1 | Acetone | 111-84-2 | Nonane |
| 71-43-2 | Benzene | 611-14-3 | o-Ethyl Toluene |
| 123-86-4 | Butyl Acetate | 95-47-6 | o-Xylene |
| 124-18-5 | Decane | 109-66-0 | Pentane |
| 25915-78-0 | Dichlorodifluoromethane | 64-17-5 | Ethanol |
| 75-09-2 | Dichloromethane | 103-65-1 | Propyl Benzene |
| 100-41-4 | Ethyl Benzene | 100-42-5 | Styrene |
| 142-82-5 | Heptane | 127-18-4 | Tetrachloroethylene |
| 110-54-3 | Hexane | 108-88-3 | Toluene |
| 67-63-0 | Isopropyl Alcohol | 75-69-4 | Trichlorofluoromethane |
| 138-86-3 | Limonene | 79-01-6 | Trichloroethylene |
| 75-01-4 | Vinyl Chloride | 141-78-6 | Ethyl Acetate |
| 56-23-5 | Carbon Tetrachloride | 71-55-6 | 1,1,1-Trichloroethane |
| 67-66-3 | Chloroform | 75-35-4 | Vinylidene Chloride |
| 106-93-4 | Ethylene Dibromide | 540-59-0 | 1,2-Dichloroethene |
| 107-06-2 | Ethylene Dichloride | na | Total VOCs |
| 75-00-3 | Chloroethane | 78-92-2 | 2-Butanol |
| 75-00-2 | Methylene Chloride | 75-27-4 | Bromodichloromethane |
| 156-59-2 | 1,2-Dichloroethylene (cis) | 111-65-9 | Octane |
| 75-34-3 | 1,1-Dichloroethane | 79-34-5 | 1,1,2,2-Tetrachloroethane |
| 156-60-5 | 1,2-Dichloroethylene (trans) | 79-00-5 | 1,1,2-Trichloroethane |
| 108-90-7 | Chlorobenzene | 25321-22-6 | Dichlorobenzene |
| 74-87-3 | Chloromethane | 75-43-4 | Dichlorofluoromethane |

Note: na - no applicable CAS Number.

A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

ATTACHMENT B

Twin Creeks Landfill Meteorological Conditions - July 2 to July 5, 2024

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|----------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 2/7/2024 8:00 | 17.3 | 17 | 24 | SSE (152) | 81 | 0 |
| 2/7/2024 9:00 | 20.1 | 22 | 31 | SE (145) | 76 | 0 |
| 2/7/2024 10:00 | 21.9 | 22 | 31 | SE (141) | 66 | 0 |
| 2/7/2024 11:00 | 23.1 | 22 | 33 | SE (129) | 62 | 0 |
| 2/7/2024 12:00 | 23.6 | 23 | 35 | SE (128) | 58 | 0 |
| 2/7/2024 13:00 | 23.9 | 22 | 33 | ESE (122) | 57 | 0 |
| 2/7/2024 14:00 | 23.8 | 19 | 32 | SE (125) | 56 | 0 |
| 2/7/2024 15:00 | 24.3 | 20 | 31 | SSE (154) | 53 | 0 |
| 2/7/2024 16:00 | 24.4 | 19 | 28 | SSE (152) | 51 | 0 |
| 2/7/2024 17:00 | 24 | 18 | 25 | SE (136) | 51 | 0 |
| 2/7/2024 18:00 | 23.4 | 17 | 26 | SE (126) | 57 | 0 |
| 2/7/2024 19:00 | 22.7 | 18 | 25 | SE (135) | 61 | 0 |
| 2/7/2024 20:00 | 22.2 | 19 | 27 | SE (126) | 63 | 0 |
| 2/7/2024 21:00 | 21.7 | 20 | 27 | SE (133) | 63 | 0 |
| 2/7/2024 22:00 | 21.4 | 20 | 27 | ESE (121) | 64 | 0 |
| 2/7/2024 23:00 | 21.1 | 21 | 28 | ESE (121) | 64 | 0 |
| 3/7/2024 0:00 | 20.9 | 21 | 29 | ESE (121) | 66 | 0 |
| 3/7/2024 1:00 | 20.4 | 21 | 26 | SE (126) | 73 | 0 |
| 3/7/2024 2:00 | 20.2 | 21 | 27 | SE (144) | 75 | 0 |
| 3/7/2024 3:00 | 20.8 | 23 | 34 | SE (141) | 74 | 0 |
| 3/7/2024 4:00 | 20.9 | 20 | 30 | S (172) | 72 | 0 |
| 3/7/2024 5:00 | 21.1 | 17 | 29 | SSE (154) | 73 | 0 |
| 3/7/2024 6:00 | 21.4 | 18 | 28 | SSE (164) | 76 | 0 |
| 3/7/2024 7:00 | 22.8 | 17 | 27 | SSE (155) | 77 | 0 |
| 3/7/2024 8:00 | 24.4 | 17 | 32 | SSW (204) | 76 | 0 |
| 3/7/2024 9:00 | 26.4 | 19 | 33 | SSW (193) | 71 | 0 |
| 3/7/2024 10:00 | 27.6 | 23 | 36 | SW (219) | 66 | 0 |
| 3/7/2024 11:00 | 27.9 | 24 | 35 | SW (230) | 62 | 0 |
| 3/7/2024 12:00 | 27.5 | 20 | 32 | SSW (208) | 65 | 0 |
| 3/7/2024 13:00 | 28.4 | 19 | 30 | SSW (205) | 64 | 0 |
| 3/7/2024 14:00 | 27.5 | 24 | 37 | SW (221) | 67 | 0 |
| 3/7/2024 15:00 | 28.6 | 21 | 32 | WSW (254) | 66 | 0 |
| 3/7/2024 16:00 | 28.7 | 22 | 33 | WSW (254) | 63 | 0 |
| 3/7/2024 17:00 | 28.4 | 19 | 28 | SW (220) | 65 | 0 |
| 3/7/2024 18:00 | 28.5 | 15 | 25 | WNW (299) | 68 | 0 |
| 3/7/2024 19:00 | 28.3 | 11 | 21 | W (267) | 68 | 0 |
| 3/7/2024 20:00 | 27.6 | 8 | 15 | WNW (294) | 74 | 0 |
| 3/7/2024 21:00 | 25.4 | 3 | 6 | W (278) | 81 | 0 |
| 3/7/2024 22:00 | 23.9 | 3 | 5 | NW (306) | 88 | 0 |
| 3/7/2024 23:00 | 22.7 | 3 | 6 | W (268) | 90 | 0 |
| 4/7/2024 0:00 | 22 | 3 | 9 | SW (223) | 89 | 0 |
| 4/7/2024 1:00 | 21.4 | 6 | 9 | WSW (252) | 92 | 0 |
| 4/7/2024 2:00 | 20.5 | 4 | 9 | SW (234) | 93 | 0 |
| 4/7/2024 3:00 | 20.3 | 6 | 11 | WSW (255) | 89 | 0 |
| 4/7/2024 4:00 | 19.6 | 2 | 6 | S (188) | 90 | 0 |
| 4/7/2024 5:00 | 19.7 | 5 | 9 | SSW (205) | 89 | 0 |
| 4/7/2024 6:00 | 20.2 | 3 | 6 | S (172) | 89 | 0 |
| 4/7/2024 7:00 | 20.9 | 5 | 10 | SW (218) | 86 | 0 |
| 4/7/2024 8:00 | 22.9 | 5 | 9 | SW (216) | 84 | 0 |
| 4/7/2024 9:00 | 24.9 | 8 | 15 | SW (217) | 69 | 0 |
| 4/7/2024 10:00 | 26.6 | 8 | 14 | WSW (242) | 64 | 0 |
| 4/7/2024 11:00 | 27.5 | 8 | 15 | WSW (255) | 60 | 0 |
| 4/7/2024 12:00 | 27.8 | 9 | 16 | WSW (250) | 61 | 0 |
| 4/7/2024 13:00 | 28.2 | 11 | 19 | SW (228) | 58 | 0 |
| 4/7/2024 14:00 | 27.8 | 13 | 20 | SW (214) | 58 | 0 |
| 4/7/2024 15:00 | 27.5 | 13 | 25 | SW (232) | 60 | 0 |
| 4/7/2024 16:00 | 27.7 | 10 | 16 | SSW (206) | 59 | 0 |
| 4/7/2024 17:00 | 27.2 | 8 | 14 | SSE (160) | 65 | 0 |
| 4/7/2024 18:00 | 26.4 | 9 | 17 | SSW (204) | 68 | 0 |
| 4/7/2024 19:00 | 25.9 | 7 | 14 | SSE (160) | 67 | 0 |
| 4/7/2024 20:00 | 25.4 | 6 | 11 | SW (221) | 70 | 0 |
| 4/7/2024 21:00 | 24.3 | 3 | 8 | SSW (199) | 78 | 0 |
| 4/7/2024 22:00 | 23.6 | 2 | 4 | SSW (192) | 85 | 0 |
| 4/7/2024 23:00 | 22.3 | 3 | 7 | ESE (115) | 90 | 0 |
| 5/7/2024 0:00 | 21.5 | 3 | 6 | SSE (153) | 92 | 0 |
| 5/7/2024 1:00 | 21.5 | 3 | 6 | SSW (212) | 90 | 0 |
| 5/7/2024 2:00 | 20 | 2 | 5 | NNE (22) | 96 | 0 |
| 5/7/2024 3:00 | 19.5 | 2 | 5 | N (0) | 95 | 0 |
| 5/7/2024 4:00 | 19.1 | 2 | 6 | WSW (258) | 96 | 0 |
| 5/7/2024 5:00 | 19.2 | 1 | 4 | W (270) | 94 | 0 |
| 5/7/2024 6:00 | 19.3 | 1 | 4 | SW (230) | 93 | 0 |
| 5/7/2024 7:00 | 21.2 | 3 | 11 | E (96) | 88 | 0 |

Twin Creeks Landfill Meteorological Conditions - September 10 to September 13, 2024

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|-----------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 10/9/2024 10:00 | 17.6 | 9 | 14 | SSE (151) | 85 | 0 |
| 10/9/2024 11:00 | 19.6 | 5 | 11 | S (176) | 78 | 0 |
| 10/9/2024 12:00 | 20.9 | 4 | 10 | W (272) | 64 | 0 |
| 10/9/2024 13:00 | 21.9 | 4 | 11 | WNW (282) | 66 | 0 |
| 10/9/2024 14:00 | 22.4 | 4 | 12 | NW (319) | 65 | 0 |
| 10/9/2024 15:00 | 23.2 | 5 | 12 | NNE (20) | 66 | 0 |
| 10/9/2024 16:00 | 23.8 | 3 | 14 | ESE (104) | 66 | 0 |
| 10/9/2024 17:00 | 24.2 | 4 | 9 | E (90) | 58 | 0 |
| 10/9/2024 18:00 | 22.7 | 12 | 20 | SSE (161) | 76 | 0 |
| 10/9/2024 19:00 | 20.9 | 9 | 17 | SE (143) | 84 | 0 |
| 10/9/2024 20:00 | 19.2 | 11 | 15 | SE (139) | 87 | 0 |
| 10/9/2024 21:00 | 18 | 13 | 18 | SSE (149) | 90 | 0 |
| 10/9/2024 22:00 | 17.3 | 14 | 18 | SE (134) | 91 | 0 |
| 10/9/2024 23:00 | 16.6 | 14 | 18 | SE (128) | 93 | 0 |
| 11/9/2024 0:00 | 16.3 | 13 | 19 | SSE (156) | 95 | 0 |
| 11/9/2024 1:00 | 16 | 10 | 17 | SSE (161) | 96 | 0 |
| 11/9/2024 2:00 | 16 | 10 | 15 | SSE (160) | 97 | 0 |
| 11/9/2024 3:00 | 16 | 8 | 13 | SSE (148) | 96 | 0 |
| 11/9/2024 4:00 | 15.9 | 7 | 13 | SSE (162) | 96 | 0 |
| 11/9/2024 5:00 | 14.6 | 2 | 5 | NE (49) | 99 | 0 |
| 11/9/2024 6:00 | 14.1 | 6 | 14 | ESE (113) | 100 | 0 |
| 11/9/2024 7:00 | 14.7 | 7 | 14 | ESE (122) | 99 | 0 |
| 11/9/2024 8:00 | 16.7 | 14 | 18 | SE (139) | 96 | 0 |
| 11/9/2024 9:00 | 18.6 | 11 | 17 | SSE (167) | 90 | 0 |
| 11/9/2024 10:00 | 20.4 | 10 | 16 | SSE (160) | 83 | 0 |
| 11/9/2024 11:00 | 22.2 | 11 | 18 | S (181) | 76 | 0 |
| 11/9/2024 12:00 | 23.8 | 11 | 19 | S (178) | 70 | 0 |
| 11/9/2024 13:00 | 24.8 | 9 | 17 | S (177) | 61 | 0 |
| 11/9/2024 14:00 | 25.4 | 9 | 19 | SSW (206) | 61 | 0 |
| 11/9/2024 15:00 | 26 | 7 | 17 | WNW (292) | 59 | 0 |
| 11/9/2024 16:00 | 26.2 | 9 | 18 | ESE (121) | 62 | 0 |
| 11/9/2024 17:00 | 25.6 | 15 | 22 | SE (137) | 67 | 0 |
| 11/9/2024 18:00 | 24.3 | 16 | 22 | ESE (121) | 71 | 0 |
| 11/9/2024 19:00 | 22 | 13 | 19 | SE (141) | 77 | 0 |
| 11/9/2024 20:00 | 20.2 | 13 | 19 | SE (142) | 84 | 0 |
| 11/9/2024 21:00 | 19.1 | 14 | 18 | SE (136) | 84 | 0 |
| 11/9/2024 22:00 | 18.4 | 13 | 17 | SE (134) | 84 | 0 |
| 11/9/2024 23:00 | 17.7 | 12 | 17 | SE (130) | 90 | 0 |
| 12/9/2024 0:00 | 17.4 | 14 | 21 | SE (140) | 92 | 0 |
| 12/9/2024 1:00 | 17.2 | 12 | 20 | SE (124) | 94 | 0 |
| 12/9/2024 2:00 | 16.1 | 7 | 13 | NNE (25) | 98 | 0 |
| 12/9/2024 3:00 | 15.3 | 5 | 15 | ESE (118) | 100 | 0 |
| 12/9/2024 4:00 | 15.2 | 6 | 9 | E (95) | 99 | 0 |
| 12/9/2024 5:00 | 14.9 | 9 | 12 | ESE (106) | 99 | 0 |
| 12/9/2024 6:00 | 14.7 | 9 | 12 | E (89) | 98 | 0 |
| 12/9/2024 7:00 | 14.6 | 8 | 11 | E (98) | 94 | 0 |
| 12/9/2024 8:00 | 15.8 | 9 | 12 | E (97) | 93 | 0 |
| 12/9/2024 9:00 | 18.5 | 9 | 14 | ESE (116) | 91 | 0 |
| 12/9/2024 10:00 | 20.5 | 10 | 14 | SE (128) | 79 | 0 |
| 12/9/2024 11:00 | 22.5 | 8 | 12 | ESE (121) | 80 | 0 |
| 12/9/2024 12:00 | 24.8 | 8 | 14 | ESE (114) | 59 | 0 |
| 12/9/2024 13:00 | 25.7 | 8 | 14 | E (80) | 53 | 0 |
| 12/9/2024 14:00 | 26.4 | 8 | 13 | SE (130) | 52 | 0 |
| 12/9/2024 15:00 | 26.8 | 8 | 16 | SSE (153) | 54 | 0 |
| 12/9/2024 16:00 | 27 | 8 | 16 | E (90) | 56 | 0 |
| 12/9/2024 17:00 | 26.9 | 9 | 14 | ESE (121) | 54 | 0 |
| 12/9/2024 18:00 | 26.3 | 7 | 13 | SE (126) | 63 | 0 |
| 12/9/2024 19:00 | 23.5 | 8 | 11 | ESE (107) | 81 | 0 |
| 12/9/2024 20:00 | 21.2 | 6 | 9 | ESE (123) | 85 | 0 |
| 12/9/2024 21:00 | 19.4 | 4 | 6 | ESE (104) | 92 | 0 |
| 12/9/2024 22:00 | 18.4 | 5 | 7 | ESE (104) | 93 | 0 |
| 12/9/2024 23:00 | 18.1 | 8 | 11 | ESE (106) | 92 | 0 |
| 13/9/2024 0:00 | 18.1 | 10 | 12 | ESE (110) | 88 | 0 |
| 13/9/2024 1:00 | 18.1 | 9 | 11 | ESE (103) | 86 | 0 |
| 13/9/2024 2:00 | 17.7 | 10 | 12 | ESE (105) | 90 | 0 |
| 13/9/2024 3:00 | 17.1 | 11 | 13 | ESE (104) | 94 | 0 |
| 13/9/2024 4:00 | 16.8 | 11 | 14 | ESE (106) | 96 | 0 |
| 13/9/2024 5:00 | 16.6 | 11 | 14 | ESE (114) | 97 | 0 |
| 13/9/2024 6:00 | 16.1 | 12 | 14 | ESE (107) | 97 | 0 |
| 13/9/2024 7:00 | 16.1 | 12 | 15 | ESE (109) | 98 | 0 |
| 13/9/2024 8:00 | 17.6 | 14 | 17 | ESE (104) | 96 | 0 |
| 13/9/2024 9:00 | 19.4 | 15 | 19 | ESE (120) | 92 | 0 |

Twin Creeks Landfill Meteorological Conditions - September 16 to September 19, 2024

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|-----------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 16/9/2024 16:00 | 26.5 | 18 | 27 | SE (132) | 43 | 0 |
| 16/9/2024 17:00 | 26.2 | 16 | 23 | SE (134) | 46 | 0 |
| 16/9/2024 18:00 | 25 | 15 | 21 | SE (138) | 51 | 0 |
| 16/9/2024 19:00 | 22.8 | 7 | 11 | SE (137) | 61 | 0 |
| 16/9/2024 20:00 | 19.8 | 5 | 10 | E (93) | 82 | 0 |
| 16/9/2024 21:00 | 18.5 | 5 | 6 | ESE (104) | 83 | 0 |
| 16/9/2024 22:00 | 18 | 4 | 5 | ESE (111) | 83 | 0 |
| 16/9/2024 23:00 | 17.4 | 5 | 8 | ESE (111) | 84 | 0 |
| 17/9/2024 0:00 | 16.6 | 7 | 11 | E (91) | 86 | 0 |
| 17/9/2024 1:00 | 16.6 | 5 | 9 | ESE (107) | 83 | 0 |
| 17/9/2024 2:00 | 16.4 | 10 | 12 | E (99) | 83 | 0 |
| 17/9/2024 3:00 | 15.4 | 12 | 13 | ESE (112) | 87 | 0 |
| 17/9/2024 4:00 | 14.9 | 11 | 13 | ESE (112) | 89 | 0 |
| 17/9/2024 5:00 | 14.5 | 10 | 12 | ESE (106) | 92 | 0 |
| 17/9/2024 6:00 | 13.9 | 8 | 10 | ESE (107) | 96 | 0 |
| 17/9/2024 7:00 | 13.8 | 11 | 14 | ESE (113) | 93 | 0 |
| 17/9/2024 8:00 | 14 | 11 | 14 | ESE (102) | 92 | 0 |
| 17/9/2024 9:00 | 15.9 | 9 | 13 | E (101) | 91 | 0 |
| 17/9/2024 10:00 | 20.3 | 14 | 25 | ESE (120) | 85 | 0 |
| 17/9/2024 11:00 | 22 | 18 | 24 | ESE (121) | 69 | 0 |
| 17/9/2024 12:00 | 23 | 17 | 25 | SE (132) | 66 | 0 |
| 17/9/2024 13:00 | 23.7 | 16 | 24 | ESE (115) | 65 | 0 |
| 17/9/2024 14:00 | 24.7 | 20 | 28 | SE (126) | 62 | 0 |
| 17/9/2024 15:00 | 24.2 | 20 | 28 | ESE (115) | 60 | 0 |
| 17/9/2024 16:00 | 24.6 | 13 | 22 | SE (146) | 60 | 0 |
| 17/9/2024 17:00 | 24.8 | 14 | 21 | ESE (121) | 58 | 0 |
| 17/9/2024 18:00 | 24.2 | 11 | 16 | SE (127) | 62 | 0 |
| 17/9/2024 19:00 | 22.5 | 6 | 10 | ESE (102) | 74 | 0 |
| 17/9/2024 20:00 | 20.4 | 2 | 6 | E (85) | 82 | 0 |
| 17/9/2024 21:00 | 19 | 3 | 7 | NE (49) | 89 | 0 |
| 17/9/2024 22:00 | 18.2 | 3 | 6 | ESE (109) | 89 | 0 |
| 17/9/2024 23:00 | 17.8 | 5 | 9 | E (96) | 92 | 0 |
| 18/9/2024 0:00 | 18.1 | 10 | 13 | ESE (110) | 92 | 0 |
| 18/9/2024 1:00 | 17.7 | 11 | 14 | ESE (111) | 83 | 0 |
| 18/9/2024 2:00 | 16.9 | 10 | 14 | ESE (108) | 86 | 0 |
| 18/9/2024 3:00 | 16.8 | 12 | 14 | ESE (105) | 88 | 0 |
| 18/9/2024 4:00 | 15.9 | 11 | 13 | ESE (114) | 93 | 0 |
| 18/9/2024 5:00 | 15.6 | 10 | 13 | ESE (107) | 95 | 0 |
| 18/9/2024 6:00 | 15.3 | 12 | 13 | ESE (105) | 96 | 0 |
| 18/9/2024 7:00 | 15.5 | 8 | 13 | E (97) | 97 | 0 |
| 18/9/2024 8:00 | 16.8 | 9 | 12 | E (96) | 96 | 0 |
| 18/9/2024 9:00 | 19.6 | 11 | 16 | ESE (111) | 92 | 0 |
| 18/9/2024 10:00 | 21.5 | 12 | 19 | ESE (114) | 84 | 0 |
| 18/9/2024 11:00 | 23.1 | 9 | 17 | E (83) | 77 | 0 |
| 18/9/2024 12:00 | 24 | 11 | 18 | ENE (62) | 70 | 0 |
| 18/9/2024 13:00 | 24.6 | 10 | 18 | E (85) | 69 | 0 |
| 18/9/2024 14:00 | 25.5 | 11 | 20 | ESE (123) | 60 | 0 |
| 18/9/2024 15:00 | 25.8 | 13 | 22 | SE (127) | 57 | 0 |
| 18/9/2024 16:00 | 25.9 | 12 | 23 | NE (44) | 57 | 0 |
| 18/9/2024 17:00 | 25.4 | 11 | 18 | ESE (118) | 60 | 0 |
| 18/9/2024 18:00 | 24.4 | 12 | 18 | SSE (165) | 68 | 0 |
| 18/9/2024 19:00 | 22.4 | 7 | 12 | S (185) | 79 | 0 |
| 18/9/2024 20:00 | 20.3 | 2 | 6 | N (8) | 90 | 0 |
| 18/9/2024 21:00 | 18.8 | 3 | 7 | ESE (108) | 92 | 0 |
| 18/9/2024 22:00 | 18.3 | 5 | 7 | E (90) | 94 | 0 |
| 18/9/2024 23:00 | 17.5 | 4 | 7 | E (97) | 95 | 0 |
| 19/9/2024 0:00 | 16.7 | 6 | 7 | E (99) | 96 | 0 |
| 19/9/2024 1:00 | 16.7 | 4 | 6 | E (95) | 94 | 0 |
| 19/9/2024 2:00 | 16.2 | 4 | 6 | E (94) | 94 | 0 |
| 19/9/2024 3:00 | 15.5 | 6 | 7 | E (100) | 96 | 0 |
| 19/9/2024 4:00 | 15.2 | 5 | 8 | E (94) | 95 | 0 |
| 19/9/2024 5:00 | 15 | 6 | 8 | E (91) | 96 | 0 |
| 19/9/2024 6:00 | 14.8 | 7 | 10 | E (89) | 95 | 0 |
| 19/9/2024 7:00 | 14.6 | 5 | 8 | ESE (102) | 97 | 0 |
| 19/9/2024 8:00 | 16.4 | 9 | 12 | ESE (103) | 95 | 0 |
| 19/9/2024 9:00 | 19.3 | 6 | 9 | SE (138) | 93 | 0 |
| 19/9/2024 10:00 | 21.7 | 4 | 9 | ESE (113) | 83 | 0 |
| 19/9/2024 11:00 | 23.2 | 4 | 13 | ESE (109) | 77 | 0 |
| 19/9/2024 12:00 | 24.4 | 4 | 9 | ESE (113) | 69 | 0 |
| 19/9/2024 13:00 | 25 | 5 | 11 | ENE (71) | 64 | 0 |
| 19/9/2024 14:00 | 25.6 | 4 | 11 | ENE (66) | 61 | 0 |
| 19/9/2024 15:00 | 25.8 | 5 | 14 | N (350) | 61 | 0 |

Twin Creeks Landfill Meteorological Conditions - September 18 to September 21, 2024

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|-----------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 18/9/2024 16:00 | 25.9 | 12 | 23 | NE (44) | 57 | 0 |
| 18/9/2024 17:00 | 25.4 | 11 | 18 | ESE (118) | 60 | 0 |
| 18/9/2024 18:00 | 24.4 | 12 | 18 | SSE (165) | 68 | 0 |
| 18/9/2024 19:00 | 22.4 | 7 | 12 | S (185) | 79 | 0 |
| 18/9/2024 20:00 | 20.3 | 2 | 6 | N (8) | 90 | 0 |
| 18/9/2024 21:00 | 18.8 | 3 | 7 | ESE (108) | 92 | 0 |
| 18/9/2024 22:00 | 18.3 | 5 | 7 | E (90) | 94 | 0 |
| 18/9/2024 23:00 | 17.5 | 4 | 7 | E (97) | 95 | 0 |
| 19/9/2024 0:00 | 16.7 | 6 | 7 | E (99) | 96 | 0 |
| 19/9/2024 1:00 | 16.7 | 4 | 6 | E (95) | 94 | 0 |
| 19/9/2024 2:00 | 16.2 | 4 | 6 | E (94) | 94 | 0 |
| 19/9/2024 3:00 | 15.5 | 6 | 7 | E (100) | 96 | 0 |
| 19/9/2024 4:00 | 15.2 | 5 | 8 | E (94) | 95 | 0 |
| 19/9/2024 5:00 | 15 | 6 | 8 | E (91) | 96 | 0 |
| 19/9/2024 6:00 | 14.8 | 7 | 10 | E (89) | 95 | 0 |
| 19/9/2024 7:00 | 14.6 | 5 | 8 | ESE (102) | 97 | 0 |
| 19/9/2024 8:00 | 16.4 | 9 | 12 | ESE (103) | 95 | 0 |
| 19/9/2024 9:00 | 19.3 | 6 | 9 | SE (138) | 93 | 0 |
| 19/9/2024 10:00 | 21.7 | 4 | 9 | ESE (113) | 83 | 0 |
| 19/9/2024 11:00 | 23.2 | 4 | 13 | ESE (109) | 77 | 0 |
| 19/9/2024 12:00 | 24.4 | 4 | 9 | ESE (113) | 69 | 0 |
| 19/9/2024 13:00 | 25 | 5 | 11 | ENE (71) | 64 | 0 |
| 19/9/2024 14:00 | 25.6 | 4 | 11 | ENE (66) | 61 | 0 |
| 19/9/2024 15:00 | 25.8 | 5 | 14 | N (350) | 61 | 0 |
| 19/9/2024 16:00 | 25.9 | 6 | 17 | N (11) | 66 | 0 |
| 19/9/2024 17:00 | 24.8 | 10 | 15 | NW (326) | 68 | 0 |
| 19/9/2024 18:00 | 23.6 | 9 | 15 | NNE (12) | 73 | 0 |
| 19/9/2024 19:00 | 21.7 | 7 | 17 | ESE (122) | 78 | 0 |
| 19/9/2024 20:00 | 20.8 | 7 | 11 | SE (127) | 81 | 0 |
| 19/9/2024 21:00 | 19.8 | 2 | 6 | SSE (155) | 86 | 0 |
| 19/9/2024 22:00 | 19.7 | 4 | 9 | NNE (33) | 89 | 0 |
| 19/9/2024 23:00 | 18 | 1 | 4 | E (96) | 92 | 0 |
| 20/9/2024 0:00 | 17.4 | 4 | 9 | ESE (109) | 95 | 0 |
| 20/9/2024 1:00 | 16.8 | 8 | 12 | ESE (112) | 96 | 0 |
| 20/9/2024 2:00 | 17 | 9 | 11 | ESE (111) | 94 | 0 |
| 20/9/2024 3:00 | 16.6 | 7 | 11 | ESE (108) | 97 | 0 |
| 20/9/2024 4:00 | 16.4 | 7 | 10 | ESE (104) | 97 | 0 |
| 20/9/2024 5:00 | 16.4 | 10 | 12 | ESE (106) | 94 | 0 |
| 20/9/2024 6:00 | 16.3 | 7 | 10 | ESE (110) | 93 | 0 |
| 20/9/2024 7:00 | 16.3 | 9 | 11 | ESE (106) | 94 | 0 |
| 20/9/2024 8:00 | 17.3 | 10 | 14 | ESE (112) | 91 | 0 |
| 20/9/2024 9:00 | 18.4 | 17 | 24 | SE (125) | 98 | 0 |
| 20/9/2024 10:00 | 19.1 | 11 | 19 | ESE (121) | 98 | 0 |
| 20/9/2024 11:00 | 20.9 | 6 | 12 | SE (139) | 90 | 0 |
| 20/9/2024 12:00 | 22.6 | 9 | 15 | ESE (120) | 84 | 0 |
| 20/9/2024 13:00 | 24.1 | 14 | 22 | SE (126) | 77 | 0 |
| 20/9/2024 14:00 | 25.3 | 11 | 22 | SSE (163) | 71 | 0 |
| 20/9/2024 15:00 | 25.8 | 11 | 19 | ESE (109) | 63 | 0 |
| 20/9/2024 16:00 | 26.1 | 13 | 27 | S (180) | 62 | 0 |
| 20/9/2024 17:00 | 25.5 | 16 | 26 | ESE (118) | 68 | 0 |
| 20/9/2024 18:00 | 23.9 | 16 | 22 | SE (129) | 72 | 0 |
| 20/9/2024 19:00 | 22.2 | 16 | 21 | SE (132) | 76 | 0 |
| 20/9/2024 20:00 | 20.8 | 14 | 20 | SE (146) | 81 | 0 |
| 20/9/2024 21:00 | 20.2 | 13 | 19 | ESE (120) | 86 | 0 |
| 20/9/2024 22:00 | 19.6 | 16 | 21 | SE (129) | 87 | 0 |
| 20/9/2024 23:00 | 19.4 | 18 | 21 | ESE (121) | 90 | 0 |
| 21/9/2024 0:00 | 19.4 | 15 | 20 | SE (127) | 91 | 0 |
| 21/9/2024 1:00 | - | - | - | - | - | - |
| 21/9/2024 2:00 | - | - | - | - | - | - |
| 21/9/2024 3:00 | - | - | - | - | - | - |
| 21/9/2024 4:00 | - | - | - | - | - | - |
| 21/9/2024 5:00 | - | - | - | - | - | - |
| 21/9/2024 6:00 | - | - | - | - | - | - |
| 21/9/2024 7:00 | - | - | - | - | - | - |
| 21/9/2024 8:00 | - | - | - | - | - | - |
| 21/9/2024 9:00 | - | - | - | - | - | - |
| 21/9/2024 10:00 | 22.4 | 7 | 13 | NW (309) | 88 | 0 |
| 21/9/2024 11:00 | 23.6 | 9 | 16 | NW (323) | 83 | 0 |
| 21/9/2024 12:00 | 24.8 | 10 | 22 | N (350) | 79 | 0 |
| 21/9/2024 13:00 | 25.5 | 10 | 18 | NW (325) | 62 | 0 |
| 21/9/2024 14:00 | 25.9 | 10 | 19 | WNW (296) | 61 | 0 |
| 21/9/2024 15:00 | 26.4 | 11 | 24 | NW (322) | 55 | 0 |

Twin Creeks Landfill Meteorological Conditions - October 8 to October 11, 2024

| DATE (EST) | Temperature (C) - 60 minutes | Wind Speed (km/h) - 60 minutes | Wind Gust (km/h) - 60 minutes | Wind Direction - 60 minutes | Relative Humidity (%) - 60 minutes | Precipitation (mm) - 60 minutes |
|------------------|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------------------|------------------------------------|
| 8/10/2024 1:00 | 7.9 | 8 | 12 | WSW (247) | 78 | 0 |
| 8/10/2024 2:00 | 7.8 | 6 | 9 | WSW (240) | 80 | 0 |
| 8/10/2024 3:00 | 7.9 | 6 | 9 | WSW (237) | 83 | 0 |
| 8/10/2024 4:00 | 8 | 7 | 9 | SW (226) | 83 | 0 |
| 8/10/2024 5:00 | 7.1 | 7 | 11 | WSW (238) | 89 | 0 |
| 8/10/2024 6:00 | 6.4 | 7 | 10 | SW (236) | 91 | 0 |
| 8/10/2024 7:00 | 6.3 | 6 | 8 | SW (228) | 94 | 0 |
| 8/10/2024 8:00 | 7.4 | 7 | 10 | SW (236) | 92 | 0 |
| 8/10/2024 9:00 | 9.7 | 7 | 12 | W (261) | 89 | 0 |
| 8/10/2024 10:00 | 13 | 10 | 17 | WNW (285) | 83 | 0 |
| 8/10/2024 11:00 | 14.8 | 17 | 29 | WNW (282) | 54 | 0 |
| 8/10/2024 12:00 | 15.5 | 20 | 32 | NW (310) | 46 | 0 |
| 8/10/2024 13:00 | 15.9 | 18 | 35 | NW (311) | 48 | 0 |
| 8/10/2024 14:00 | 16.2 | 18 | 34 | NNW (341) | 48 | 0 |
| 8/10/2024 15:00 | 15.5 | 16 | 31 | N (0) | 69 | 0 |
| 8/10/2024 16:00 | 13.9 | 10 | 23 | NNE (29) | 72 | 0 |
| 8/10/2024 17:00 | 14 | 11 | 21 | NNE (17) | 70 | 0 |
| 8/10/2024 18:00 | 12.9 | 4 | 12 | NNE (26) | 74 | 0 |
| 8/10/2024 19:00 | 11.7 | 4 | 7 | ENE (66) | 78 | 0 |
| 8/10/2024 20:00 | 10.8 | 5 | 7 | E (96) | 85 | 0 |
| 8/10/2024 21:00 | 10.4 | 5 | 7 | ESE (110) | 84 | 0 |
| 8/10/2024 22:00 | 9.2 | 5 | 7 | NE (45) | 91 | 0 |
| 8/10/2024 23:00 | 8.4 | 4 | 6 | ESE (108) | 88 | 0 |
| 9/10/2024 0:00 | 8.7 | 4 | 6 | E (101) | 86 | 0 |
| 9/10/2024 1:00 | 7.6 | 3 | 8 | NW (318) | 94 | 0 |
| 9/10/2024 2:00 | 7.3 | 4 | 7 | WSW (239) | 93 | 0 |
| 9/10/2024 3:00 | 7.4 | 7 | 9 | WSW (241) | 90 | 0 |
| 9/10/2024 4:00 | 7.1 | 5 | 7 | WSW (240) | 88 | 0 |
| 9/10/2024 5:00 | 6.4 | 6 | 8 | SW (232) | 86 | 0 |
| 9/10/2024 6:00 | 5.7 | 9 | 15 | WSW (247) | 87 | 0 |
| 9/10/2024 7:00 | 5.2 | 10 | 13 | WSW (245) | 89 | 0 |
| 9/10/2024 8:00 | 6.1 | 8 | 12 | SW (215) | 87 | 0 |
| 9/10/2024 9:00 | 9.5 | 14 | 29 | WNW (292) | 86 | 0 |
| 9/10/2024 10:00 | 11.6 | 25 | 40 | WNW (288) | 64 | 0 |
| 9/10/2024 11:00 | 12.3 | 28 | 50 | WNW (301) | 58 | 0 |
| 9/10/2024 12:00 | 12.8 | 30 | 47 | WNW (290) | 57 | 0 |
| 9/10/2024 13:00 | 13.1 | 27 | 47 | WNW (299) | 57 | 0 |
| 9/10/2024 14:00 | 13.2 | 25 | 40 | NW (317) | 55 | 0 |
| 9/10/2024 15:00 | 13.2 | 25 | 41 | NNW (335) | 59 | 0 |
| 9/10/2024 16:00 | 13.5 | 24 | 36 | NW (325) | 54 | 0 |
| 9/10/2024 17:00 | 13.3 | 19 | 32 | NW (315) | 56 | 0 |
| 9/10/2024 18:00 | 12.4 | 13 | 27 | NNW (348) | 69 | 0 |
| 9/10/2024 19:00 | 10.7 | 7 | 16 | N (349) | 77 | 0 |
| 9/10/2024 20:00 | 9.8 | 8 | 16 | NNE (26) | 77 | 0 |
| 9/10/2024 21:00 | 8.2 | 7 | 16 | NNE (33) | 79 | 0 |
| 9/10/2024 22:00 | 7.8 | 6 | 10 | E (91) | 80 | 0 |
| 9/10/2024 23:00 | 6.7 | 4 | 6 | ESE (117) | 85 | 0 |
| 10/10/2024 0:00 | 6.2 | 4 | 8 | S (175) | 90 | 0 |
| 10/10/2024 1:00 | 6.3 | 4 | 8 | SSW (195) | 87 | 0 |
| 10/10/2024 2:00 | 5.3 | 3 | 6 | E (80) | 93 | 0 |
| 10/10/2024 3:00 | 4.9 | 2 | 6 | SW (231) | 95 | 0 |
| 10/10/2024 4:00 | 5.5 | 2 | 4 | SSW (206) | 94 | 0 |
| 10/10/2024 5:00 | 5.1 | 0 | 2 | ENE (69) | 94 | 0 |
| 10/10/2024 6:00 | 4.4 | 0 | 3 | E (84) | 95 | 0 |
| 10/10/2024 7:00 | 4.5 | 0 | 1 | SE (125) | 94 | 0 |
| 10/10/2024 8:00 | 6.7 | 0 | 2 | SSW (202) | 92 | 0 |
| 10/10/2024 9:00 | 9.2 | 2 | 5 | E (94) | 81 | 0 |
| 10/10/2024 10:00 | 10.4 | 3 | 9 | ENE (61) | 69 | 0 |
| 10/10/2024 11:00 | 11.3 | 7 | 18 | NW (308) | 67 | 0 |
| 10/10/2024 12:00 | 12.2 | 8 | 18 | WNW (283) | 66 | 0 |
| 10/10/2024 13:00 | 13 | 8 | 16 | NW (318) | 63 | 0 |
| 10/10/2024 14:00 | 13.6 | 11 | 22 | NW (306) | 59 | 0 |
| 10/10/2024 15:00 | 13.9 | 11 | 20 | NW (326) | 57 | 0 |
| 10/10/2024 16:00 | 13.9 | 9 | 17 | NW (320) | 56 | 0 |
| 10/10/2024 17:00 | 13.8 | 8 | 16 | NNW (348) | 60 | 0 |
| 10/10/2024 18:00 | 12.5 | 5 | 11 | NE (45) | 69 | 0 |
| 10/10/2024 19:00 | 10.7 | 4 | 6 | ESE (105) | 80 | 0 |
| 10/10/2024 20:00 | 9.4 | 3 | 4 | ESE (116) | 82 | 0 |
| 10/10/2024 21:00 | 8.2 | 1 | 3 | SE (131) | 90 | 0 |
| 10/10/2024 22:00 | 7.4 | 1 | 3 | SSE (164) | 93 | 0 |
| 10/10/2024 23:00 | 7.8 | 4 | 7 | SSE (161) | 87 | 0 |
| 11/10/2024 0:00 | 8.2 | 7 | 10 | S (176) | 84 | 0 |

The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'APPENDIX E2' is centered within the gray area.

APPENDIX E2



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: NA

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/07/23
Report #: R8245970
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4K6713

Received: 2024/07/08, 14:49

Sample Matrix: Air
Samples Received: 2

| Analyses | Date | | Date Analyzed | Laboratory Method | Analytical Method |
|---|----------|-----------|---------------|-------------------|-------------------|
| | Quantity | Extracted | | | |
| Canister Pressure (TO-15) | 2 | N/A | 2024/07/15 | BRL SOP-00304 | EPA TO-15 m |
| VOCs in Air (TO-15) | 2 | N/A | 2024/07/18 | BRL SOP-00304 | EPA TO-15 m |
| Volatile Organics in Air (TO-15mod) (1) | 2 | N/A | 2024/07/15 | BRL SOP-00304 | EPA TO-15A m |
| Volatile Organics in Air (TO-15) (2) | 2 | N/A | 2024/07/15 | BRL SOP-00304 | EPA TO-15 m |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: NA

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/07/23
Report #: R8245970
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4K6713

Received: 2024/07/08, 14:49

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant
Email: Julian.Tong@bureauveritas.com
Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4K6713
Report Date: 2024/07/23

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF AIR

| | | | | |
|----------------------------------|--------------|--------------------|--------------------|-----------------|
| Bureau Veritas ID | | ZQU853 | ZQU854 | |
| Sampling Date | | 2024/07/04 | 2024/07/04 | |
| COC Number | | NA | NA | |
| | UNITS | 1A (SX1987) | 1B (SX1803) | QC Batch |
| Volatile Organics | | | | |
| Pressure on Receipt | psig | (-3.7) | (-2.7) | 9516091 |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4K6713
Report Date: 2024/07/23

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ZQU853 | | ZQU854 | | |
|-------------------------------------|-------|-------------|------|-------------|------|----------|
| Sampling Date | | 2024/07/04 | | 2024/07/04 | | |
| COC Number | | NA | | NA | | |
| | UNITS | 1A (SX1987) | RDL | 1B (SX1803) | RDL | QC Batch |
| Volatile Organics | | | | | | |
| Dichlorodifluoromethane (FREON 12) | ppbv | 0.66 | 0.20 | 0.56 | 0.20 | 9516094 |
| 1,2-Dichlorotetrafluoroethane | ppbv | <0.17 | 0.17 | <0.17 | 0.17 | 9516094 |
| Chloromethane | ppbv | 0.45 | 0.30 | 0.45 | 0.30 | 9516094 |
| Vinyl Chloride | ppbv | 0.06 | 0.02 | 0.05 | 0.02 | 9531324 |
| Chloroethane | ppbv | <0.30 | 0.30 | <0.30 | 0.30 | 9516094 |
| 1,3-Butadiene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9516094 |
| Trichlorofluoromethane (FREON 11) | ppbv | 0.73 | 0.20 | 0.40 | 0.20 | 9516094 |
| Ethanol (ethyl alcohol) | ppbv | 8.2 | 1.0 | 7.4 | 1.0 | 9516094 |
| Trichlorotrifluoroethane | ppbv | <0.15 | 0.15 | <0.15 | 0.15 | 9516094 |
| 2-propanol | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9516094 |
| 2-Propanone | ppbv | 4.06 | 0.60 | 4.71 | 0.60 | 9516094 |
| Methyl Ethyl Ketone (2-Butanone) | ppbv | 1.42 | 0.20 | 1.16 | 0.20 | 9516094 |
| Methyl Isobutyl Ketone | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Methyl Butyl Ketone (2-Hexanone) | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9516094 |
| Methyl t-butyl ether (MTBE) | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Ethyl Acetate | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9516094 |
| 1,1-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| cis-1,2-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| trans-1,2-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Methylene Chloride(Dichloromethane) | ppbv | <0.60 | 0.60 | <0.60 | 0.60 | 9516094 |
| Chloroform | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Carbon Tetrachloride | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 1,1-Dichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 1,2-Dichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Ethylene Dibromide | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 1,1,1-Trichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 1,1,2-Trichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 1,1,2,2-Tetrachloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| cis-1,3-Dichloropropene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| trans-1,3-Dichloropropene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 1,2-Dichloropropane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Bromomethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Bromoform | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Bromodichloromethane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4K6713
Report Date: 2024/07/23

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ZQU853 | | ZQU854 | | |
|--|-------|-------------|------|-------------|------|----------|
| Sampling Date | | 2024/07/04 | | 2024/07/04 | | |
| COC Number | | NA | | NA | | |
| | UNITS | 1A (SX1987) | RDL | 1B (SX1803) | RDL | QC Batch |
| Dibromochloromethane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Trichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Tetrachloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Benzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Toluene | ppbv | 0.59 | 0.10 | 0.47 | 0.10 | 9516094 |
| Ethylbenzene | ppbv | 0.12 | 0.10 | 0.11 | 0.10 | 9516094 |
| p+m-Xylene | ppbv | 0.31 | 0.20 | 0.25 | 0.20 | 9516094 |
| o-Xylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Styrene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 4-ethyltoluene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9516094 |
| 1,3,5-Trimethylbenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9516094 |
| 1,2,4-Trimethylbenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9516094 |
| Chlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Benzyl chloride | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9516094 |
| 1,3-Dichlorobenzene | ppbv | <0.40 | 0.40 | <0.40 | 0.40 | 9516094 |
| 1,4-Dichlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 1,2-Dichlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| 1,2,4-Trichlorobenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9516094 |
| Hexachlorobutadiene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9516094 |
| Hexane | ppbv | <0.20 | 0.20 | <0.31 | 0.31 | 9516094 |
| Heptane | ppbv | <0.30 | 0.30 | <0.30 | 0.30 | 9516094 |
| Cyclohexane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Tetrahydrofuran | ppbv | <0.40 | 0.40 | <0.40 | 0.40 | 9516094 |
| 1,4-Dioxane | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9516094 |
| Naphthalene | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Total Xylenes | ppbv | 0.31 | 0.30 | <0.30 | 0.30 | 9516094 |
| 1,1,1,2-Tetrachloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9516094 |
| Vinyl Bromide | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Propene | ppbv | <2.8 | 2.8 | <1.9 | 1.9 | 9516094 |
| 2,2,4-Trimethylpentane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Carbon Disulfide | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9516094 |
| Vinyl Acetate | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9516094 |
| Surrogate Recovery (%) | | | | | | |
| Bromochloromethane | % | 101 | | 102 | | 9531324 |
| D5-Chlorobenzene | % | 104 | | 101 | | 9531324 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4K6713
Report Date: 2024/07/23

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| | | | | | | |
|----------------------------------|--------------|--------------------|------------|--------------------|------------|-----------------|
| Bureau Veritas ID | | ZQU853 | | ZQU854 | | |
| Sampling Date | | 2024/07/04 | | 2024/07/04 | | |
| COC Number | | NA | | NA | | |
| | UNITS | 1A (SX1987) | RDL | 1B (SX1803) | RDL | QC Batch |
| Difluorobenzene | % | 103 | | 101 | | 9531324 |
| Bromochloromethane | % | 82 | | 82 | | 9518202 |
| D5-Chlorobenzene | % | 77 | | 76 | | 9518202 |
| Difluorobenzene | % | 82 | | 81 | | 9518202 |
| Bromochloromethane | % | 82 | | 82 | | 9516094 |
| D5-Chlorobenzene | % | 77 | | 76 | | 9516094 |
| Difluorobenzene | % | 82 | | 81 | | 9516094 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



GENERAL COMMENTS

Sample ZQU853:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

2-Methylbutane was detected at 3.1 ppbv (87% probability) and pentane at 2.4 ppbv (91% probability).

Sample ZQU854:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

2-Methylbutane was detected at 1.3 ppbv (64% probability) and pentane at 1.1 ppbv (80% probability).

Sample ZQU853 [1A (SX1987)] : Increased DL for propene due to interference from propane.

Sample ZQU854 [1B (SX1803)] : Increased DL for propene due to interference from propane.
Increased DL for hexane due to interference.

Results relate only to the items tested.



Bureau Veritas Job #: C4K6713
Report Date: 2024/07/23

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9516094 | Bromochloromethane | 2024/07/15 | 108 | 60 - 140 | 92 | % | | |
| 9516094 | D5-Chlorobenzene | 2024/07/15 | 109 | 60 - 140 | 87 | % | | |
| 9516094 | Difluorobenzene | 2024/07/15 | 108 | 60 - 140 | 93 | % | | |
| 9518202 | Bromochloromethane | 2024/07/15 | 108 | 60 - 140 | 92 | % | | |
| 9518202 | D5-Chlorobenzene | 2024/07/15 | 109 | 60 - 140 | 87 | % | | |
| 9518202 | Difluorobenzene | 2024/07/15 | 108 | 60 - 140 | 93 | % | | |
| 9531324 | Bromochloromethane | 2024/07/18 | 102 | 60 - 140 | 106 | % | | |
| 9531324 | D5-Chlorobenzene | 2024/07/18 | 103 | 60 - 140 | 85 | % | | |
| 9531324 | Difluorobenzene | 2024/07/18 | 103 | 60 - 140 | 92 | % | | |
| 9516094 | 1,1,1,2-Tetrachloroethane | 2024/07/15 | 100 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,1,1-Trichloroethane | 2024/07/15 | 96 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,1,2,2-Tetrachloroethane | 2024/07/15 | 96 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,1,2-Trichloroethane | 2024/07/15 | 95 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,1-Dichloroethane | 2024/07/15 | 92 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,1-Dichloroethylene | 2024/07/15 | 94 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,2,4-Trichlorobenzene | 2024/07/15 | 117 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9516094 | 1,2,4-Trimethylbenzene | 2024/07/15 | 104 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9516094 | 1,2-Dichlorobenzene | 2024/07/15 | 105 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,2-Dichloroethane | 2024/07/15 | 92 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,2-Dichloropropane | 2024/07/15 | 93 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,2-Dichlorotetrafluoroethane | 2024/07/15 | 96 | 70 - 130 | <0.17 | ppbv | NC (2) | 25 |
| 9516094 | 1,3,5-Trimethylbenzene | 2024/07/15 | 101 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9516094 | 1,3-Butadiene | 2024/07/15 | 101 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9516094 | 1,3-Dichlorobenzene | 2024/07/15 | 102 | 70 - 130 | <0.40 | ppbv | NC (2) | 25 |
| 9516094 | 1,4-Dichlorobenzene | 2024/07/15 | 104 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | 1,4-Dioxane | 2024/07/15 | 99 | 70 - 130 | <1.0 | ppbv | NC (2) | 25 |
| 9516094 | 2,2,4-Trimethylpentane | 2024/07/15 | 103 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | 2-propanol | 2024/07/15 | 111 | 70 - 130 | <1.0 | ppbv | NC (2) | 25 |
| 9516094 | 2-Propanone | 2024/07/15 | 107 | 70 - 130 | <0.60 | ppbv | 2.0 (2) | 25 |
| 9516094 | 4-ethyltoluene | 2024/07/15 | 124 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9516094 | Benzene | 2024/07/15 | 98 | 70 - 130 | <0.10 | ppbv | 8.2 (2) | 25 |



Bureau Veritas Job #: C4K6713
Report Date: 2024/07/23

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9516094 | Benzyl chloride | 2024/07/15 | 131 (1) | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9516094 | Bromodichloromethane | 2024/07/15 | 98 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | Bromoform | 2024/07/15 | 114 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | Bromomethane | 2024/07/15 | 92 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Carbon Disulfide | 2024/07/15 | 94 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9516094 | Carbon Tetrachloride | 2024/07/15 | 97 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Chlorobenzene | 2024/07/15 | 95 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Chloroethane | 2024/07/15 | 92 | 70 - 130 | <0.30 | ppbv | NC (2) | 25 |
| 9516094 | Chloroform | 2024/07/15 | 93 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Chloromethane | 2024/07/15 | 94 | 70 - 130 | <0.30 | ppbv | 5.8 (2) | 25 |
| 9516094 | cis-1,2-Dichloroethylene | 2024/07/15 | 95 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | cis-1,3-Dichloropropene | 2024/07/15 | 96 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Cyclohexane | 2024/07/15 | 103 | 70 - 130 | <0.20 | ppbv | 3.9 (2) | 25 |
| 9516094 | Dibromochloromethane | 2024/07/15 | 106 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | Dichlorodifluoromethane (FREON 12) | 2024/07/15 | 93 | 70 - 130 | <0.20 | ppbv | 1.8 (2) | 25 |
| 9516094 | Ethanol (ethyl alcohol) | 2024/07/15 | 80 | 70 - 130 | <1.0 | ppbv | 1.2 (2) | 25 |
| 9516094 | Ethyl Acetate | 2024/07/15 | 101 | 70 - 130 | <1.0 | ppbv | NC (2) | 25 |
| 9516094 | Ethylbenzene | 2024/07/15 | 97 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Ethylene Dibromide | 2024/07/15 | 95 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Heptane | 2024/07/15 | 101 | 70 - 130 | <0.30 | ppbv | NC (2) | 25 |
| 9516094 | Hexachlorobutadiene | 2024/07/15 | 91 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9516094 | Hexane | 2024/07/15 | 99 | 70 - 130 | <0.20 | ppbv | 0.87 (2) | 25 |
| 9516094 | Methyl Butyl Ketone (2-Hexanone) | 2024/07/15 | 106 | 70 - 130 | <1.0 | ppbv | NC (2) | 25 |
| 9516094 | Methyl Ethyl Ketone (2-Butanone) | 2024/07/15 | 101 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | Methyl Isobutyl Ketone | 2024/07/15 | 101 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | Methyl t-butyl ether (MTBE) | 2024/07/15 | 104 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | Methylene Chloride(Dichloromethane) | 2024/07/15 | 95 | 70 - 130 | <0.60 | ppbv | 0.45 (2) | 25 |
| 9516094 | Naphthalene | 2024/07/15 | 123 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | o-Xylene | 2024/07/15 | 97 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | p+m-Xylene | 2024/07/15 | 98 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | Propene | 2024/07/15 | 95 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |



Bureau Veritas Job #: C4K6713
Report Date: 2024/07/23

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-----------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9516094 | Styrene | 2024/07/15 | 102 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Tetrachloroethylene | 2024/07/15 | 100 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Tetrahydrofuran | 2024/07/15 | 102 | 70 - 130 | <0.40 | ppbv | NC (2) | 25 |
| 9516094 | Toluene | 2024/07/15 | 97 | 70 - 130 | <0.10 | ppbv | 3.3 (2) | 25 |
| 9516094 | Total Xylenes | 2024/07/15 | 97 | 70 - 130 | <0.30 | ppbv | NC (2) | 25 |
| 9516094 | trans-1,2-Dichloroethylene | 2024/07/15 | 102 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | trans-1,3-Dichloropropene | 2024/07/15 | 102 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Trichloroethylene | 2024/07/15 | 99 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9516094 | Trichlorofluoromethane (FREON 11) | 2024/07/15 | 90 | 70 - 130 | <0.20 | ppbv | 0.62 (2) | 25 |
| 9516094 | Trichlorotrifluoroethane | 2024/07/15 | 93 | 70 - 130 | <0.15 | ppbv | NC (2) | 25 |
| 9516094 | Vinyl Acetate | 2024/07/15 | 99 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9516094 | Vinyl Bromide | 2024/07/15 | 91 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9531324 | Vinyl Chloride | 2024/07/18 | 93 | 70 - 130 | <0.02 | ppbv | | |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Duplicate Parent ID



Bureau Veritas Job #: C4K6713
Report Date: 2024/07/23

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink, appearing to read "AMacfarlane", written over a horizontal line.

Anke Macfarlane, Laboratory Manager, VOC

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C4K6713

Maxxam
A Burgess Veolia Group Company

Toll Free
Phone
Fax

C1V

REPORT INFORMATION

| | |
|---------------|---------------|
| Company Name: | RWDI AIR Inc. |
|---------------|---------------|

Project Manager: Khalid Hussein

Address: 600 Southgate Dr.,
Guelph, ON N1G 4A6

E-mail: jeffery.cleland@rwdi.com

Ph: 519-823-1311 ext 2055

| TAT Requirement | | PROJECT INFORMATION | | REPORTING REQUIREMENTS | | Notes | |
|-----------------------------|-------------------------------------|----------------------|-------------|------------------------|--------|---|--|
| STD 10 Business day | <input checked="" type="checkbox"/> | Project #: | 2402553.02 | EDD | | 1) please indicate on chain of custody if your samples are soil vapour or ambient air | |
| Rush 5 Business day * | <input type="checkbox"/> | Name: | Twin Creeks | Regulations | ON 153 | 2) please list all canisters on the chain of custody even if unused | |
| Rush 2 Business day * | <input type="checkbox"/> | PO #: | 13254248 | | ON 419 | | |
| Rush Other * | <input type="checkbox"/> | Maxxam Quote #: | | | BC CSR | | |
| | | Maxxam Contact: | | Other | | | |
| * need approval from Maxxam | | Task Order/Line Item | | | | PROJECT SPECIFIC COMMENTS | |
| | | | | | | See attached page for list of Library Search Items | |
| Client Signature: JRA | | Received by: | | | | | |
| Date/Time: 7/5/2024, AM | | Date/Time: | | | | PLEASE RETURN ALL UNUSED EQUIPMENT | |

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms which are available for viewing at www.maxxam.ca/terms.

Page 13 of 13



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: NA

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/19
Report #: R8326340
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4S9781

Received: 2024/09/17, 10:50

Sample Matrix: Air
Samples Received: 2

| Analyses | Date | | Laboratory Method | Analytical Method |
|--------------------------------------|----------|-----------|--------------------------|-------------------|
| | Quantity | Extracted | | |
| Canister Pressure (TO-15) | 2 | N/A | 2024/09/17 BRL SOP-00304 | EPA TO-15 m |
| VOCs in Air (TO-15) | 2 | N/A | 2024/09/17 BRL SOP-00304 | EPA TO-15 m |
| Volatile Organics in Air (TO-15) (1) | 2 | N/A | 2024/09/17 BRL SOP-00304 | EPA TO-15 m |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: NA

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/19
Report #: R8326340
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4S9781

Received: 2024/09/17, 10:50

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4S9781
Report Date: 2024/09/19

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF AIR

| | | | | |
|----------------------------------|--------------|------------|------------|-----------------|
| Bureau Veritas ID | | ADAL95 | ADAL96 | |
| Sampling Date | | 2024/09/12 | 2024/09/12 | |
| COC Number | | NA | NA | |
| | UNITS | 5A | 5B | QC Batch |
| Volatile Organics | | | | |
| Pressure on Receipt | psig | (-4.6) | (-4.4) | 9642738 |
| QC Batch = Quality Control Batch | | | | |



VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ADAL95 | ADAL96 | | |
|-------------------------------------|-------|------------|------------|------|----------|
| Sampling Date | | 2024/09/12 | 2024/09/12 | | |
| COC Number | | NA | NA | | |
| | UNITS | 5A | 5B | RDL | QC Batch |
| Volatile Organics | | | | | |
| Dichlorodifluoromethane (FREON 12) | ppbv | 0.49 | 0.74 | 0.20 | 9643449 |
| 1,2-Dichlorotetrafluoroethane | ppbv | <0.17 | <0.17 | 0.17 | 9643449 |
| Chloromethane | ppbv | 0.41 | 0.44 | 0.30 | 9643449 |
| Vinyl Chloride | ppbv | <0.02 | 0.19 | 0.02 | 9643790 |
| Chloroethane | ppbv | <0.30 | <0.30 | 0.30 | 9643449 |
| 1,3-Butadiene | ppbv | <0.50 | <0.50 | 0.50 | 9643449 |
| Trichlorofluoromethane (FREON 11) | ppbv | 0.21 | 0.58 | 0.20 | 9643449 |
| Ethanol (ethyl alcohol) | ppbv | 7.0 | 15.2 | 1.0 | 9643449 |
| Trichlorotrifluoroethane | ppbv | <0.15 | <0.15 | 0.15 | 9643449 |
| 2-propanol | ppbv | <1.0 | 1.3 | 1.0 | 9643449 |
| 2-Propanone | ppbv | 2.30 | 6.88 | 0.60 | 9643449 |
| Methyl Ethyl Ketone (2-Butanone) | ppbv | 0.41 | 5.79 | 0.20 | 9643449 |
| Methyl Isobutyl Ketone | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| Methyl Butyl Ketone (2-Hexanone) | ppbv | <1.0 | <1.0 | 1.0 | 9643449 |
| Methyl t-butyl ether (MTBE) | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| Ethyl Acetate | ppbv | <1.0 | <1.0 | 1.0 | 9643449 |
| 1,1-Dichloroethylene | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| cis-1,2-Dichloroethylene | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| trans-1,2-Dichloroethylene | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| Methylene Chloride(Dichloromethane) | ppbv | <0.60 | <0.60 | 0.60 | 9643449 |
| Chloroform | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| Carbon Tetrachloride | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| 1,1-Dichloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| 1,2-Dichloroethane | ppbv | <0.10 | 0.12 | 0.10 | 9643449 |
| Ethylene Dibromide | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| 1,1,1-Trichloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| 1,1,2-Trichloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| 1,1,2,2-Tetrachloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| cis-1,3-Dichloropropene | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| trans-1,3-Dichloropropene | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| 1,2-Dichloropropane | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| Bromomethane | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| Bromoform | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| Bromodichloromethane | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| RDL = Reportable Detection Limit | | | | | |
| QC Batch = Quality Control Batch | | | | | |



Bureau Veritas Job #: C4S9781
Report Date: 2024/09/19

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ADAL95 | ADAL96 | | |
|--|-------|------------|------------|------|----------|
| Sampling Date | | 2024/09/12 | 2024/09/12 | | |
| COC Number | | NA | NA | | |
| | UNITS | 5A | 5B | RDL | QC Batch |
| Dibromochloromethane | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| Trichloroethylene | ppbv | <0.10 | 0.12 | 0.10 | 9643449 |
| Tetrachloroethylene | ppbv | <0.10 | 0.17 | 0.10 | 9643449 |
| Benzene | ppbv | <0.10 | 0.23 | 0.10 | 9643449 |
| Toluene | ppbv | 0.10 | 1.94 | 0.10 | 9643449 |
| Ethylbenzene | ppbv | <0.10 | 0.46 | 0.10 | 9643449 |
| p+m-Xylene | ppbv | <0.20 | 1.28 | 0.20 | 9643449 |
| o-Xylene | ppbv | <0.10 | 0.49 | 0.10 | 9643449 |
| Styrene | ppbv | <0.10 | 0.17 | 0.10 | 9643449 |
| 4-ethyltoluene | ppbv | <0.50 | <0.50 | 0.50 | 9643449 |
| 1,3,5-Trimethylbenzene | ppbv | <0.50 | <0.50 | 0.50 | 9643449 |
| 1,2,4-Trimethylbenzene | ppbv | <0.50 | <0.50 | 0.50 | 9643449 |
| Chlorobenzene | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| Benzyl chloride | ppbv | <0.50 | <0.50 | 0.50 | 9643449 |
| 1,3-Dichlorobenzene | ppbv | <0.40 | <0.40 | 0.40 | 9643449 |
| 1,4-Dichlorobenzene | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| 1,2-Dichlorobenzene | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| 1,2,4-Trichlorobenzene | ppbv | <0.50 | <0.50 | 0.50 | 9643449 |
| Hexachlorobutadiene | ppbv | <0.50 | <0.50 | 0.50 | 9643449 |
| Hexane | ppbv | <0.20 | 0.70 | 0.20 | 9643449 |
| Heptane | ppbv | <0.30 | 0.69 | 0.30 | 9643449 |
| Cyclohexane | ppbv | <0.20 | 0.31 | 0.20 | 9643449 |
| Tetrahydrofuran | ppbv | <0.40 | 0.42 | 0.40 | 9643449 |
| 1,4-Dioxane | ppbv | <1.0 | <1.0 | 1.0 | 9643449 |
| Naphthalene | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| Total Xylenes | ppbv | <0.30 | 1.77 | 0.30 | 9643449 |
| 1,1,1,2-Tetrachloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9643449 |
| Vinyl Bromide | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| Propene | ppbv | <0.50 | 5.55 | 0.50 | 9643449 |
| 2,2,4-Trimethylpentane | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| Carbon Disulfide | ppbv | <0.50 | <0.50 | 0.50 | 9643449 |
| Vinyl Acetate | ppbv | <0.20 | <0.20 | 0.20 | 9643449 |
| Surrogate Recovery (%) | | | | | |
| Bromochloromethane | % | 98 | 95 | | 9643790 |
| D5-Chlorobenzene | % | 96 | 96 | | 9643790 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | |



Bureau Veritas Job #: C4S9781
Report Date: 2024/09/19

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ADAL95 | ADAL96 | | |
|----------------------------------|-------|------------|------------|-----|----------|
| Sampling Date | | 2024/09/12 | 2024/09/12 | | |
| COC Number | | NA | NA | | |
| | UNITS | 5A | 5B | RDL | QC Batch |
| Difluorobenzene | % | 94 | 93 | | 9643790 |
| Bromochloromethane | % | 77 | 79 | | 9643449 |
| D5-Chlorobenzene | % | 74 | 77 | | 9643449 |
| Difluorobenzene | % | 76 | 78 | | 9643449 |
| RDL = Reportable Detection Limit | | | | | |
| QC Batch = Quality Control Batch | | | | | |



GENERAL COMMENTS

Sample ADAL95:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylbutane,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Pentane,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

Sample ADAL96:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Pentane,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

2-Methylbutane was detected at 2.7 ppbv (91% probability).

Sample ADAL96 [5B] : Propene is a mixture of both propene and propane and this represents the highest possible concentration of propene.

Results relate only to the items tested.



Bureau Veritas Job #: C4S9781
Report Date: 2024/09/19

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9643449 | Bromochloromethane | 2024/09/17 | 106 | 60 - 140 | 94 | % | | |
| 9643449 | D5-Chlorobenzene | 2024/09/17 | 105 | 60 - 140 | 92 | % | | |
| 9643449 | Difluorobenzene | 2024/09/17 | 104 | 60 - 140 | 93 | % | | |
| 9643790 | Bromochloromethane | 2024/09/17 | 103 | 60 - 140 | 109 | % | | |
| 9643790 | D5-Chlorobenzene | 2024/09/17 | 104 | 60 - 140 | 88 | % | | |
| 9643790 | Difluorobenzene | 2024/09/17 | 106 | 60 - 140 | 99 | % | | |
| 9643449 | 1,1,1,2-Tetrachloroethane | 2024/09/17 | 103 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,1,1-Trichloroethane | 2024/09/17 | 102 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,1,2,2-Tetrachloroethane | 2024/09/17 | 103 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,1,2-Trichloroethane | 2024/09/17 | 102 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,1-Dichloroethane | 2024/09/17 | 95 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,1-Dichloroethylene | 2024/09/17 | 101 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,2,4-Trichlorobenzene | 2024/09/17 | 125 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9643449 | 1,2,4-Trimethylbenzene | 2024/09/17 | 116 | 70 - 130 | <0.50 | ppbv | 6.2 (2) | 25 |
| 9643449 | 1,2-Dichlorobenzene | 2024/09/17 | 114 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,2-Dichloroethane | 2024/09/17 | 99 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,2-Dichloropropane | 2024/09/17 | 98 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,2-Dichlorotetrafluoroethane | 2024/09/17 | 99 | 70 - 130 | <0.17 | ppbv | NC (2) | 25 |
| 9643449 | 1,3,5-Trimethylbenzene | 2024/09/17 | 110 | 70 - 130 | <0.50 | ppbv | 6.4 (2) | 25 |
| 9643449 | 1,3-Butadiene | 2024/09/17 | 101 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9643449 | 1,3-Dichlorobenzene | 2024/09/17 | 114 | 70 - 130 | <0.40 | ppbv | NC (2) | 25 |
| 9643449 | 1,4-Dichlorobenzene | 2024/09/17 | 114 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | 1,4-Dioxane | 2024/09/17 | 99 | 70 - 130 | <1.0 | ppbv | NC (2) | 25 |
| 9643449 | 2,2,4-Trimethylpentane | 2024/09/17 | 100 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9643449 | 2-propanol | 2024/09/17 | 98 | 70 - 130 | <1.0 | ppbv | 11 (2) | 25 |
| 9643449 | 2-Propanone | 2024/09/17 | 95 | 70 - 130 | <0.60 | ppbv | 11 (2) | 25 |
| 9643449 | 4-ethyltoluene | 2024/09/17 | 120 | 70 - 130 | <0.50 | ppbv | 3.8 (2) | 25 |
| 9643449 | Benzene | 2024/09/17 | 103 | 70 - 130 | <0.10 | ppbv | 3.8 (2) | 25 |
| 9643449 | Benzyl chloride | 2024/09/17 | 128 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9643449 | Bromodichloromethane | 2024/09/17 | 101 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9643449 | Bromoform | 2024/09/17 | 116 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |



Bureau Veritas Job #: C4S9781
Report Date: 2024/09/19

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9643449 | Bromomethane | 2024/09/17 | 99 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Carbon Disulfide | 2024/09/17 | 94 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9643449 | Carbon Tetrachloride | 2024/09/17 | 103 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Chlorobenzene | 2024/09/17 | 104 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Chloroethane | 2024/09/17 | 99 | 70 - 130 | <0.30 | ppbv | NC (2) | 25 |
| 9643449 | Chloroform | 2024/09/17 | 99 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Chloromethane | 2024/09/17 | 98 | 70 - 130 | <0.30 | ppbv | 15 (2) | 25 |
| 9643449 | cis-1,2-Dichloroethylene | 2024/09/17 | 100 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | cis-1,3-Dichloropropene | 2024/09/17 | 103 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Cyclohexane | 2024/09/17 | 104 | 70 - 130 | <0.20 | ppbv | 2.2 (2) | 25 |
| 9643449 | Dibromochloromethane | 2024/09/17 | 110 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9643449 | Dichlorodifluoromethane (FREON 12) | 2024/09/17 | 97 | 70 - 130 | <0.20 | ppbv | 9.8 (2) | 25 |
| 9643449 | Ethanol (ethyl alcohol) | 2024/09/17 | 79 | 70 - 130 | <1.0 | ppbv | 9.3 (2) | 25 |
| 9643449 | Ethyl Acetate | 2024/09/17 | 100 | 70 - 130 | <1.0 | ppbv | NC (2) | 25 |
| 9643449 | Ethylbenzene | 2024/09/17 | 106 | 70 - 130 | <0.10 | ppbv | 1.0 (2) | 25 |
| 9643449 | Ethylene Dibromide | 2024/09/17 | 103 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Heptane | 2024/09/17 | 103 | 70 - 130 | <0.30 | ppbv | 0.97 (2) | 25 |
| 9643449 | Hexachlorobutadiene | 2024/09/17 | 97 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9643449 | Hexane | 2024/09/17 | 100 | 70 - 130 | <0.20 | ppbv | 0.97 (2) | 25 |
| 9643449 | Methyl Butyl Ketone (2-Hexanone) | 2024/09/17 | 105 | 70 - 130 | <1.0 | ppbv | NC (2) | 25 |
| 9643449 | Methyl Ethyl Ketone (2-Butanone) | 2024/09/17 | 104 | 70 - 130 | <0.20 | ppbv | 2.6 (2) | 25 |
| 9643449 | Methyl Isobutyl Ketone | 2024/09/17 | 101 | 70 - 130 | <0.20 | ppbv | 2.8 (2) | 25 |
| 9643449 | Methyl t-butyl ether (MTBE) | 2024/09/17 | 105 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9643449 | Methylene Chloride(Dichloromethane) | 2024/09/17 | 97 | 70 - 130 | <0.60 | ppbv | 6.5 (2) | 25 |
| 9643449 | Naphthalene | 2024/09/17 | 138 (1) | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9643449 | o-Xylene | 2024/09/17 | 103 | 70 - 130 | <0.10 | ppbv | 1.1 (2) | 25 |
| 9643449 | p+m-Xylene | 2024/09/17 | 107 | 70 - 130 | <0.20 | ppbv | 3.4 (2) | 25 |
| 9643449 | Propene | 2024/09/17 | 99 | 70 - 130 | <0.50 | ppbv | NC (2) | 25 |
| 9643449 | Styrene | 2024/09/17 | 117 | 70 - 130 | <0.10 | ppbv | 2.2 (2) | 25 |
| 9643449 | Tetrachloroethylene | 2024/09/17 | 110 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Tetrahydrofuran | 2024/09/17 | 104 | 70 - 130 | <0.40 | ppbv | 5.5 (2) | 25 |



Bureau Veritas Job #: C4S9781
Report Date: 2024/09/19

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-----------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9643449 | Toluene | 2024/09/17 | 105 | 70 - 130 | <0.10 | ppbv | 1.3 (2) | 25 |
| 9643449 | Total Xylenes | 2024/09/17 | 106 | 70 - 130 | <0.30 | ppbv | 2.3 (2) | 25 |
| 9643449 | trans-1,2-Dichloroethylene | 2024/09/17 | 102 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | trans-1,3-Dichloropropene | 2024/09/17 | 110 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Trichloroethylene | 2024/09/17 | 106 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9643449 | Trichlorofluoromethane (FREON 11) | 2024/09/17 | 99 | 70 - 130 | <0.20 | ppbv | 7.1 (2) | 25 |
| 9643449 | Trichlorotrifluoroethane | 2024/09/17 | 98 | 70 - 130 | <0.15 | ppbv | NC (2) | 25 |
| 9643449 | Vinyl Acetate | 2024/09/17 | 98 | 70 - 130 | <0.20 | ppbv | 12 (2) | 25 |
| 9643449 | Vinyl Bromide | 2024/09/17 | 93 | 70 - 130 | <0.20 | ppbv | NC (2) | 25 |
| 9643790 | Vinyl Chloride | 2024/09/17 | 98 | 70 - 130 | <0.02 | ppbv | | |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Duplicate Parent ID



Bureau Veritas Job #: C4S9781
Report Date: 2024/09/19

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink that reads "Melanie Mabini".

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Julian Tong
C4S9781

Maxxam
A Bureau Veritas Group Company

CIV AIR-001

| | |
|----------------------|--|
| Company Name: | WM of Canada |
| Contact Name: | Lisa Mertick |
| Address: | 8039 Zion Line RR#4Watford, ON NON 1A0 |
| E-mail: | lmertick@wm.com |
| Ph: | |
| Sampled by: | JRA, RWDI |

| | |
|-------------------------|---|
| Company Name: | <u>RWDI AIR Inc.</u> |
| Project Manager: | <u>Khalid Hussein</u> |
| Address: | <u>600 Southgate Dr., Guelph, ON N1G 4A6 khalid.hussein@rwdi.com</u> |
| E-mail: | <u>jeffery.cleland@rwdi.com</u> |
| Ph: | <u>519-823-1311 ext 2055</u> |

CAM FCD-01302 /2 Page 1 of 1

ANALYSIS REQUESTED

[illegible]

| | |
|-----------------------|-------------------------------------|
| STD 10 Business day | <input type="checkbox"/> |
| Rush 5 Business day * | <input type="checkbox"/> |
| Rush 2 Business day * | <input checked="" type="checkbox"/> |
| Rush Other * | <input type="checkbox"/> |

- * need approval from Maxxam

Project #: 2402553.02
Name: Twin Creeks
PO #: 13254248

Maxxam Quote #: _____
Maxxam Contact: _____

Task Order/Line Item

| | | |
|-------------|--------|--------------------------|
| EDD | | <input type="checkbox"/> |
| Regulations | ON 153 | <input type="checkbox"/> |
| | ON 419 | <input type="checkbox"/> |
| | BC CSR | <input type="checkbox"/> |
| Other | | |

1) please indicate on chain of custody if your samples are soil vapour or ambient air
2) please list all canisters on the chain of custody even if unused

PROJECT SPECIFIC COMMENTS

See attached page for list of Library Search Items
Additional Flow controller closure
plate returned.

PLEASE RETURN ALL UNUSED EQUIPMENT

Client Signature: JRA

Received by: Cindy Vong
Date/Time: 2024/09/17 10:50

Date/Time: 13/09/2024 AM

Date/Time: 2024/09/17 10:50

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms which are available for viewing at www.maxxam.ca/terms.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: na

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/26
Report #: R8336450
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4T7256

Received: 2024/09/23, 09:28

Sample Matrix: Air
Samples Received: 2

| Analyses | Date | | Laboratory Method | Analytical Method |
|--------------------------------------|----------|-----------|--------------------------|-------------------|
| | Quantity | Extracted | | |
| Canister Pressure (TO-15) | 2 | N/A | 2024/09/23 BRL SOP-00304 | EPA TO-15 m |
| VOCs in Air (TO-15) | 2 | N/A | 2024/09/24 BRL SOP-00304 | EPA TO-15 m |
| Volatile Organics in Air (TO-15) (1) | 2 | N/A | 2024/09/23 BRL SOP-00304 | EPA TO-15 m |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: na

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/26
Report #: R8336450
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4T7256

Received: 2024/09/23, 09:28

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4T7256
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF AIR

| | | | | |
|----------------------------------|--------------|------------|------------|-----------------|
| Bureau Veritas ID | | ADQV05 | ADQV06 | |
| Sampling Date | | 2024/09/18 | 2024/09/18 | |
| COC Number | | na | na | |
| | UNITS | 6A | 6B | QC Batch |
| Volatile Organics | | | | |
| Pressure on Receipt | psig | (-2.5) | (-3.8) | 9655988 |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4T7256
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ADQV05 | | ADQV06 | | |
|-------------------------------------|-------|------------|------|------------|------|----------|
| Sampling Date | | 2024/09/18 | | 2024/09/18 | | |
| COC Number | | na | | na | | |
| | UNITS | 6A | RDL | 6B | RDL | QC Batch |
| Volatile Organics | | | | | | |
| Dichlorodifluoromethane (FREON 12) | ppbv | 0.48 | 0.20 | 0.70 | 0.20 | 9655989 |
| 1,2-Dichlorotetrafluoroethane | ppbv | <0.17 | 0.17 | <0.17 | 0.17 | 9655989 |
| Chloromethane | ppbv | 0.38 | 0.30 | 0.46 | 0.30 | 9655989 |
| Vinyl Chloride | ppbv | <0.02 | 0.02 | 0.04 | 0.02 | 9659123 |
| Chloroethane | ppbv | <0.30 | 0.30 | <0.30 | 0.30 | 9655989 |
| 1,3-Butadiene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9655989 |
| Trichlorofluoromethane (FREON 11) | ppbv | 0.21 | 0.20 | 0.57 | 0.20 | 9655989 |
| Ethanol (ethyl alcohol) | ppbv | 8.2 | 1.0 | 19.6 | 1.0 | 9655989 |
| Trichlorotrifluoroethane | ppbv | <0.15 | 0.15 | <0.15 | 0.15 | 9655989 |
| 2-propanol | ppbv | <1.0 | 1.0 | 1.2 | 1.0 | 9655989 |
| 2-Propanone | ppbv | 1.78 | 0.60 | 4.28 | 0.60 | 9655989 |
| Methyl Ethyl Ketone (2-Butanone) | ppbv | 0.51 | 0.20 | 3.16 | 0.20 | 9655989 |
| Methyl Isobutyl Ketone | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Methyl Butyl Ketone (2-Hexanone) | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9655989 |
| Methyl t-butyl ether (MTBE) | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Ethyl Acetate | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9655989 |
| 1,1-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| cis-1,2-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| trans-1,2-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Methylene Chloride(Dichloromethane) | ppbv | <0.60 | 0.60 | <0.60 | 0.60 | 9655989 |
| Chloroform | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Carbon Tetrachloride | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 1,1-Dichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 1,2-Dichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Ethylene Dibromide | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 1,1,1-Trichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 1,1,2-Trichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 1,1,2,2-Tetrachloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| cis-1,3-Dichloropropene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| trans-1,3-Dichloropropene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 1,2-Dichloropropane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Bromomethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Bromoform | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Bromodichloromethane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4T7256
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ADQV05 | | ADQV06 | | |
|--|-------|------------|------|------------|------|----------|
| Sampling Date | | 2024/09/18 | | 2024/09/18 | | |
| COC Number | | na | | na | | |
| | UNITS | 6A | RDL | 6B | RDL | QC Batch |
| Dibromochloromethane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Trichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Tetrachloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Benzene | ppbv | <0.10 | 0.10 | 0.16 | 0.10 | 9655989 |
| Toluene | ppbv | 0.11 | 0.10 | 1.23 | 0.10 | 9655989 |
| Ethylbenzene | ppbv | <0.10 | 0.10 | 0.26 | 0.10 | 9655989 |
| p+m-Xylene | ppbv | <0.20 | 0.20 | 0.68 | 0.20 | 9655989 |
| o-Xylene | ppbv | <0.10 | 0.10 | 0.20 | 0.10 | 9655989 |
| Styrene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 4-ethyltoluene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9655989 |
| 1,3,5-Trimethylbenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9655989 |
| 1,2,4-Trimethylbenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9655989 |
| Chlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Benzyl chloride | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9655989 |
| 1,3-Dichlorobenzene | ppbv | <0.40 | 0.40 | <0.40 | 0.40 | 9655989 |
| 1,4-Dichlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 1,2-Dichlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| 1,2,4-Trichlorobenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9655989 |
| Hexachlorobutadiene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9655989 |
| Hexane | ppbv | <0.20 | 0.20 | 0.42 | 0.20 | 9655989 |
| Heptane | ppbv | <0.30 | 0.30 | 0.39 | 0.30 | 9655989 |
| Cyclohexane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Tetrahydrofuran | ppbv | <0.40 | 0.40 | <0.40 | 0.40 | 9655989 |
| 1,4-Dioxane | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9655989 |
| Naphthalene | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Total Xylenes | ppbv | <0.30 | 0.30 | 0.88 | 0.30 | 9655989 |
| 1,1,1,2-Tetrachloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9655989 |
| Vinyl Bromide | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Propene | ppbv | <0.55 | 0.55 | <2.7 | 2.7 | 9655989 |
| 2,2,4-Trimethylpentane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Carbon Disulfide | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9655989 |
| Vinyl Acetate | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9655989 |
| Surrogate Recovery (%) | | | | | | |
| Bromochloromethane | % | 97 | | 92 | | 9659123 |
| D5-Chlorobenzene | % | 93 | | 93 | | 9659123 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4T7256
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ADQV05 | | ADQV06 | | |
|--|-------|------------|-----|------------|-----|----------|
| Sampling Date | | 2024/09/18 | | 2024/09/18 | | |
| COC Number | | na | | na | | |
| | UNITS | 6A | RDL | 6B | RDL | QC Batch |
| Difluorobenzene | % | 90 | | 90 | | 9659123 |
| Bromochloromethane | % | 87 | | 83 | | 9655989 |
| D5-Chlorobenzene | % | 84 | | 79 | | 9655989 |
| Difluorobenzene | % | 85 | | 82 | | 9655989 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | | |



GENERAL COMMENTS

Sample ADQV05:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylbutane,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Pentane,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

Sample ADQV06:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

2-Methylbutane was detected at 2.76 ppbv (91% probability) and pentane at 2.24 ppbv (90% probability).

Sample ADQV05 [6A] : Increased DL for propene due to interference from propane.

Sample ADQV06 [6B] : Increased DL for propene due to interference from propane.

Results relate only to the items tested.



Bureau Veritas Job #: C4T7256
Report Date: 2024/09/26

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | |
|----------|-------------------------------|------------|--------------|-----------|--------------|-------|
| | | | % Recovery | QC Limits | Value | UNITS |
| 9655989 | Bromochloromethane | 2024/09/23 | 116 | 60 - 140 | 101 | % |
| 9655989 | D5-Chlorobenzene | 2024/09/23 | 115 | 60 - 140 | 92 | % |
| 9655989 | Difluorobenzene | 2024/09/23 | 117 | 60 - 140 | 99 | % |
| 9659123 | Bromochloromethane | 2024/09/24 | 103 | 60 - 140 | 107 | % |
| 9659123 | D5-Chlorobenzene | 2024/09/24 | 103 | 60 - 140 | 90 | % |
| 9659123 | Difluorobenzene | 2024/09/24 | 105 | 60 - 140 | 98 | % |
| 9655989 | 1,1,1,2-Tetrachloroethane | 2024/09/23 | 97 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,1,1-Trichloroethane | 2024/09/23 | 96 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,1,2,2-Tetrachloroethane | 2024/09/23 | 100 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,1,2-Trichloroethane | 2024/09/23 | 100 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,1-Dichloroethane | 2024/09/23 | 96 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,1-Dichloroethylene | 2024/09/23 | 97 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,2,4-Trichlorobenzene | 2024/09/23 | 121 | 70 - 130 | <0.50 | ppbv |
| 9655989 | 1,2,4-Trimethylbenzene | 2024/09/23 | 108 | 70 - 130 | <0.50 | ppbv |
| 9655989 | 1,2-Dichlorobenzene | 2024/09/23 | 107 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,2-Dichloroethane | 2024/09/23 | 94 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,2-Dichloropropane | 2024/09/23 | 98 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,2-Dichlorotetrafluoroethane | 2024/09/23 | 97 | 70 - 130 | <0.17 | ppbv |
| 9655989 | 1,3,5-Trimethylbenzene | 2024/09/23 | 103 | 70 - 130 | <0.50 | ppbv |
| 9655989 | 1,3-Butadiene | 2024/09/23 | 102 | 70 - 130 | <0.50 | ppbv |
| 9655989 | 1,3-Dichlorobenzene | 2024/09/23 | 107 | 70 - 130 | <0.40 | ppbv |
| 9655989 | 1,4-Dichlorobenzene | 2024/09/23 | 107 | 70 - 130 | <0.10 | ppbv |
| 9655989 | 1,4-Dioxane | 2024/09/23 | 98 | 70 - 130 | <1.0 | ppbv |
| 9655989 | 2,2,4-Trimethylpentane | 2024/09/23 | 100 | 70 - 130 | <0.20 | ppbv |
| 9655989 | 2-propanol | 2024/09/23 | 96 | 70 - 130 | <1.0 | ppbv |
| 9655989 | 2-Propanone | 2024/09/23 | 92 | 70 - 130 | <0.60 | ppbv |
| 9655989 | 4-ethyltoluene | 2024/09/23 | 113 | 70 - 130 | <0.50 | ppbv |
| 9655989 | Benzene | 2024/09/23 | 102 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Benzyl chloride | 2024/09/23 | 123 | 70 - 130 | <0.50 | ppbv |
| 9655989 | Bromodichloromethane | 2024/09/23 | 96 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Bromoform | 2024/09/23 | 106 | 70 - 130 | <0.20 | ppbv |



Bureau Veritas Job #: C4T7256
Report Date: 2024/09/26

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | |
|----------|-------------------------------------|------------|--------------|-----------|--------------|-------|
| | | | % Recovery | QC Limits | Value | UNITS |
| 9655989 | Bromomethane | 2024/09/23 | 96 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Carbon Disulfide | 2024/09/23 | 96 | 70 - 130 | <0.50 | ppbv |
| 9655989 | Carbon Tetrachloride | 2024/09/23 | 97 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Chlorobenzene | 2024/09/23 | 98 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Chloroethane | 2024/09/23 | 99 | 70 - 130 | <0.30 | ppbv |
| 9655989 | Chloroform | 2024/09/23 | 97 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Chloromethane | 2024/09/23 | 98 | 70 - 130 | <0.30 | ppbv |
| 9655989 | cis-1,2-Dichloroethylene | 2024/09/23 | 100 | 70 - 130 | <0.10 | ppbv |
| 9655989 | cis-1,3-Dichloropropene | 2024/09/23 | 101 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Cyclohexane | 2024/09/23 | 104 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Dibromochloromethane | 2024/09/23 | 104 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Dichlorodifluoromethane (FREON 12) | 2024/09/23 | 94 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Ethanol (ethyl alcohol) | 2024/09/23 | 80 | 70 - 130 | <1.0 | ppbv |
| 9655989 | Ethyl Acetate | 2024/09/23 | 101 | 70 - 130 | <1.0 | ppbv |
| 9655989 | Ethylbenzene | 2024/09/23 | 100 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Ethylene Dibromide | 2024/09/23 | 100 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Heptane | 2024/09/23 | 103 | 70 - 130 | <0.30 | ppbv |
| 9655989 | Hexachlorobutadiene | 2024/09/23 | 90 | 70 - 130 | <0.50 | ppbv |
| 9655989 | Hexane | 2024/09/23 | 103 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Methyl Butyl Ketone (2-Hexanone) | 2024/09/23 | 101 | 70 - 130 | <1.0 | ppbv |
| 9655989 | Methyl Ethyl Ketone (2-Butanone) | 2024/09/23 | 105 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Methyl Isobutyl Ketone | 2024/09/23 | 98 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Methyl t-butyl ether (MTBE) | 2024/09/23 | 104 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Methylene Chloride(Dichloromethane) | 2024/09/23 | 97 | 70 - 130 | <0.60 | ppbv |
| 9655989 | Naphthalene | 2024/09/23 | 135 (1) | 70 - 130 | <0.20 | ppbv |
| 9655989 | o-Xylene | 2024/09/23 | 98 | 70 - 130 | <0.10 | ppbv |
| 9655989 | p+m-Xylene | 2024/09/23 | 101 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Propene | 2024/09/23 | 98 | 70 - 130 | <0.50 | ppbv |
| 9655989 | Styrene | 2024/09/23 | 109 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Tetrachloroethylene | 2024/09/23 | 105 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Tetrahydrofuran | 2024/09/23 | 105 | 70 - 130 | <0.40 | ppbv |



Bureau Veritas Job #: C4T7256
Report Date: 2024/09/26

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | |
|---|-----------------------------------|------------|--------------|-----------|--------------|-------|
| | | | % Recovery | QC Limits | Value | UNITS |
| 9655989 | Toluene | 2024/09/23 | 102 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Total Xylenes | 2024/09/23 | 100 | 70 - 130 | <0.30 | ppbv |
| 9655989 | trans-1,2-Dichloroethylene | 2024/09/23 | 104 | 70 - 130 | <0.10 | ppbv |
| 9655989 | trans-1,3-Dichloropropene | 2024/09/23 | 105 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Trichloroethylene | 2024/09/23 | 102 | 70 - 130 | <0.10 | ppbv |
| 9655989 | Trichlorofluoromethane (FREON 11) | 2024/09/23 | 94 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Trichlorotrifluoroethane | 2024/09/23 | 97 | 70 - 130 | <0.15 | ppbv |
| 9655989 | Vinyl Acetate | 2024/09/23 | 98 | 70 - 130 | <0.20 | ppbv |
| 9655989 | Vinyl Bromide | 2024/09/23 | 89 | 70 - 130 | <0.20 | ppbv |
| 9659123 | Vinyl Chloride | 2024/09/24 | 98 | 70 - 130 | <0.02 | ppbv |
| Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy. | | | | | | |
| Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination. | | | | | | |
| Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency. | | | | | | |
| (1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria. | | | | | | |



Bureau Veritas Job #: C4T7256
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink that reads "Melanie Mabini".

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Page 13 of 13



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: NA

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/26
Report #: R8336448
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4T8107

Received: 2024/09/24, 09:07

Sample Matrix: Air
Samples Received: 2

| Analyses | Date | | Laboratory Method | Analytical Method |
|--------------------------------------|----------|-----------|--------------------------|-------------------|
| | Quantity | Extracted | | |
| Canister Pressure (TO-15) | 2 | N/A | 2024/09/24 BRL SOP-00304 | EPA TO-15 m |
| VOCs in Air (TO-15) | 2 | N/A | 2024/09/24 BRL SOP-00304 | EPA TO-15 m |
| Volatile Organics in Air (TO-15) (1) | 2 | N/A | 2024/09/24 BRL SOP-00304 | EPA TO-15 m |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: NA

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/26
Report #: R8336448
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4T8107

Received: 2024/09/24, 09:07

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4T8107
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF AIR

| | | | | |
|----------------------------------|--------------|------------|------------|-----------------|
| Bureau Veritas ID | | ADSV61 | ADSV62 | |
| Sampling Date | | 2024/09/19 | 2024/09/19 | |
| COC Number | | NA | NA | |
| | UNITS | 7A | 7B | QC Batch |
| Volatile Organics | | | | |
| Pressure on Receipt | psig | (-3.0) | (-4.0) | 9658107 |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4T8107
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ADSV61 | | ADSV62 | | |
|-------------------------------------|-------|------------|------|------------|------|----------|
| Sampling Date | | 2024/09/19 | | 2024/09/19 | | |
| COC Number | | NA | | NA | | |
| | UNITS | 7A | RDL | 7B | RDL | QC Batch |
| Volatile Organics | | | | | | |
| Dichlorodifluoromethane (FREON 12) | ppbv | 0.48 | 0.20 | 0.56 | 0.20 | 9659013 |
| 1,2-Dichlorotetrafluoroethane | ppbv | <0.17 | 0.17 | <0.17 | 0.17 | 9659013 |
| Chloromethane | ppbv | 0.41 | 0.30 | 0.45 | 0.30 | 9659013 |
| Vinyl Chloride | ppbv | <0.02 | 0.02 | 0.11 | 0.02 | 9659123 |
| Chloroethane | ppbv | <0.30 | 0.30 | <0.30 | 0.30 | 9659013 |
| 1,3-Butadiene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9659013 |
| Trichlorofluoromethane (FREON 11) | ppbv | 0.20 | 0.20 | 0.31 | 0.20 | 9659013 |
| Ethanol (ethyl alcohol) | ppbv | 2.9 | 1.0 | 11.5 | 1.0 | 9659013 |
| Trichlorotrifluoroethane | ppbv | <0.15 | 0.15 | <0.15 | 0.15 | 9659013 |
| 2-propanol | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9659013 |
| 2-Propanone | ppbv | 2.95 | 0.60 | 4.19 | 0.60 | 9659013 |
| Methyl Ethyl Ketone (2-Butanone) | ppbv | 0.32 | 0.20 | 2.22 | 0.20 | 9659013 |
| Methyl Isobutyl Ketone | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Methyl Butyl Ketone (2-Hexanone) | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9659013 |
| Methyl t-butyl ether (MTBE) | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Ethyl Acetate | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9659013 |
| 1,1-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| cis-1,2-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| trans-1,2-Dichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Methylene Chloride(Dichloromethane) | ppbv | <0.60 | 0.60 | <0.60 | 0.60 | 9659013 |
| Chloroform | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Carbon Tetrachloride | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 1,1-Dichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 1,2-Dichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Ethylene Dibromide | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 1,1,1-Trichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 1,1,2-Trichloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 1,1,2,2-Tetrachloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| cis-1,3-Dichloropropene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| trans-1,3-Dichloropropene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 1,2-Dichloropropane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Bromomethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Bromoform | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Bromodichloromethane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4T8107
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | ADSV61 | | ADSV62 | | |
|--|-------|------------|------|------------|------|----------|
| Sampling Date | | 2024/09/19 | | 2024/09/19 | | |
| COC Number | | NA | | NA | | |
| | UNITS | 7A | RDL | 7B | RDL | QC Batch |
| Dibromochloromethane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Trichloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Tetrachloroethylene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Benzene | ppbv | <0.10 | 0.10 | 0.16 | 0.10 | 9659013 |
| Toluene | ppbv | 0.13 | 0.10 | 0.90 | 0.10 | 9659013 |
| Ethylbenzene | ppbv | <0.10 | 0.10 | 0.18 | 0.10 | 9659013 |
| p+m-Xylene | ppbv | <0.20 | 0.20 | 0.45 | 0.20 | 9659013 |
| o-Xylene | ppbv | <0.10 | 0.10 | 0.15 | 0.10 | 9659013 |
| Styrene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 4-ethyltoluene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9659013 |
| 1,3,5-Trimethylbenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9659013 |
| 1,2,4-Trimethylbenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9659013 |
| Chlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Benzyl chloride | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9659013 |
| 1,3-Dichlorobenzene | ppbv | <0.40 | 0.40 | <0.40 | 0.40 | 9659013 |
| 1,4-Dichlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 1,2-Dichlorobenzene | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| 1,2,4-Trichlorobenzene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9659013 |
| Hexachlorobutadiene | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9659013 |
| Hexane | ppbv | <0.20 | 0.20 | <0.40 | 0.40 | 9659013 |
| Heptane | ppbv | <0.30 | 0.30 | <0.30 | 0.30 | 9659013 |
| Cyclohexane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Tetrahydrofuran | ppbv | <0.40 | 0.40 | <0.40 | 0.40 | 9659013 |
| 1,4-Dioxane | ppbv | <1.0 | 1.0 | <1.0 | 1.0 | 9659013 |
| Naphthalene | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Total Xylenes | ppbv | <0.30 | 0.30 | 0.59 | 0.30 | 9659013 |
| 1,1,1,2-Tetrachloroethane | ppbv | <0.10 | 0.10 | <0.10 | 0.10 | 9659013 |
| Vinyl Bromide | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Propene | ppbv | <0.75 | 0.75 | <2.0 | 2.0 | 9659013 |
| 2,2,4-Trimethylpentane | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Carbon Disulfide | ppbv | <0.50 | 0.50 | <0.50 | 0.50 | 9659013 |
| Vinyl Acetate | ppbv | <0.20 | 0.20 | <0.20 | 0.20 | 9659013 |
| Surrogate Recovery (%) | | | | | | |
| Bromochloromethane | % | 98 | | 93 | | 9659123 |
| D5-Chlorobenzene | % | 96 | | 94 | | 9659123 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4T8107
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| | | | | | | |
|--|--------------|------------|------------|------------|------------|-----------------|
| Bureau Veritas ID | | ADSV61 | | ADSV62 | | |
| Sampling Date | | 2024/09/19 | | 2024/09/19 | | |
| COC Number | | NA | | NA | | |
| | UNITS | 7A | RDL | 7B | RDL | QC Batch |
| Difluorobenzene | % | 92 | | 90 | | 9659123 |
| Bromochloromethane | % | 89 | | 84 | | 9659013 |
| D5-Chlorobenzene | % | 81 | | 73 | | 9659013 |
| Difluorobenzene | % | 88 | | 81 | | 9659013 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | | |



GENERAL COMMENTS

Sample ADSV61:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylbutane,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Pentane,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

Sample ADSV62:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Pentane,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

2-Methylbutane was detected at 1.21 ppbv (90% probability).

Sample ADSV61 [7A] : Increased DL for propene due to interference from propane.

Sample ADSV62 [7B] : Increased DL for propene due to interference from propane.
Increased DL for hexane due to interference.



Bureau Veritas Job #: C4T8107
Report Date: 2024/09/26

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9659013 | Bromochloromethane | 2024/09/24 | 117 | 60 - 140 | 96 | % | | |
| 9659013 | D5-Chlorobenzene | 2024/09/24 | 110 | 60 - 140 | 88 | % | | |
| 9659013 | Difluorobenzene | 2024/09/24 | 115 | 60 - 140 | 96 | % | | |
| 9659123 | Bromochloromethane | 2024/09/24 | 103 | 60 - 140 | 107 | % | | |
| 9659123 | D5-Chlorobenzene | 2024/09/24 | 103 | 60 - 140 | 90 | % | | |
| 9659123 | Difluorobenzene | 2024/09/24 | 105 | 60 - 140 | 98 | % | | |
| 9659013 | 1,1,1,2-Tetrachloroethane | 2024/09/24 | 102 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,1,1-Trichloroethane | 2024/09/24 | 102 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,1,2,2-Tetrachloroethane | 2024/09/24 | 106 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,1,2-Trichloroethane | 2024/09/24 | 105 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,1-Dichloroethane | 2024/09/24 | 98 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,1-Dichloroethylene | 2024/09/24 | 99 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,2,4-Trichlorobenzene | 2024/09/24 | 129 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | 1,2,4-Trimethylbenzene | 2024/09/24 | 113 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | 1,2-Dichlorobenzene | 2024/09/24 | 115 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,2-Dichloroethane | 2024/09/24 | 96 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,2-Dichloropropane | 2024/09/24 | 102 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,2-Dichlorotetrafluoroethane | 2024/09/24 | 100 | 70 - 130 | <0.17 | ppbv | | |
| 9659013 | 1,3,5-Trimethylbenzene | 2024/09/24 | 108 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | 1,3-Butadiene | 2024/09/24 | 104 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | 1,3-Dichlorobenzene | 2024/09/24 | 114 | 70 - 130 | <0.40 | ppbv | | |
| 9659013 | 1,4-Dichlorobenzene | 2024/09/24 | 115 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | 1,4-Dioxane | 2024/09/24 | 108 | 70 - 130 | <1.0 | ppbv | | |
| 9659013 | 2,2,4-Trimethylpentane | 2024/09/24 | 105 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | 2-propanol | 2024/09/24 | 104 | 70 - 130 | <1.0 | ppbv | | |
| 9659013 | 2-Propanone | 2024/09/24 | 95 | 70 - 130 | <0.60 | ppbv | | |
| 9659013 | 4-ethyltoluene | 2024/09/24 | 118 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | Benzene | 2024/09/24 | 107 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Benzyl chloride | 2024/09/24 | 129 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | Bromodichloromethane | 2024/09/24 | 101 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Bromoform | 2024/09/24 | 113 | 70 - 130 | <0.20 | ppbv | | |

BUREAU
VERITAS

Bureau Veritas Job #: C4T8107

Report Date: 2024/09/26

QUALITY ASSURANCE REPORT(CONT'D)

RWDI

Client Project #: 2402553.02

Site Location: TWIN CREEKS

Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9659013 | Bromomethane | 2024/09/24 | 99 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Carbon Disulfide | 2024/09/24 | 99 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | Carbon Tetrachloride | 2024/09/24 | 101 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Chlorobenzene | 2024/09/24 | 103 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Chloroethane | 2024/09/24 | 101 | 70 - 130 | <0.30 | ppbv | | |
| 9659013 | Chloroform | 2024/09/24 | 101 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Chloromethane | 2024/09/24 | 100 | 70 - 130 | <0.30 | ppbv | | |
| 9659013 | cis-1,2-Dichloroethylene | 2024/09/24 | 103 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9659013 | cis-1,3-Dichloropropene | 2024/09/24 | 105 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Cyclohexane | 2024/09/24 | 108 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Dibromochloromethane | 2024/09/24 | 108 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Dichlorodifluoromethane (FREON 12) | 2024/09/24 | 95 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Ethanol (ethyl alcohol) | 2024/09/24 | 85 | 70 - 130 | <1.0 | ppbv | | |
| 9659013 | Ethyl Acetate | 2024/09/24 | 104 | 70 - 130 | <1.0 | ppbv | | |
| 9659013 | Ethylbenzene | 2024/09/24 | 106 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Ethylene Dibromide | 2024/09/24 | 105 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Heptane | 2024/09/24 | 106 | 70 - 130 | <0.30 | ppbv | | |
| 9659013 | Hexachlorobutadiene | 2024/09/24 | 98 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | Hexane | 2024/09/24 | 105 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Methyl Butyl Ketone (2-Hexanone) | 2024/09/24 | 106 | 70 - 130 | <1.0 | ppbv | | |
| 9659013 | Methyl Ethyl Ketone (2-Butanone) | 2024/09/24 | 107 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Methyl Isobutyl Ketone | 2024/09/24 | 102 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Methyl t-butyl ether (MTBE) | 2024/09/24 | 106 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Methylene Chloride(Dichloromethane) | 2024/09/24 | 99 | 70 - 130 | <0.60 | ppbv | | |
| 9659013 | Naphthalene | 2024/09/24 | 142 (1) | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | o-Xylene | 2024/09/24 | 103 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | p+m-Xylene | 2024/09/24 | 107 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Propene | 2024/09/24 | 100 | 70 - 130 | <0.50 | ppbv | | |
| 9659013 | Styrene | 2024/09/24 | 115 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Tetrachloroethylene | 2024/09/24 | 111 | 70 - 130 | <0.10 | ppbv | 1.5 (2) | 25 |
| 9659013 | Tetrahydrofuran | 2024/09/24 | 106 | 70 - 130 | <0.40 | ppbv | | |



Bureau Veritas Job #: C4T8107
Report Date: 2024/09/26

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-----------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9659013 | Toluene | 2024/09/24 | 108 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Total Xylenes | 2024/09/24 | 106 | 70 - 130 | <0.30 | ppbv | | |
| 9659013 | trans-1,2-Dichloroethylene | 2024/09/24 | 106 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9659013 | trans-1,3-Dichloropropene | 2024/09/24 | 111 | 70 - 130 | <0.10 | ppbv | | |
| 9659013 | Trichloroethylene | 2024/09/24 | 107 | 70 - 130 | <0.10 | ppbv | NC (2) | 25 |
| 9659013 | Trichlorofluoromethane (FREON 11) | 2024/09/24 | 96 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Trichlorotrifluoroethane | 2024/09/24 | 100 | 70 - 130 | <0.15 | ppbv | | |
| 9659013 | Vinyl Acetate | 2024/09/24 | 100 | 70 - 130 | <0.20 | ppbv | | |
| 9659013 | Vinyl Bromide | 2024/09/24 | 93 | 70 - 130 | <0.20 | ppbv | | |
| 9659123 | Vinyl Chloride | 2024/09/24 | 98 | 70 - 130 | <0.02 | ppbv | | |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Duplicate Parent ID



Bureau Veritas Job #: C4T8107
Report Date: 2024/09/26

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink that reads "Melanie Mabini".

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Maxxam
A Bureau Veritas Group Company

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CAM FCD-01302 / 2 Page 1 of 1

ANALYSIS REQUESTED

[illegible]

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms which are available for viewing at www.maxxam.ca/terms.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: na

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/10/17
Report #: R8365182
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4W2210

Received: 2024/10/15, 08:55

Sample Matrix: Air
Samples Received: 2

| Analyses | Date | | Laboratory Method | Analytical Method |
|--------------------------------------|----------|-----------|--------------------------|-------------------|
| | Quantity | Extracted | | |
| Canister Pressure (TO-15) | 2 | N/A | 2024/10/15 BRL SOP-00304 | EPA TO-15 m |
| VOCs in Air (TO-15) | 2 | N/A | 2024/10/16 BRL SOP-00304 | EPA TO-15 m |
| Volatile Organics in Air (TO-15) (1) | 2 | N/A | 2024/10/15 BRL SOP-00304 | EPA TO-15 m |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: na

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/10/17
Report #: R8365182
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4W2210

Received: 2024/10/15, 08:55

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4W2210
Report Date: 2024/10/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF AIR

| | | | | |
|----------------------------------|--------------|------------|------------|-----------------|
| Bureau Veritas ID | | AFTU27 | AFTU28 | |
| Sampling Date | | 2024/10/11 | 2024/10/11 | |
| COC Number | | na | na | |
| | UNITS | 8A | BB | QC Batch |
| Volatile Organics | | | | |
| Pressure on Receipt | psig | (-3.7) | (-4.1) | 9701830 |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4W2210
Report Date: 2024/10/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | AFTU27 | AFTU28 | | |
|-------------------------------------|-------|------------|------------|------|----------|
| Sampling Date | | 2024/10/11 | 2024/10/11 | | |
| COC Number | | na | na | | |
| | UNITS | 8A | BB | RDL | QC Batch |
| Volatile Organics | | | | | |
| Dichlorodifluoromethane (FREON 12) | ppbv | 0.48 | 0.48 | 0.20 | 9701834 |
| 1,2-Dichlorotetrafluoroethane | ppbv | <0.17 | <0.17 | 0.17 | 9701834 |
| Chloromethane | ppbv | 0.39 | 0.46 | 0.30 | 9701834 |
| Vinyl Chloride | ppbv | <0.02 | <0.02 | 0.02 | 9703722 |
| Chloroethane | ppbv | <0.30 | <0.30 | 0.30 | 9701834 |
| 1,3-Butadiene | ppbv | <0.50 | <0.50 | 0.50 | 9701834 |
| Trichlorofluoromethane (FREON 11) | ppbv | 0.21 | 0.21 | 0.20 | 9701834 |
| Ethanol (ethyl alcohol) | ppbv | 46.7 | 42.5 | 1.0 | 9701834 |
| Trichlorotrifluoroethane | ppbv | <0.15 | <0.15 | 0.15 | 9701834 |
| 2-propanol | ppbv | <1.0 | <1.0 | 1.0 | 9701834 |
| 2-Propanone | ppbv | 15.0 | 31.6 | 0.60 | 9701834 |
| Methyl Ethyl Ketone (2-Butanone) | ppbv | 0.85 | 0.89 | 0.20 | 9701834 |
| Methyl Isobutyl Ketone | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Methyl Butyl Ketone (2-Hexanone) | ppbv | <1.0 | <1.0 | 1.0 | 9701834 |
| Methyl t-butyl ether (MTBE) | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Ethyl Acetate | ppbv | <1.0 | <1.0 | 1.0 | 9701834 |
| 1,1-Dichloroethylene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| cis-1,2-Dichloroethylene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| trans-1,2-Dichloroethylene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| Methylene Chloride(Dichloromethane) | ppbv | <0.60 | <0.60 | 0.60 | 9701834 |
| Chloroform | ppbv | 0.26 | 0.24 | 0.10 | 9701834 |
| Carbon Tetrachloride | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| 1,1-Dichloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| 1,2-Dichloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| Ethylene Dibromide | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| 1,1,1-Trichloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| 1,1,2-Trichloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| 1,1,2,2-Tetrachloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| cis-1,3-Dichloropropene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| trans-1,3-Dichloropropene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| 1,2-Dichloropropane | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| Bromomethane | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| Bromoform | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Bromodichloromethane | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| RDL = Reportable Detection Limit | | | | | |
| QC Batch = Quality Control Batch | | | | | |



Bureau Veritas Job #: C4W2210
Report Date: 2024/10/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| Bureau Veritas ID | | AFTU27 | AFTU28 | | |
|--|-------|------------|------------|------|----------|
| Sampling Date | | 2024/10/11 | 2024/10/11 | | |
| COC Number | | na | na | | |
| | UNITS | 8A | BB | RDL | QC Batch |
| Dibromochloromethane | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Trichloroethylene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| Tetrachloroethylene | ppbv | 0.40 | 0.41 | 0.10 | 9701834 |
| Benzene | ppbv | 0.13 | 0.14 | 0.10 | 9701834 |
| Toluene | ppbv | 0.62 | 0.60 | 0.10 | 9701834 |
| Ethylbenzene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| p+m-Xylene | ppbv | 0.23 | 0.21 | 0.20 | 9701834 |
| o-Xylene | ppbv | 0.11 | <0.10 | 0.10 | 9701834 |
| Styrene | ppbv | 0.14 | 0.12 | 0.10 | 9701834 |
| 4-ethyltoluene | ppbv | <0.50 | <0.50 | 0.50 | 9701834 |
| 1,3,5-Trimethylbenzene | ppbv | <0.50 | <0.50 | 0.50 | 9701834 |
| 1,2,4-Trimethylbenzene | ppbv | <0.50 | <0.50 | 0.50 | 9701834 |
| Chlorobenzene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| Benzyl chloride | ppbv | <0.50 | <0.50 | 0.50 | 9701834 |
| 1,3-Dichlorobenzene | ppbv | <0.40 | <0.40 | 0.40 | 9701834 |
| 1,4-Dichlorobenzene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| 1,2-Dichlorobenzene | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| 1,2,4-Trichlorobenzene | ppbv | <0.50 | <0.50 | 0.50 | 9701834 |
| Hexachlorobutadiene | ppbv | <0.50 | <0.50 | 0.50 | 9701834 |
| Hexane | ppbv | 0.27 | 0.33 | 0.20 | 9701834 |
| Heptane | ppbv | <0.30 | <0.30 | 0.30 | 9701834 |
| Cyclohexane | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Tetrahydrofuran | ppbv | <0.40 | <0.40 | 0.40 | 9701834 |
| 1,4-Dioxane | ppbv | <1.0 | <1.0 | 1.0 | 9701834 |
| Naphthalene | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Total Xylenes | ppbv | 0.34 | <0.30 | 0.30 | 9701834 |
| 1,1,1,2-Tetrachloroethane | ppbv | <0.10 | <0.10 | 0.10 | 9701834 |
| Vinyl Bromide | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Propene | ppbv | <1.5 | <1.5 | 1.5 | 9701834 |
| 2,2,4-Trimethylpentane | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Carbon Disulfide | ppbv | <0.50 | <0.50 | 0.50 | 9701834 |
| Vinyl Acetate | ppbv | <0.20 | <0.20 | 0.20 | 9701834 |
| Surrogate Recovery (%) | | | | | |
| Bromochloromethane | % | 96 | 97 | | 9703722 |
| D5-Chlorobenzene | % | 97 | 96 | | 9703722 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | |



Bureau Veritas Job #: C4W2210
Report Date: 2024/10/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VOLATILE ORGANICS BY GC/MS (AIR)

| | | | | | |
|--|--------------|------------|------------|------------|-----------------|
| Bureau Veritas ID | | AFTU27 | AFTU28 | | |
| Sampling Date | | 2024/10/11 | 2024/10/11 | | |
| COC Number | | na | na | | |
| | UNITS | 8A | BB | RDL | QC Batch |
| Difluorobenzene | % | 93 | 93 | | 9703722 |
| Bromochloromethane | % | 88 | 88 | | 9701834 |
| D5-Chlorobenzene | % | 84 | 88 | | 9701834 |
| Difluorobenzene | % | 87 | 87 | | 9701834 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | |



GENERAL COMMENTS

Sample AFTU27:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylbutane,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Pentane,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

Sample AFTU28:

The following compounds were not detected above 1ppbv via a library search:

1,2,3-Trimethylbenzene,
2-Methylbutane,
2-Methylhexane,
2-Methylpentane,
3-Methylpentane,
3-Methylhexane,
Butyl Acetate,
Pentane,
Decane,
Limonene,
m/p ethyl toluene,
m-cymene,
methyl cyclohexane,
chlorodifluoromethane,
n-butanal,
nonane,
o-ethyl toluene,
propylbenzene,
2-butanol,
octane

Sample AFTU27 [8A] : Increased DL for propene due to interference from propane.

Sample AFTU28 [BB] : Increased DL for propene due to interference from propane.

Results relate only to the items tested.



Bureau Veritas Job #: C4W2210
Report Date: 2024/10/17

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9701834 | Bromochloromethane | 2024/10/15 | 108 | 60 - 140 | 94 | % | | |
| 9701834 | D5-Chlorobenzene | 2024/10/15 | 104 | 60 - 140 | 86 | % | | |
| 9701834 | Difluorobenzene | 2024/10/15 | 106 | 60 - 140 | 94 | % | | |
| 9703722 | Bromochloromethane | 2024/10/16 | 103 | 60 - 140 | 107 | % | | |
| 9703722 | D5-Chlorobenzene | 2024/10/16 | 103 | 60 - 140 | 85 | % | | |
| 9703722 | Difluorobenzene | 2024/10/16 | 103 | 60 - 140 | 98 | % | | |
| 9701834 | 1,1,1,2-Tetrachloroethane | 2024/10/15 | 101 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | 1,1,1-Trichloroethane | 2024/10/15 | 96 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | 1,1,2,2-Tetrachloroethane | 2024/10/15 | 104 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | 1,1,2-Trichloroethane | 2024/10/15 | 100 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | 1,1-Dichloroethane | 2024/10/15 | 99 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | 1,1-Dichloroethylene | 2024/10/15 | 98 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | 1,2,4-Trichlorobenzene | 2024/10/15 | 96 | 70 - 130 | <0.50 | ppbv | NC (1) | 25 |
| 9701834 | 1,2,4-Trimethylbenzene | 2024/10/15 | 102 | 70 - 130 | <0.50 | ppbv | | |
| 9701834 | 1,2-Dichlorobenzene | 2024/10/15 | 101 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | 1,2-Dichloroethane | 2024/10/15 | 95 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | 1,2-Dichloropropane | 2024/10/15 | 100 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | 1,2-Dichlorotetrafluoroethane | 2024/10/15 | 97 | 70 - 130 | <0.17 | ppbv | | |
| 9701834 | 1,3,5-Trimethylbenzene | 2024/10/15 | 100 | 70 - 130 | <0.50 | ppbv | | |
| 9701834 | 1,3-Butadiene | 2024/10/15 | 103 | 70 - 130 | <0.50 | ppbv | | |
| 9701834 | 1,3-Dichlorobenzene | 2024/10/15 | 101 | 70 - 130 | <0.40 | ppbv | | |
| 9701834 | 1,4-Dichlorobenzene | 2024/10/15 | 101 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | 1,4-Dioxane | 2024/10/15 | 108 | 70 - 130 | <1.0 | ppbv | | |
| 9701834 | 2,2,4-Trimethylpentane | 2024/10/15 | 104 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | 2-propanol | 2024/10/15 | 99 | 70 - 130 | <1.0 | ppbv | | |
| 9701834 | 2-Propanone | 2024/10/15 | 100 | 70 - 130 | <0.60 | ppbv | 8.2 (1) | 25 |
| 9701834 | 4-ethyltoluene | 2024/10/15 | 110 | 70 - 130 | <0.50 | ppbv | | |
| 9701834 | Benzene | 2024/10/15 | 102 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Benzyl chloride | 2024/10/15 | 115 | 70 - 130 | <0.50 | ppbv | | |
| 9701834 | Bromodichloromethane | 2024/10/15 | 101 | 70 - 130 | <0.20 | ppbv | NC (1) | 25 |
| 9701834 | Bromoform | 2024/10/15 | 110 | 70 - 130 | <0.20 | ppbv | | |



Bureau Veritas Job #: C4W2210
Report Date: 2024/10/17

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9701834 | Bromomethane | 2024/10/15 | 100 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Carbon Disulfide | 2024/10/15 | 100 | 70 - 130 | <0.50 | ppbv | NC (1) | 25 |
| 9701834 | Carbon Tetrachloride | 2024/10/15 | 98 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | Chlorobenzene | 2024/10/15 | 98 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | Chloroethane | 2024/10/15 | 104 | 70 - 130 | <0.30 | ppbv | NC (1) | 25 |
| 9701834 | Chloroform | 2024/10/15 | 98 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Chloromethane | 2024/10/15 | 99 | 70 - 130 | <0.30 | ppbv | NC (1) | 25 |
| 9701834 | cis-1,2-Dichloroethylene | 2024/10/15 | 99 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | cis-1,3-Dichloropropene | 2024/10/15 | 100 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Cyclohexane | 2024/10/15 | 105 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | Dibromochloromethane | 2024/10/15 | 107 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | Dichlorodifluoromethane (FREON 12) | 2024/10/15 | 94 | 70 - 130 | <0.20 | ppbv | 6.4 (1) | 25 |
| 9701834 | Ethanol (ethyl alcohol) | 2024/10/15 | 80 | 70 - 130 | <1.0 | ppbv | | |
| 9701834 | Ethyl Acetate | 2024/10/15 | 105 | 70 - 130 | <1.0 | ppbv | NC (1) | 25 |
| 9701834 | Ethylbenzene | 2024/10/15 | 98 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Ethylene Dibromide | 2024/10/15 | 97 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Heptane | 2024/10/15 | 103 | 70 - 130 | <0.30 | ppbv | | |
| 9701834 | Hexachlorobutadiene | 2024/10/15 | 86 | 70 - 130 | <0.50 | ppbv | | |
| 9701834 | Hexane | 2024/10/15 | 106 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | Methyl Butyl Ketone (2-Hexanone) | 2024/10/15 | 108 | 70 - 130 | <1.0 | ppbv | NC (1) | 25 |
| 9701834 | Methyl Ethyl Ketone (2-Butanone) | 2024/10/15 | 110 | 70 - 130 | <0.20 | ppbv | NC (1) | 25 |
| 9701834 | Methyl Isobutyl Ketone | 2024/10/15 | 104 | 70 - 130 | <0.20 | ppbv | NC (1) | 25 |
| 9701834 | Methyl t-butyl ether (MTBE) | 2024/10/15 | 102 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | Methylene Chloride(Dichloromethane) | 2024/10/15 | 100 | 70 - 130 | <0.60 | ppbv | NC (1) | 25 |
| 9701834 | Naphthalene | 2024/10/15 | 96 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | o-Xylene | 2024/10/15 | 97 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | p+m-Xylene | 2024/10/15 | 98 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | Propene | 2024/10/15 | 96 | 70 - 130 | <0.50 | ppbv | | |
| 9701834 | Styrene | 2024/10/15 | 105 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Tetrachloroethylene | 2024/10/15 | 101 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | Tetrahydrofuran | 2024/10/15 | 106 | 70 - 130 | <0.40 | ppbv | | |



Bureau Veritas Job #: C4W2210
Report Date: 2024/10/17

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-----------------------------------|------------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9701834 | Toluene | 2024/10/15 | 99 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Total Xylenes | 2024/10/15 | 98 | 70 - 130 | <0.30 | ppbv | | |
| 9701834 | trans-1,2-Dichloroethylene | 2024/10/15 | 105 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | trans-1,3-Dichloropropene | 2024/10/15 | 102 | 70 - 130 | <0.10 | ppbv | | |
| 9701834 | Trichloroethylene | 2024/10/15 | 101 | 70 - 130 | <0.10 | ppbv | NC (1) | 25 |
| 9701834 | Trichlorofluoromethane (FREON 11) | 2024/10/15 | 93 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | Trichlorotrifluoroethane | 2024/10/15 | 98 | 70 - 130 | <0.15 | ppbv | | |
| 9701834 | Vinyl Acetate | 2024/10/15 | 95 | 70 - 130 | <0.20 | ppbv | | |
| 9701834 | Vinyl Bromide | 2024/10/15 | 94 | 70 - 130 | <0.20 | ppbv | | |
| 9703722 | Vinyl Chloride | 2024/10/16 | 95 | 70 - 130 | <0.02 | ppbv | | |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID



Bureau Veritas Job #: C4W2210
Report Date: 2024/10/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink that reads "Melanie Mabini".

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Page 13 of 13

The background of the page features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'APPENDIX F' is centered within the gray area.

APPENDIX F

24

1/2hr VOC Sampling Data Sheet

start

| | |
|----------------|-----------|
| Date | 4-JUL-24 |
| Pbar | 101.3 kps |
| Temp | 21 |
| Wind Speed | 10.3/h |
| Wind Direction | SW |
| Cloud Cover | clear |

Comments

END(5-JUL-24)

weather (taken down)

100.9 kps

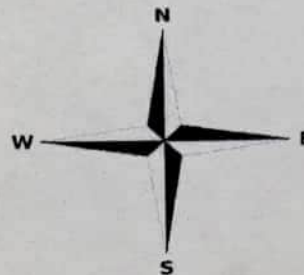
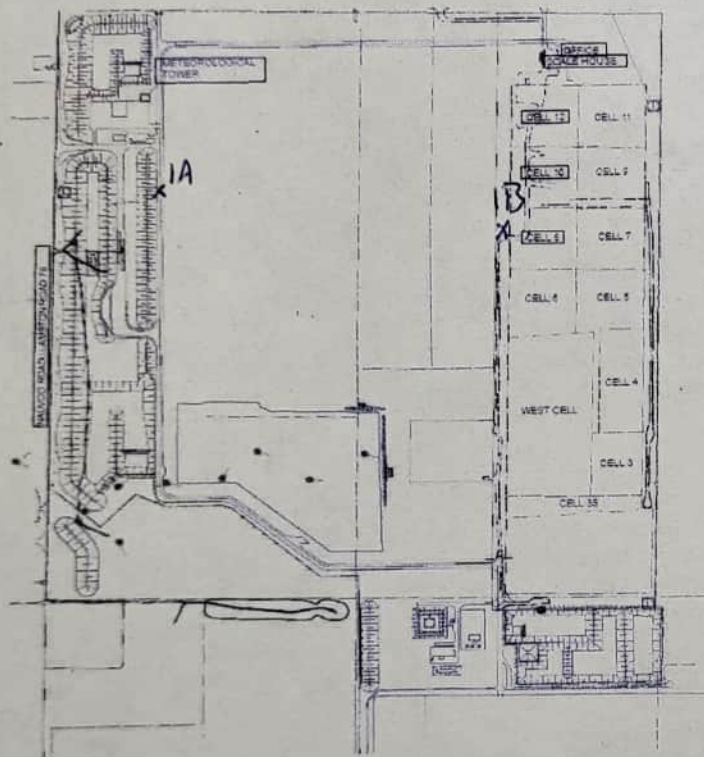
19

1 km/h

W

clear

| Sample ID | Canister No. | S/N (Mass flow controller) | Initial | | | Final | | |
|-----------|--------------|-------------------------------|---------|----------------|-------------------|-------|----------------|-------------------|
| | | | Time | Delta P(in Hg) | Flow Rate(cc/min) | Time | Delta P(in Hg) | Flow Rate(cc/min) |
| 1A | SX1957 | FX1371 | 7:47 | -28 | 3.6834 | 7:47 | -6 | 3.0968 |
| 1B | SX1603 | FX1729 | 7:39 | -28 | 3.1698 | 7:39 | -65 | 3.1315 |



(Wind Direction)

Sample ID 1A
 UTM 475874
 17T 42850

upwind Downwind

Sample ID 1B
 UTM 4758347
 17T 429164

Upwind/ Downwind

Runtime: 24 hours 24 hours

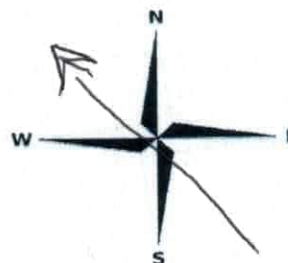
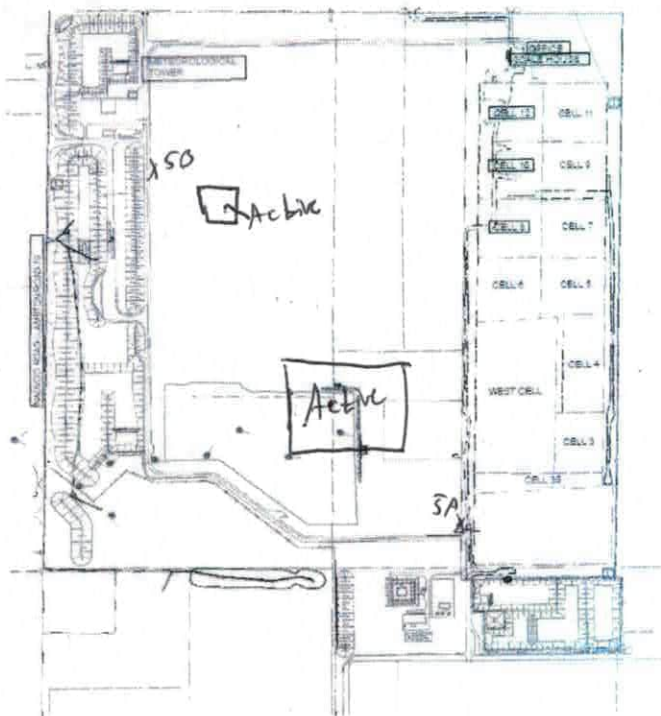
1/2hr VOC Sampling Data Sheet

Date 12-Sep-24
Pbar 102.0 kPa
Temp 18.5 °C
Wind Speed 10 km/h
Wind Direction SE
Cloud Cover Clear

Star
End
13-Sep-24
102.2 kPa
20 °C
11
SE
Clear

Comments

| Sample ID | Canister No. | S/N (Mass flow controller) | Initial | | | Final | | |
|-----------|--------------|-------------------------------|---------|-----------------|--------------------|-------|-----------------|--------------------|
| | | | Time | Delta P (in Hg) | Flow Rate (cc/min) | Time | Delta P (in Hg) | Flow Rate (cc/min) |
| SA | SX 6239 | FX 169 | 1000 | -29.5 | 3.1383 | 1000 | -9 | 2.7851 |
| SB | SX 1758 | FX 57 | 1010 | -29 | 3.1385 | 1010 | -8.5 | 2.5890 |



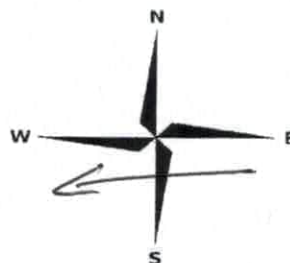
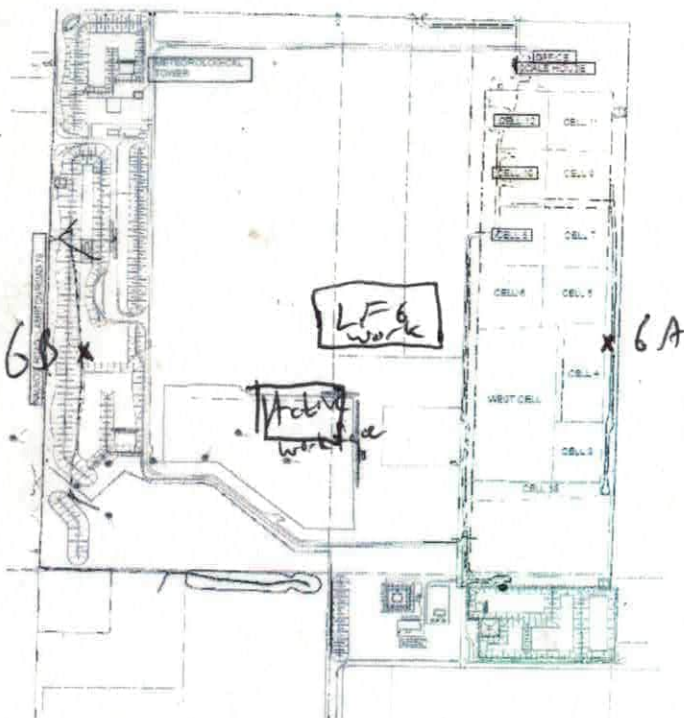
(Wind Direction)

Sample ID SA Sample ID SB
UTM 429125.311E UTM 428494.224E
17T 4757687.334N 17T 4758521.889N
Upwind/ Downwind Upwind/ Downwind

1/2hr VOC Sampling Data Sheet

| | | | |
|----------------|------------|------------|----------|
| Date | 18 Sept-24 | 19-Sept-24 | Comments |
| Pbar | 101.5 kPa | 101.3 kPa | |
| Temp | 25°C | 25°C | |
| Wind Speed | 12 km/h | 6 km/hr | |
| Wind Direction | SE | NE | |
| Cloud Cover | clear | few clouds | |

| Sample ID | Canister No. | S/N (Mass flow controller) | Initial | | | Final | | |
|-----------|--------------|-------------------------------|---------|-----------------|--------------------|-------|-----------------|--------------------|
| | | | Time | Delta P (in Hg) | Flow Rate (cc/min) | Time | Delta P (in Hg) | Flow Rate (cc/min) |
| 6A | 5X2564 | FX48 | 355 | -28.5 | 3.1169 | 3:52 | -7 | 2.8598 |
| 6B | 5X1040 | FX1658 | 407 | -30 | 3.1148 | 4:09 | -9 | 3.0221 |



(Wind Direction)

Sample ID 6A

UTM 42473807
424185.982E

17T 4758199.562N

Upwind/Downwind

Sample ID 6B

UTM 428348777E

17T 4758104.04N

Upwind/Downwind

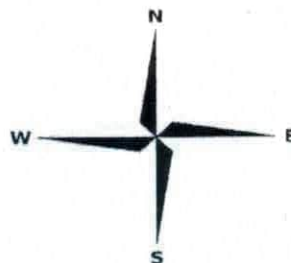
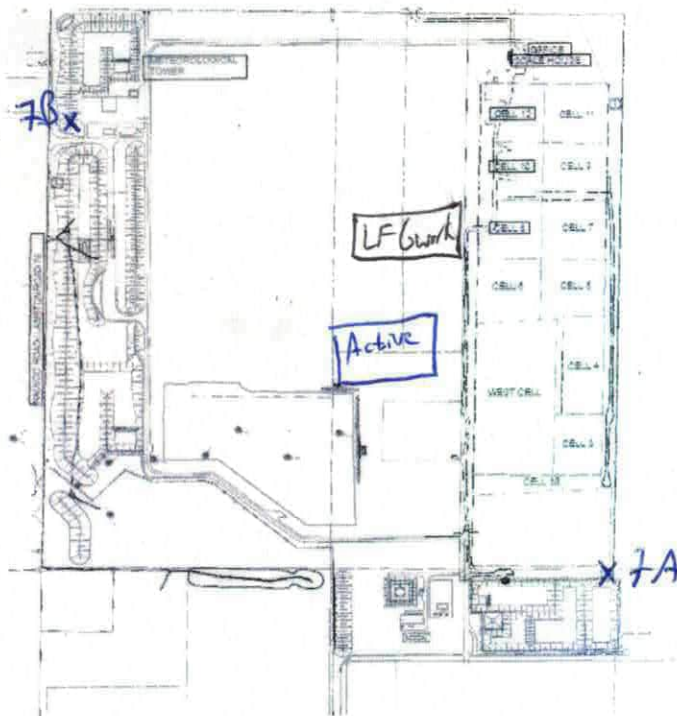
1/2hr VOC Sampling Data Sheet

| | |
|----------------|------------|
| Date | 19-SEP-24 |
| Pbar | 101.3 kPa |
| Temp | 25°C |
| Wind Speed | 6 km/hr |
| Wind Direction | NE 6 km/hr |
| Cloud Cover | few clouds |

20-SEP-24
101.3 kPa
26°C
13 km/hr
S
clear

Comments

| Sample ID | Canister No. | S/N (Mass flow controller) | Initial | | | Final | | |
|-----------|--------------|-------------------------------|---------|-----------------|--------------------|-------|-----------------|--------------------|
| | | | Time | Delta P (in Hg) | Flow Rate (cc/min) | Time | Delta P (in Hg) | Flow Rate (cc/min) |
| 7A | SX0063 | FX1735 | 16:15 | -29.6 | 3.1108 | 16:15 | -7 | 2.7674 |
| 7B | SX1491 | FX1314 | 16:20 | -28.5 | 3.1204 | 16:25 | -8 | 3.1164 |



(Wind Direction)

Sample ID 7A Sample ID 7B
UTM 429473.94E UTM 428310.841E
17T 4757584.56N 17T 4758093.64N
Upwind/Downwind Upwind/Downwind

1/2hr VOC Sampling Data Sheet

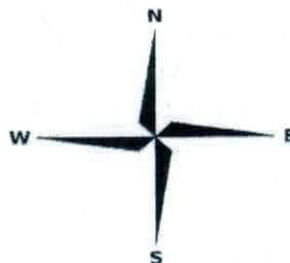
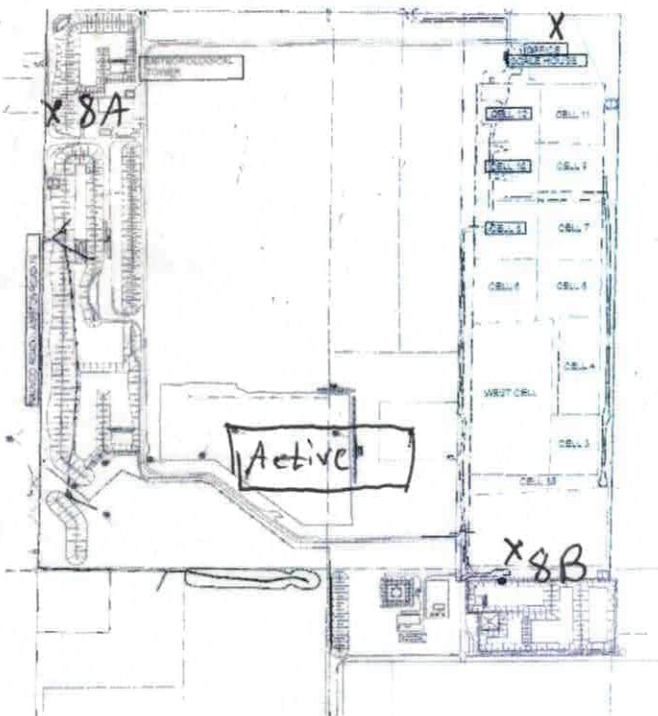
| | |
|----------------|-----------|
| Date | 10-Oct-24 |
| Pbar | 997KPa |
| Temp | 6.3 |
| Wind Speed | 4 km/h |
| Wind Direction | SSW |
| Cloud Cover | Clear |

End
11-Oct-24
60KPa
8.2
6 km/h
SSW
Clear

Comments

| |
|--------------------|
| Used Nutech timers |
| |
| |
| |
| |
| |

| Sample ID | Canister No. | S/N (Mass flow controller) | Initial | | | Final | | |
|-----------|--------------|-------------------------------|---------|-----------------|--------------------|-------|-----------------|--------------------|
| | | | Time | Delta P (in Hg) | Flow Rate (cc/min) | Time | Delta P (in Hg) | Flow Rate (cc/min) |
| 8A | SX0227 | 110124026 | 01:00 | 32-29 | 3.2 | 01:00 | -7 | 2.3 |
| 8B | SX1060 | 110123003 | 01:00 | 22-29 | 3.2 | 01:00 | -7 | 3.2 |



(Wind Direction)

Sample ID 8A Sample ID 8B
UTM 428320756E UTM 429469.134E
17T 4758721.54N 17T 4757582.538N
Upwind/Downwind Upwind/Downwind

A decorative background graphic featuring a large, light gray curved shape on the right side and a blue curved shape on the left side, separated by a white line.

APPENDIX G

The graphic for Appendix G1 features a large, light gray circular shape on the right side of the page. On the left, a blue triangular shape is partially visible, with a white curved line separating it from the gray circle. The text 'APPENDIX G1' is centered in the white space between the blue triangle and the gray circle.

APPENDIX G1



600 Southgate Drive
Guelph, ON N1G 4P6
Canada

Tel: +1.519.823.1311
Fax: +1.519.823.1316
E-mail: solutions@rwdi.com

May 23, 2024

Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
5768 Nauvoo Road (Watford)
Warwick Township, County of Lambton N0M 2S0
E: amclachl@wm.com

**Re: First Quarter 2024 TSP and Metals Report
January, February and March of 2024
Twin Creeks Environmental Centre – Watford, Ontario
RWDI Reference No. 2402553.02**

Dear Ms. McLachlan,

RWDI AIR Inc. (RWDI) was retained by Waste Management of Canada Corporation (WM) to complete the Total Suspended Particulate Matter (TSP) and Airborne Metal (Metals) sampling required under the Environmental Compliance Approval A032203, dated December 16, 2023 (Waste ECA). The sampling program is being completed, as approved by the Ontario Ministry of the Environment, Conservation and Parks (MECP) per Condition 13.8 of the Waste ECA. The station locations were approved by the MECP, as noted under Schedule "A" Reference 85 in the Waste ECA. The sampler locations for the TSP samplers are illustrated in the figures section of this report. These locations remained fixed for the duration of the sampling program. This report outlines the results from the first quarter (Q1) samples collected from January 1 to March 31, 2024.

SAMPLING PROGRAM OVERVIEW

Consistent with the Waste ECA dated December 16, 2023 and the AAQMP dated May 18, 2017, the samplers are run on a 6-day schedule from January 1 to May 31 and October 1 to December 31 of each year and run on a 3-day cycle from June 1 to September 30 of each year. A copy of the most recently amended AAQMP can be found in **Attachment A**.

Each sample location has two (2) High Volume Air samplers (Hi-Vols) which run on an alternating 6-day or 3-day schedule, depending on the time of year. Each sample period consists of a 24-hour (midnight to midnight) sample that operates in concurrence with the NAPS sampling schedule.

During the month of January, a total of six (6) sample sets or eighteen (18) samples were initiated, eighteen (18) of which are valid.

During the month of February, a total of four (4) sample sets or twelve (12) samples were initiated, eleven (11) of which are valid.



During the month of March, a total of six (6) sample sets or eighteen (18) samples were initiated, seventeen (17) of which are valid.

In Q1, a total of forty-eight (48) samples were initiated, forty-six (46) samples of which were valid. This indicates, that 96% of the total samples were successful. Sample validity at the Southeast, Northeast and Western Stations were 88%, 100% and 100% respectively, which means that every sampling station had a valid quarter ($\geq 75\%$ validity). **Table 1** below summarizes the measured TSP concentrations for the forty-six (46) valid samples as collected from the Southeast, Northeast, and Western samplers.

Table 1 also indicates the direction of the wind at each sampling location relative to the active landfill cell. The Downwind designation indicates that the sampler was located predominantly downwind of the active landfill cell during the sampling period. Under these conditions the landfilling operations are likely to contribute to the measured concentrations. The Upwind designation indicates that the sampler was located predominantly upwind from the active cell. The Crosswind designation indicates that the wind was blowing in a direction that did not put the sampler either upwind or downwind with respect to the active cell or that the sampler was not located upwind or downwind for a significant period of time. Under the Upwind and Crosswind conditions the landfilling operations are unlikely to make a significant contribution to the measured concentrations. **Table 2** summarizes the significant cardinal wind directions observed during each sampling period.

Table 1: Summary of Meteorological Conditions and Measured TSP Concentrations for January, February and March of 2024

| Sample Date | Southeast TSP Concentration and Sample Location ⁽¹⁾ ($\mu\text{g}/\text{m}^3$) | Northeast TSP Concentration and Sample Location ⁽¹⁾ ($\mu\text{g}/\text{m}^3$) | Western TSP Concentration and Sample Location ⁽¹⁾ ($\mu\text{g}/\text{m}^3$) |
|-------------|--|--|--|
| 01-Jan-24 | 9 $\mu\text{g}/\text{m}^3$ Crosswind | 8 $\mu\text{g}/\text{m}^3$ Crosswind | 21 $\mu\text{g}/\text{m}^3$ Crosswind |
| 07-Jan-24 | 19 $\mu\text{g}/\text{m}^3$ Crosswind | 26 $\mu\text{g}/\text{m}^3$ Downwind | 29 $\mu\text{g}/\text{m}^3$ Upwind |
| 13-Jan-24 | 10 $\mu\text{g}/\text{m}^3$ Crosswind | 17 $\mu\text{g}/\text{m}^3$ Downwind | 17 $\mu\text{g}/\text{m}^3$ Upwind |
| 19-Jan-24 | 13 $\mu\text{g}/\text{m}^3$ Crosswind | 15 $\mu\text{g}/\text{m}^3$ Crosswind | 14 $\mu\text{g}/\text{m}^3$ Crosswind |
| 25-Jan-24 | 16 $\mu\text{g}/\text{m}^3$ Crosswind | 21 $\mu\text{g}/\text{m}^3$ Upwind | 22 $\mu\text{g}/\text{m}^3$ Downwind |
| 31-Jan-24 | 10 $\mu\text{g}/\text{m}^3$ Crosswind | 11 $\mu\text{g}/\text{m}^3$ Downwind | 11 $\mu\text{g}/\text{m}^3$ Upwind |
| 06-Feb-24 | 10 $\mu\text{g}/\text{m}^3$ Crosswind | 5 $\mu\text{g}/\text{m}^3$ Crosswind | 39 $\mu\text{g}/\text{m}^3$ Crosswind |
| 12-Feb-24 | Invalid Crosswind | 30 $\mu\text{g}/\text{m}^3$ Downwind | 31 $\mu\text{g}/\text{m}^3$ Upwind |
| 18-Feb-24 | 14 $\mu\text{g}/\text{m}^3$ Crosswind | 21 $\mu\text{g}/\text{m}^3$ Downwind | 23 $\mu\text{g}/\text{m}^3$ Upwind |
| 24-Feb-24 | 12 $\mu\text{g}/\text{m}^3$ Crosswind | 13 $\mu\text{g}/\text{m}^3$ Crosswind | 14 $\mu\text{g}/\text{m}^3$ Crosswind |
| 01-Mar-24 | Invalid Upwind | 15 $\mu\text{g}/\text{m}^3$ Crosswind | 27 $\mu\text{g}/\text{m}^3$ Crosswind |



| Sample Date | Southeast TSP Concentration and Sample Location ^[1] (µg/m ³) | Northeast TSP Concentration and Sample Location ^[1] (µg/m ³) | Western TSP Concentration and Sample Location ^[1] (µg/m ³) |
|-------------|--|--|---|
| 07-Mar-24 | 14 µg/m ³ Crosswind | 18 µg/m ³ Upwind | 62 µg/m ³ Downwind |
| 13-Mar-24 | 26 µg/m ³ Crosswind | 45 µg/m ³ Crosswind | 39 µg/m ³ Crosswind |
| 19-Mar-24 | 18 µg/m ³ Crosswind | 21 µg/m ³ Downwind | 32 µg/m ³ Upwind |
| 25-Mar-24 | 11 µg/m ³ Upwind | 9 µg/m ³ Crosswind | 122 µg/m ³ Downwind |
| 31-Mar-24 | 6 µg/m ³ Crosswind | 5 µg/m ³ Crosswind | 11 µg/m ³ Crosswind |

Notes: [1] Directional references indicate the direction of the wind at each sampling location during the sampling period relative to the active landfill cell, as described above.

Table 2: Summary of Meteorological Conditions for the Sample Dates in January, February and March of 2024

| Sample Date | Range of Mean Wind Speeds ^[1] (km/h) | Dominant Wind Direction ^[2] (compass) |
|-------------|--|---|
| 01-Jan-24 | 8-21 | N, NNE, NE, WSW, W, NNW |
| 07-Jan-24 | 1-12 | NW, W, WSW, SW, WNW |
| 13-Jan-24 | 20-37 | SW, WSW, SSW, W |
| 19-Jan-24 | 1-19 | NE, SW, NNE |
| 25-Jan-24 | 2-19 | NNE, ENE, E |
| 31-Jan-24 | 1-20 | SW, S, SSW, W, SE |
| 06-Feb-24 | 1-10 | SE, SSE, NE, N, ESE |
| 12-Feb-24 | 3-12 | SW, WSW |
| 18-Feb-24 | 12-31 | SSW, SW, W |
| 24-Feb-24 | 2-28 | N, NNE, NW |
| 1-Mar-24 | 6-25 | SSE, S, SE |
| 7-Mar-24 | 4-18 | SSE, S, SE |
| 13-Mar-24 | 5-19 | SW, NW, SSW, ENE |
| 19-Mar-24 | 4-26 | SW, W, WNW |
| 25-Mar-24 | 20-34 | ESE, SE |
| 31-Mar-24 | 3-12 | NW, NNW, N, NNE |

Notes: [1] Based on average wind speed per wind direction.

[2] Based on the direction from which the wind is blowing.

Calm – Less than 1.8 kilometers per hour.

Figures 1a through **1p**, found in the **Figure section** of this report, illustrate the sample location, measured TSP concentration, and the wind-rose depicting the wind conditions for each sample period. The wind-roses express the percentage of time the wind is blowing from each direction and provides the distribution of wind speeds observed for each direction.

A summary of the calculated statistics for measured concentrations at the Twin Creeks Environmental Centre sampling locations is presented in **Table 3**.



Table 3: Calculated Statistics for Measured 24-hour Averaged TSP Concentrations ($\mu\text{g}/\text{m}^3$)

| Sample Locations | No. of Valid Samples | Percentiles (%) | | | Maximum | Arithmetic Mean | Number of Measurements Above the AAQC ($120 \mu\text{g}/\text{m}^3$) |
|------------------|----------------------|-----------------|----|----|---------|-----------------|--|
| | | 50 | 70 | 90 | | | |
| Southeast | 14 | 13 | 14 | 19 | 26 | 13 | 0 |
| Northeast | 16 | 16 | 21 | 28 | 45 | 18 | 0 |
| Western | 16 | 25 | 31 | 50 | 122 | 32 | 1 |

The MECP 24-hour Ambient Air Quality Criteria (AAQC) for TSP ($120 \mu\text{g}/\text{m}^3$) was exceeded one (1) time during the first quarter sampling period:

- On March 25th, 2024, the AAQC was exceeded at the Western station, with a concentration of $122 \mu\text{g}/\text{m}^3$.

Consistent with the MECP approved monitoring/reporting requirements for TSP at the landfill, the exceedances were reported to the MECP within the 2-week notification requirements.

Further details of the notification and discussion of the event are provided in **Attachment C**.

In agreement with the Warwick Township Technical Review Team, only the highest TSP filter weight for each station was analyzed for airborne metal concentrations per 4 sample sets.

During the first quarter, airborne metals were assessed on January 7 (Southeast, Northeast and Western), January 25 (Southeast and Northeast), February 6 (Western), February 12 (Northeast, Western), February 18 (Southeast), March 13 (Southeast and Northeast), and March 25 (Western). All measured concentrations of airborne metals were below their respective AAQC's as outlined in Ontario Regulation 419. The summary of Q1 total suspended particulate and metals results are provided in **Attachment B**. Laboratory analytical reports will be provided in the Annual Report.

CURRENT MITIGATION MEASURES

The Twin Creeks Environmental Centre has created a Best Management Practices Plan for dust that is implemented at the site. All Site employees are trained in the contents of the plan. Through the combined efforts of the mitigation measures and implementation of the Dust Management Plan, Twin Creeks Environmental Centre plans on limiting the number of TSP exceedances during the periods of heavy construction and beyond.

Currently, particulate emission mitigation measures are in place at the Twin Creeks Environmental Centre and consist of watering on-site roadways and construction sites as well as a number of other practices as outlined in the Best Management Practices Plan for dust. The practices listed above will not occur if precipitation events cause these activities to become redundant or if the ground is sufficiently wet from previous precipitation events.



Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2402553
May 23, 2024

CLOSING

Please feel free to contact us with any questions or comments that you may have with respect to this submission.

Yours very truly,

RWDI AIR Inc.

A handwritten signature in black ink, appearing to read 'Khalid Hussein'.

Khalid Hussein, P.Eng.
Project Manager

KAMH/hta

Attach.

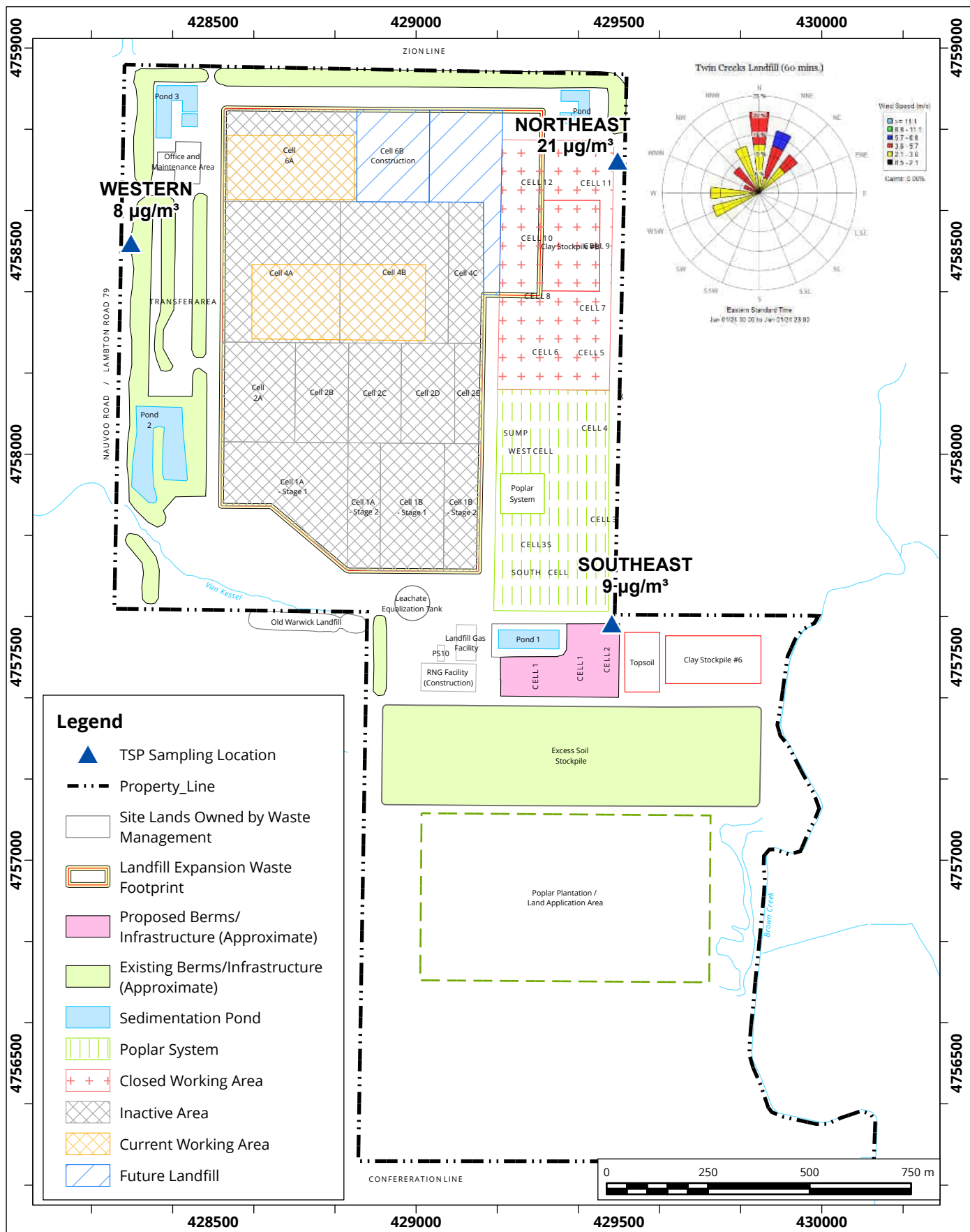
GENERAL STATEMENT OF LIMITATIONS

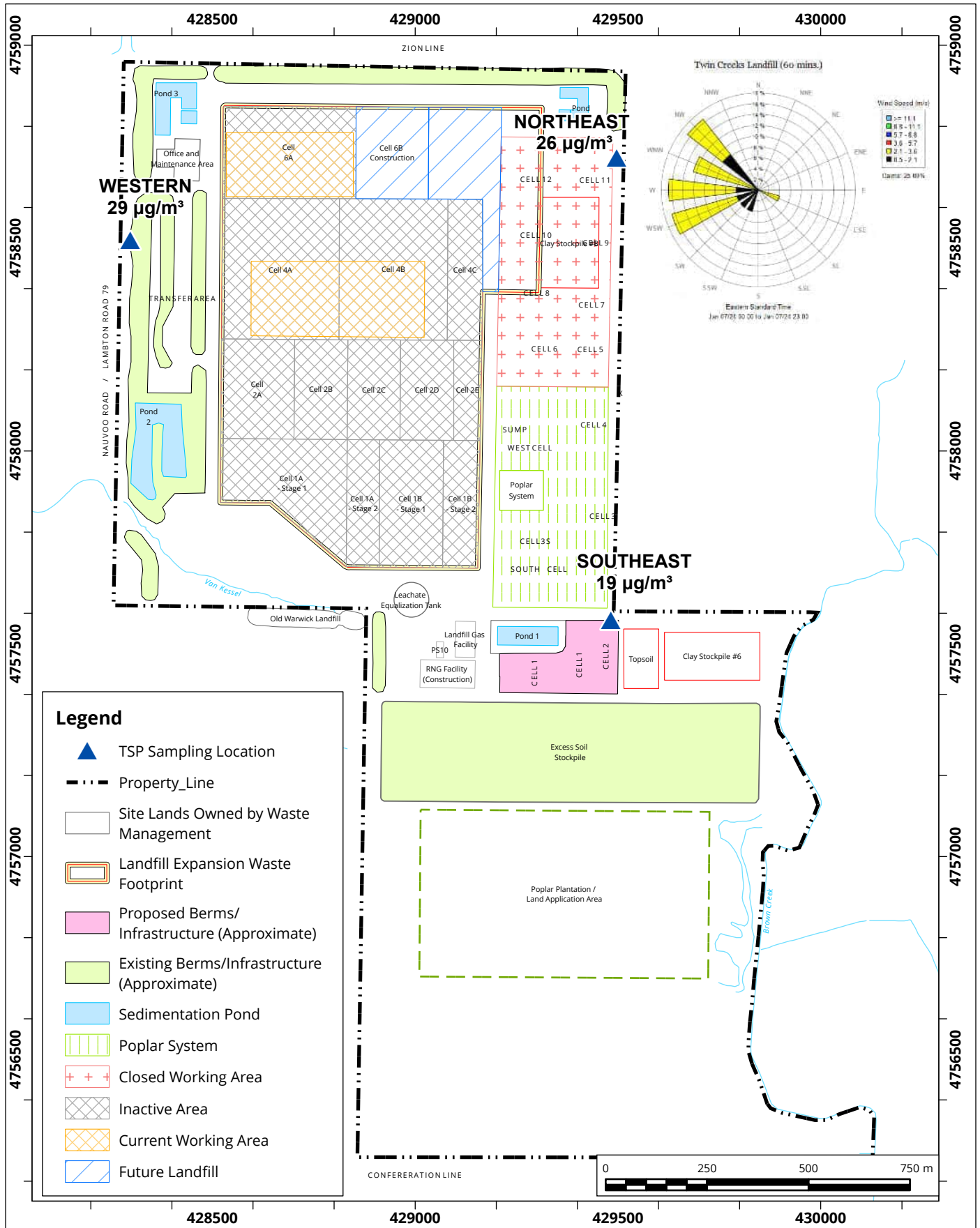
This report entitled “First Quarter 2024 TSP and Metals Report”, dated May 23, 2024 was prepared by RWDI AIR Inc. (“RWDI”) for Waste Management of Canada Corporation (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). This report was prepared using scientific principles, published methodologies and professional judgment in assessing available information and data. The findings presented within this document are based on available data within the limits of the existing information, budgeted scope of work, and schedule. The conclusions contained in this report are based on the information available to RWDI when this report was prepared; subsequent changes made by the Client after the date of this report have not been reflected in the conclusions.

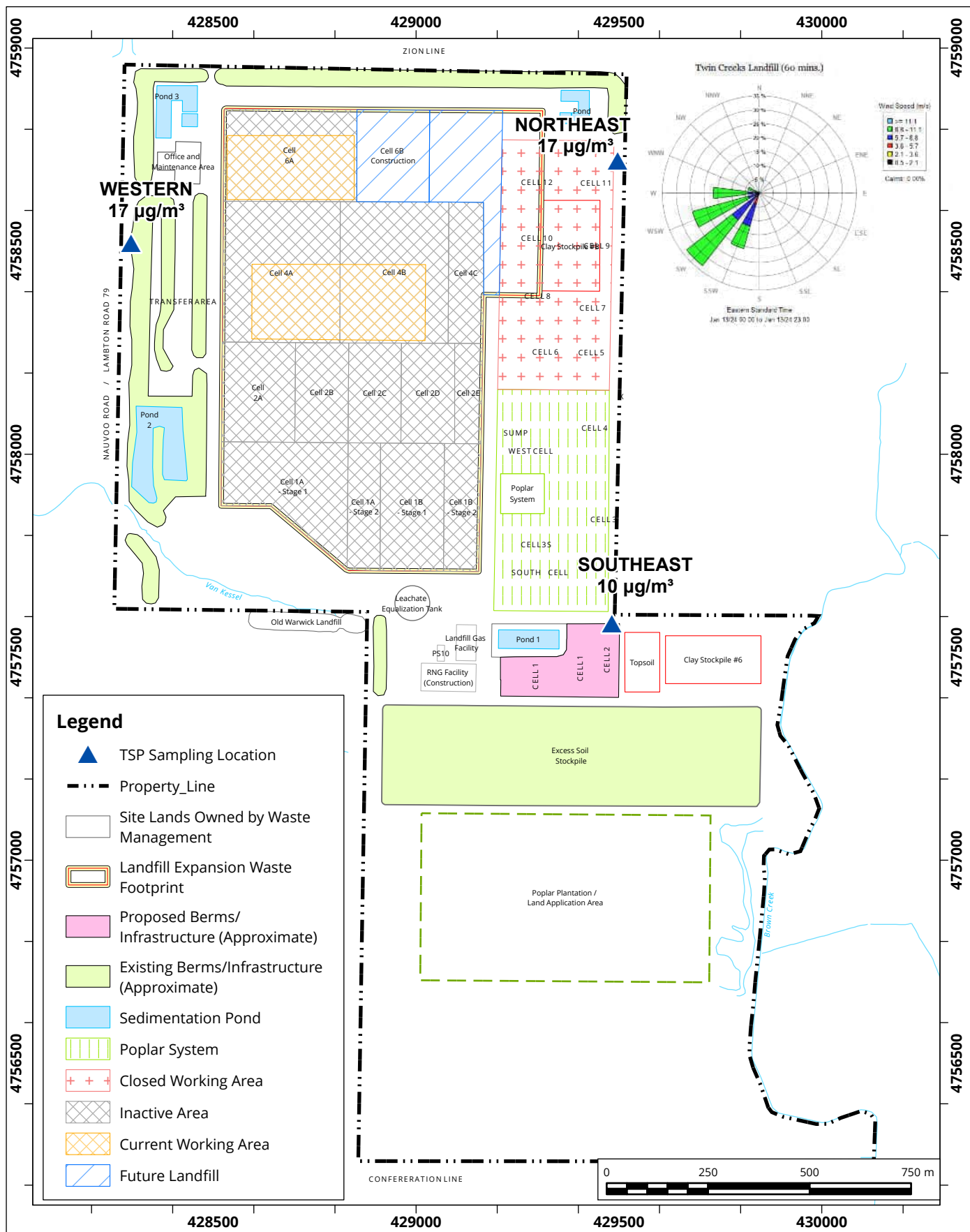
This report was prepared for the exclusive use of Waste Management of Canada Corporation and the MECP. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. RWDI accepts no responsibility for damages, if any, suffered by any third party as result of decisions made or actions based on this report.

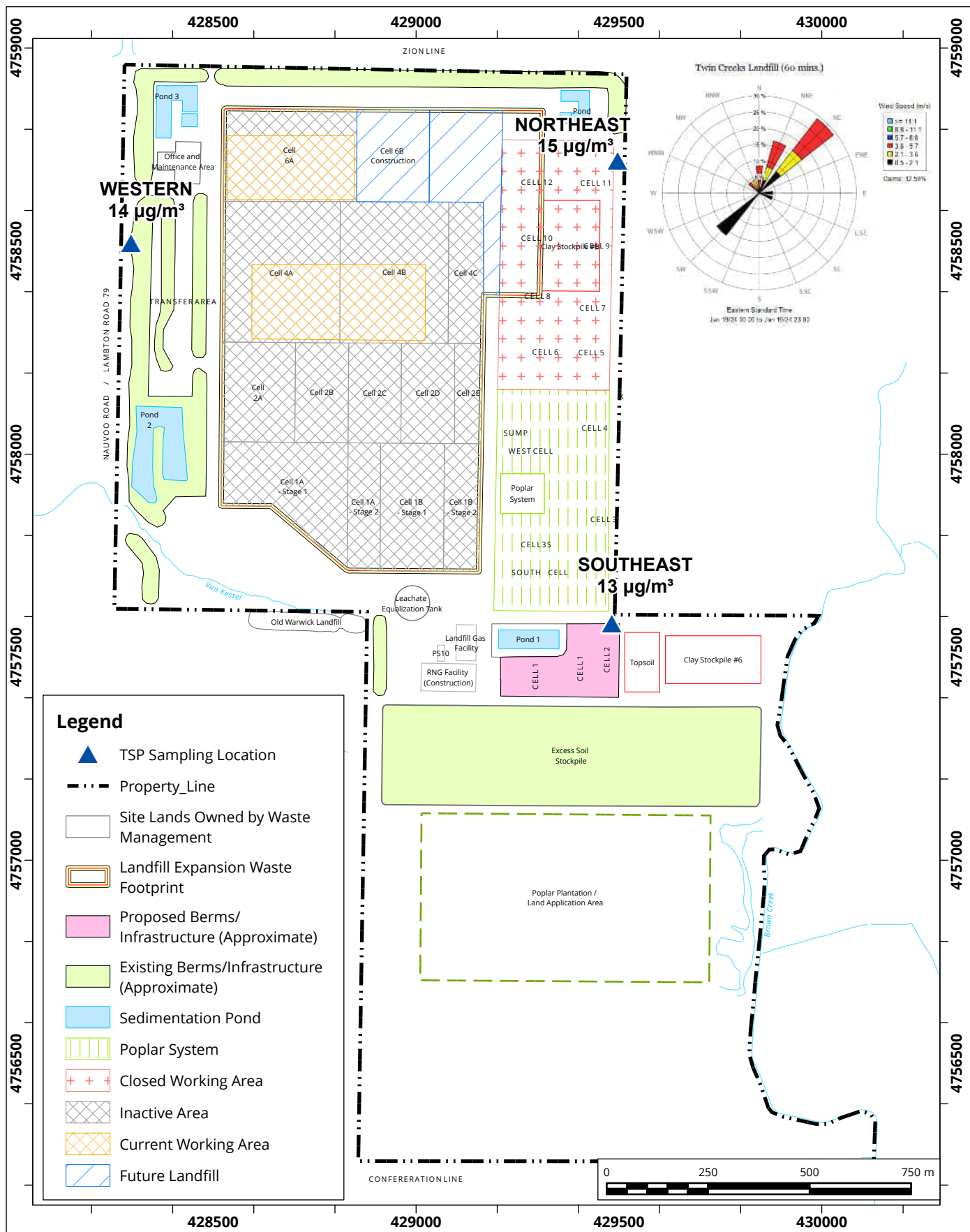
A large decorative graphic on the left side of the page. It features a blue triangular shape in the top-left corner, a white curved line separating it from a large light-grey circular area, and a thin white line separating the grey area from the rest of the page.

FIGURES









Site Plan Showing Sampling Locations and Wind Rose Sampling Period: January 19, 2024

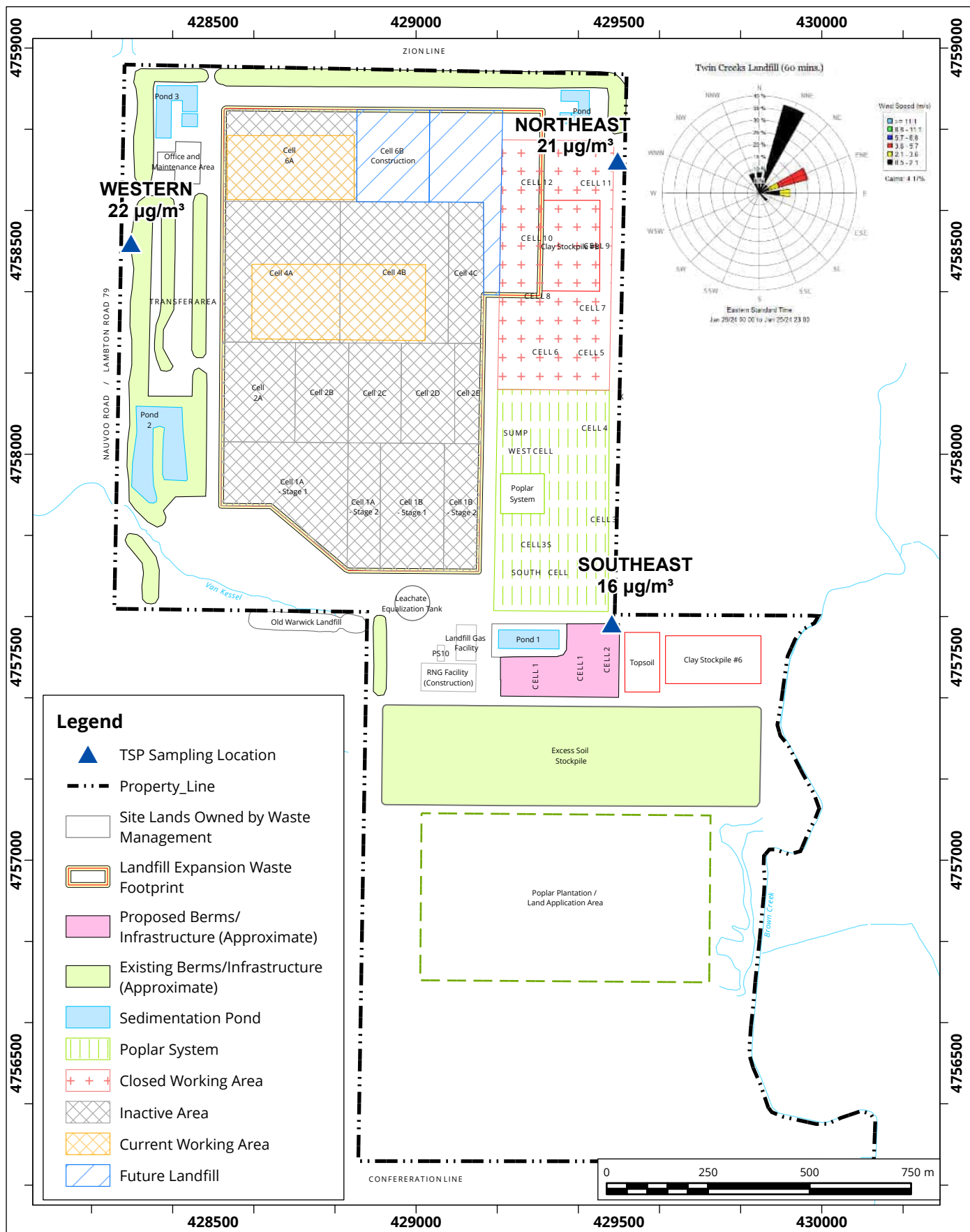
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

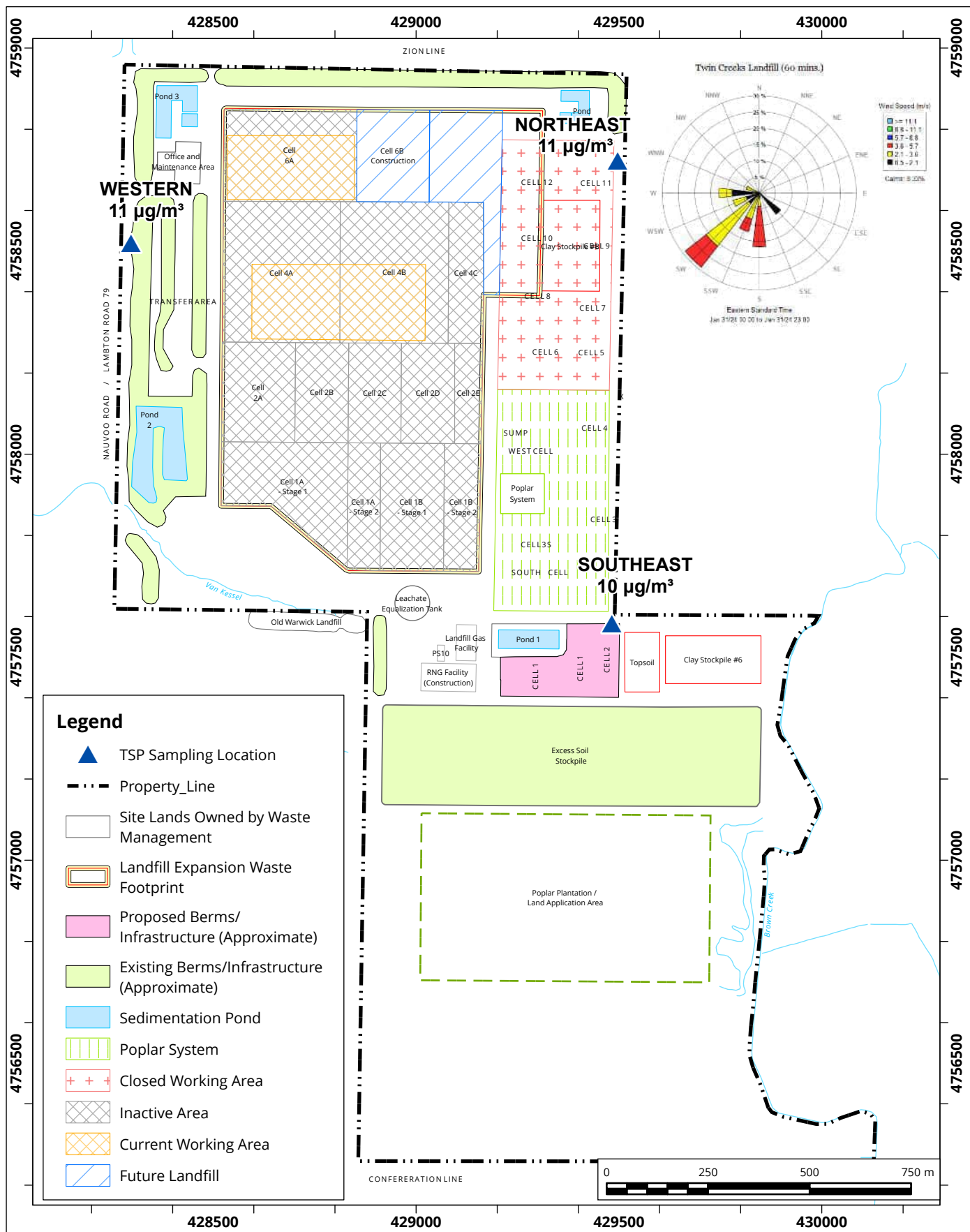


Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1d |
| Approx. Scale: | 1:13,000 |
| Date Revised: | May 7, 2024 |







Site Plan Showing Sampling Locations and Wind Rose Sampling Period: January 31, 2024

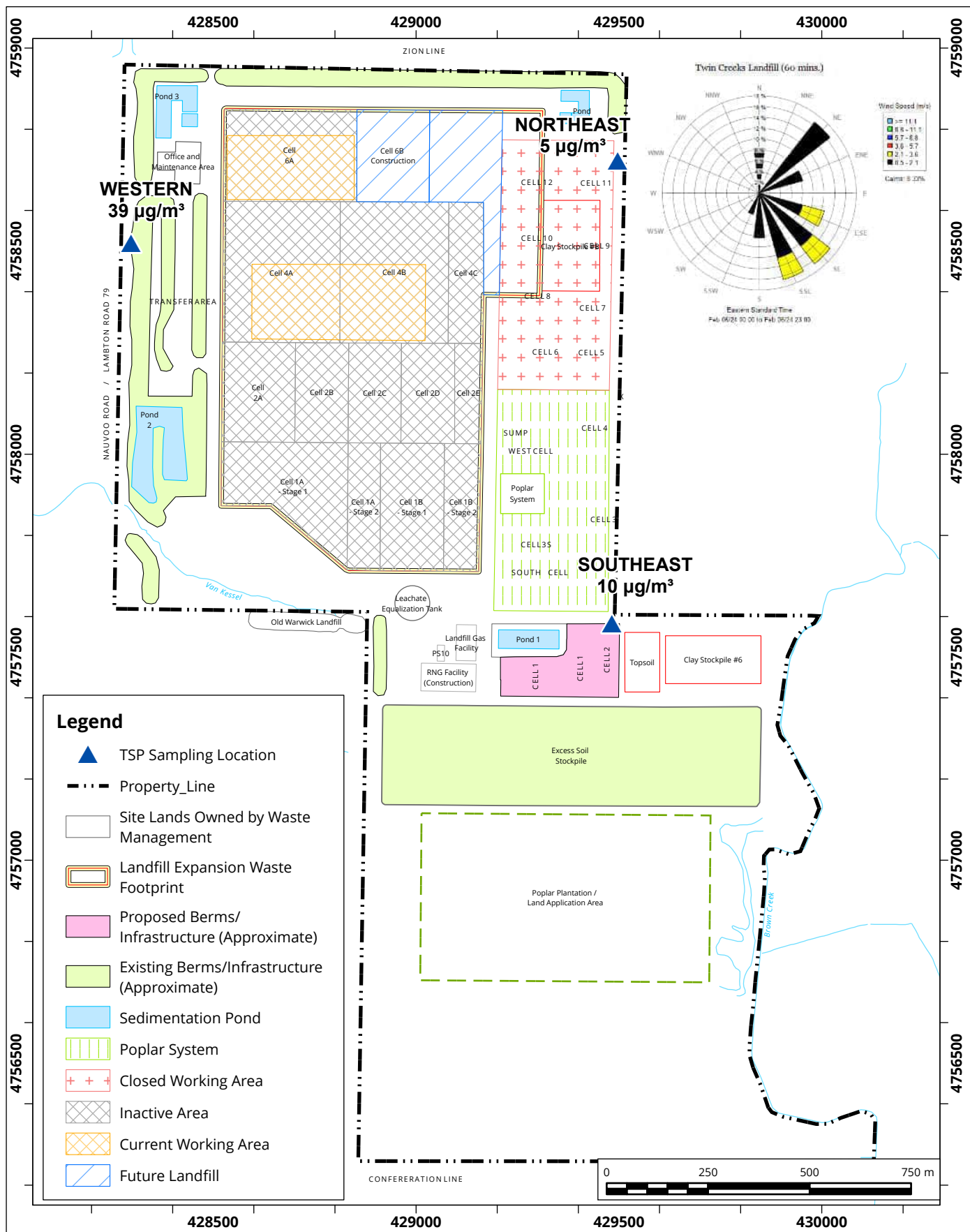
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1f |
| Approx. Scale: | 1:13,000 |
| Date Revised: | May 7, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: February 6, 2024

Map Projection: NAD 1983 UTM Zone 17N

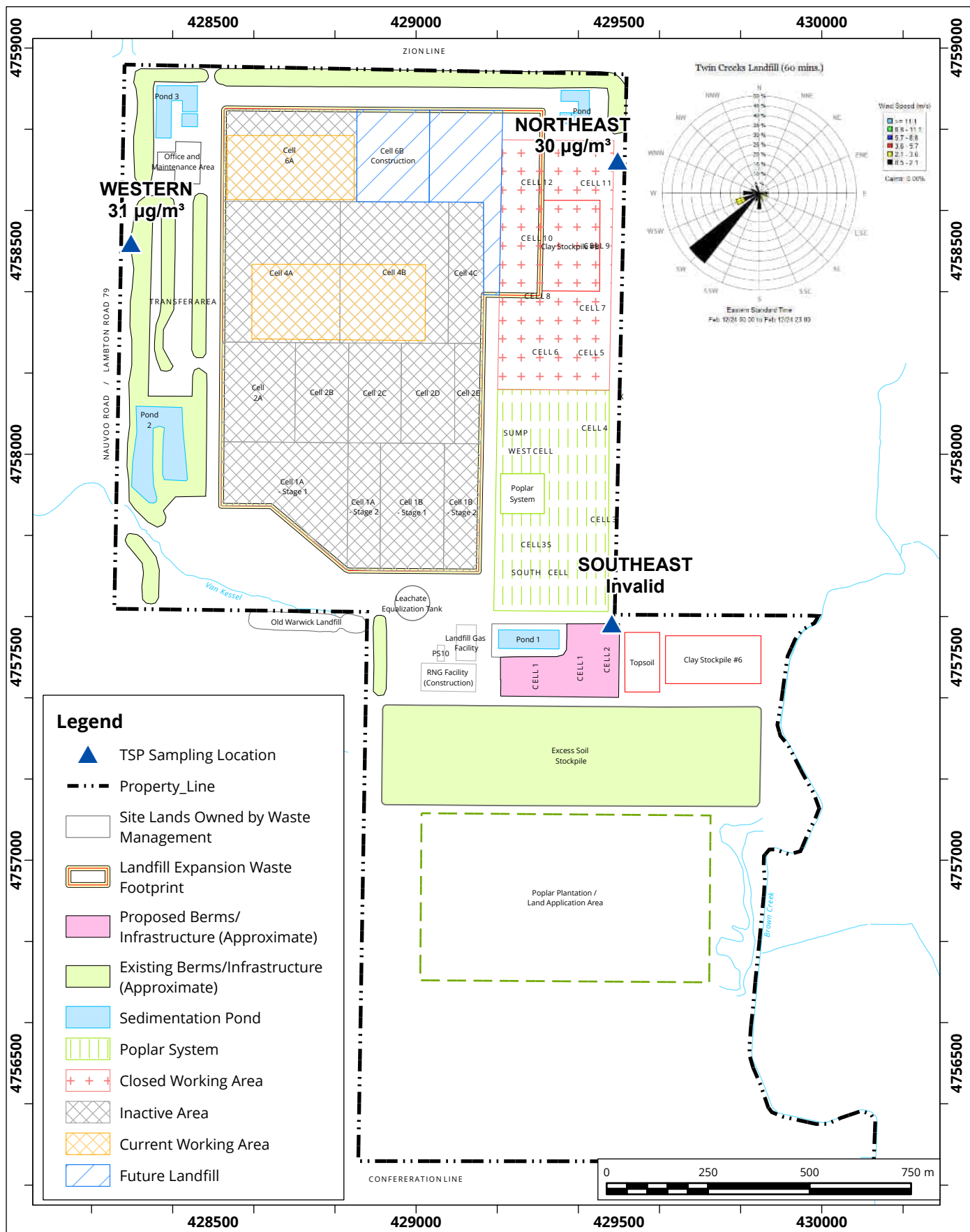
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|---------------------------|------------|
| Drawn by: AXT | Figure: 1g |
| Approx. Scale: 1:13,000 | |
| Date Revised: May 7, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: February 12, 2024

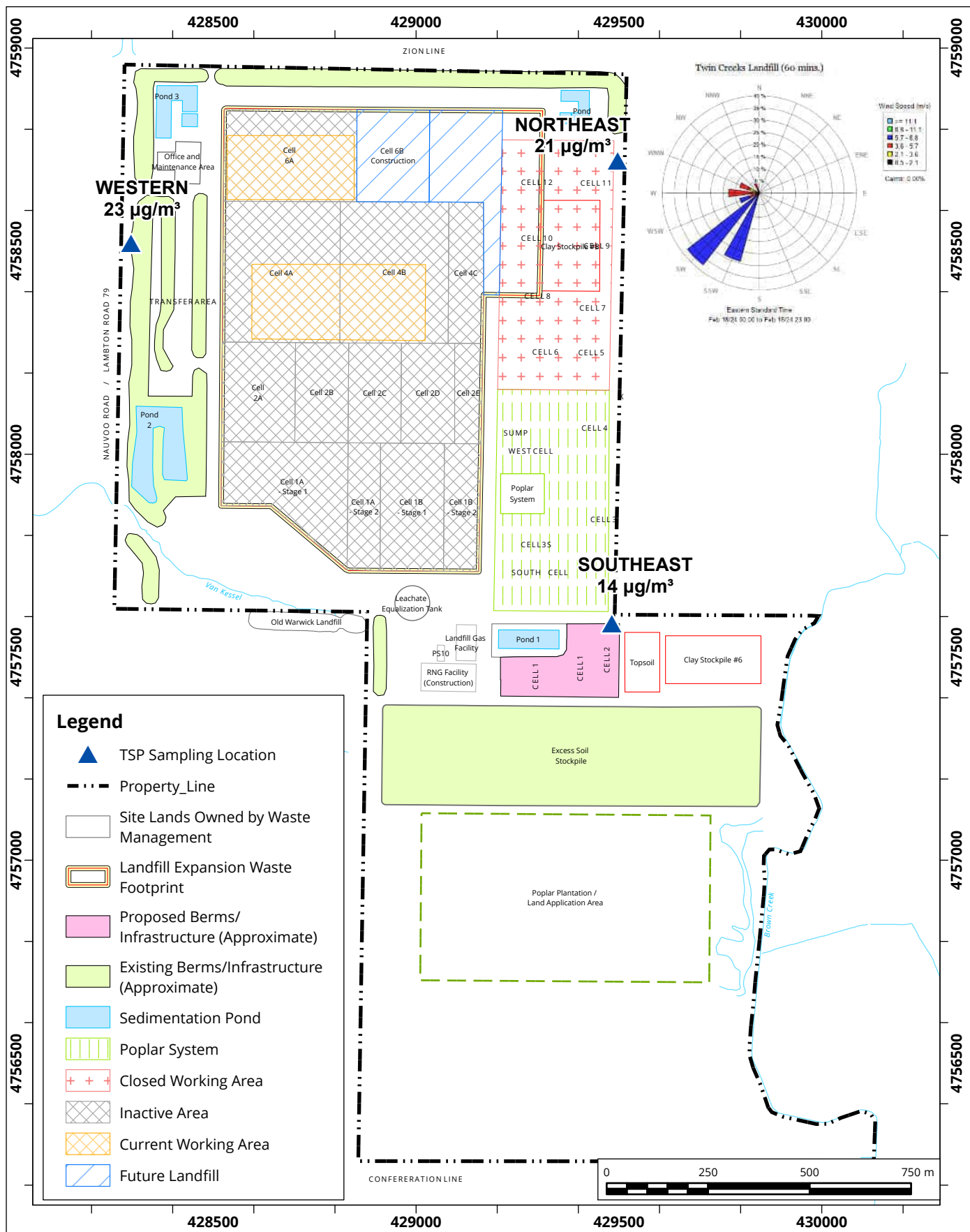
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|---------------------------|------------|
| Drawn by: AXT | Figure: 1h |
| Approx. Scale: 1:13,000 | |
| Date Revised: May 7, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: February 18, 2024

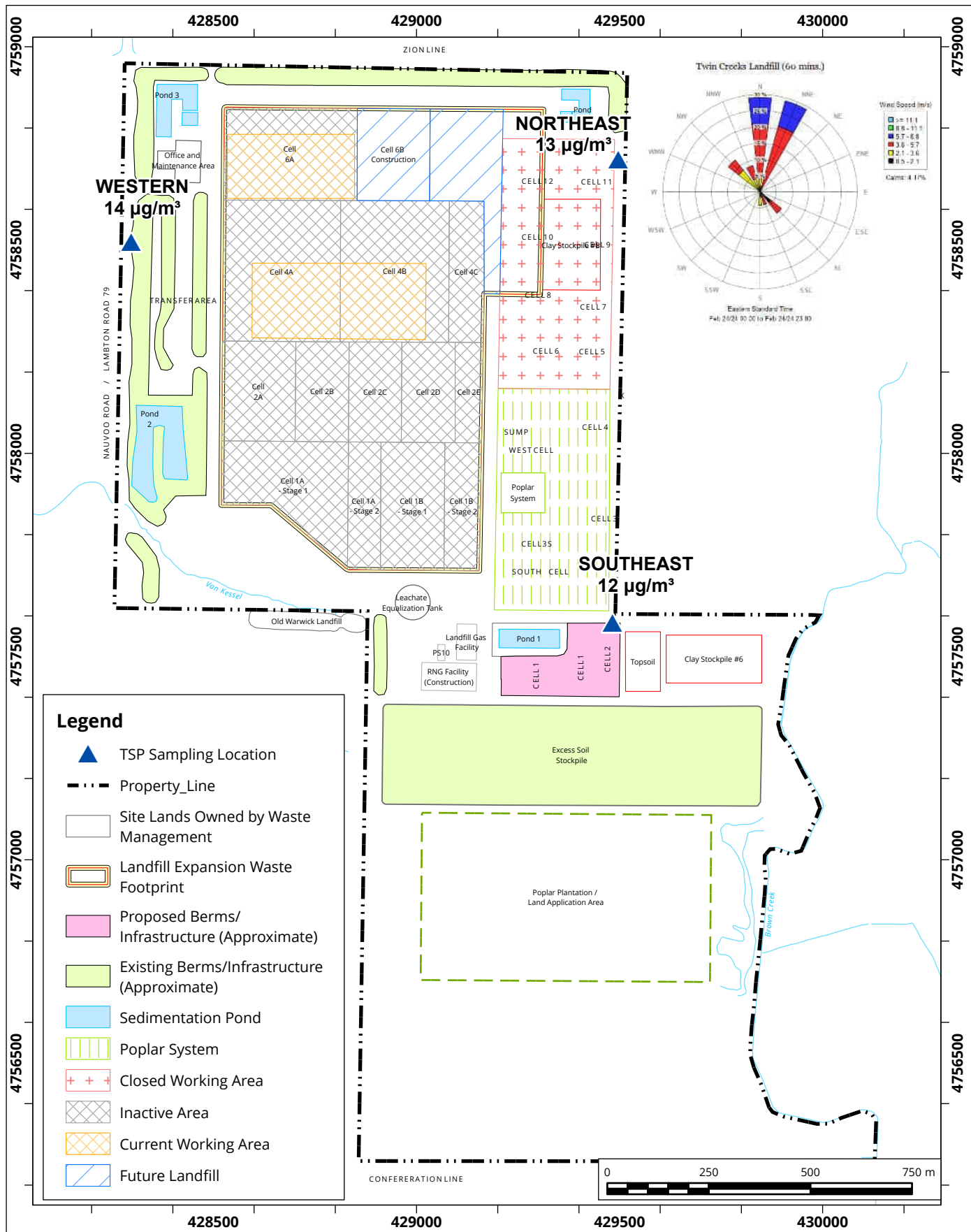
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1i |
| Approx. Scale: | 1:13,000 |
| Date Revised: | May 7, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: February 24, 2024

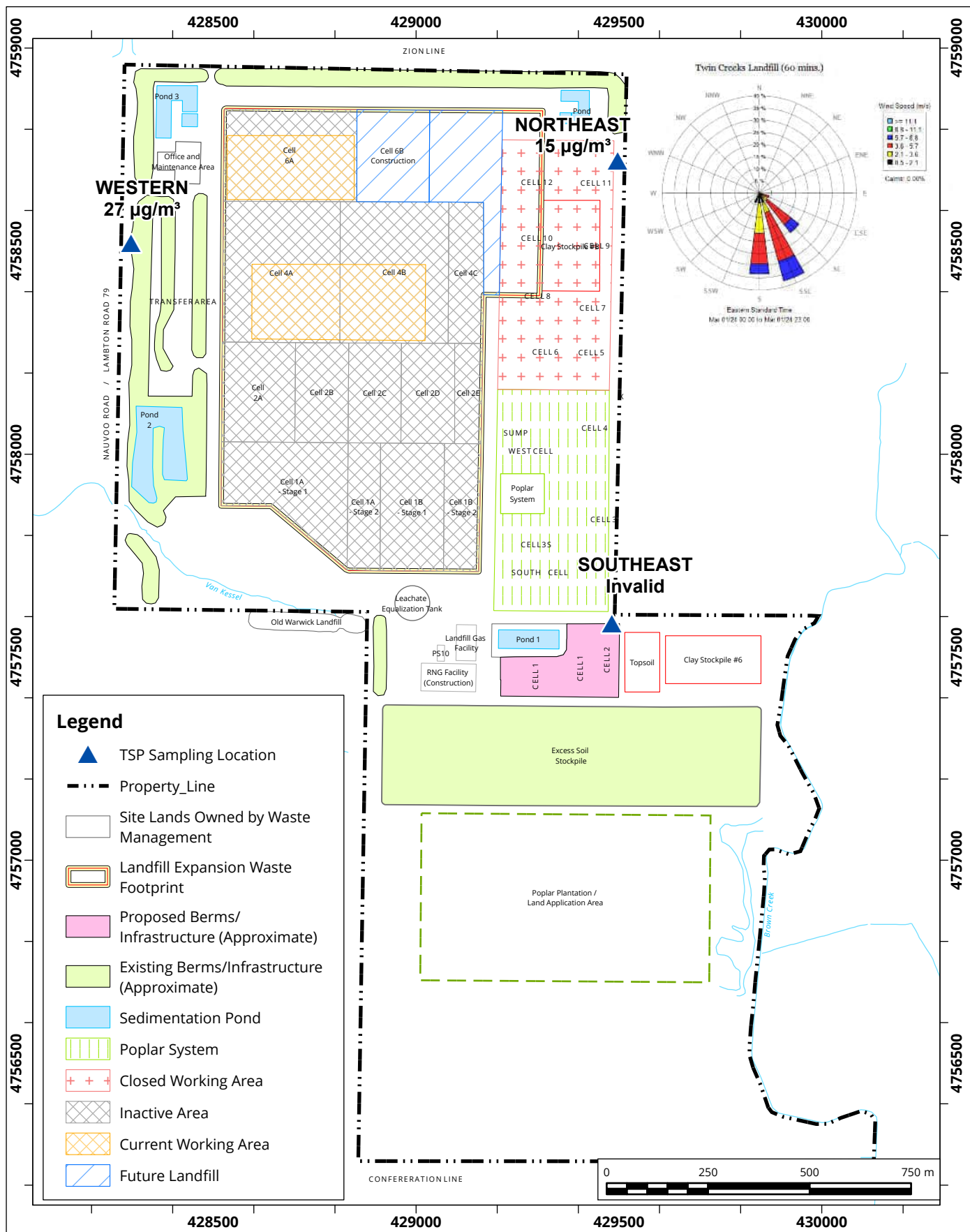
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1j |
| Approx. Scale: | 1:13,000 |
| Date Revised: | May 7, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: March 1, 2024

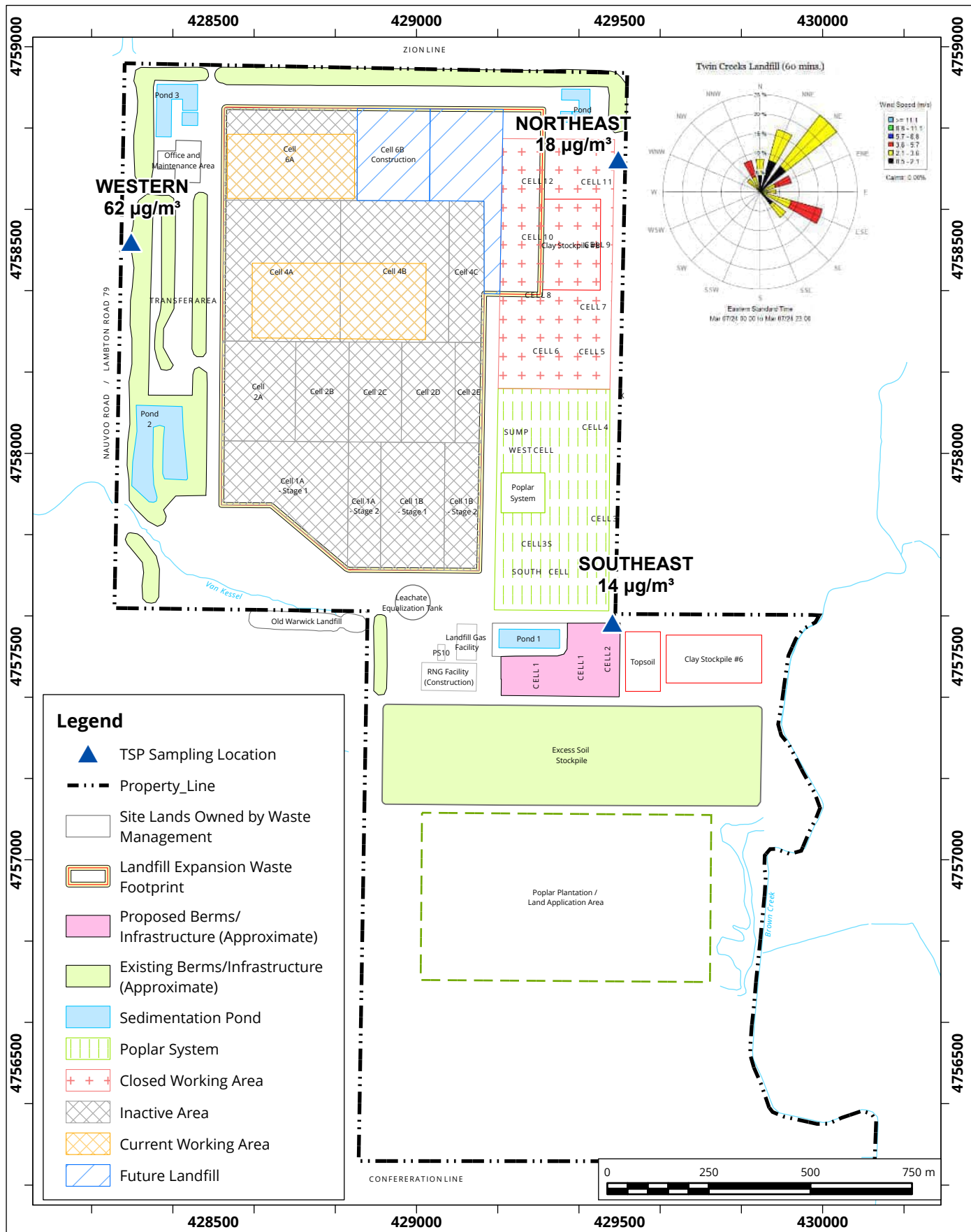
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

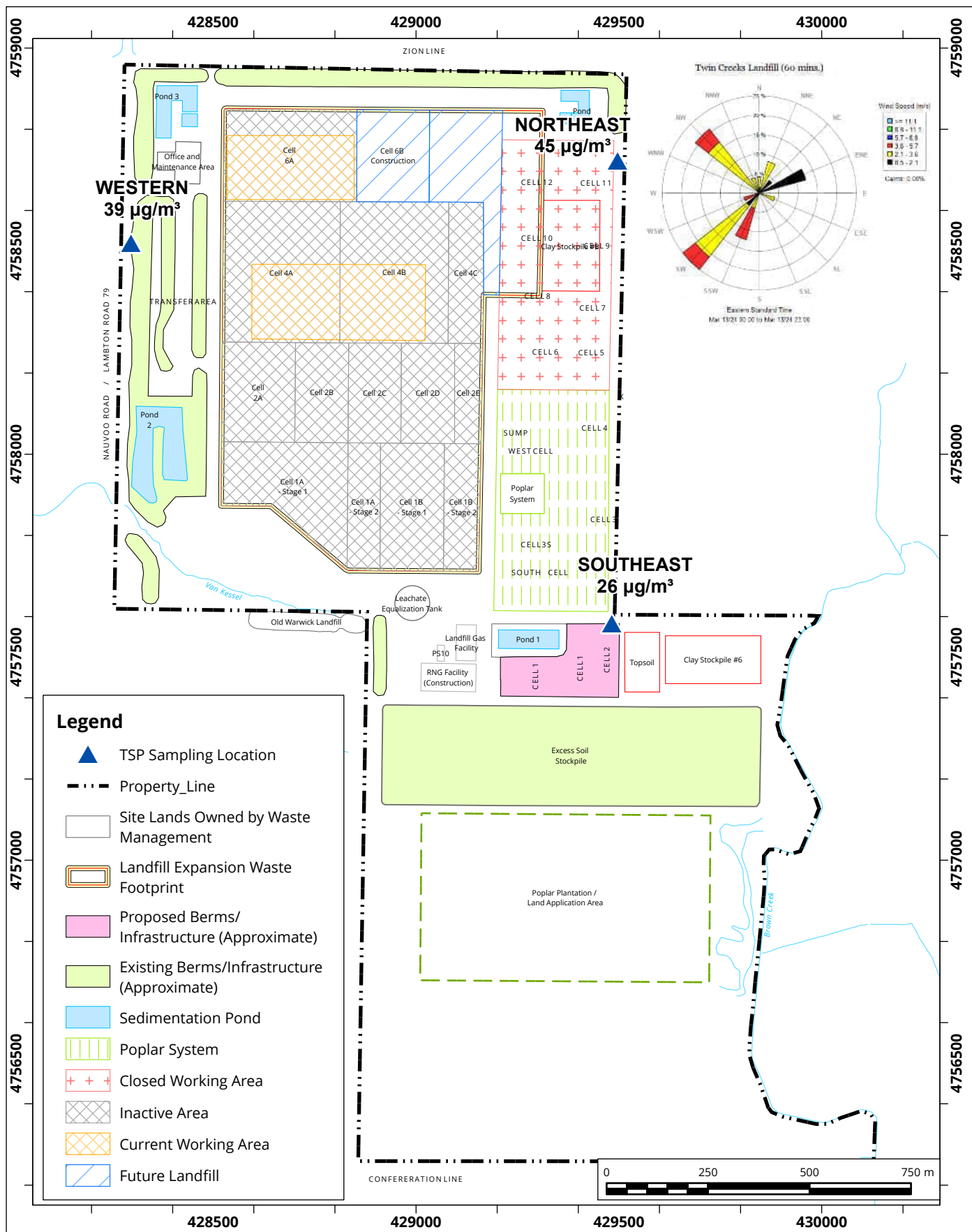


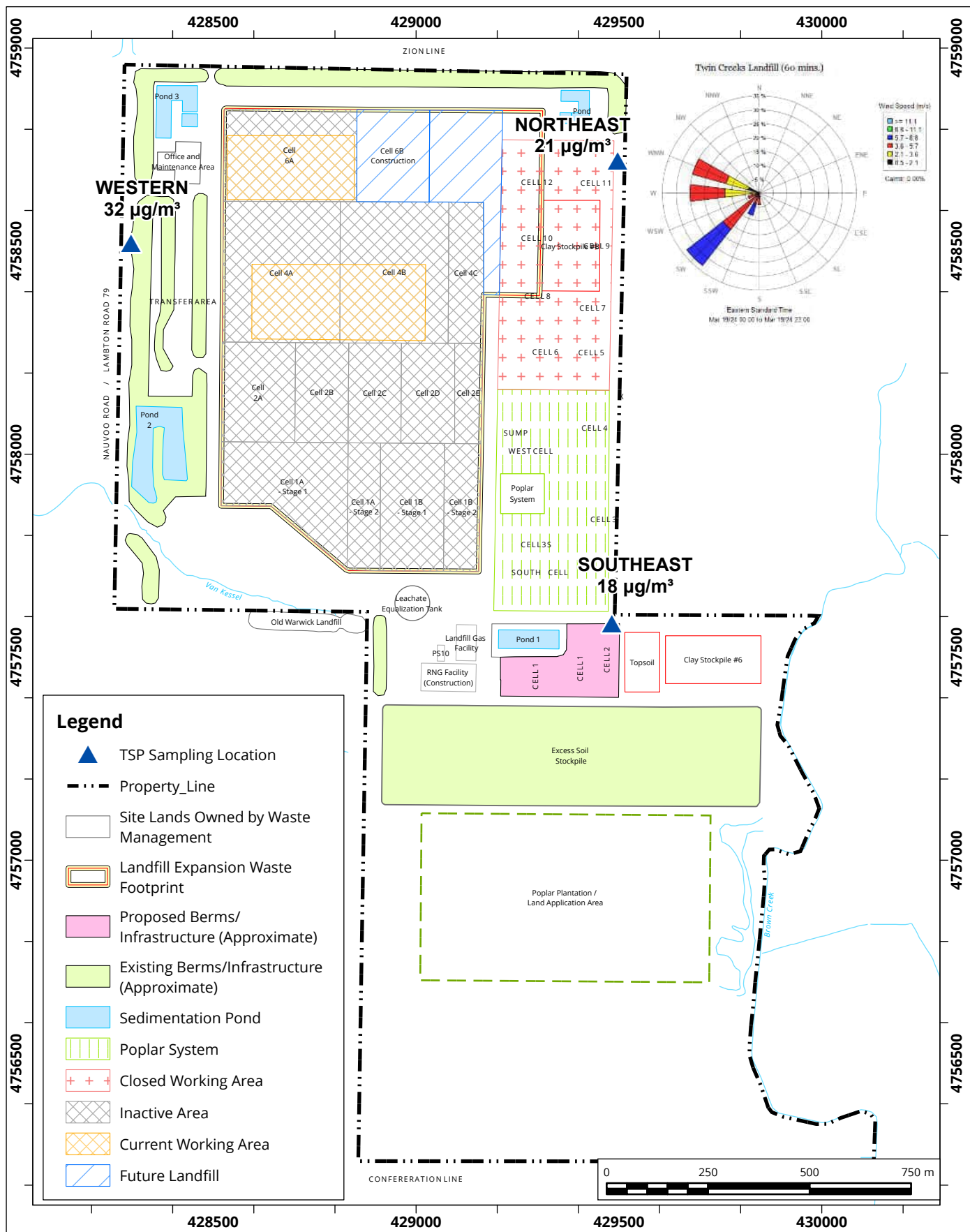
Project #: 2402553

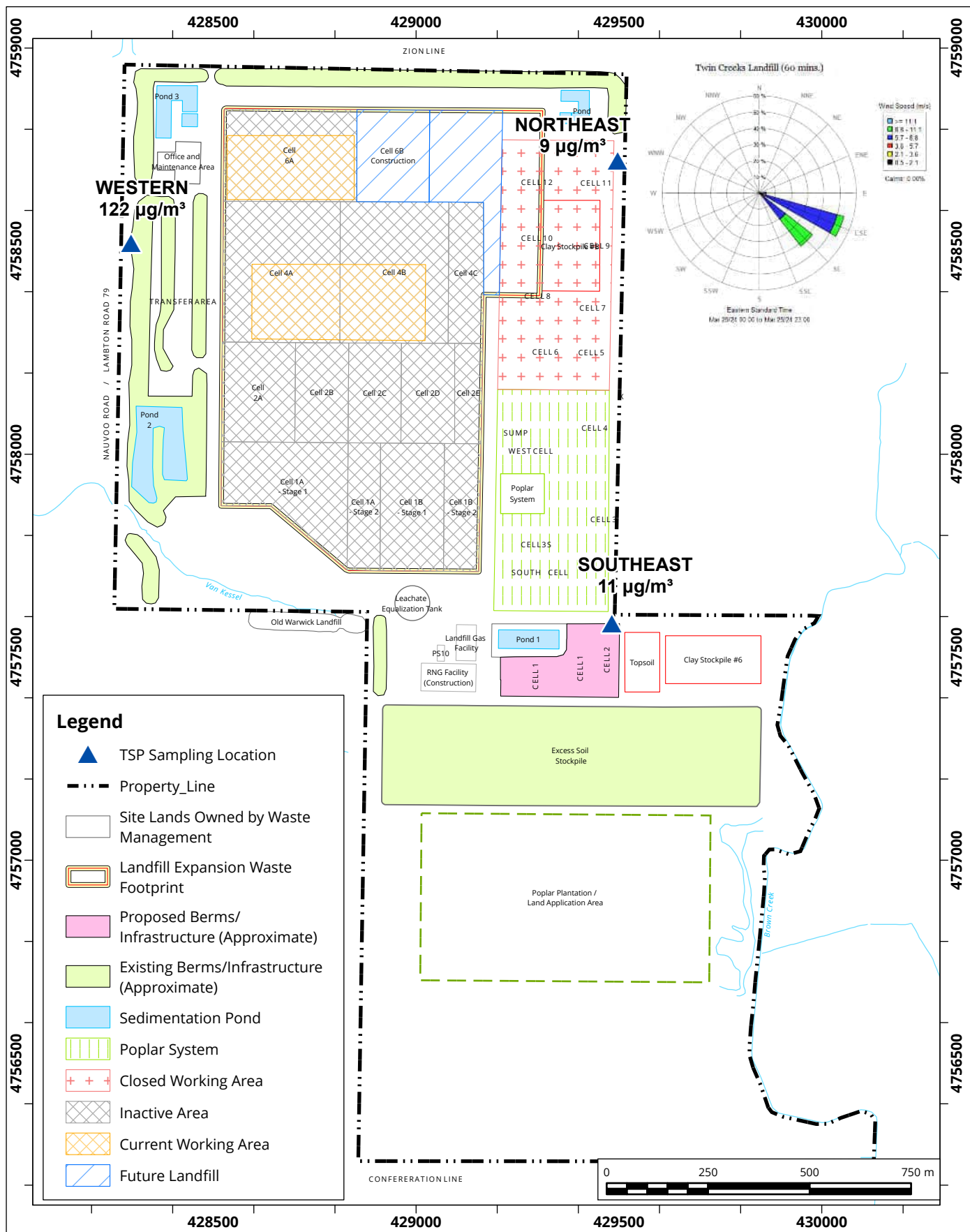
| | |
|---------------------------|------------|
| Drawn by: AXT | Figure: 1k |
| Approx. Scale: 1:13,000 | |
| Date Revised: May 7, 2024 | |

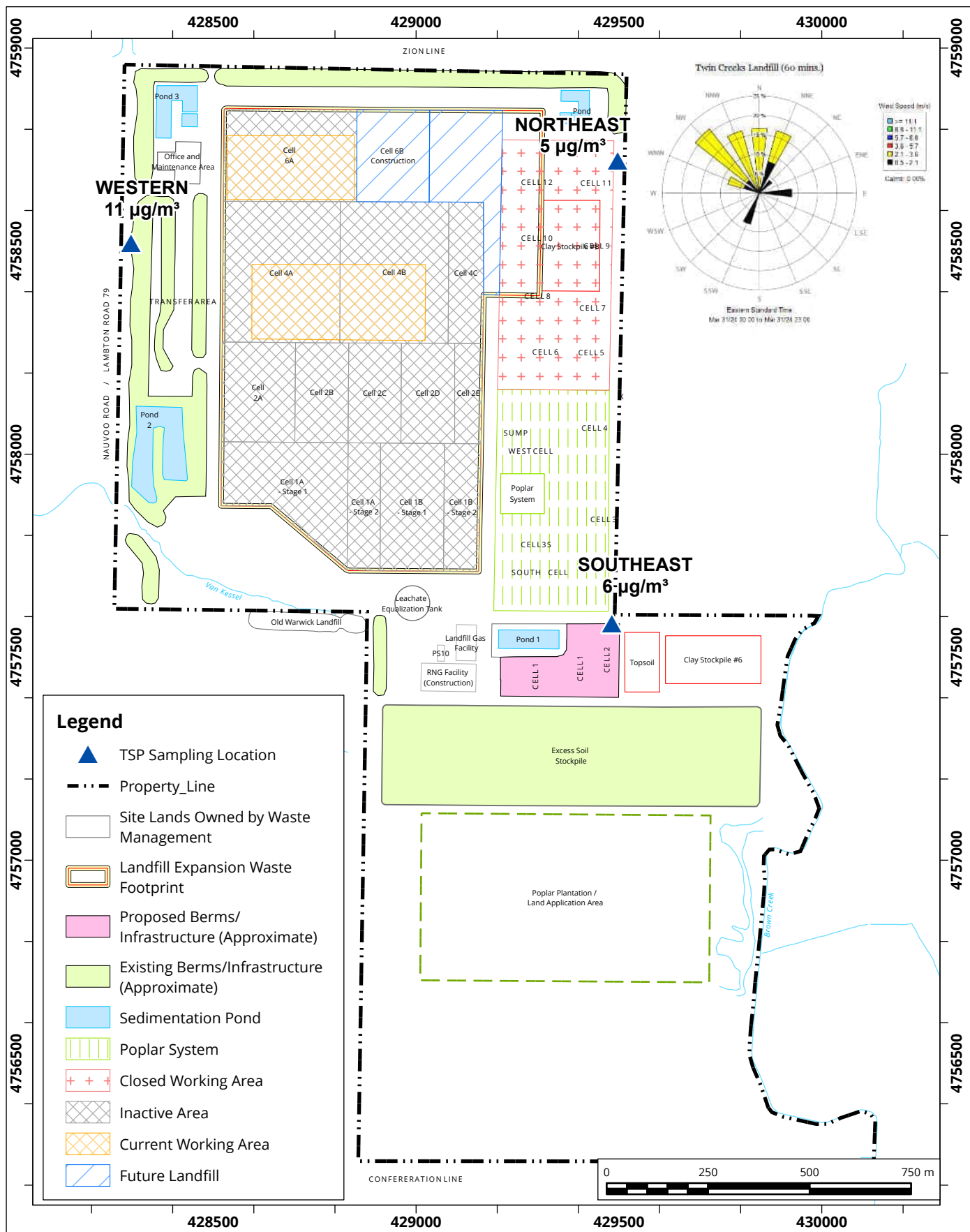












Site Plan Showing Sampling Locations and Wind Rose Sampling Period: March 31, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

True North



Drawn by: AXT

Figure: 1p

Approx. Scale: 1:13,000

Date Revised: May 7, 2024

Project #: 2402553



The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT A' is centered within the gray circle.

ATTACHMENT A

WASTE MANAGEMENT OF CANADA CORPORATION

WATFORD, ONTARIO

TWIN CREEKS LANDFILL SITE: AMBIENT AIR QUALITY MONITORING PLAN [REVISION #3]

RWDI #1600984

May 18, 2017

SUBMITTED TO

Wayne Jenken
Area Landfill Engineer
wjenken@wm.com

**Waste Management of Canada
Corporation | Twin Creeks Landfill**
8039 Zion Line
Watford, Ontario N0M 2S0

T: 519.849.5810
C: 519.381.3017
F: 519.849.6816

SUBMITTED BY

Brad Bergeron, A.Sc.T., d.E.T.
Senior Project Manager | Principal
Brad.Bergeron@rwdi.com

**RWDI AIR Inc.
Consulting Engineers & Scientists**
600 Southgate Drive
Guelph, Ontario N1G 4P6

T: 519.823.1311, ext. 2428
F: 519.823.1316



TABLE OF CONTENTS

1 **TOTAL HYDROCARBON “WALKABOUT” SURVEY.....1**

2 **DUST MONITORING3**

2.1 Additional Dust Monitoring Provisions..... 5

3 **VOC MONITORING.....5**

4 **COMPLAINT RECORDING PROCESS.....7**

5 **REFERENCES.....8**

LIST OF TABLES

Table 1: List of Monitored VOCs.....5

LIST OF FIGURES

Figure 1: Walkabout Pattern.....2

Figure 2: Dust Monitor Locations.....4



1 TOTAL HYDROCARBON “WALKABOUT” SURVEY

The “Walkabout” survey will consist of a grid survey of the entire landfill mound using a handheld THC analyzer (FID). A portable FID will be used throughout the surveys. The FID will be calibrated using a methane gas standard and zeroed using ultra zero pure air. The instrument used will have the following characteristics:

- a response time of no greater than 15 seconds
- an accuracy of 3 percent or better
- a minimum detectable limit of 5 ppmv (or lower)
- a flame-out indicator, audible and visual

The “Walkabout” survey will be completed in a grid like formation gathering data at 7.6 cm or lower (3 inches or lower) above the ground. “Hotspots” of “breakout points” consisting of cracks, fissures, areas of bubbling surface water, or patches of dead (brunt) vegetation on the mound will be visually observed and notes for THC concentrations exceeding 500 ppm (methane). The “walkabout” surveys should be completed at winds less than 8 kilometers per hour (5 miles per hour) and during dry conditions (no measurable precipitation for the proceeding 72 hours prior to sampling). In addition, for the instantaneous readings, the surveys should be completed when the ambient temperatures are within 0 to 50 degrees Celsius.

THC concentrations 500 ppm or greater should be considered of concern during the instantaneous measurements. Therefore, THC concentrations less than 500 ppm will not be noted during the survey. Locations where the THC concentrations are 500 ppm or greater should assist WMI in determining all potential and existing landfill gas release points that require remedial action.

All THC concentrations measured will be expressed as methane on the calibration standard used. After the ‘hotspot’ or “breakout points” are fixed, documentation of the corrective actions taken as well as confirmation of adequate actions taken (THC concentrations less than 500 ppm) will be presented to the MOECC. The “walkabout” survey will include the following:

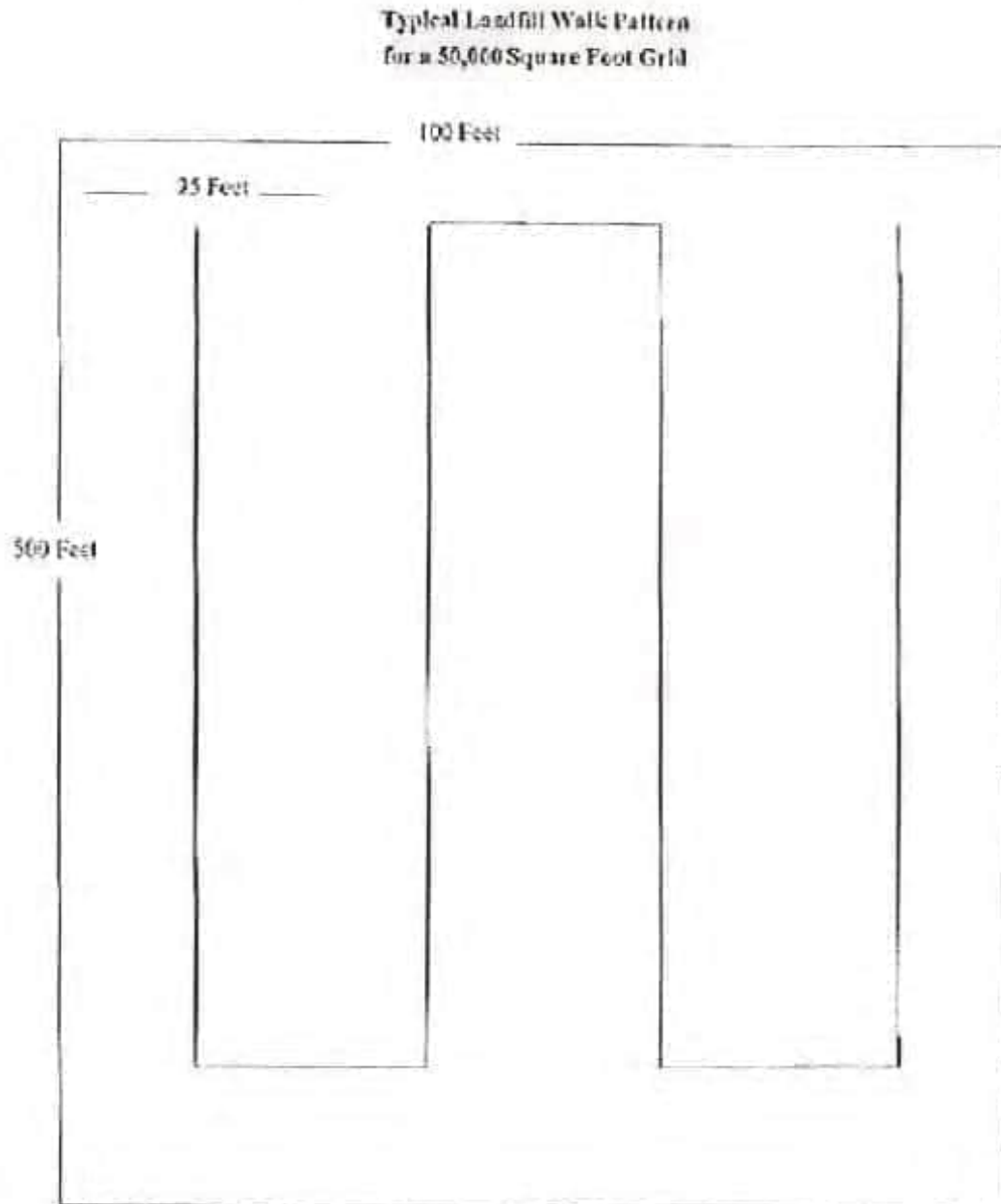
- precise locations of all sampling sites on the site map
- identification of all data obtained in the field measurements
- documentation of all remedial action

The “walkabout” survey should be done in the spring and the early fall. The measured areas should include areas where landfill cover is complete. Problem areas identified should be repaired within two (2) months of identification. Once repairs are completed, a follow-up survey on the specific locations will be completed to validate success of the remediation action(s). The process is important in minimizing odour and VOC emissions.

The “Walkabout” surveys will be performed twice per year or in response to otherwise unexplained odour events. As outlined in the Odour Best Management Practices Plan, routine visual inspections of the landfill cap integrity will also occur on a monthly basis to identify possible problem areas.

Figure 1 includes the walkabout pattern.

Figure 1: Walkabout Pattern





2 DUST MONITORING

The monitoring for Total Suspended Particulate (TSP) will be completed on an on-going basis at three locations around the landfill footprint. The TSP monitor locations are shown in **Figure 2**.

Total Suspended Particulate samples will be taken on a six-day interval during the months of October through May and samples will be taken on a three-day interval during the months of June through September. The sampling will be in concurrence with the U.S EPA National Air Pollutant Surveillance (NAPS) monitoring schedule. The sampling will include the entire year (sampling during 12 months per year). In addition, the analysis for airborne metals will be completed for 11 of the collected TSP samples per station (total of 33 metal samples per year). For each of the 11 sets of samples collected, the particulate analysis will be completed prior to the metal analysis and the highest particulate loaded filters from each station will undergo the analysis for airborne metals.

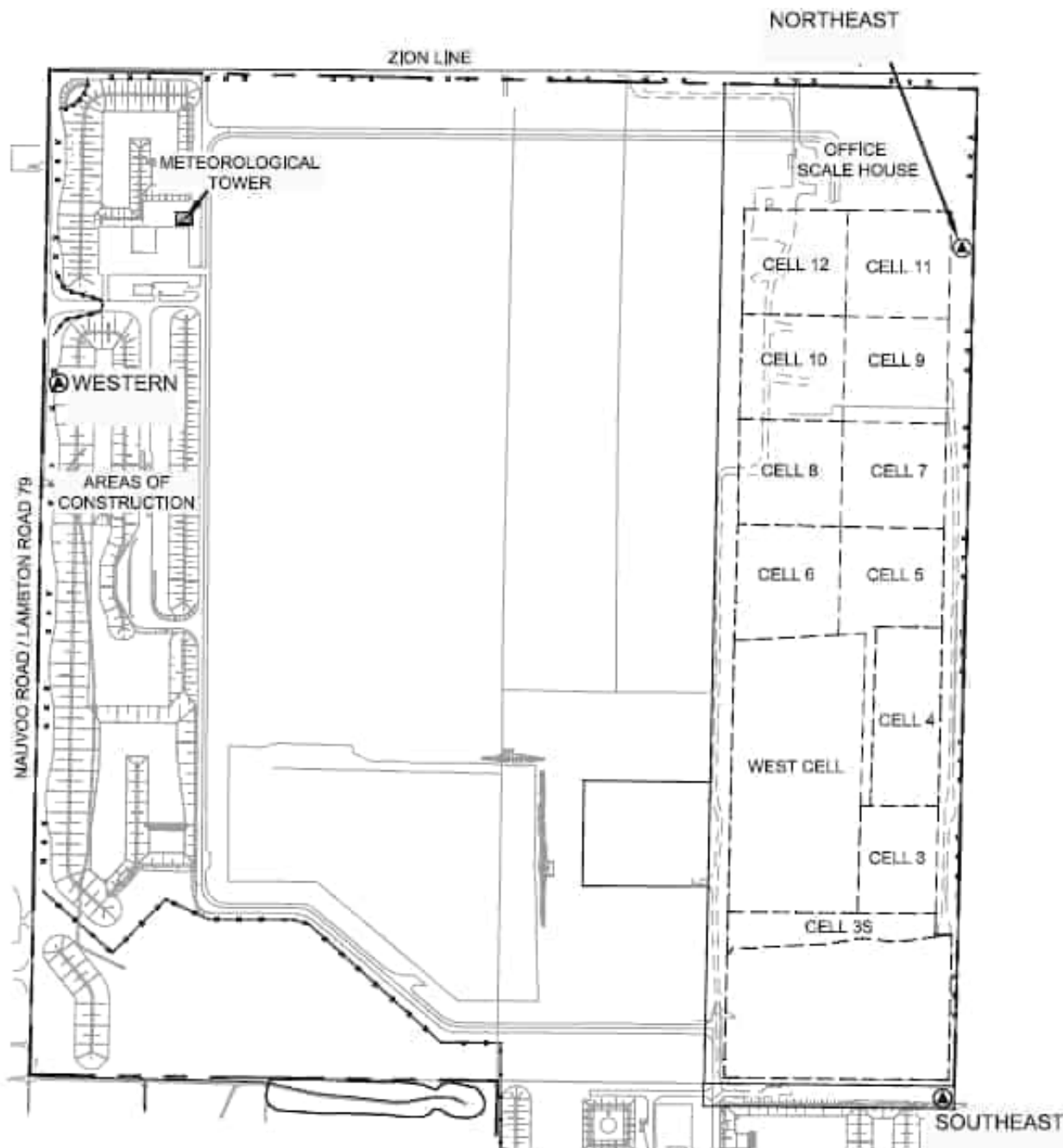
The monitoring method will comply with the metals specified by U.S. EPA Method 10-2. The 24-hour samples would be collected on standard hi-volume air samplers. The station siting requirements and sampling procedures will follow the most recent version of the U.S. EPA methods as well as the Ministry of the Environment's Operations Manual for Point Source Air Quality Monitoring as approved by the MOECC at the onset on the monitoring. The U.S. EPA methods are referenced in the MOECC document as appropriate reference methods to follow for air quality monitoring programs.

The results will be presented in quarterly summary letters and an annual report. The report will include the data in tabular format with a description of the program, quality assurance documentation, details regarding data recovery, abnormal site conditions, etc. As well, any days when the ambient air quality criterion for TSP was exceeded would be reported to the District MOECC office within two (2) weeks of receiving results. In order to enhance the notification of elevated TSP Levels, WM will copy the Township of Warwick on any future elevated TSP level reporting provided to the MOECC.

As part of the dust control strategy, the shift supervisor will be responsible to see that a record of roadway sweeping and watering is maintained. The control measure will be initiated whenever a visible plume behind vehicles is longer than $\frac{1}{4}$ the length of the vehicle. These logs will be kept on-site for a period of not less than two (2) years and will be made available for inspection should the MOECC wish to see them.

When the facility receives a complaint, the shift supervisor will see that the relevant information is recorded, including any remedial action taken as a result of the complaint. A sample complaint log sheet is included in the Best Management Practices Plan (Dust).

Figure 2: Dust Monitor Locations





2.1 Additional Dust Monitoring Provisions

As discussed with stakeholders during the consultation for the annual fill rate increase for the site, the following provisions were made for additional monitoring to be completed under specific conditions. The following notes the agreed to provisions for the additional monitoring. This provision will also be included in the Dust Best Management Practices Plan (BMPP). In the event that the provisions are triggered, WM will prepare an updated Air Quality Monitoring Plan to layout the specific agreed to monitoring at the time the additional monitoring provision is required.

As agreed to with stakeholders, in the event that 2 measured exceedances (trigger), that can be attributed to WM operations, in any quarter (excluding periods when on-site cell construction is occurring) occurs, WM is committing to reviewing the data with the Township of Warwick. Upon confirmation that the exceedances can be attributed to WM operations, and are not related to cell construction, WM will complete the installation of continuous dust monitors.

If continuous dust monitors are to be installed, WM will work with the Township of Warwick to update the following documents:

- Air Quality Monitoring Plan – updated for equipment change as well as trigger for shorter duration alerts to be issued to WM as warnings for higher dust levels; and
- Best Management Practices Plan (Dust) – to be updated to link dust alerts to dust control initiatives.

3 VOC MONITORING

It is proposed that monitoring for VOC's be conducted through the summer months, with samples to be taken in upwind and downwind pairs, during normal operating hours of the landfill. There would be a total of 5 sample pairs taken between June and September. No more than two (2) samples will be collected in any calendar month. The samples will be 24-hours in duration and compared to their respective Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List.

The samples will be collected and analyzed using methods defined in U.S. EPA Method TO-14/15. Vinyl chloride is of particular concern with these types of samples and vinyl chloride will be analyzed in selective ion mode (SIM). Sampling for VOC samples will be collected during periods of light wind conditions (less than 15 kilometers per hour) and during dry conditions (no measureable precipitation for the proceeding 48 hours prior to sampling). The list of VOC's monitored is presented in Table 1.



Table 1: List of Monitored VOCs

| CAS No. | Compound | CAS No. | Compound |
|------------|---------------------------------------|-------------------|------------------------|
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 620-14-4/622-96-8 | m/p-Ethyl Toluene |
| 526-73-8 | 1,2,3-Trimethyl Benzene | 108-38-3/106-42-3 | m/p-Xylene |
| 95-63-6 | 1,2,4 -Trimethyl Benzene | 535-77-3 | m-Cymene |
| 108-67-8 | 1,3,5 -Trimethyl Benzene | 78-93-3 | MEK |
| 591-76-4 | 2-Methyl Hexane | 108-87-2 | Methyl Cyclohexane |
| 107-83-5 | 2-Methyl Pentane | 108-10-1 | MIBK |
| 78-78-4 | 2-Methyl Butane | 75-45-6 | Chlorodifluoromethane |
| 96-14-0 | 3-Methyl Pentane | 123-72-8 | n-Butanol |
| 589-34-4 | 3-Methyl Hexane | 91-20-3 | Naphthalene |
| 67-64-1 | Acetone | 111-84-2 | Nonane |
| 71-43-2 | Benzene | 611-14-3 | o-Ethyl Toluene |
| 123-86-4 | Butyl Acetate | 95-47-6 | o-Xylene |
| 124-18-5 | Decane | 109-66-0 | Pentane |
| 25915-78-0 | Dichlorodifluoromethane | 64-17-5 | Ethanol |
| 75-09-2 | Dichloromethane | 103-65-1 | Propyl Benzene |
| 100-41-4 | Ethyl Benzene | 100-42-5 | Styrene |
| 142-82-5 | Heptane | 127-18-4 | Tetrachloroethylene |
| 110-54-3 | Hexane | 108-88-3 | Toluene |
| 67-63-0 | Isopropyl Alcohol | 75-69-4 | Trichlorofluoromethane |
| 138-86-3 | Limonene | 79-01-6 | Trichloroethylene |
| 75-01-4 | Vinyl Chloride | 141-78-6 | Ethyl Acetate |
| 56-23-5 | Carbon Tetrachloride | 71-55-6 | 1,1,1-Trichloroethane |
| 67-66-3 | Chloroform | 75-35-4 | Vinylidene Chloride |
| 106-93-4 | Ethylene Dibromide | 540-59-0 | 1,2-Dichloroethene |
| 107-6-2 | Ethylene Dichloride | Na | Total VOCs |

As the MOECC updates Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List in the Province of Ontario, the measured values will be compared to the most stringent limits available at the time of testing. For compounds that do not have Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List, the measured values will be compared to the predicated concentrations provided and approved by the MOECC for the Section 9 EPA approval supporting documentation to demonstrate compliance. As all compounds identified without Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List are subject to review by the MOECC's Standard Development Branch, these levels should be considered acceptable.



4 COMPLAINT RECORDING PROCESS

Waste Management of Canada has outlined Best Practices Plans of Odour, Litter and Dust. Within each plan the procedures for outlining the responsibilities and recordkeeping. For further details, please refer to the most recent versions of the Best Management Practices Plan. [1,2,3]. Please note that like this air quality monitoring plan, the Best Management Plans are intended to be updates to endure continuous improvements are being documented at the site.



5 REFERENCES

1. RWDI AIR Inc. Best Management Practices Plan (Odour), Twin Creeks Landfill Site, Watford, ON – Revision 7, dated May 18, 2017.
2. RWDI AIR Inc. Best Management Practices Plan (Dust), Twin Creeks Landfill Site, Watford, ON – Revision 5, dated May 18, 2017.
3. RWDI AIR Inc. Best Management Practices Plan (Litter), Twin Creeks Landfill Site, Watford, ON – Revision 4, dated December 11, 2007.



RWDI aims to accommodate. If you require this document in a different format in order to aid accessibility, please contact the sender of this document, email solutions@rwdi.com or call +1.519.823.1311

The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT B' is centered within the gray circle.

ATTACHMENT B

Table 1: Summary of Total Suspended Particulate Results

January 1, 2024

| Compounds | CAS No. | 1-Jan-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 23110949 | Filter ID: | 23110157 | Filter ID: | 23110156 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-16 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-10 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 14000 | 9 | 12700 | 8 | 34800 | 21 | 21 | 120 | Schedule 3 | 18% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Crosswind | | Crosswind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1646 | | 1642 | | 1648 | | | | | |
| | Sample Flow Rate (m³/min) | 1.14 | | 1.14 | | 1.14 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 2: Summary of Total Suspended Particulate Results

January 7, 2024

| Compounds | CAS No. | 7-Jan-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------|---------------|-------------------|---------------|-----------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 23110953 | Filter ID: | 23110955 | Filter ID: | 23110954 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | ND | ND | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | ND | ND | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | ND | ND | ND | ND | ND | ND | ND | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | ND | ND | ND | ND | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | 74 | 0.045 | 174 | 0.105 | 51.5 | 0.031 | 0.105 | 50 | Schedule 3 | 0.21% |
| Total Iron (Fe) | 7439-89-16 | 169 | 0.103 | 224 | 0.136 | 227 | 0.138 | 0.138 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | 4.5 | 0.003 | 4.8 | 0.003 | 5.1 | 0.003 | 0.003 | 0.5 | Schedule 3 | 0.62% |
| Total Manganese (Mn) | 7439-96-15 | 5.6 | 0.003 | 7.7 | 0.005 | 9 | 0.005 | 0.005 | 2.5 | Guideline | 0.22% |
| Total Nickel (Ni) | 7440-02-10 | ND | ND | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | ND | ND | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | ND | ND | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | 30.5 | 0.019 | 37.4 | 0.023 | 51.1 | 0.031 | 0.031 | 120 | Schedule 3 | 0.03% |
| Total Particulate | - | 31200 | 19 | 42200 | 26 | 47800 | 29 | 29 | 120 | Schedule 3 | 24% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Downwind | | Upwind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1645 | | 1652 | | 1645 | | | | | |
| | Sample Flow Rate (m³/min) | 1.14 | | 1.15 | | 1.14 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 3: Summary of Total Suspended Particulate Results

| Table 3: Summary of Total Suspended Particulate Results | | January 13, 2024 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit [2][3] | Percentage of Criteria (%) | | |
|---|---|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---|---------------------------|-------------------------------|--|--|
| Compounds | CAS No. | 13-Jan-24 | | | | | | | | | | | |
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | | | |
| | | Filter ID: | 13110957 | Filter ID: | 23110958 | Filter ID: | 23110956 | | | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | - | 0.3 | Guideline | - | | |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | | - | 0.025 | Schedule 3 | - | | |
| Total Chromium (Cr) | 7440-47-12 | | | | | | | - | 1.5 | Guideline | - | | |
| Total Cobalt (Co) | 7440-48-14 | | | | | | | - | 0.1 | Guideline | - | | |
| Total Copper (Cu) | 7440-50-18 | | | | | | | - | 50 | Schedule 3 | - | | |
| Total Iron (Fe) | 7439-89-16 | | | | | | | - | N/A | N/A | - | | |
| Total Lead (Pb) | 7439-92-11 | | | | | | | - | 0.5 | Schedule 3 | - | | |
| Total Manganese (Mn) | 7439-96-15 | | | | | | | - | 2.5 | Guideline | - | | |
| Total Nickel (Ni) | 7440-02-10 | | | | | | | - | 2 | Schedule 3 | - | | |
| Total Selenium (Se) | 7782-49-12 | | | | | | | - | 10 | Guideline | - | | |
| Total Vanadium (V) | 7440-62-12 | | | | | | | - | 2 | Schedule 3 | - | | |
| Total Zinc (Zn) | 7440-66-16 | | | | | | | - | 120 | Schedule 3 | - | | |
| Total Particulate | - | 16100 | 10 | 27600 | 17 | 29300 | 17 | 17 | 120 | Schedule 3 | 14% | | |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Downwind | | Upwind | | | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | | | |
| | Sample Volume (m³) [1] | 1660 | | 1645 | | 1688 | | | | | | | |
| | Sample Flow Rate (m³/min) | 1.15 | | 1.14 | | 1.17 | | | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 4: Summary of Total Suspended Particulate Results

| Table 4: Summary of Total Suspended Particulate Results | | January 19, 2024 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|--|---------------------------|-------------------------------|
| Compounds | CAS No. | 19-Jan-24 | | | | | | | | | |
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 23110970 | Filter ID: | 23110969 | Filter ID: | 23110971 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 1 of 4 No Metals Analysis | Sample 1 of 4 No Metals Analysis | Sample 1 of 4 No Metals Analysis | Sample 1 of 4 No Metals Analysis | Sample 1 of 4 No Metals Analysis | Sample 1 of 4 No Metals Analysis | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-16 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-10 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 22000 | 13 | 24700 | 15 | 22400 | 14 | 15 | 120 | Schedule 3 | 13% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Crosswind | | Crosswind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m ³) [1] | 1647 | | 1617 | | 1657 | | | | | |
| | Sample Flow Rate (m ³ /min) | 1.14 | | 1.12 | | 1.15 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 5: Summary of Total Suspended Particulate ResultsJanuary 25, 2024

| Compounds | CAS No. | 25-Jan-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------|---------------|-------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 23110972 | Filter ID: | 23110974 | Filter ID: | 23110973 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | ND | ND | ND | ND | Sample 2 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | ND | ND | ND | ND | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | ND | ND | ND | ND | | | ND | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | ND | ND | ND | ND | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | 42.2 | 0.025 | 97.2 | 0.059 | | | 0.059 | 50 | Schedule 3 | 0.12% |
| Total Iron (Fe) | 7439-89-16 | 199 | 0.119 | 189 | 0.115 | | | 0.119 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | 4.3 | 0.003 | 4.5 | 0.003 | | | 0.003 | 0.5 | Schedule 3 | 0.55% |
| Total Manganese (Mn) | 7439-96-15 | 8.3 | 0.005 | 8.2 | 0.005 | | | 0.005 | 2.5 | Guideline | 0.20% |
| Total Nickel (Ni) | 7440-02-10 | ND | ND | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | ND | ND | ND | ND | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | ND | ND | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | 40.1 | 0.024 | 50.2 | 0.031 | | | 0.031 | 120 | Schedule 3 | 0.03% |
| Total Particulate | - | 26900 | 16 | 35000 | 21 | 36300 | 22 | 22 | 120 | Schedule 3 | 18% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Upwind | | Downwind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1668 | | 1643 | | 1660 | | | | | |
| | Sample Flow Rate (m³/min) | 1.16 | | 1.14 | | 1.15 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 6: Summary of Total Suspended Particulate ResultsJanuary 31, 2024

| Compounds | CAS No. | 31-Jan-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 23110978 | Filter ID: | 23110959 | Filter ID: | 23110977 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-16 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-10 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 16100 | 10 | 17900 | 11 | 17600 | 11 | 11 | 120 | Schedule 3 | 9% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Downwind | | Upwind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1606 | | 1609 | | 1589 | | | | | |
| | Sample Flow Rate (m³/min) | 1.12 | | 1.12 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 7: Summary of Total Suspended Particulate ResultsFebruary 6, 2024

| Compounds | CAS No. | 6-Feb-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------------------------|-------------------------------------|-------------------|---------------|-----------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 23110960 | Filter ID: | 23110962 | Filter ID: | 23110961 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 4 of 4 No Metals Analysis | Sample 4 of 4 No Metals Analysis | ND | ND | ND | 0.3 | Guideline | - | | |
| Total Cadmium (Cd) | 7440-43-19 | | | ND | ND | ND | 0.025 | Schedule 3 | - | | |
| Total Chromium (Cr) | 7440-47-12 | | | ND | ND | ND | 1.5 | Guideline | - | | |
| Total Cobalt (Co) | 7440-48-14 | | | ND | ND | ND | 0.1 | Guideline | - | | |
| Total Copper (Cu) | 7440-50-18 | | | 39.4 | 0.025 | 0.025 | 50 | Schedule 3 | 0.05% | | |
| Total Iron (Fe) | 7439-89-16 | | | 685 | 0.429 | 0.429 | N/A | N/A | - | | |
| Total Lead (Pb) | 7439-92-11 | | | 4.6 | 0.003 | 0.003 | 0.5 | Schedule 3 | 0.58% | | |
| Total Manganese (Mn) | 7439-96-15 | | | 21.7 | 0.014 | 0.014 | 2.5 | Guideline | 0.54% | | |
| Total Nickel (Ni) | 7440-02-10 | | | ND | ND | ND | 2 | Schedule 3 | - | | |
| Total Selenium (Se) | 7782-49-12 | | | ND | ND | ND | 10 | Guideline | - | | |
| Total Vanadium (V) | 7440-62-12 | | | ND | ND | ND | 2 | Schedule 3 | - | | |
| Total Zinc (Zn) | 7440-66-16 | | | 31 | 0.019 | 0.019 | 120 | Schedule 3 | 0.02% | | |
| Total Particulate | - | 16400 | 10 | 9100 | 5 | 61700 | 39 | 39 | 120 | Schedule 3 | 32% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Crosswind | | Crosswind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1594 | | 1725 | | 1598 | | | | | |
| | Sample Flow Rate (m³/min) | 1.11 | | 1.20 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 8: Summary of Total Suspended Particulate ResultsFebruary 12, 2024

| Compounds | CAS No. | 12-Feb-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------|---------------|-------------------|---------------|-----------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 23110964 | Filter ID: | 23110965 | Filter ID: | 23110963 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Invalid Sample | | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | ND | ND | ND | ND | ND | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | ND | ND | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | 167 | 0.105 | 50.1 | 0.031 | 0.105 | 50 | Schedule 3 | 0.21% |
| Total Iron (Fe) | 7439-89-16 | | | 726 | 0.455 | 675 | 0.416 | 0.455 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | 5 | 0.003 | ND | ND | 0.003 | 0.5 | Schedule 3 | 0.63% |
| Total Manganese (Mn) | 7439-96-15 | | | 19.8 | 0.012 | 20.6 | 0.013 | 0.013 | 2.5 | Guideline | 0.51% |
| Total Nickel (Ni) | 7440-02-10 | | | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | 43.2 | 0.027 | 37.8 | 0.023 | 0.027 | 120 | Schedule 3 | 0.02% |
| Total Particulate | - | - | - | 48400 | 30 | 49600 | 31 | 31 | 120 | Schedule 3 | 25% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Downwind | | Upwind | | | | | |
| | Sample Duration (min) | - | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | - | | 1597 | | 1623 | | | | | |
| | Sample Flow Rate (m³/min) | - | | 1.11 | | 1.13 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 9: Summary of Total Suspended Particulate ResultsFebruary 18, 2024

| Compounds | CAS No. | 18-Feb-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 23110966 | Filter ID: | 23110967 | Filter ID: | 23120596 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | ND | ND | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | ND | ND | | | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | ND | ND | | | | | ND | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | ND | ND | | | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | 8.2 | 0.005 | | | | | 0.005 | 50 | Schedule 3 | 0.01% |
| Total Iron (Fe) | 7439-89-16 | 439 | 0.269 | | | | | 0.269 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | ND | ND | | | | | ND | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | 13.8 | 0.008 | | | | | 0.008 | 2.5 | Guideline | 0.34% |
| Total Nickel (Ni) | 7440-02-10 | ND | ND | | | | | ND | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | ND | ND | | | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | ND | ND | | | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | 26.4 | 0.016 | | | | | 0.016 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 23200 | 14 | 36100 | 21 | 37700 | 23 | 23 | 120 | Schedule 3 | 19% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Downwind | | Upwind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1630 | | 1735 | | 1638 | | | | | |
| | Sample Flow Rate (m³/min) | 1.13 | | 1.20 | | 1.14 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 10: Summary of Total Suspended Particulate ResultsFebruary 24, 2024

| Compounds | CAS No. | 24-Feb-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 23120598 | Filter ID: | 23120599 | Filter ID: | 23122700 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-16 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-10 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 19800 | 12 | 19800 | 13 | 21700 | 14 | 14 | 120 | Schedule 3 | 11% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Crosswind | | Crosswind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m ³) ^[1] | 1636 | | 1582 | | 1594 | | | | | |
| | Sample Flow Rate (m ³ /min) | 1.14 | | 1.10 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 11: Summary of Total Suspended Particulate ResultsMarch 1, 2024

| Compounds | CAS No. | 1-Mar-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 23122703 | Filter ID: | 23122701 | Filter ID: | 21122702 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Invalid Sample | | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-16 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-10 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | - | - | 26700 | 15 | 42200 | 27 | 27 | 120 | Schedule 3 | 22% |
| | Upwind or Downwind Position (based on actual meteorological data) | Upwind | | Crosswind | | Crosswind | | | | | |
| | Sample Duration (min) | - | | 1440 | | 1437 | | | | | |
| | Sample Volume (m³) ^[1] | - | | 1728 | | 1582 | | | | | |
| | Sample Flow Rate (m³/min) | - | | 1.20 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 12: Summary of Total Suspended Particulate ResultsMarch 7, 2024

| Compounds | CAS No. | 7-Mar-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 23122708 | Filter ID: | 23122709 | Filter ID: | 23122707 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | - | 0.3 | Guideline | - | |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | - | 0.025 | Schedule 3 | - | |
| Total Chromium (Cr) | 7440-47-12 | | | | | | - | 1.5 | Guideline | - | |
| Total Cobalt (Co) | 7440-48-14 | | | | | | - | 0.1 | Guideline | - | |
| Total Copper (Cu) | 7440-50-18 | | | | | | - | 50 | Schedule 3 | - | |
| Total Iron (Fe) | 7439-89-16 | | | | | | - | N/A | N/A | - | |
| Total Lead (Pb) | 7439-92-11 | | | | | | - | 0.5 | Schedule 3 | - | |
| Total Manganese (Mn) | 7439-96-15 | | | | | | - | 2.5 | Guideline | - | |
| Total Nickel (Ni) | 7440-02-10 | | | | | | - | 2 | Schedule 3 | - | |
| Total Selenium (Se) | 7782-49-12 | | | | | | - | 10 | Guideline | - | |
| Total Vanadium (V) | 7440-62-12 | | | | | | - | 2 | Schedule 3 | - | |
| Total Zinc (Zn) | 7440-66-16 | | | | | | - | 120 | Schedule 3 | - | |
| Total Particulate | - | 21900 | 14 | 28500 | 18 | 99400 | 62 | 62 | 120 | Schedule 3 | 52% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Upwind | | Downwind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1582 | | 1584 | | 1608 | | | | | |
| | Sample Flow Rate (m³/min) | 1.10 | | 1.10 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 13: Summary of Total Suspended Particulate ResultsMarch 13, 2024

| Compounds | CAS No. | 13-Mar-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------|---------------|-------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 23122704 | Filter ID: | 23122706 | Filter ID: | 23122705 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | ND | ND | ND | ND | Sample 2 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | ND | ND | ND | ND | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | ND | ND | ND | ND | | | ND | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | ND | ND | ND | ND | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | 27.5 | 0.017 | 70.3 | 0.040 | | | 0.040 | 50 | Schedule 3 | 0.08% |
| Total Iron (Fe) | 7439-89-16 | 524 | 0.329 | 1060 | 0.608 | | | 0.608 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | 3.7 | 0.002 | 5.2 | 0.003 | | | 0.003 | 0.5 | Schedule 3 | 0.60% |
| Total Manganese (Mn) | 7439-96-15 | 19.8 | 0.012 | 37.5 | 0.022 | | | 0.022 | 2.5 | Guideline | 0.86% |
| Total Nickel (Ni) | 7440-02-10 | ND | ND | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | ND | ND | ND | ND | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | ND | ND | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | 36.6 | 0.023 | 45.5 | 0.026 | | | 0.026 | 120 | Schedule 3 | 0.02% |
| Total Particulate | - | 41800 | 26 | 79100 | 45 | 61400 | 39 | 45 | 120 | Schedule 3 | 38% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Crosswind | | Crosswind | | | | | |
| | Sample Duration (min) | 1440 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1594 | | 1744 | | 1575 | | | | | |
| | Sample Flow Rate (m³/min) | 1.11 | | 1.21 | | 1.09 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 14: Summary of Total Suspended Particulate ResultsMarch 19, 2024

| Compounds | CAS No. | 19-Mar-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 23122714 | Filter ID: | 23122713 | Filter ID: | 23122712 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-16 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-10 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 29000 | 18 | 33000 | 21 | 49700 | 32 | 32 | 120 | Schedule 3 | 27% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Downwind | | Upwind | | | | | |
| | Sample Duration (min) | 1439 | | 1440 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1610 | | 1586 | | 1561 | | | | | |
| | Sample Flow Rate (m³/min) | 1.12 | | 1.10 | | 1.08 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 15: Summary of Total Suspended Particulate ResultsMarch 25, 2024

| Compounds | CAS No. | 25-Mar-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|-----------------------------------|---|-------------------------------------|---------------|-------------------------------------|---------------|-----------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24012937 | Filter ID: | 23122710 | Filter ID: | 23122711 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | | | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | | | ND | ND | ND | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | | | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | | | 18.7 | 0.012 | 0.012 | 50 | Schedule 3 | 0.02% |
| Total Iron (Fe) | 7439-89-16 | | | | | 705 | 0.450 | 0.450 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | | | ND | ND | ND | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | | | | | 26.1 | 0.017 | 0.017 | 2.5 | Guideline | 0.67% |
| Total Nickel (Ni) | 7440-02-10 | | | | | ND | ND | ND | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | | | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | | | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | | | 42.7 | 0.027 | 0.027 | 120 | Schedule 3 | 0.02% |
| Total Particulate | - | 17900 | 11 | 16100 | 9 | 191000 | 122 | 122 | 120 | Schedule 3 | 102% |
| | Upwind or Downwind Position (based on actual meteorological data) | Upwind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1439 | | | | | |
| Sample Volume (m³) ^[1] | | 1597 | | 1735 | | 1565 | | | | | |
| Sample Flow Rate (m³/min) | | 1.11 | | 1.20 | | 1.09 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 16: Summary of Total Suspended Particulate ResultsMarch 31, 2024

| Compounds | CAS No. | 31-Mar-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|----------------------|---|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24012939 | Filter ID: | 24012941 | Filter ID: | 24012940 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-12 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-19 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-12 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-14 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-18 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-16 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-11 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-15 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-10 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-12 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-12 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-16 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 10100 | 6 | 7800 | 5 | 18300 | 11 | 11 | 120 | Schedule 3 | 9% |
| | Upwind or Downwind Position (based on actual meteorological data) | Crosswind | | Crosswind | | Crosswind | | | | | |
| | Sample Duration (min) | 1440 | | 1414 | | 1440 | | | | | |
| | Sample Volume (m³) ^[1] | 1604 | | 1568 | | 1613 | | | | | |
| | Sample Flow Rate (m³/min) | 1.11 | | 1.11 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT C' is centered in the white space between these two shapes.

ATTACHMENT C

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On April 30, 2024, we received the TSP results from Bureau Veritas regarding the particulate weights from the March 25, 2024 sampling event. On April 30, 2024, the results were entered and assessed, and it was found that there was one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

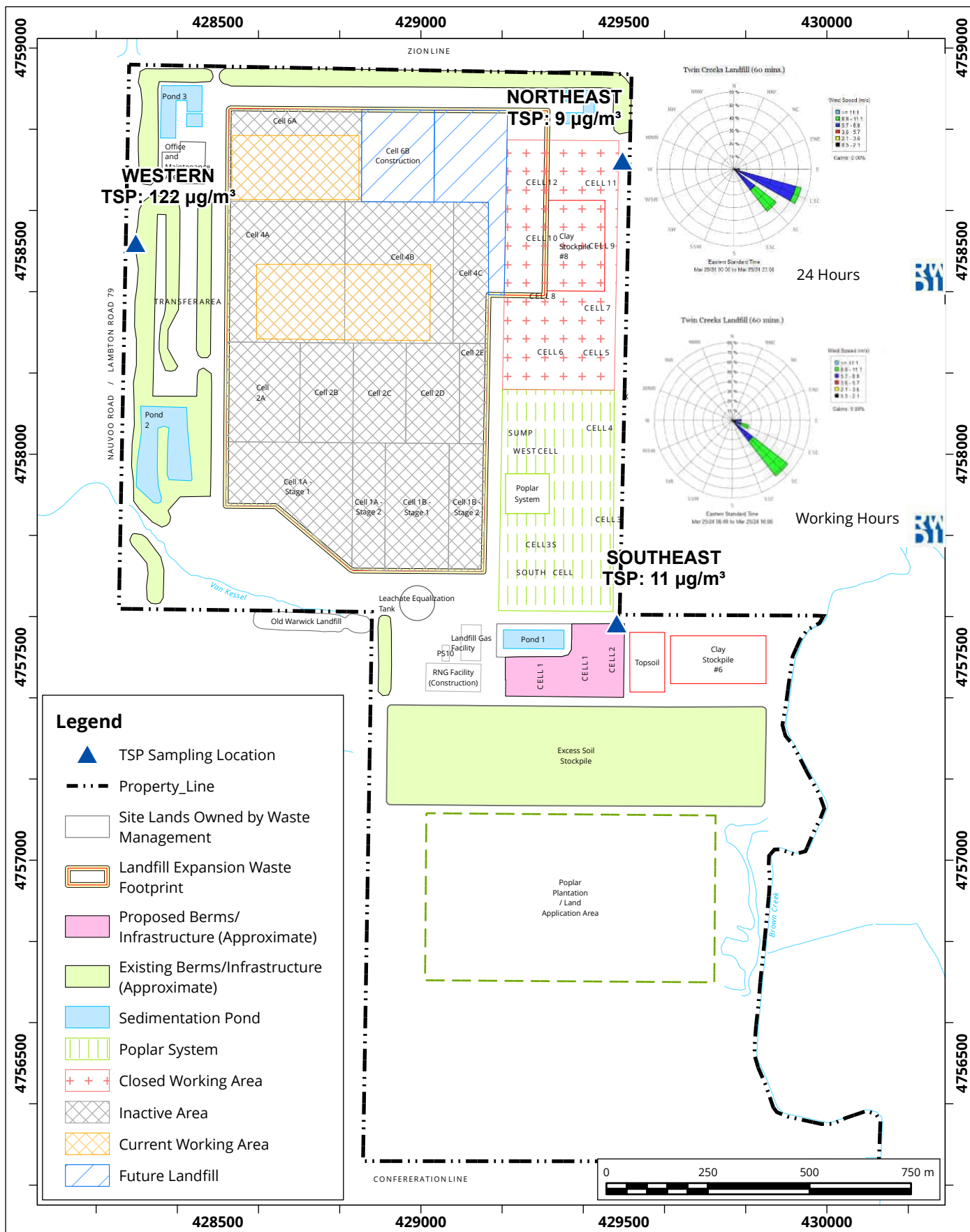
March 25, 2024

On Monday March 25, 2024, there was an exceedance of the TSP 24-hour AAQC at the Western sampler. Attached is Figure 1, which presents wind roses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the March 25 sampling date.

1. The measured TSP concentration at the Northeast sampler was 9 ug/m³, the Western sampler was 122 ug/m³ and Southeast sampler (site background) was 11 ug/m³. During the 24-hour period, the wind was predominantly from the SSE, SE and SSW; wind speeds ranged from 20 to 34 km/h and wind gusts reached a maximum of 48 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the ESE to S. During this timeframe, the Western sampler location was in close proximity to site construction activities associated with interim capping that was occurring on the Western portion of Cell 4A (sideslope and on the top).
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Western TSP sampler location, predominantly originated from on-site construction activities related to interim capping, with minimal contributions from off-site activities/sources as measured at the site background location (Northeast and Southeast samplers at 9 ug/m³ and 11 ug/m³ respectively for TSP).



General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) May 14, 2024 | Date Exceedence Determined April 30, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|------|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | | County/District County of Lambton | Postal Code N0M 2S0 |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|-----|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, was the ESDM Report prepared to fulfill (select all that apply): <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard <input type="checkbox"/> Other (please specify): _____ | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input type="checkbox"/> Other Location (explain): _____ | |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|--|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 25/03/24 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? <input checked="" type="checkbox"/> Yes If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input checked="" type="checkbox"/> Other Location (explain): Property Line of Facility | | |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.


| | | | |
|--|----------------|---|--------------------------|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) _____ | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| Postal Code N0M 2S0 | | | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | |
| E-mail Address amclahl@wm.com | | | |
| Signature  | | Date (dd/mm/yyyy) 14/05/2024 | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| | | | | |
|--|--------------------------------------|--------------------|------------------------------------|--|
| Location of Monitor (Describe) Western | Date (dd/mm/yyyy) 25/03/24 | Time N/A | Sampling Period 24-Hours | Land Use at Monitor Site Property Line |
|--|--------------------------------------|--------------------|------------------------------------|--|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit |
|----------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|
| 1 TSP (Western Sampler) | N/A | Hi-Vol | 122 | 24 | 120 | Visibility | AAQC | 102% |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |

*** For additional measurement locations / sampling times, please included additional tables**

**** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column**

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

The graphic for Appendix G2 features a large, light gray circular shape on the right side of the page. On the left, a blue triangular shape is partially visible, with a white curved line separating it from the gray circle. The text 'APPENDIX G2' is centered in the white space between the blue triangle and the gray circle.

APPENDIX G2



600 Southgate Drive
Guelph, ON N1G 4P6
Canada

Tel: +1.519.823.1311
Fax: +1.519.823.1316
E-mail: solutions@rwdi.com

August 22, 2024

Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
5768 Nauvoo Road (Watford)
Warwick Township, County of Lambton N0M 2S0
E: amclachl@wm.com

**Re: Second Quarter 2024 TSP and Metals Report
April, May, and June of 2024
Twin Creeks Environmental Centre – Watford, Ontario
RWDI Reference No. 2402553.02**

Dear Ms. McLachlan,

RWDI AIR Inc. (RWDI) was retained by Waste Management of Canada Corporation (WM) to complete the Total Suspended Particulate Matter (TSP) and Airborne Metal (Metals) sampling required under the Environmental Compliance Approval A032203, dated December 16, 2023 (Waste ECA). The sampling program is being completed, as approved by the Ontario Ministry of the Environment, Conservation and Parks (MECP) per Condition 13.8 of the Waste ECA. The station locations were approved by the MECP, as noted under Schedule "A" Reference 85 in the Waste ECA. The sampler locations for the TSP samplers are illustrated in the figures section of this report. These locations remained fixed for the duration of the sampling program. This report outlines the results from the second quarter (Q2) samples collected from April 1 to June 30, 2024.

SAMPLING PROGRAM OVERVIEW

Consistent with the Waste ECA dated December 16, 2023 and the AAQMP dated May 18, 2017, the samplers are run on a 6-day schedule from January 1 to May 31 and October 1 to December 31 of each year and run on a 3-day cycle from June 1 to September 30 of each year. A copy of the most recently amended AAQMP can be found in **Attachment A**.

Each sample location has two (2) High Volume Air samplers (Hi-Vols) which run on an alternating 6-day or 3-day schedule, depending on the time of year. Each sample period consists of a 24-hour (midnight to midnight) sample that operates in concurrence with the NAPS sampling schedule.

During the month of April, a total of five (5) sample sets or fifteen (15) samples were initiated, fifteen (15) of which are valid.

During the month of May, a total of five (5) sample sets or fifteen (15) samples were initiated fifteen (15) of which are valid.



During the month of June, a total of ten (10) sample sets or thirty (30) samples were initiated, twenty-six (26) of which are valid.

In Q2, a total of sixty (60) samples were initiated, fifty-six (56) samples of which were valid. This indicates, that 93% of the total samples were successful. Sample validity at the Southeast, Northeast and Western Stations were 95%, 90% and 95% respectively, which means that every sampling station had a valid quarter ($\geq 75\%$ validity). **Table 1** below summarizes the measured TSP concentrations for the forty-six (46) valid samples as collected from the Southeast, Northeast, and Western samplers.

Table 1 also indicates the direction of the wind at each sampling location relative to the active landfill cell. The Downwind designation indicates that the sampler was located predominantly downwind of the active landfill cell during the sampling period. Under these conditions the landfilling operations are likely to contribute to the measured concentrations. The Upwind designation indicates that the sampler was located predominantly upwind from the active cell. The Crosswind designation indicates that the wind was blowing in a direction that did not put the sampler either upwind or downwind with respect to the active cell or that the sampler was not located upwind or downwind for a significant period of time. Under the Upwind and Crosswind conditions the landfilling operations are unlikely to make a significant contribution to the measured concentrations. **Table 2** summarizes the significant cardinal wind directions observed during each sampling period.

Table 1: Summary of Meteorological Conditions and Measured TSP Concentrations for April, May and June of 2024

| Sample Date | Southeast TSP Concentration and Sample Location ⁽¹⁾ ($\mu\text{g}/\text{m}^3$) | Northeast TSP Concentration and Sample Location ⁽¹⁾ ($\mu\text{g}/\text{m}^3$) | Western TSP Concentration and Sample Location ⁽¹⁾ ($\mu\text{g}/\text{m}^3$) |
|-------------|--|--|--|
| 6-Apr-24 | 3 $\mu\text{g}/\text{m}^3$ Downwind | 4 $\mu\text{g}/\text{m}^3$ Crosswind | 10 $\mu\text{g}/\text{m}^3$ Crosswind |
| 12-Apr-24 | 7 $\mu\text{g}/\text{m}^3$ Crosswind | 9 $\mu\text{g}/\text{m}^3$ Downwind | 12 $\mu\text{g}/\text{m}^3$ Upwind |
| 18-Apr-24 | 20 $\mu\text{g}/\text{m}^3$ Crosswind | 17 $\mu\text{g}/\text{m}^3$ Crosswind | 25 $\mu\text{g}/\text{m}^3$ Upwind |
| 24-Apr-24 | 40 $\mu\text{g}/\text{m}^3$ Downwind | 16 $\mu\text{g}/\text{m}^3$ Crosswind | 16 $\mu\text{g}/\text{m}^3$ Crosswind |
| 30-Apr-24 | 16 $\mu\text{g}/\text{m}^3$ Crosswind | 28 $\mu\text{g}/\text{m}^3$ Crosswind | 32 $\mu\text{g}/\text{m}^3$ Crosswind |
| 6-May-24 | 24 $\mu\text{g}/\text{m}^3$ Crosswind | 21 $\mu\text{g}/\text{m}^3$ Crosswind | 70 $\mu\text{g}/\text{m}^3$ Crosswind |
| 12-May-24 | 11 $\mu\text{g}/\text{m}^3$ Downwind | 10 $\mu\text{g}/\text{m}^3$ Crosswind | 14 $\mu\text{g}/\text{m}^3$ Crosswind |
| 18-May-24 | 33 $\mu\text{g}/\text{m}^3$ Upwind | 40 $\mu\text{g}/\text{m}^3$ Crosswind | 41 $\mu\text{g}/\text{m}^3$ Crosswind |
| 24-May-24 | 77 $\mu\text{g}/\text{m}^3$ Crosswind | 111 $\mu\text{g}/\text{m}^3$ Downwind | 99 $\mu\text{g}/\text{m}^3$ Crosswind |
| 30-May-24 | 24 $\mu\text{g}/\text{m}^3$ Downwind | 82 $\mu\text{g}/\text{m}^3$ Crosswind | 29 $\mu\text{g}/\text{m}^3$ Crosswind |
| 2-Jun-24 | Invalid Crosswind | Invalid Crosswind | Invalid Crosswind |



| Sample Date | Southeast TSP Concentration and Sample Location ^[1] (µg/m ³) | Northeast TSP Concentration and Sample Location ^[1] (µg/m ³) | Western TSP Concentration and Sample Location ^[1] (µg/m ³) |
|-------------|--|--|---|
| 5-Jun-24 | 57 µg/m ³ Upwind | 125 µg/m ³ Crosswind | 59 µg/m ³ Crosswind |
| 8-Jun-24 | 37 µg/m ³ Crosswind | 32 µg/m ³ Crosswind | 22 µg/m ³ Upwind |
| 11-Jun-24 | 284 µg/m ³ Crosswind | 440 µg/m ³ Crosswind | 161 µg/m ³ Crosswind |
| 14-Jun-24 | 45 µg/m ³ Downwind | 192 µg/m ³ Crosswind | 44 µg/m ³ Crosswind |
| 17-Jun-24 | 50 µg/m ³ Crosswind | 104 µg/m ³ Downwind | 49 µg/m ³ Upwind |
| 20-Jun-24 | 30 µg/m ³ Crosswind | Invalid Crosswind | 49 µg/m ³ Crosswind |
| 23-Jun-24 | 24 µg/m ³ Crosswind | 37 µg/m ³ Crosswind | 28 µg/m ³ Upwind |
| 26-Jun-24 | 22 µg/m ³ Crosswind | 25 µg/m ³ Crosswind | 23 µg/m ³ Upwind |
| 29-Jun-24 | 19 µg/m ³ Crosswind | 22 µg/m ³ Crosswind | 22 µg/m ³ Upwind |

Notes: [1] Directional references indicate the direction of the wind at each sampling location during the sampling period relative to the active landfill cell, as described above.

Table 2: Summary of Meteorological Conditions for the Sample Dates in April, May and June of 2024

| Sample Date | Range of Mean Wind Speeds ^[1] (km/h) | Dominant Wind Direction ^[2] (compass) |
|-------------|--|---|
| 6-Apr-24 | 4-26 | NW, NNW, N |
| 12-Apr-24 | 14-49 | WNW, W, NW |
| 18-Apr-24 | 4-22 | W, SE, SWS, WNW, NW |
| 24-Apr-24 | 6-28 | NW, NNW, N |
| 30-Apr-24 | 4-19 | SSE, NNE, NE, NW |
| 6-May-24 | 1-15 | N, NNE |
| 12-May-24 | 4-27 | NW, WNW, SE |
| 18-May-24 | 2-14 | SSE, ESE, SE, E |
| 24-May-24 | 3-14 | NW, E |
| 30-May-24 | 2-20 | NNW, NW, WNW, N |
| 2-Jun-24 | 5-15 | SE, S, SSE, NNW |
| 5-Jun-24 | 6-26 | SSE, SE, S, ESE |
| 8-Jun-24 | 2-20 | NW, WNW, WSW |
| 11-Jun-24 | 1-14 | WNW, NW, NNW, N, SSE |
| 14-Jun-24 | 2-20 | NW, NNW, N |
| 17-Jun-24 | 5-25 | SW, SSW, S |
| 20-Jun-24 | 3-22 | SE, NW, NNW, N |
| 23-Jun-24 | 6-33 | SW, NW, NNW |
| 26-Jun-24 | 5-17 | SW, S, SSE, SSE |
| 29-Jun-24 | 6-21 | SW, SSW, W |

Notes: [1] Based on average wind speed per wind direction.

[2] Based on the direction from which the wind is blowing.

Calm – Less than 1.8 kilometers per hour.



Figures 1a through **1t**, found in the **figure section** of this report, illustrate the sample location, measured TSP concentration, and the wind-rose depicting the wind conditions for each sample period. The wind-roses express the percentage of time the wind is blowing from each direction and provides the distribution of wind speeds observed for each direction.

A summary of the calculated statistics for measured concentrations at the Twin Creeks Environmental Centre sampling locations is presented in **Table 3**.

Table 3: Calculated Statistics for Measured 24-hour Averaged TSP Concentrations ($\mu\text{g}/\text{m}^3$)

| Sample Locations | No. of Valid Samples | Percentiles (%) | | | Maximum | Arithmetic Mean | Number of Measurements Above the AAQC ($120 \mu\text{g}/\text{m}^3$) |
|------------------|----------------------|-----------------|----|-----|---------|-----------------|--|
| | | 50 | 70 | 90 | | | |
| Southeast | 19 | 24 | 39 | 61 | 284 | 43 | 1 |
| Northeast | 18 | 30 | 78 | 145 | 440 | 73 | 3 |
| Western | 19 | 29 | 43 | 76 | 161 | 42 | 1 |

The MECP 24-hour Ambient Air Quality Criteria (AAQC) for TSP ($120 \mu\text{g}/\text{m}^3$) was exceeded five (5) times during the second quarter sampling period:

- On June 5th, 2024, the AAQC was exceeded at the Northeastern station, with a concentration of $125 \mu\text{g}/\text{m}^3$.
- On June 11th, 2024, the AAQC was exceeded at the Southeastern station, with a concentration of $284 \mu\text{g}/\text{m}^3$.
- On June 11th, 2024, the AAQC was exceeded at the Northeastern station, with a concentration of $440 \mu\text{g}/\text{m}^3$.
- On June 11th, 2024, the AAQC was exceeded at the Western station, with a concentration of $161 \mu\text{g}/\text{m}^3$.
- On June 14th, 2024, the AAQC was exceeded at the Northeastern station, with a concentration of $192 \mu\text{g}/\text{m}^3$.

Consistent with the MECP approved monitoring/reporting requirements for TSP at the landfill, the exceedances were reported to the MECP within the 2-week notification requirements.

Further details of the notification and discussion of the event are provided in **Attachment C**.

In agreement with the Warwick Township Technical Review Team, only the highest TSP filter weight for each station was analyzed for airborne metal concentrations per 4 sample sets.

During the second quarter, airborne metals were assessed on April 18 (Southeast, Northeast and Western), April 24 (Southeast), April 30 (Northeast), May 6 (Western), May 24 (Southeast, Northeast and Western), June 11 (Southeast, Northeast and Western) and June 17 (Southeast, Northeast and Western). All measured concentrations of airborne metals were below their respective AAQC's as outlined in Ontario Regulation 419. The summary of Q2 total suspended particulate and metals results are provided in **Attachment B**. Laboratory analytical reports will be provided in the Annual Report.



Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2402553
August 22, 2024

CURRENT MITIGATION MEASURES

The Twin Creeks Environmental Centre has created a Best Management Practices Plan for dust that is implemented at the site. All Site employees are trained in the contents of the plan. Through the combined efforts of the mitigation measures and implementation of the Dust Management Plan, Twin Creeks Environmental Centre plans on limiting the number of TSP exceedances during the periods of heavy construction and beyond.

Currently, particulate emission mitigation measures are in place at the Twin Creeks Environmental Centre and consist of watering on-site roadways and construction sites as well as a number of other practices as outlined in the Best Management Practices Plan for dust. The practices listed above will not occur if precipitation events cause these activities to become redundant or if the ground is sufficiently wet from previous precipitation events.

CLOSING

Please feel free to contact us with any questions or comments that you may have with respect to this submission.

Yours very truly,

RWDI AIR Inc.

A handwritten signature in black ink, appearing to read 'Khalid Hussein', is written over a white rectangular background.

Khalid Hussein, P.Eng.
Project Manager

KAMH/hta

Attach.



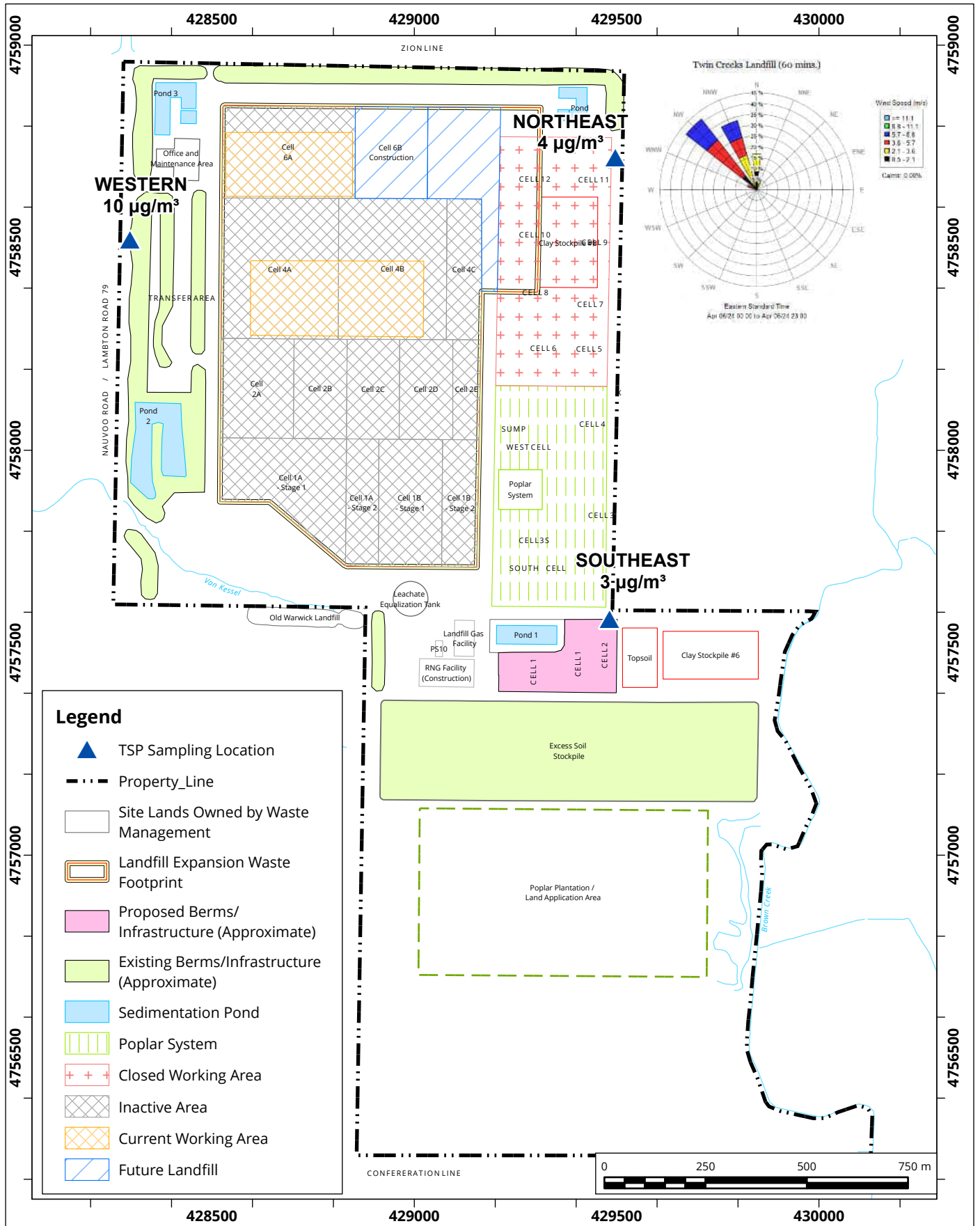
GENERAL STATEMENT OF LIMITATIONS

This report entitled “Second Quarter 2024 TSP and Metals Report”, dated August 22, 2024 was prepared by RWDI AIR Inc. (“RWDI”) for Waste Management of Canada Corporation (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). This report was prepared using scientific principles, published methodologies and professional judgment in assessing available information and data. The findings presented within this document are based on available data within the limits of the existing information, budgeted scope of work, and schedule. The conclusions contained in this report are based on the information available to RWDI when this report was prepared; subsequent changes made by the Client after the date of this report have not been reflected in the conclusions.

This report was prepared for the exclusive use of Waste Management of Canada Corporation and the MECP. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. RWDI accepts no responsibility for damages, if any, suffered by any third party as result of decisions made or actions based on this report.

A large decorative graphic on the left side of the page. It features a blue triangular shape at the top left, a white curved line separating it from a large light gray circular area, and the word 'FIGURES' in blue text within the gray area.

FIGURES



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: April 6, 2024

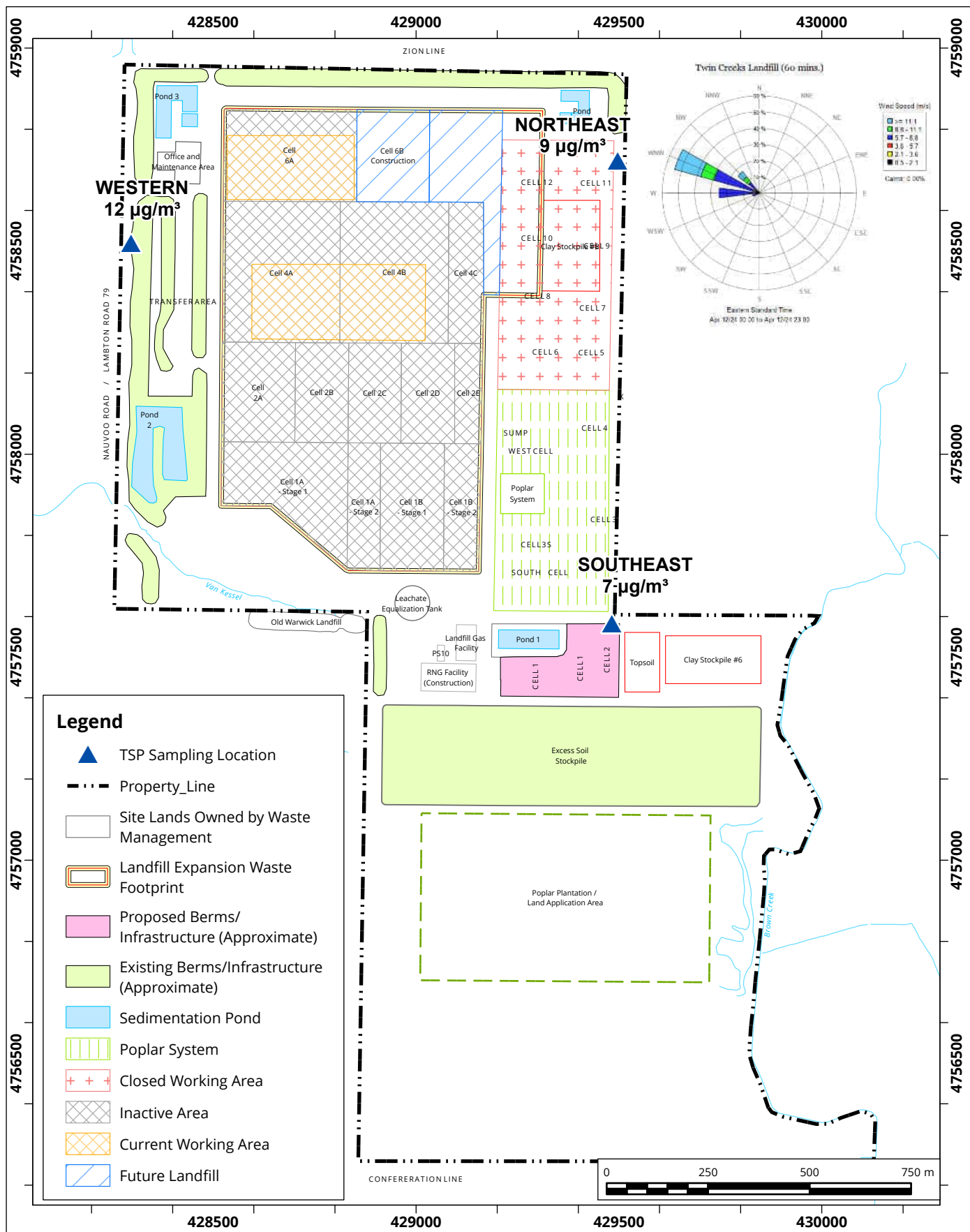
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

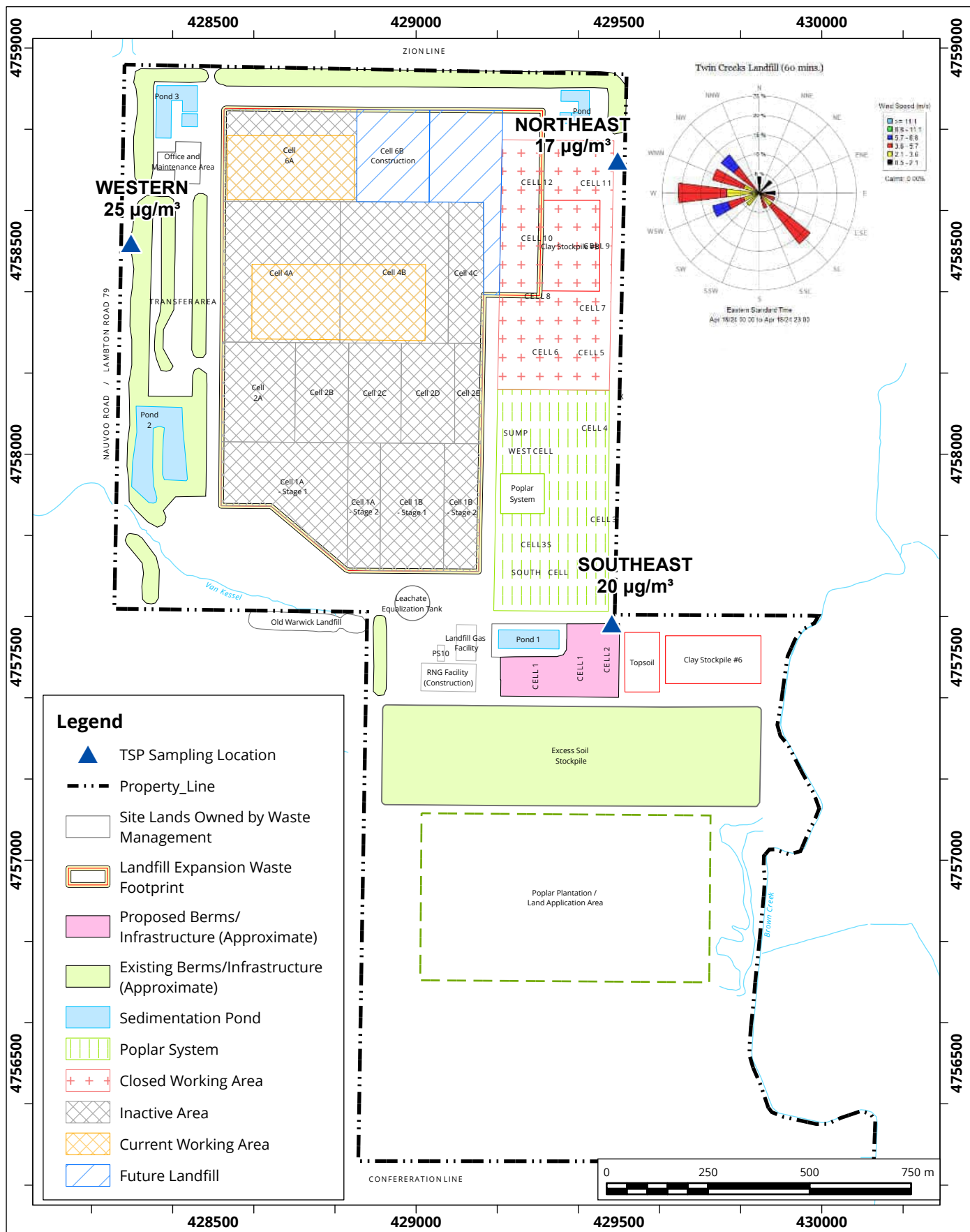


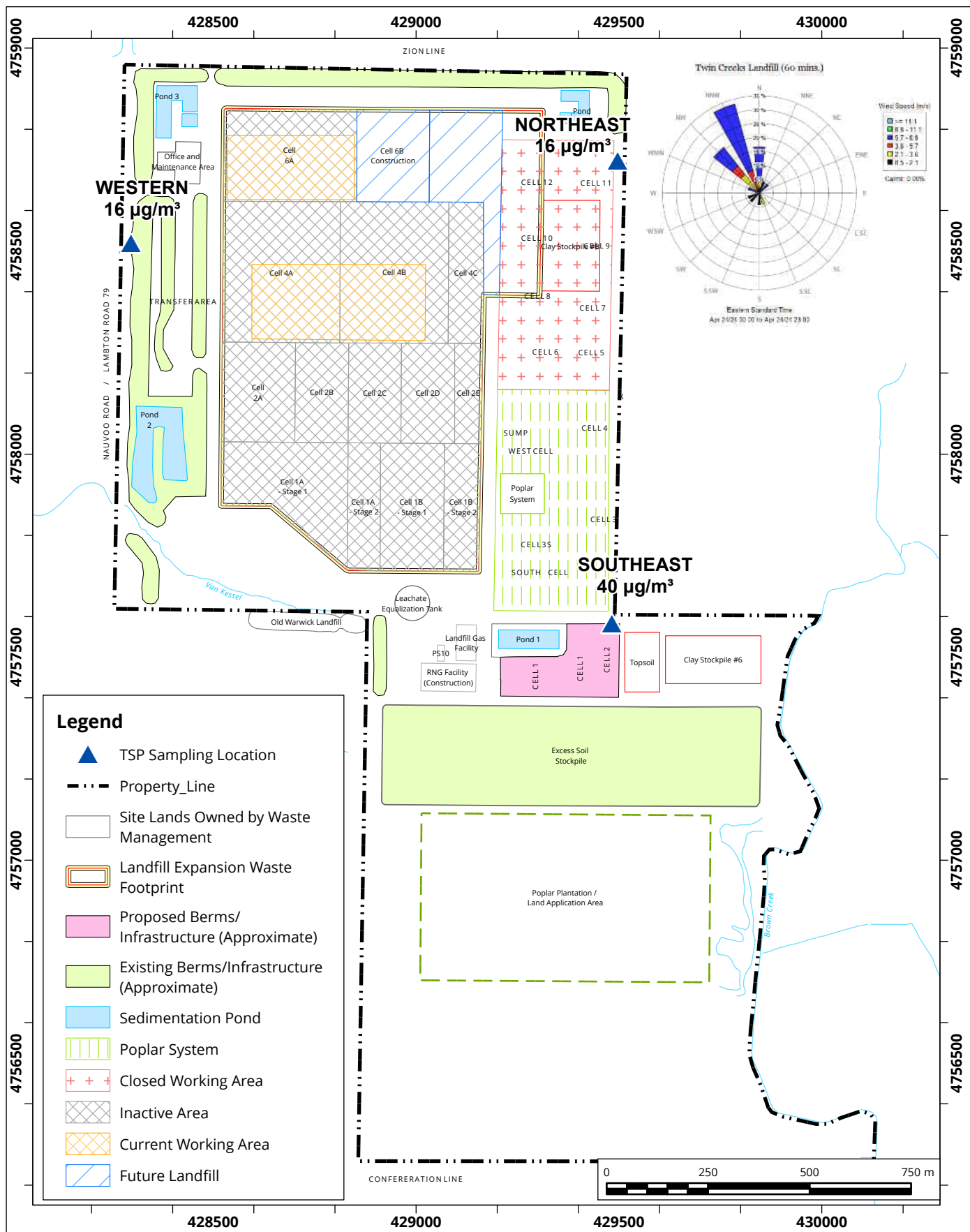
Project #: 2402553

| | |
|----------------------------|------------|
| Drawn by: AXT | Figure: 1a |
| Approx. Scale: 1:13,000 | |
| Date Revised: May 24, 2024 | |









Site Plan Showing Sampling Locations and Wind Rose Sampling Period: April 24, 2024

Map Projection: NAD 1983 UTM Zone 17N

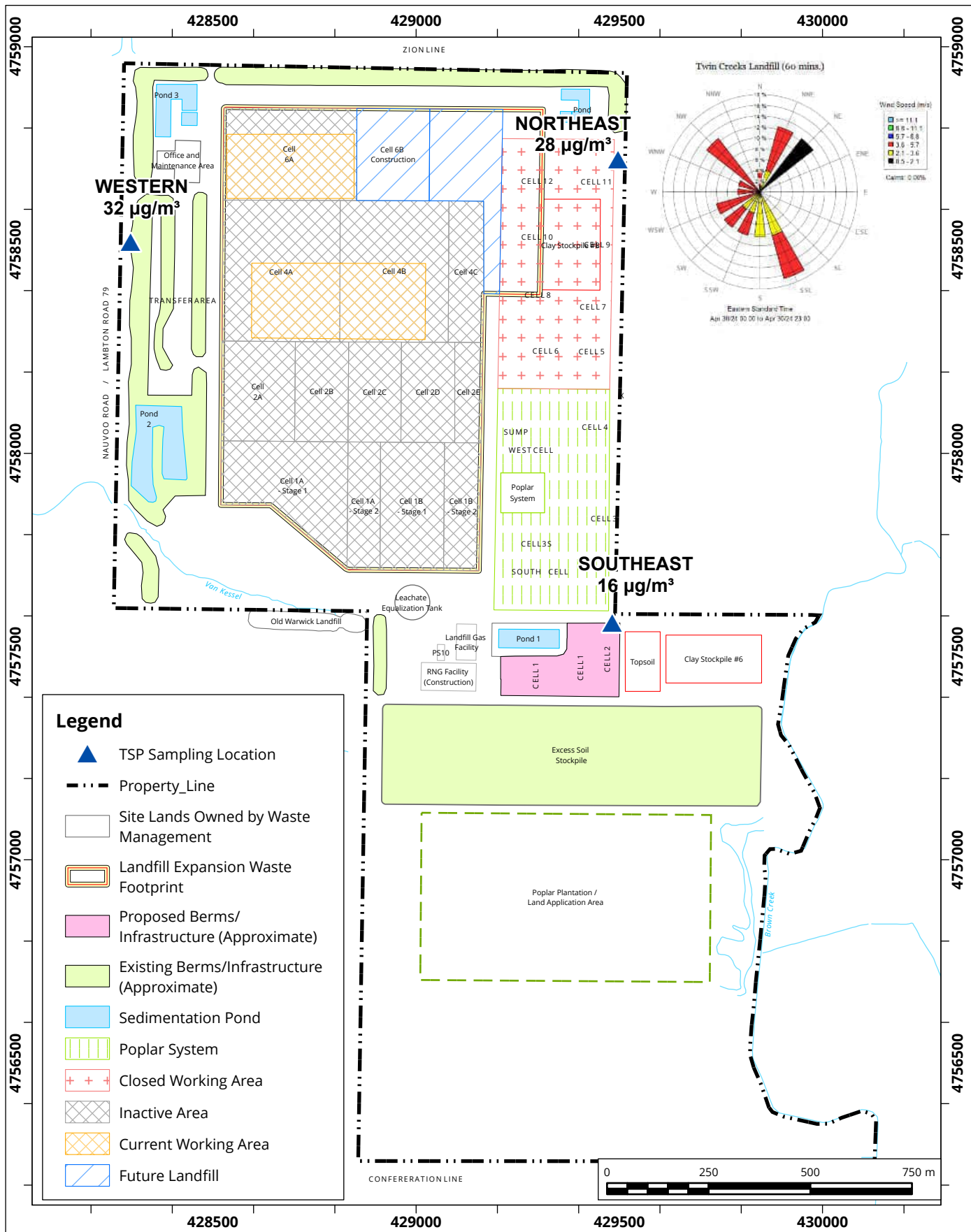
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1d |
| Approx. Scale: | 1:13,000 |
| Date Revised: | May 24, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: April 30, 2024

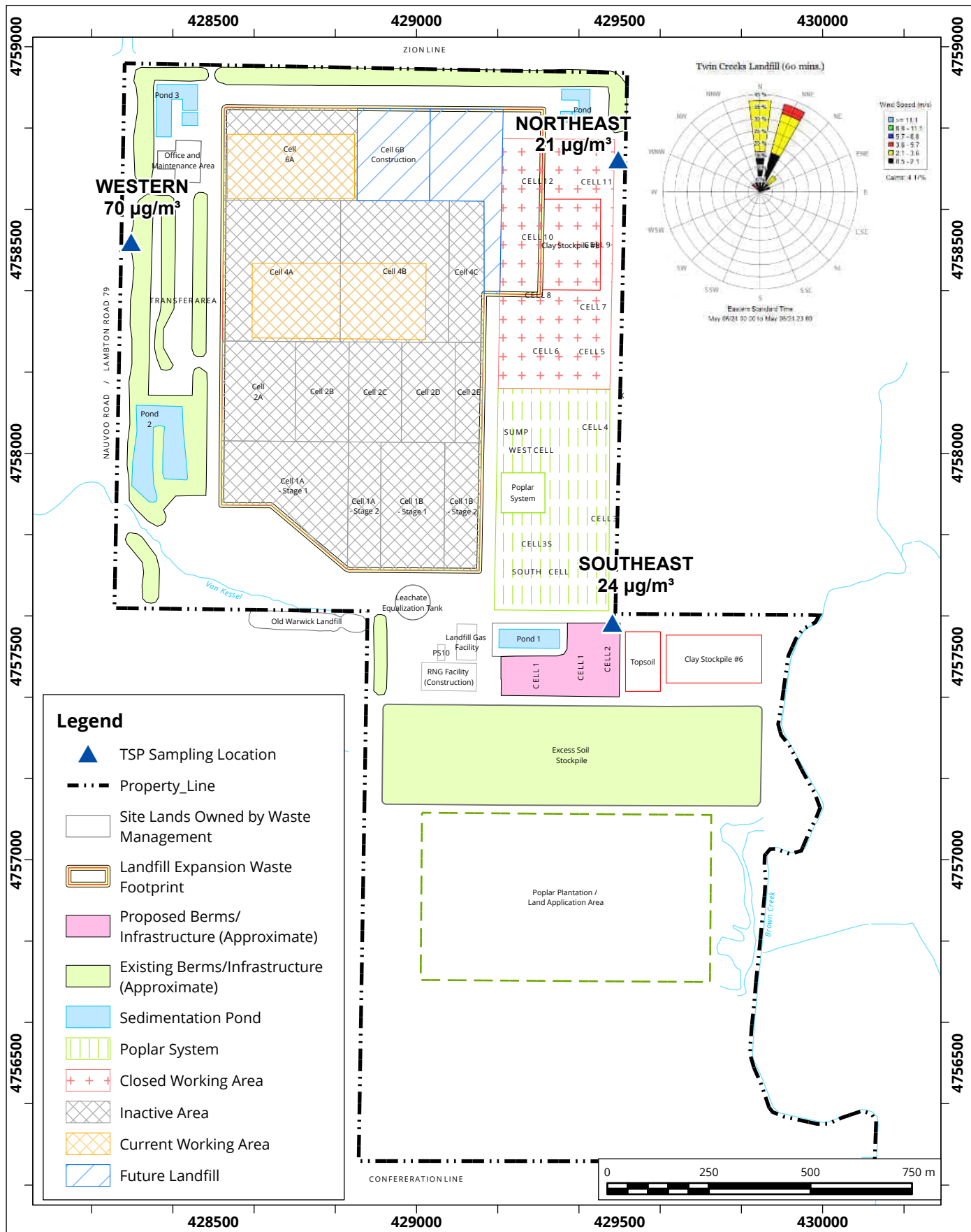
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------------------|------------|
| Drawn by: AXT | Figure: 1e |
| Approx. Scale: 1:13,000 | |
| Date Revised: May 24, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: May 6, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

True North



Drawn by: AXT

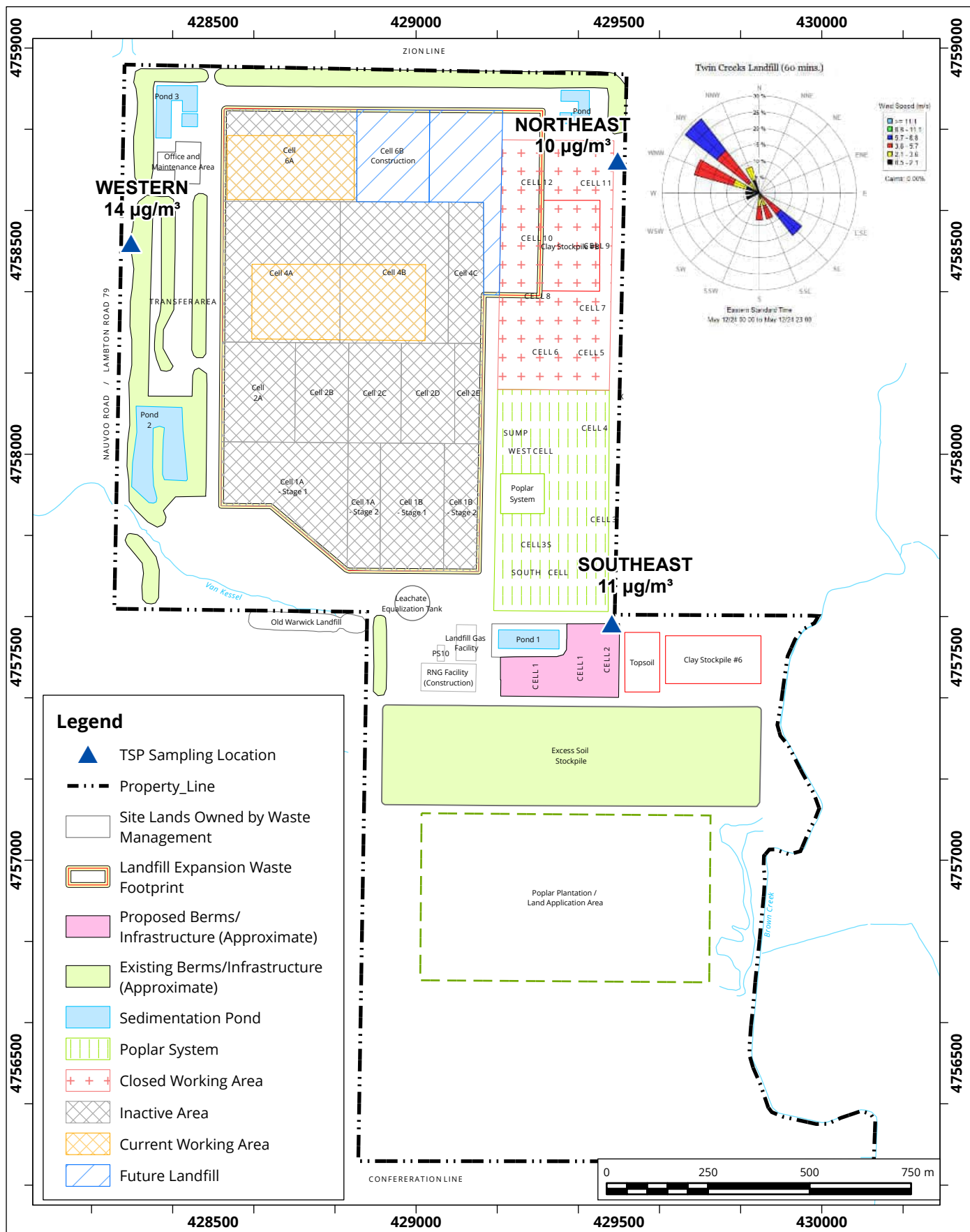
Figure: 1f

Approx. Scale: 1:13,000

Date Revised: May 24, 2024

Project #: 2402553





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: May 12, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

True North



Drawn by: AXT

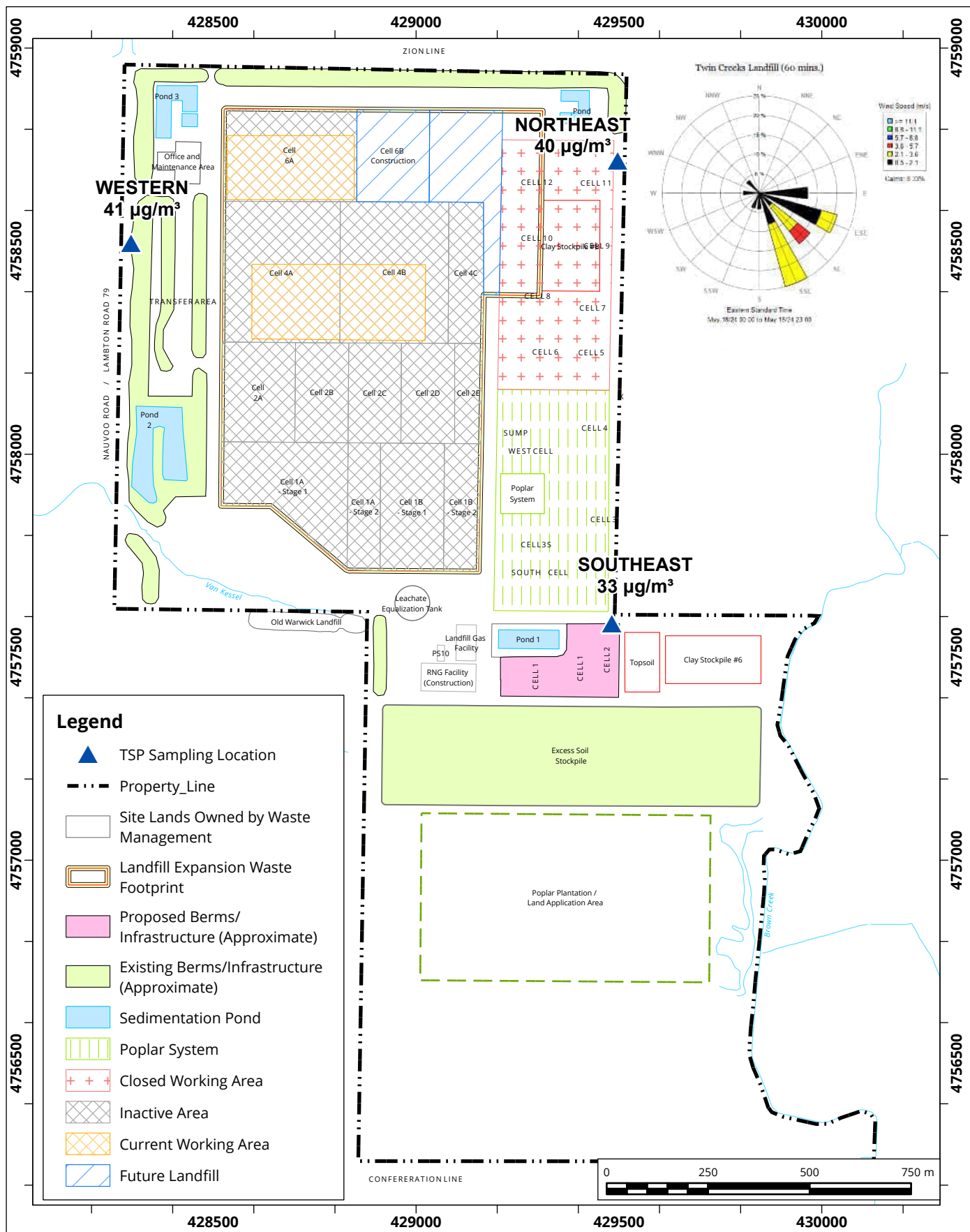
Figure: 1g

Approx. Scale: 1:13,000

Date Revised: May 24, 2024

Project #: 2402553





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: May 18, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

True North



Drawn by: AXT

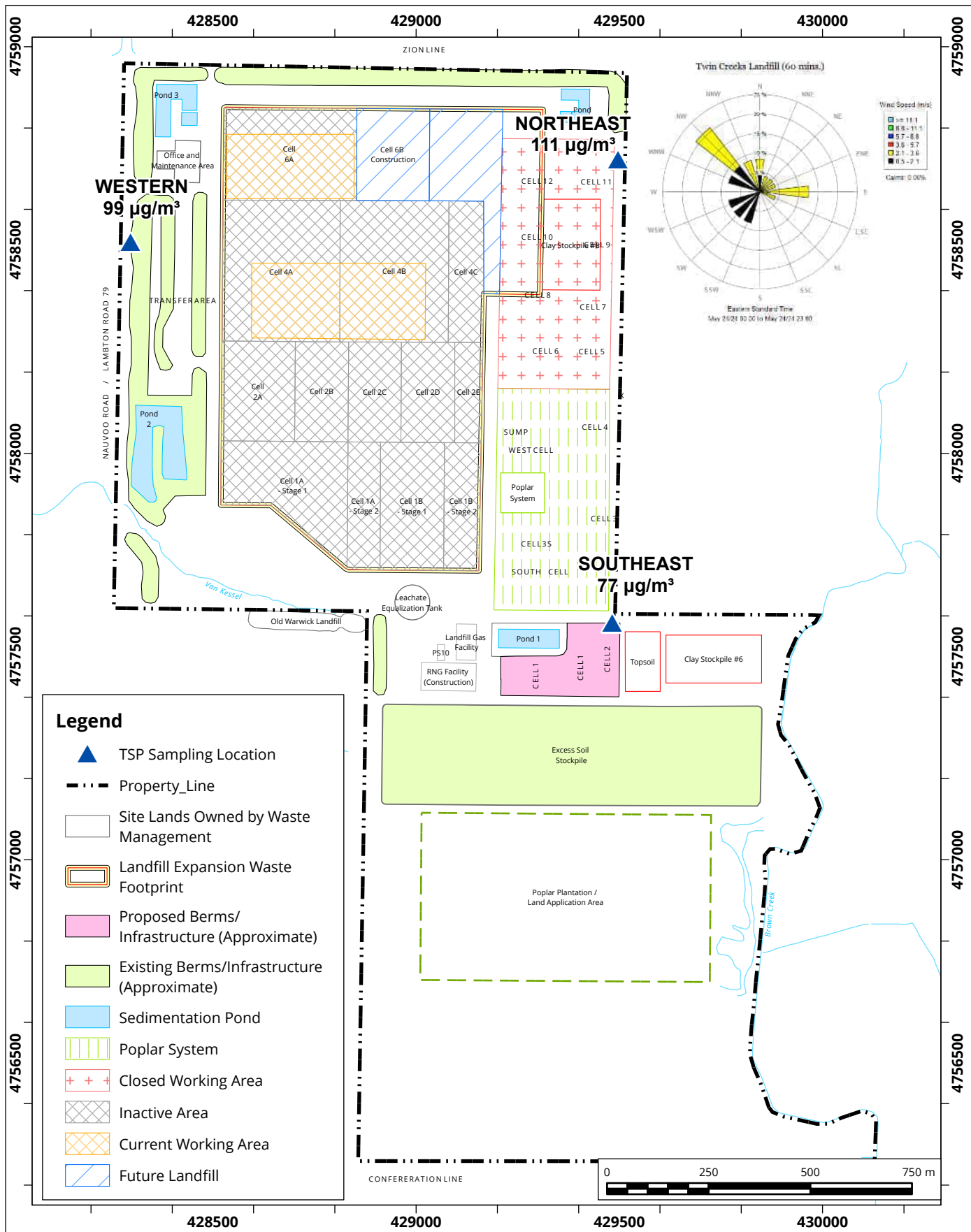
Figure: 1h

Approx. Scale: 1:13,000

Date Revised: Jun 14, 2024

Project #: 2402553





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: May 24, 2024

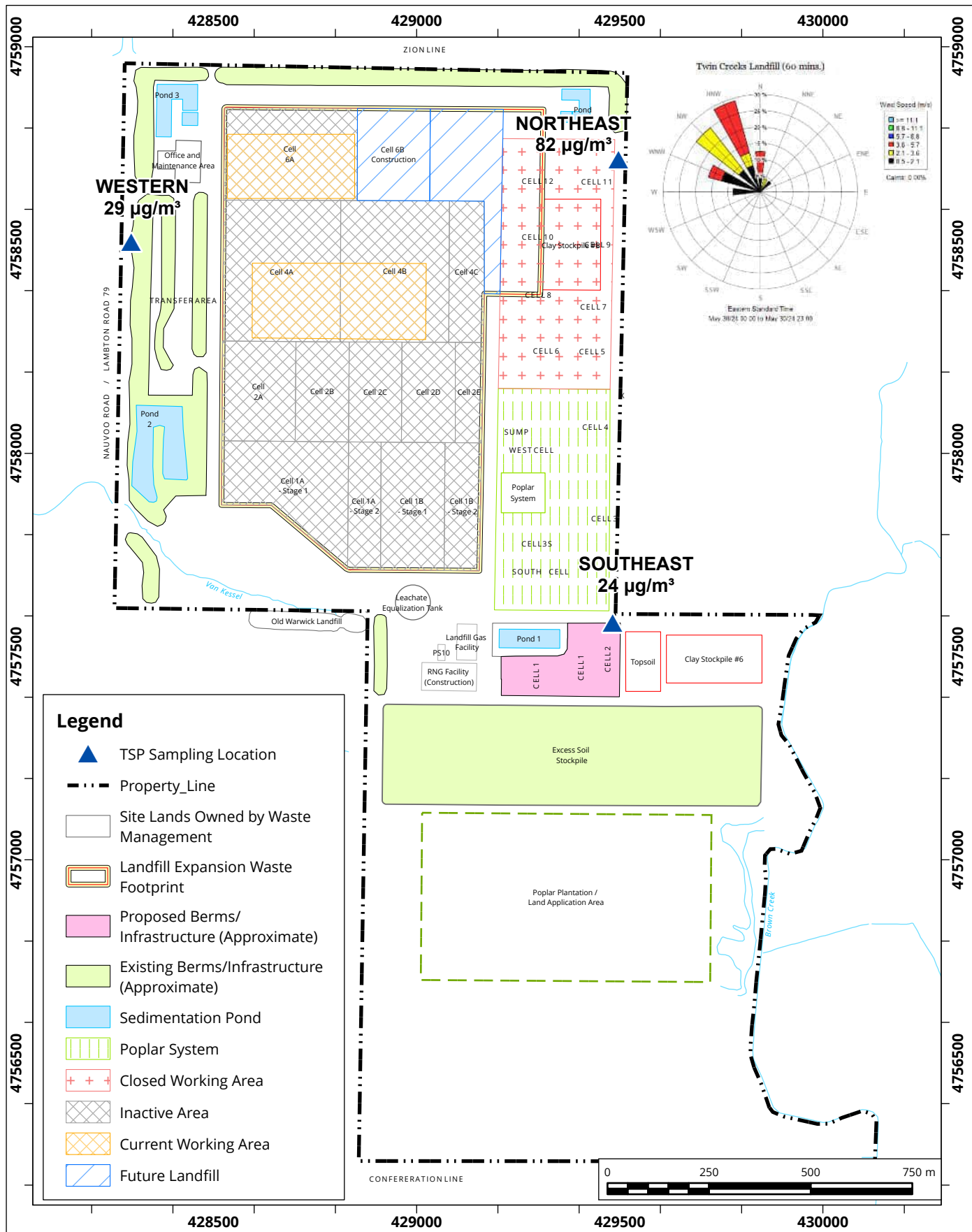
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1i |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Jun 14, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: May 30, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

True North



Drawn by: AXT

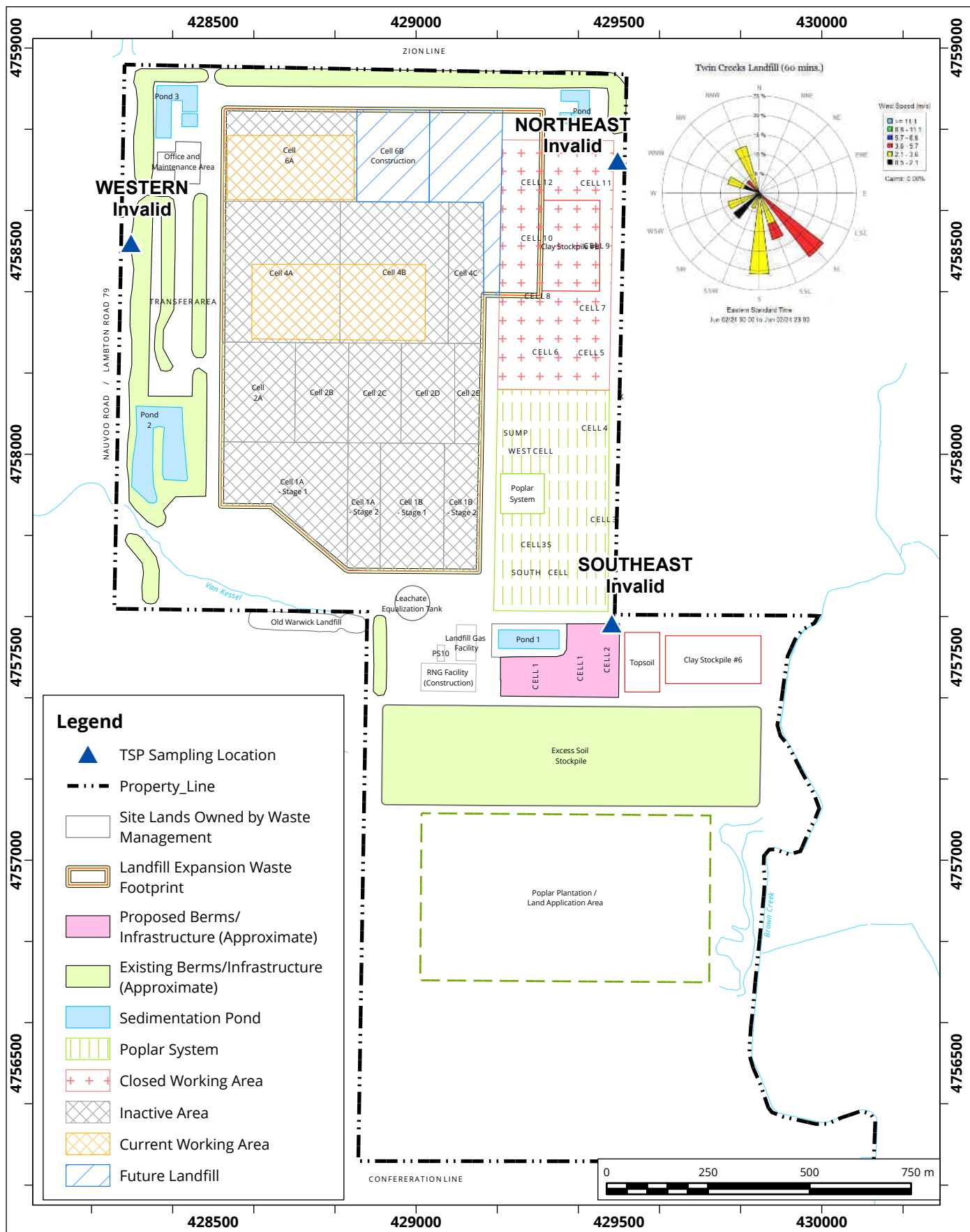
Figure: 1j

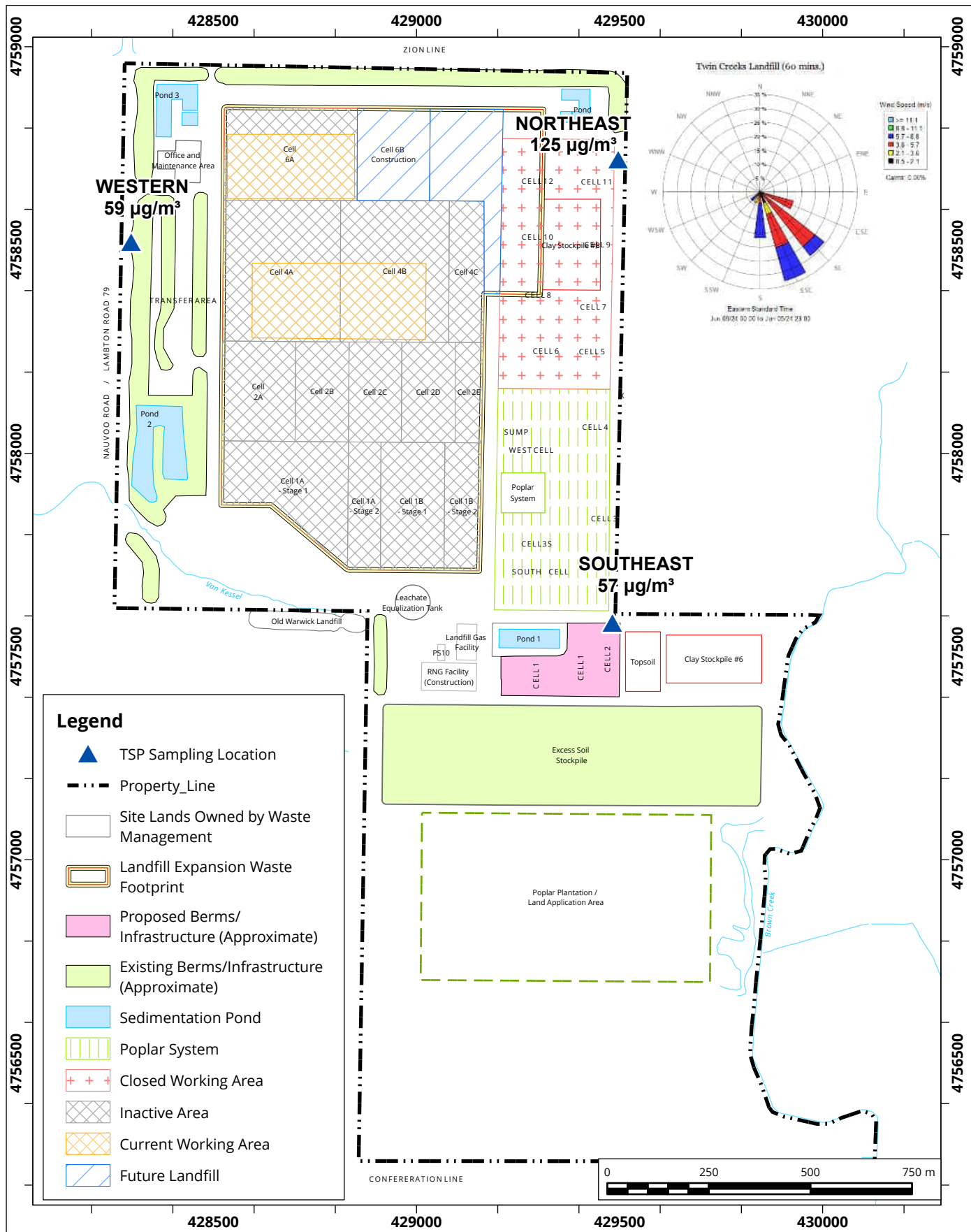
Approx. Scale: 1:13,000

Date Revised: Jun 14, 2024

Project #: 2402553







Site Plan Showing Sampling Locations and Wind Rose Sampling Period: June 5, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

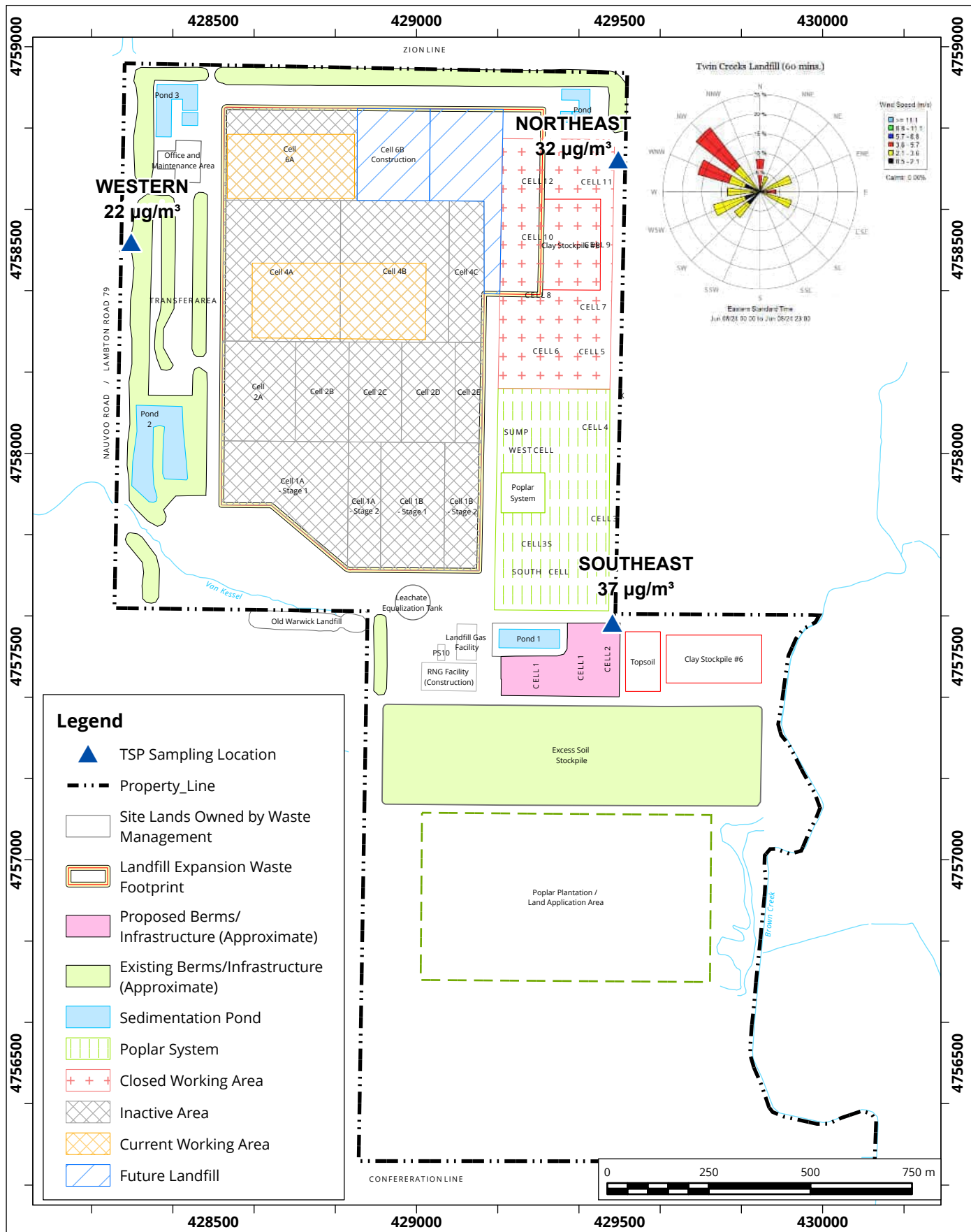
True North



| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1I |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Jul 29, 2024 |

Project #: 2402553





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: June 8, 2024

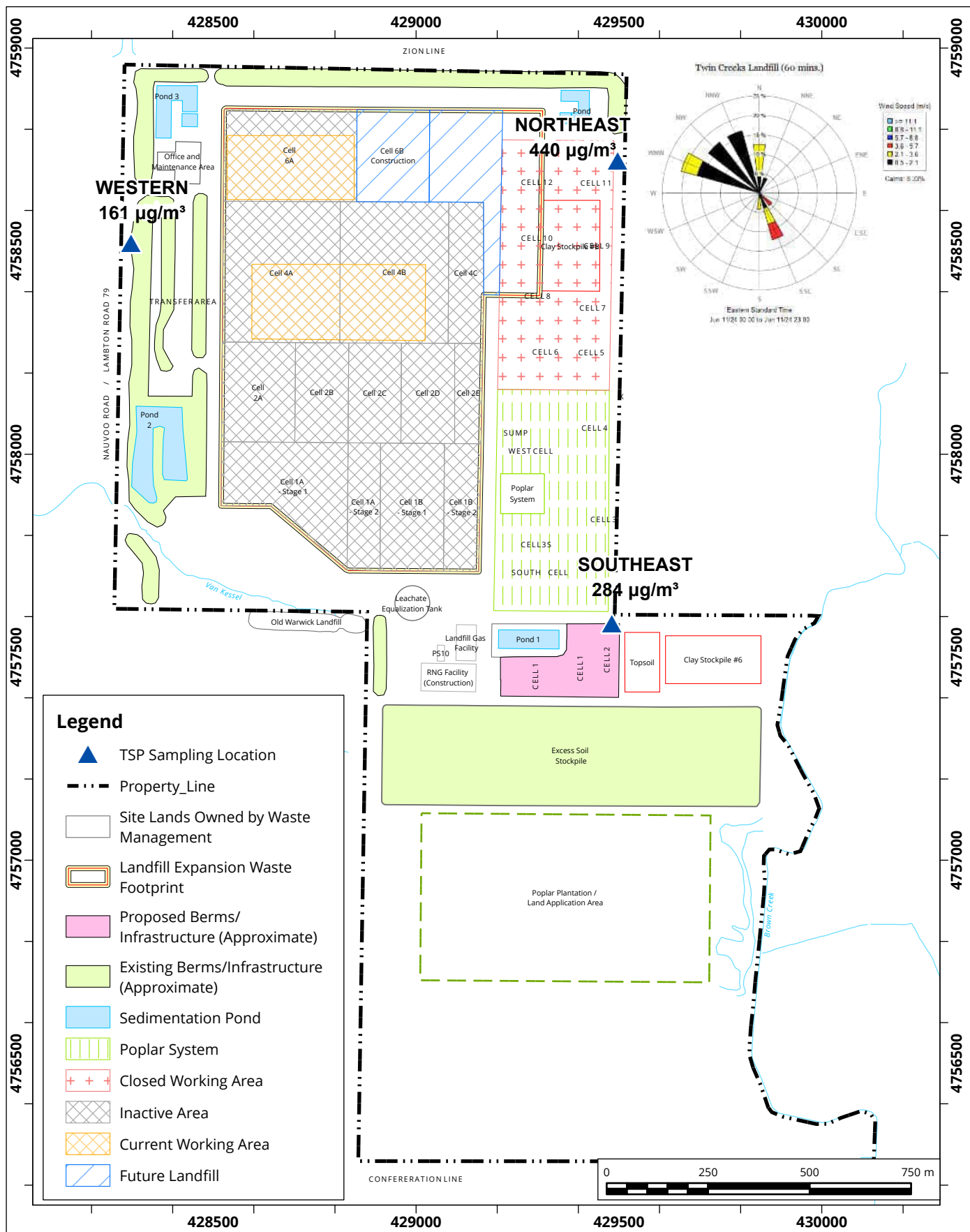
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

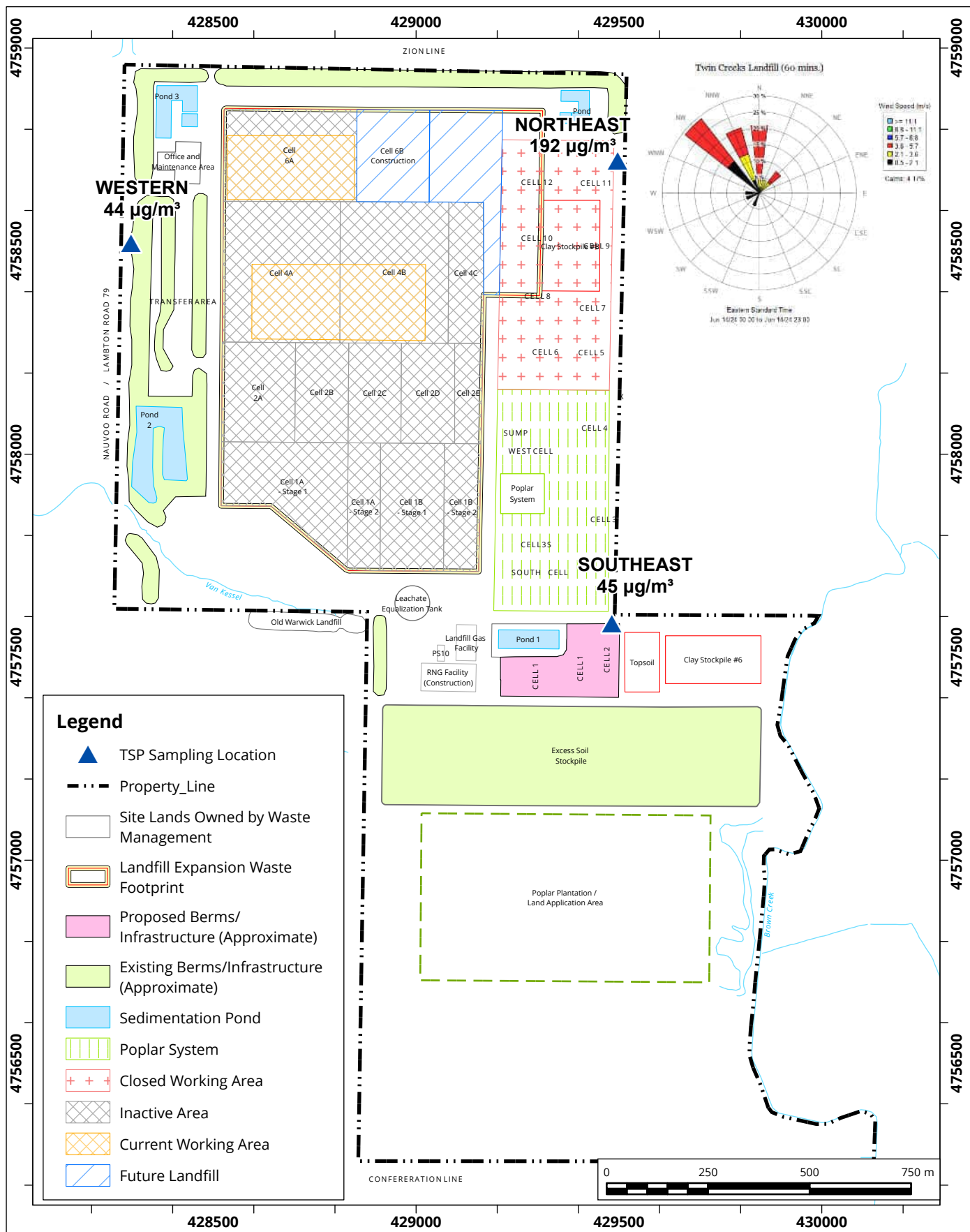


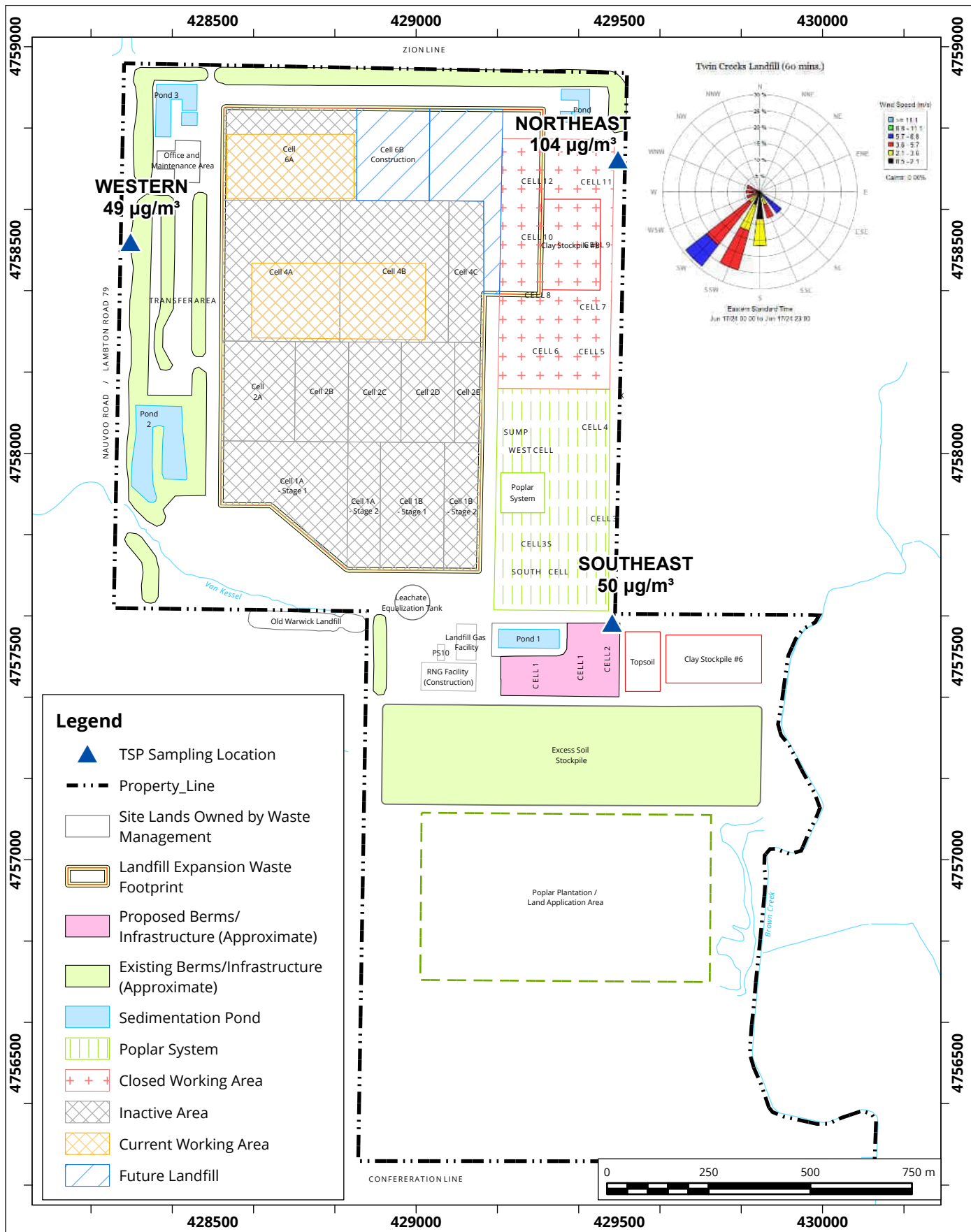
Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1m |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Jul 29, 2024 |









Site Plan Showing Sampling Locations and Wind Rose Sampling Period: June 17, 2024

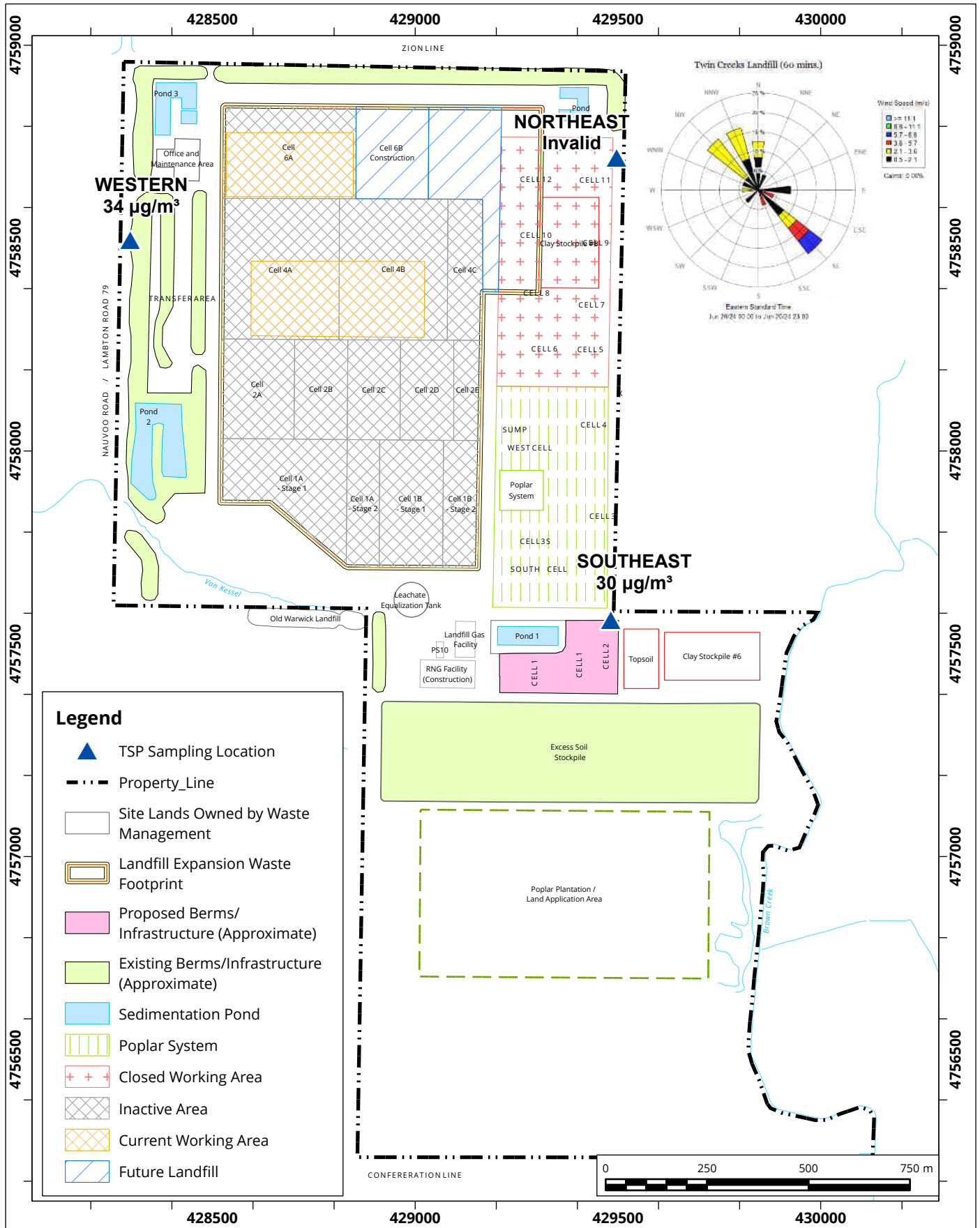
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

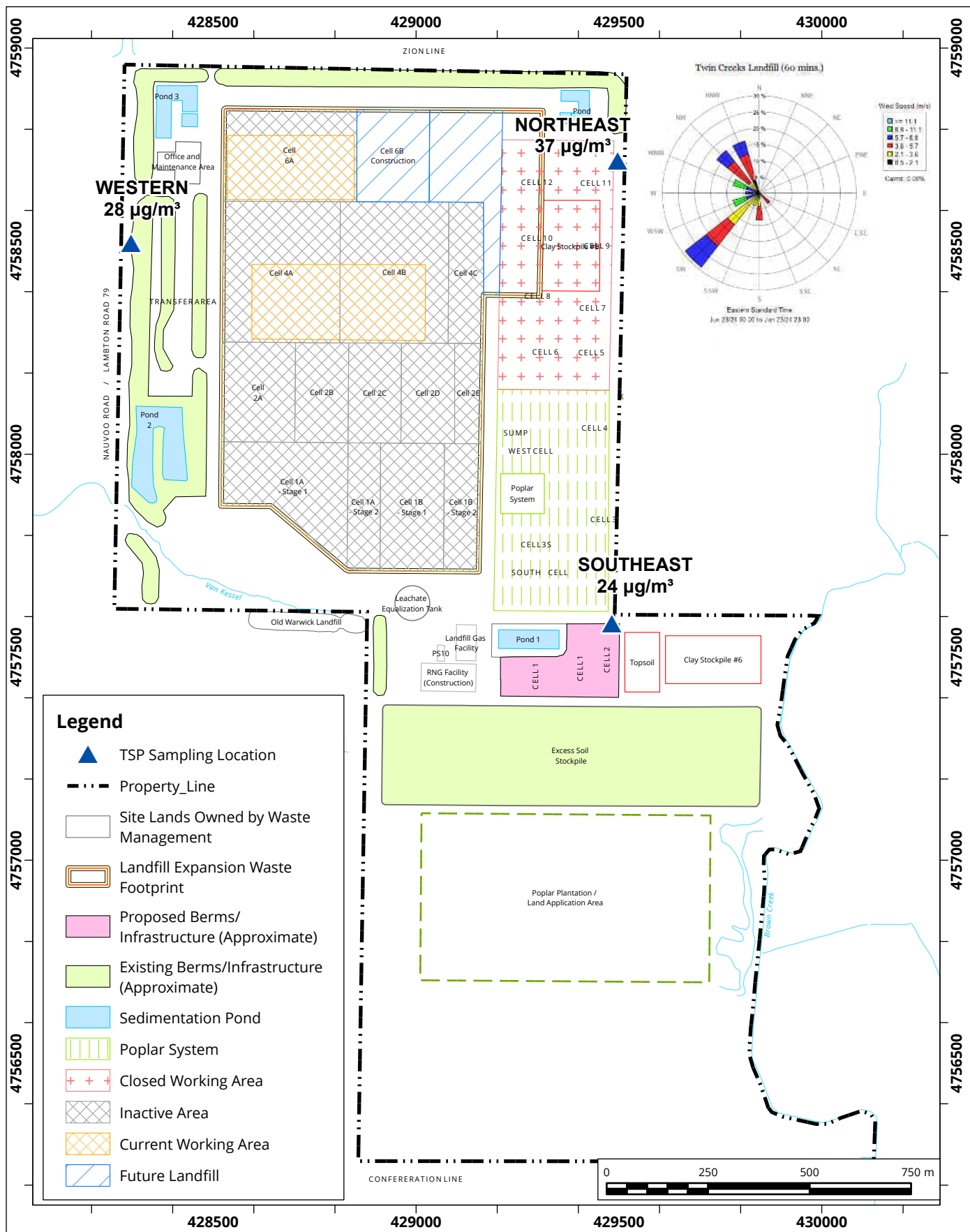


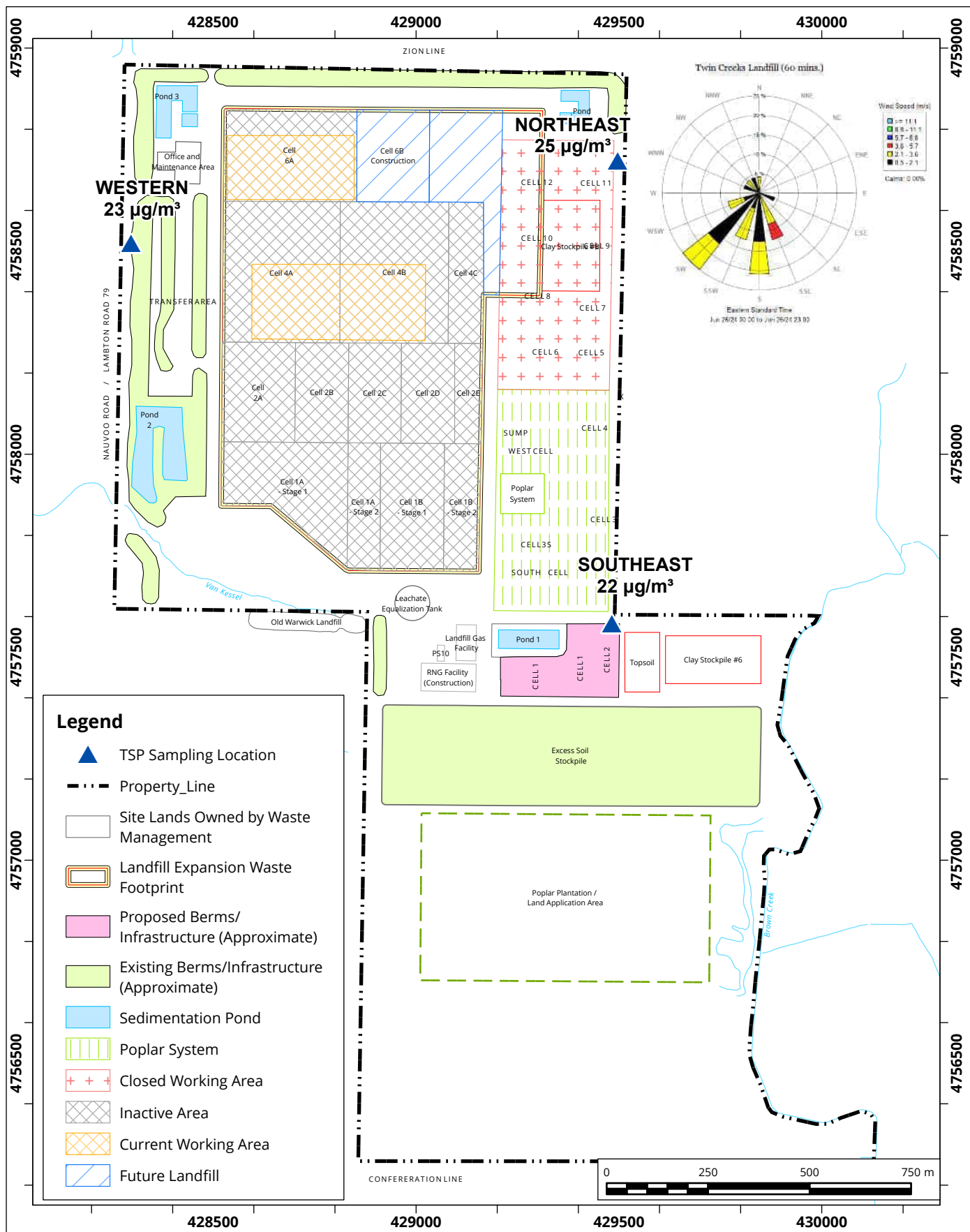
Project #: 2402553

| | |
|----------------------------|------------|
| Drawn by: AXT | Figure: 1p |
| Approx. Scale: 1:13,000 | |
| Date Revised: Jul 29, 2024 | |









Site Plan Showing Sampling Locations and Wind Rose Sampling Period: June 26, 2024

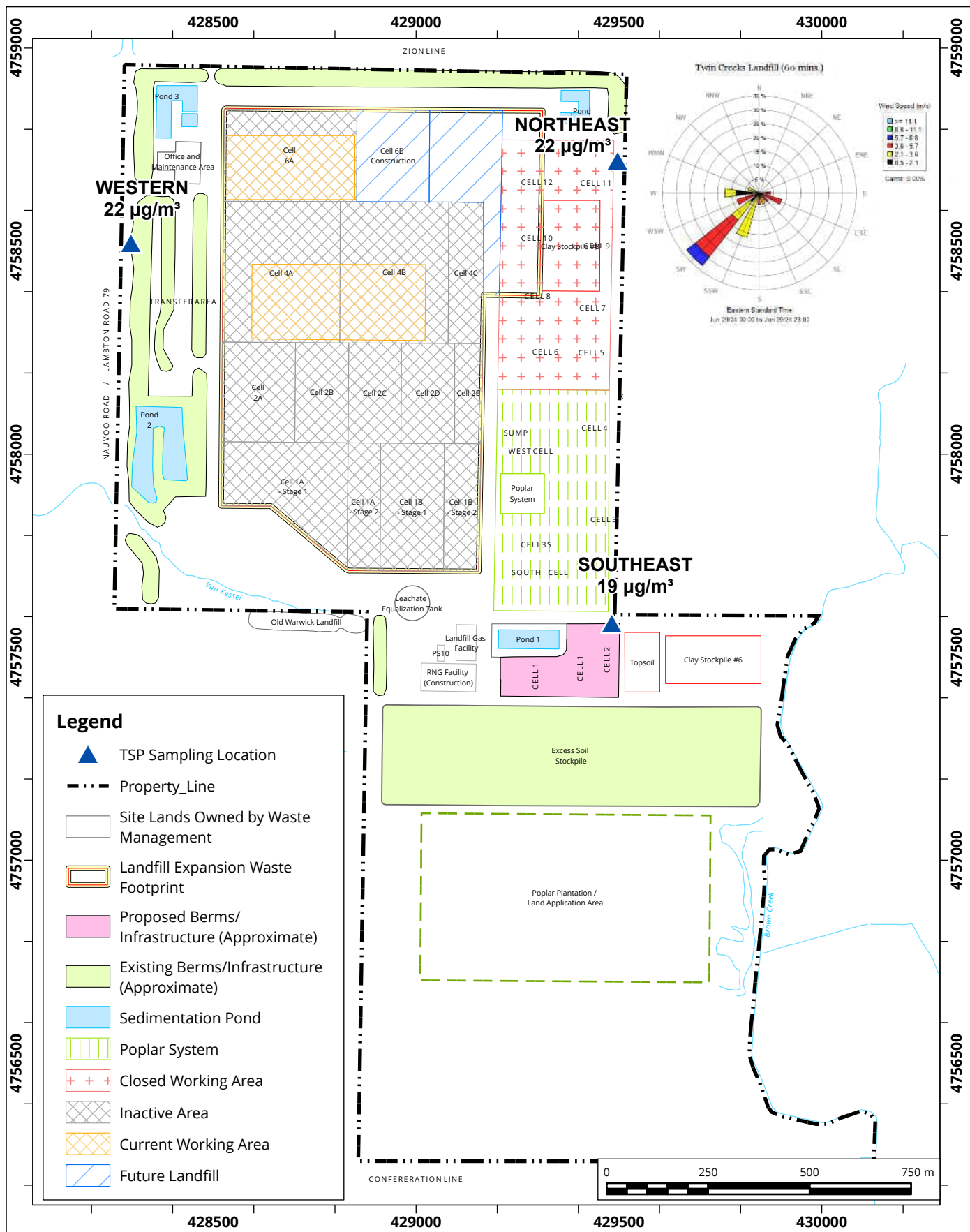
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1s |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Jul 29, 2024 |





The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT A' is centered within the gray circle.

ATTACHMENT A

WASTE MANAGEMENT OF CANADA CORPORATION

WATFORD, ONTARIO

TWIN CREEKS LANDFILL SITE: AMBIENT AIR QUALITY MONITORING PLAN [REVISION #3]

RWDI #1600984

May 18, 2017

SUBMITTED TO

Wayne Jenken
Area Landfill Engineer
wjenken@wm.com

**Waste Management of Canada
Corporation | Twin Creeks Landfill**
8039 Zion Line
Watford, Ontario N0M 2S0

T: 519.849.5810
C: 519.381.3017
F: 519.849.6816

SUBMITTED BY

Brad Bergeron, A.Sc.T., d.E.T.
Senior Project Manager | Principal
Brad.Bergeron@rwdi.com

**RWDI AIR Inc.
Consulting Engineers & Scientists**
600 Southgate Drive
Guelph, Ontario N1G 4P6

T: 519.823.1311, ext. 2428
F: 519.823.1316



TABLE OF CONTENTS

1 **TOTAL HYDROCARBON “WALKABOUT” SURVEY.....1**

2 **DUST MONITORING3**

2.1 Additional Dust Monitoring Provisions..... 5

3 **VOC MONITORING.....5**

4 **COMPLAINT RECORDING PROCESS.....7**

5 **REFERENCES.....8**

LIST OF TABLES

Table 1: List of Monitored VOCs.....5

LIST OF FIGURES

Figure 1: Walkabout Pattern.....2

Figure 2: Dust Monitor Locations.....4



1 TOTAL HYDROCARBON “WALKABOUT” SURVEY

The “Walkabout” survey will consist of a grid survey of the entire landfill mound using a handheld THC analyzer (FID). A portable FID will be used throughout the surveys. The FID will be calibrated using a methane gas standard and zeroed using ultra zero pure air. The instrument used will have the following characteristics:

- a response time of no greater than 15 seconds
- an accuracy of 3 percent or better
- a minimum detectable limit of 5 ppmv (or lower)
- a flame-out indicator, audible and visual

The “Walkabout” survey will be completed in a grid like formation gathering data at 7.6 cm or lower (3 inches or lower) above the ground. “Hotspots” of “breakout points” consisting of cracks, fissures, areas of bubbling surface water, or patches of dead (brunt) vegetation on the mound will be visually observed and notes for THC concentrations exceeding 500 ppm (methane). The “walkabout” surveys should be completed at winds less than 8 kilometers per hour (5 miles per hour) and during dry conditions (no measurable precipitation for the proceeding 72 hours prior to sampling). In addition, for the instantaneous readings, the surveys should be completed when the ambient temperatures are within 0 to 50 degrees Celsius.

THC concentrations 500 ppm or greater should be considered of concern during the instantaneous measurements. Therefore, THC concentrations less than 500 ppm will not be noted during the survey. Locations where the THC concentrations are 500 ppm or greater should assist WMI in determining all potential and existing landfill gas release points that require remedial action.

All THC concentrations measured will be expressed as methane on the calibration standard used. After the ‘hotspot’ or “breakout points” are fixed, documentation of the corrective actions taken as well as confirmation of adequate actions taken (THC concentrations less than 500 ppm) will be presented to the MOECC. The “walkabout” survey will include the following:

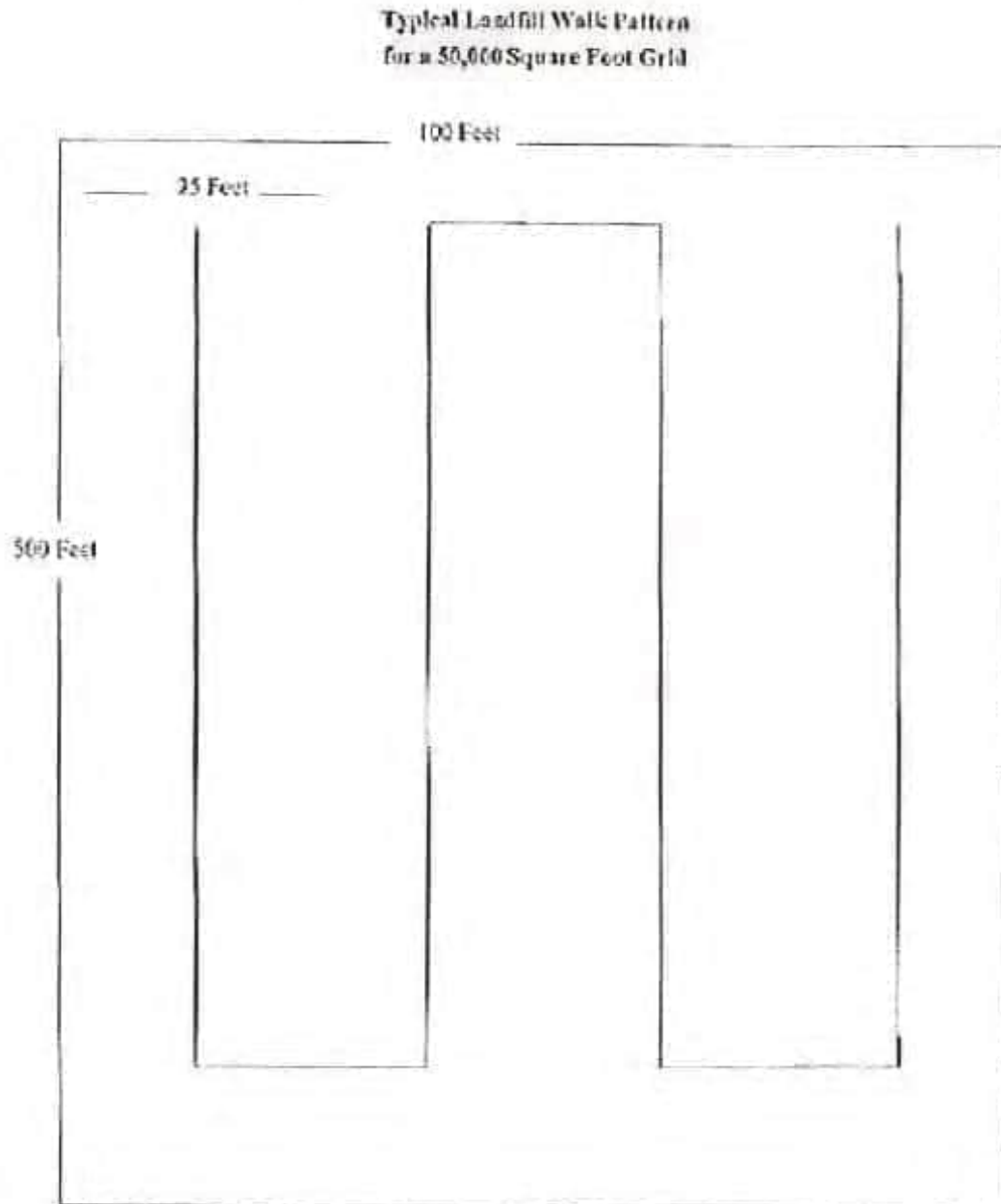
- precise locations of all sampling sites on the site map
- identification of all data obtained in the field measurements
- documentation of all remedial action

The “walkabout” survey should be done in the spring and the early fall. The measured areas should include areas where landfill cover is complete. Problem areas identified should be repaired within two (2) months of identification. Once repairs are completed, a follow-up survey on the specific locations will be completed to validate success of the remediation action(s). The process is important in minimizing odour and VOC emissions.

The “Walkabout” surveys will be performed twice per year or in response to otherwise unexplained odour events. As outlined in the Odour Best Management Practices Plan, routine visual inspections of the landfill cap integrity will also occur on a monthly basis to identify possible problem areas.

Figure 1 includes the walkabout pattern.

Figure 1: Walkabout Pattern





2 DUST MONITORING

The monitoring for Total Suspended Particulate (TSP) will be completed on an on-going basis at three locations around the landfill footprint. The TSP monitor locations are shown in **Figure 2**.

Total Suspended Particulate samples will be taken on a six-day interval during the months of October through May and samples will be taken on a three-day interval during the months of June through September. The sampling will be in concurrence with the U.S EPA National Air Pollutant Surveillance (NAPS) monitoring schedule. The sampling will include the entire year (sampling during 12 months per year). In addition, the analysis for airborne metals will be completed for 11 of the collected TSP samples per station (total of 33 metal samples per year). For each of the 11 sets of samples collected, the particulate analysis will be completed prior to the metal analysis and the highest particulate loaded filters from each station will undergo the analysis for airborne metals.

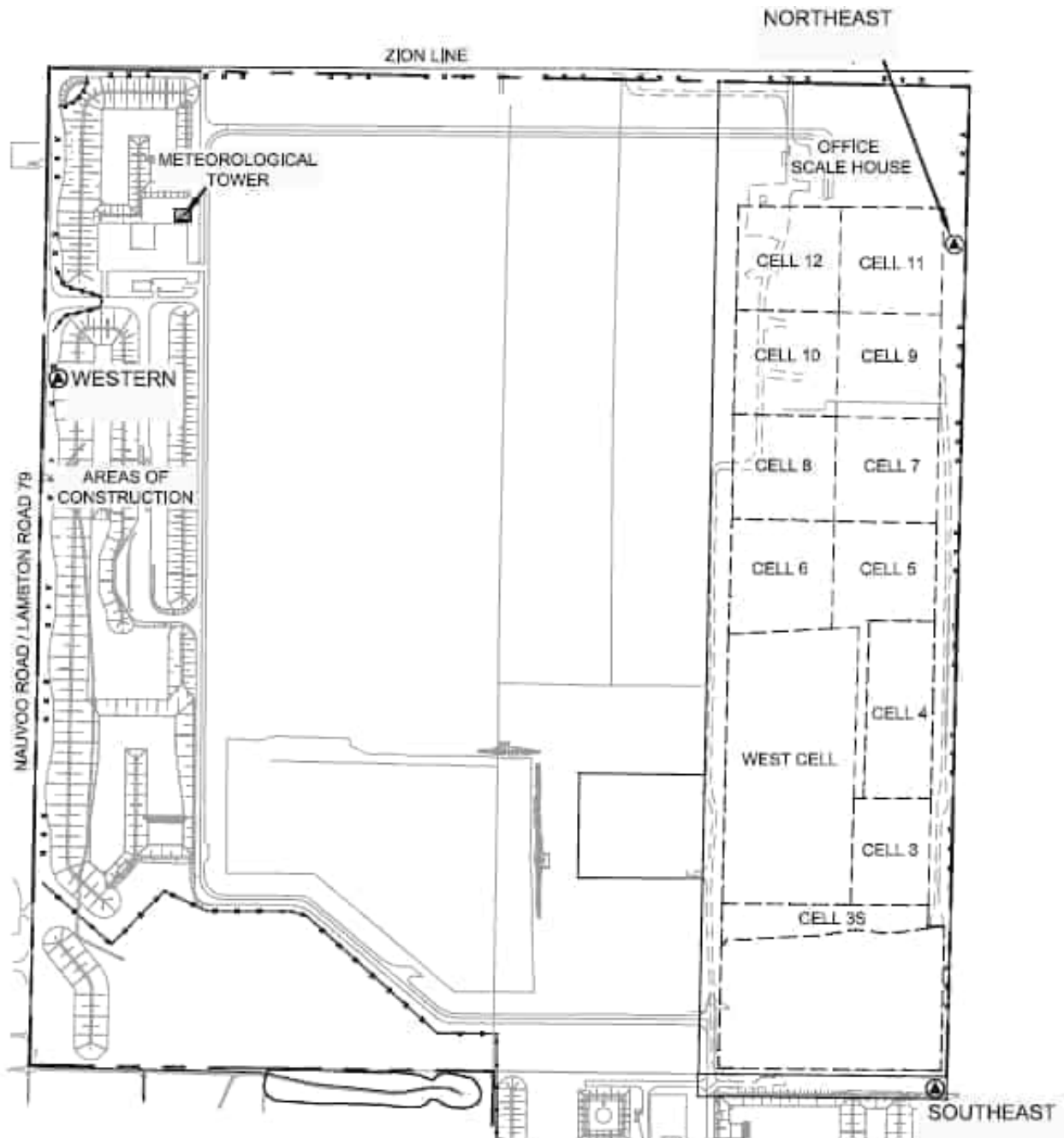
The monitoring method will comply with the metals specified by U.S. EPA Method 10-2. The 24-hour samples would be collected on standard hi-volume air samplers. The station siting requirements and sampling procedures will follow the most recent version of the U.S. EPA methods as well as the Ministry of the Environment's Operations Manual for Point Source Air Quality Monitoring as approved by the MOECC at the onset on the monitoring. The U.S. EPA methods are referenced in the MOECC document as appropriate reference methods to follow for air quality monitoring programs.

The results will be presented in quarterly summary letters and an annual report. The report will include the data in tabular format with a description of the program, quality assurance documentation, details regarding data recovery, abnormal site conditions, etc. As well, any days when the ambient air quality criterion for TSP was exceeded would be reported to the District MOECC office within two (2) weeks of receiving results. In order to enhance the notification of elevated TSP Levels, WM will copy the Township of Warwick on any future elevated TSP level reporting provided to the MOECC.

As part of the dust control strategy, the shift supervisor will be responsible to see that a record of roadway sweeping and watering is maintained. The control measure will be initiated whenever a visible plume behind vehicles is longer than $\frac{1}{4}$ the length of the vehicle. These logs will be kept on-site for a period of not less than two (2) years and will be made available for inspection should the MOECC wish to see them.

When the facility receives a complaint, the shift supervisor will see that the relevant information is recorded, including any remedial action taken as a result of the complaint. A sample complaint log sheet is included in the Best Management Practices Plan (Dust).

Figure 2: Dust Monitor Locations





2.1 Additional Dust Monitoring Provisions

As discussed with stakeholders during the consultation for the annual fill rate increase for the site, the following provisions were made for additional monitoring to be completed under specific conditions. The following notes the agreed to provisions for the additional monitoring. This provision will also be included in the Dust Best Management Practices Plan (BMPP). In the event that the provisions are triggered, WM will prepare an updated Air Quality Monitoring Plan to layout the specific agreed to monitoring at the time the additional monitoring provision is required.

As agreed to with stakeholders, in the event that 2 measured exceedances (trigger), that can be attributed to WM operations, in any quarter (excluding periods when on-site cell construction is occurring) occurs, WM is committing to reviewing the data with the Township of Warwick. Upon confirmation that the exceedances can be attributed to WM operations, and are not related to cell construction, WM will complete the installation of continuous dust monitors.

If continuous dust monitors are to be installed, WM will work with the Township of Warwick to update the following documents:

- Air Quality Monitoring Plan – updated for equipment change as well as trigger for shorter duration alerts to be issued to WM as warnings for higher dust levels; and
- Best Management Practices Plan (Dust) – to be updated to link dust alerts to dust control initiatives.

3 VOC MONITORING

It is proposed that monitoring for VOC's be conducted through the summer months, with samples to be taken in upwind and downwind pairs, during normal operating hours of the landfill. There would be a total of 5 sample pairs taken between June and September. No more than two (2) samples will be collected in any calendar month. The samples will be 24-hours in duration and compared to their respective Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List.

The samples will be collected and analyzed using methods defined in U.S. EPA Method TO-14/15. Vinyl chloride is of particular concern with these types of samples and vinyl chloride will be analyzed in selective ion mode (SIM). Sampling for VOC samples will be collected during periods of light wind conditions (less than 15 kilometers per hour) and during dry conditions (no measureable precipitation for the proceeding 48 hours prior to sampling). The list of VOC's monitored is presented in Table 1.



Table 1: List of Monitored VOCs

| CAS No. | Compound | CAS No. | Compound |
|------------|---------------------------------------|-------------------|------------------------|
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 620-14-4/622-96-8 | m/p-Ethyl Toluene |
| 526-73-8 | 1,2,3-Trimethyl Benzene | 108-38-3/106-42-3 | m/p-Xylene |
| 95-63-6 | 1,2,4 -Trimethyl Benzene | 535-77-3 | m-Cymene |
| 108-67-8 | 1,3,5 -Trimethyl Benzene | 78-93-3 | MEK |
| 591-76-4 | 2-Methyl Hexane | 108-87-2 | Methyl Cyclohexane |
| 107-83-5 | 2-Methyl Pentane | 108-10-1 | MIBK |
| 78-78-4 | 2-Methyl Butane | 75-45-6 | Chlorodifluoromethane |
| 96-14-0 | 3-Methyl Pentane | 123-72-8 | n-Butanol |
| 589-34-4 | 3-Methyl Hexane | 91-20-3 | Naphthalene |
| 67-64-1 | Acetone | 111-84-2 | Nonane |
| 71-43-2 | Benzene | 611-14-3 | o-Ethyl Toluene |
| 123-86-4 | Butyl Acetate | 95-47-6 | o-Xylene |
| 124-18-5 | Decane | 109-66-0 | Pentane |
| 25915-78-0 | Dichlorodifluoromethane | 64-17-5 | Ethanol |
| 75-09-2 | Dichloromethane | 103-65-1 | Propyl Benzene |
| 100-41-4 | Ethyl Benzene | 100-42-5 | Styrene |
| 142-82-5 | Heptane | 127-18-4 | Tetrachloroethylene |
| 110-54-3 | Hexane | 108-88-3 | Toluene |
| 67-63-0 | Isopropyl Alcohol | 75-69-4 | Trichlorofluoromethane |
| 138-86-3 | Limonene | 79-01-6 | Trichloroethylene |
| 75-01-4 | Vinyl Chloride | 141-78-6 | Ethyl Acetate |
| 56-23-5 | Carbon Tetrachloride | 71-55-6 | 1,1,1-Trichloroethane |
| 67-66-3 | Chloroform | 75-35-4 | Vinylidene Chloride |
| 106-93-4 | Ethylene Dibromide | 540-59-0 | 1,2-Dichloroethene |
| 107-6-2 | Ethylene Dichloride | Na | Total VOCs |

As the MOECC updates Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List in the Province of Ontario, the measured values will be compared to the most stringent limits available at the time of testing. For compounds that do not have Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List, the measured values will be compared to the predicated concentrations provided and approved by the MOECC for the Section 9 EPA approval supporting documentation to demonstrate compliance. As all compounds identified without Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List are subject to review by the MOECC's Standard Development Branch, these levels should be considered acceptable.



4 COMPLAINT RECORDING PROCESS

Waste Management of Canada has outlined Best Practices Plans of Odour, Litter and Dust. Within each plan the procedures for outlining the responsibilities and recordkeeping. For further details, please refer to the most recent versions of the Best Management Practices Plan. [1,2,3]. Please note that like this air quality monitoring plan, the Best Management Plans are intended to be updates to endure continuous improvements are being documented at the site.



5 REFERENCES

1. RWDI AIR Inc. Best Management Practices Plan (Odour), Twin Creeks Landfill Site, Watford, ON – Revision 7, dated May 18, 2017.
2. RWDI AIR Inc. Best Management Practices Plan (Dust), Twin Creeks Landfill Site, Watford, ON – Revision 5, dated May 18, 2017.
3. RWDI AIR Inc. Best Management Practices Plan (Litter), Twin Creeks Landfill Site, Watford, ON – Revision 4, dated December 11, 2007.



RWDI aims to accommodate. If you require this document in a different format in order to aid accessibility, please contact the sender of this document, email solutions@rwdi.com or call +1.519.823.1311

The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT B' is centered within the gray area.

ATTACHMENT B

Table 1: Summary of Total Suspended Particulate ResultsApril 6, 2024

| Compounds | CAS No. | 6-Apr-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24012944 | Filter ID: | 24012942 | Filter ID: | 24012943 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | - | 0.3 | Guideline | - | |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | - | 0.025 | Schedule 3 | - | |
| Total Chromium (Cr) | 7440-47-2 | | | | | | - | 0.5 | Guideline | - | |
| Total Cobalt (Co) | 7440-48-4 | | | | | | - | 0.1 | Guideline | - | |
| Total Copper (Cu) | 7440-50-8 | | | | | | - | 50 | Schedule 3 | - | |
| Total Iron (Fe) | 7439-89-6 | | | | | | - | N/A | N/A | - | |
| Total Lead (Pb) | 7439-92-1 | | | | | | - | 0.5 | Schedule 3 | - | |
| Total Manganese (Mn) | 7439-96-5 | | | | | | - | 0.4 | Guideline | - | |
| Total Nickel (Ni) | 7440-02-0 | | | | | | - | 0.2 | Guideline | - | |
| Total Selenium (Se) | 7782-49-2 | | | | | | - | 10 | Guideline | - | |
| Total Vanadium (V) | 7440-62-2 | | | | | | - | 2 | Schedule 3 | - | |
| Total Zinc (Zn) | 7440-66-6 | | | | | | - | 120 | Schedule 3 | - | |
| Total Particulate | - | 5600 | 3 | 6200 | 4 | 15400 | 10 | 10 | 120 | Schedule 3 | 8% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1603 | | 1720 | | 1591 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.11 | | 1.19 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 2: Summary of Total Suspended Particulate ResultsApril 12, 2024

| Compounds | CAS No. | 12-Apr-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|-----------------------|-------------------------------------|-----------------------|-------------------------------------|-----------------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24012947 | Filter ID: | 24012946 | Filter ID: | 24012948 | | | | |
| | | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 11800 | 7 | 14700 | 9 | 19500 | 12 | 12 | 120 | Schedule 3 | 10% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) ^[1] | | 1655 | | 1601 | | 1595 | | | | | |
| Sample Flow Rate (m³/min) | | 1.15 | | 1.11 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 3: Summary of Total Suspended Particulate ResultsApril 18, 2024

| Compounds | CAS No. | 18-Apr-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-----------------|----------------------|---|--|------------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24012950 | Filter ID: | 24012951 | Filter ID: | 24012949 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | ND | ND | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 21.4 | 0.013 | 59.7 | 0.036 | 29 | 0.018 | 0.036 | 50 | Schedule 3 | 0.07% |
| Total Iron (Fe) | 7439-89-6 | 442 | 0.272 | 340 | 0.204 | 523 | 0.321 | 0.321 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 5.2 | 0.003 | 5.1 | 0.003 | 6 | 0.004 | 0.004 | 0.5 | Schedule 3 | 0.74% |
| Total Manganese (Mn) | 7439-96-5 | 13 | 0.008 | 11.4 | 0.007 | 14.6 | 0.009 | 0.009 | 0.4 | Guideline | 2.24% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | ND | ND | ND | ND | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 32.9 | 0.020 | 21.6 | 0.013 | 43.9 | 0.027 | 0.027 | 120 | Schedule 3 | 0.02% |
| Total Particulate | - | 32000 | 20 | 28800 | 17 | 40700 | 25 | 25 | 120 | Schedule 3 | 21% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | | | | | | |
| Sample Volume (m ³) ^[1] | | 1626 | | 1665 | | | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.16 | | | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 4: Summary of Total Suspended Particulate ResultsApril 24, 2024

| Compounds | CAS No. | 24-Apr-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|---------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24012928 | Filter ID: | 24012923 | Filter ID: | 24012925 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | | | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | | | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | | | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 18.7 | 0.011 | | | | | 0.011 | 50 | Schedule 3 | 0.02% |
| Total Iron (Fe) | 7439-89-6 | 1390 | 0.828 | | | | | 0.828 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | ND | ND | | | | | ND | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | 30.2 | 0.018 | | | | | 0.018 | 0.4 | Guideline | 4.50% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | | | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | | | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | | | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 16.1 | 0.010 | | | | | 0.010 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 67200 | 40 | 26200 | 16 | 26800 | 16 | 40 | 120 | Schedule 3 | 33% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1441 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1679 | | 1656 | | 1630 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.17 | | 1.15 | | 1.13 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 5: Summary of Total Suspended Particulate ResultsApril 30, 2024

| Compounds | CAS No. | 30-Apr-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------|------------------------------------|-------------------------------------|------------------------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24012931 | Filter ID: | 24012924 | Filter ID: | 24012927 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | ND | ND | Sample 2 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | ND | ND | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | ND | ND | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | ND | ND | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | 37.9 | 0.024 | | | 0.024 | 50 | Schedule 3 | 0.05% |
| Total Iron (Fe) | 7439-89-6 | | | 497 | 0.319 | | | 0.319 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | ND | ND | | | ND | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | 17 | 0.011 | | | 0.011 | 0.4 | Guideline | 2.73% |
| Total Nickel (Ni) | 7440-02-0 | | | ND | ND | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | ND | ND | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | 25.2 | 0.016 | | | 0.016 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 26600 | 16 | 43500 | 28 | 52400 | 32 | 32 | 120 | Schedule 3 | 27% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1439 | | 1437 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1636 | | 1559 | | 1641 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.14 | | 1.08 | | 1.14 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 6: Summary of Total Suspended Particulate ResultsMay 6, 2024

| Compounds | CAS No. | 6-May-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|-------------------------------------|-------------------|-----------------------|-----------------|-----------------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24012926 | Filter ID: | 24012929 | Filter ID: | 24012930 | | | | |
| | | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | Sample 3 of 4 No Metals Analysis | ND | ND | ND | 0.3 | Guideline | - | | |
| Total Cadmium (Cd) | 7440-43-9 | | | ND | ND | ND | 0.025 | Schedule 3 | - | | |
| Total Chromium (Cr) | 7440-47-2 | | | 5.3 | 0.003 | 0.003 | 0.5 | Guideline | 0.67% | | |
| Total Cobalt (Co) | 7440-48-4 | | | ND | ND | ND | 0.1 | Guideline | - | | |
| Total Copper (Cu) | 7440-50-8 | | | 86.4 | 0.054 | 0.054 | 50 | Schedule 3 | 0.11% | | |
| Total Iron (Fe) | 7439-89-6 | | | 1960 | 1.231 | 1.231 | N/A | N/A | - | | |
| Total Lead (Pb) | 7439-92-1 | | | 9.1 | 0.006 | 0.006 | 0.5 | Schedule 3 | 1.14% | | |
| Total Manganese (Mn) | 7439-96-5 | | | 56.7 | 0.036 | 0.036 | 0.4 | Guideline | 8.90% | | |
| Total Nickel (Ni) | 7440-02-0 | | | 3.6 | 0.002 | 0.002 | 0.2 | Guideline | 1.13% | | |
| Total Selenium (Se) | 7782-49-2 | | | ND | ND | ND | 10 | Guideline | - | | |
| Total Vanadium (V) | 7440-62-2 | | | ND | ND | ND | 2 | Schedule 3 | - | | |
| Total Zinc (Zn) | 7440-66-6 | | | 101 | 0.063 | 0.063 | 120 | Schedule 3 | 0.05% | | |
| Total Particulate | - | 40300 | 24 | 33600 | 21 | 112000 | 70 | 70 | 120 | Schedule 3 | 59% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1442 | | 1441 | | 1440 | | | | | |
| Sample Volume (m³) ^[1] | | 1653 | | 1608 | | 1592 | | | | | |
| Sample Flow Rate (m³/min) | | 1.15 | | 1.12 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 7: Summary of Total Suspended Particulate ResultsMay 12, 2024

| Compounds | CAS No. | 12-May-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24012936 | Filter ID: | 24022396 | Filter ID: | 24012932 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 18600 | 11 | 15500 | 10 | 21400 | 14 | 14 | 120 | Schedule 3 | 11% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1437 | | 1447 | | | | | |
| Sample Volume (m ³) ^[1] | | 1646 | | 1613 | | 1567 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.14 | | 1.12 | | 1.08 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 8: Summary of Total Suspended Particulate ResultsMay 18, 2024

| Compounds | CAS No. | 18-May-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24012933 | Filter ID: | 24012935 | Filter ID: | 24012934 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 54100 | 33 | 63800 | 40 | 65900 | 41 | 41 | 120 | Schedule 3 | 34% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1442 | | | | | |
| Sample Volume (m ³) ^[1] | | 1626 | | 1597 | | 1593 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.11 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 9: Summary of Total Suspended Particulate ResultsMay 24, 2024

| Compounds | CAS No. | 24-May-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-----------------|----------------------|---|--|------------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24032802 | Filter ID: | 24032800 | Filter ID: | 24032801 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | ND | ND | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 52.3 | 0.031 | 113 | 0.069 | 58.8 | 0.037 | 0.069 | 50 | Schedule 3 | 0.14% |
| Total Iron (Fe) | 7439-89-6 | 2440 | 1.457 | 2700 | 1.661 | 2540 | 1.585 | 1.661 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 6.1 | 0.004 | 6.5 | 0.004 | 7.1 | 0.004 | 0.004 | 0.5 | Schedule 3 | 0.89% |
| Total Manganese (Mn) | 7439-96-5 | 61.2 | 0.037 | 79.3 | 0.049 | 65.7 | 0.041 | 0.049 | 0.4 | Guideline | 12.19% |
| Total Nickel (Ni) | 7440-02-0 | 3.2 | 0.002 | 3.9 | 0.002 | 3.5 | 0.002 | 0.002 | 0.2 | Guideline | 1.20% |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 56.6 | 0.034 | 38.1 | 0.023 | 56.4 | 0.035 | 0.035 | 120 | Schedule 3 | 0.03% |
| Total Particulate | - | 129000 | 77 | 181000 | 111 | 159000 | 99 | 111 | 120 | Schedule 3 | 93% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1439 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1675 | | 1626 | | 1603 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.16 | | 1.13 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 10: Summary of Total Suspended Particulate ResultsMay 30, 2024

| Compounds | CAS No. | 30-May-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|-----------------------|-------------------------------------|-----------------------|-------------------------------------|-----------------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24022398 | Filter ID: | 24022399 | Filter ID: | 24022397 | | | | |
| | | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 38600 | 24 | 129000 | 82 | 45500 | 29 | 82 | 120 | Schedule 3 | 68% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1439 | | | | | |
| Sample Volume (m³) ^[1] | | 1617 | | 1577 | | 1553 | | | | | |
| Sample Flow Rate (m³/min) | | 1.12 | | 1.10 | | 1.08 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 11: Summary of Total Suspended Particulate ResultsJune 2, 2024

| Compounds | CAS No. | 2-Jun-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|------------------------------------|-------------------|------------------------------------|-----------------|------------------------------------|--|--|------------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | | Filter ID: | 24032803 | Filter ID: | | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Invalid | Invalid | Invalid | - | 0.3 | Guideline | - | | | |
| Total Cadmium (Cd) | 7440-43-9 | | | | - | 0.025 | Schedule 3 | - | | | |
| Total Chromium (Cr) | 7440-47-2 | | | | - | 0.5 | Guideline | - | | | |
| Total Cobalt (Co) | 7440-48-4 | | | | - | 0.1 | Guideline | - | | | |
| Total Copper (Cu) | 7440-50-8 | | | | - | 50 | Schedule 3 | - | | | |
| Total Iron (Fe) | 7439-89-6 | | | | - | N/A | N/A | - | | | |
| Total Lead (Pb) | 7439-92-1 | | | | - | 0.5 | Schedule 3 | - | | | |
| Total Manganese (Mn) | 7439-96-5 | | | | - | 0.4 | Guideline | - | | | |
| Total Nickel (Ni) | 7440-02-0 | | | | - | 0.2 | Guideline | - | | | |
| Total Selenium (Se) | 7782-49-2 | | | | - | 10 | Guideline | - | | | |
| Total Vanadium (V) | 7440-62-2 | | | | - | 2 | Schedule 3 | - | | | |
| Total Zinc (Zn) | 7440-66-6 | | | | - | 120 | Schedule 3 | - | | | |
| Total Particulate | - | | | | - | - | - | - | 0 | 120 | Schedule 3 |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | - | | - | | - | | | | | |
| Sample Volume (m ³) ^[1] | | - | | - | | - | | | | | |
| Sample Flow Rate (m ³ /min) | | - | | - | | - | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 12: Summary of Total Suspended Particulate ResultsJune 5, 2024

| Compounds | CAS No. | 5-Jun-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|-------------------------------------|-------------------------------------|---------------|-----------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24032809 | Filter ID: | 24032807 | Filter ID: | 24032812 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | Sample 1 of 4 No Metals Analysis | Sample 1 of 4 No Metals Analysis | - | 0.3 | Guideline | - | | | |
| Total Cadmium (Cd) | 7440-43-9 | | | | - | 0.025 | Schedule 3 | - | | | |
| Total Chromium (Cr) | 7440-47-2 | | | | - | 0.5 | Guideline | - | | | |
| Total Cobalt (Co) | 7440-48-4 | | | | - | 0.1 | Guideline | - | | | |
| Total Copper (Cu) | 7440-50-8 | | | | - | 50 | Schedule 3 | - | | | |
| Total Iron (Fe) | 7439-89-6 | | | | - | N/A | N/A | - | | | |
| Total Lead (Pb) | 7439-92-1 | | | | - | 0.5 | Schedule 3 | - | | | |
| Total Manganese (Mn) | 7439-96-5 | | | | - | 0.4 | Guideline | - | | | |
| Total Nickel (Ni) | 7440-02-0 | | | | - | 0.2 | Guideline | - | | | |
| Total Selenium (Se) | 7782-49-2 | | | | - | 10 | Guideline | - | | | |
| Total Vanadium (V) | 7440-62-2 | | | | - | 2 | Schedule 3 | - | | | |
| Total Zinc (Zn) | 7440-66-6 | | | | - | 120 | Schedule 3 | - | | | |
| Total Particulate | - | | | | 94700 | 57 | 206000 | 125 | 96100 | 59 | 125 |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) ^[1] | | 1669 | | 1650 | | 1630 | | | | | |
| Sample Flow Rate (m³/min) | | 1.16 | | 1.15 | | 1.13 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 13: Summary of Total Suspended Particulate ResultsJune 8, 2024

| Compounds | CAS No. | 8-Jun-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------|-----------------|----------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24032805 | Filter ID: | 24032808 | Filter ID: | 24032810 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | Sample 2 of 4 No Metals Analysis | Sample 2 of 4 No Metals Analysis | - | 0.3 | Guideline | - | | | |
| Total Cadmium (Cd) | 7440-43-9 | | | | - | 0.025 | Schedule 3 | - | | | |
| Total Chromium (Cr) | 7440-47-2 | | | | - | 0.5 | Guideline | - | | | |
| Total Cobalt (Co) | 7440-48-4 | | | | - | 0.1 | Guideline | - | | | |
| Total Copper (Cu) | 7440-50-8 | | | | - | 50 | Schedule 3 | - | | | |
| Total Iron (Fe) | 7439-89-6 | | | | - | N/A | N/A | - | | | |
| Total Lead (Pb) | 7439-92-1 | | | | - | 0.5 | Schedule 3 | - | | | |
| Total Manganese (Mn) | 7439-96-5 | | | | - | 0.4 | Guideline | - | | | |
| Total Nickel (Ni) | 7440-02-0 | | | | - | 0.2 | Guideline | - | | | |
| Total Selenium (Se) | 7782-49-2 | | | | - | 10 | Guideline | - | | | |
| Total Vanadium (V) | 7440-62-2 | | | | - | 2 | Schedule 3 | - | | | |
| Total Zinc (Zn) | 7440-66-6 | | | | - | 120 | Schedule 3 | - | | | |
| Total Particulate | - | 57500 | 37 | 52100 | 32 | 34900 | 22 | 37 | 120 | Schedule 3 | 31% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1570 | | 1646 | | 1607 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.09 | | 1.14 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 14: Summary of Total Suspended Particulate ResultsJune 11, 2024

| Compounds | CAS No. | 11-Jun-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-----------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24032816 | Filter ID: | 24032817 | Filter ID: | 24032815 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | 9.7 | 0.006 | 13.6 | 0.008 | 6.4 | 0.004 | 0.008 | 0.5 | Guideline | 1.68% |
| Total Cobalt (Co) | 7440-48-4 | 4.7 | 0.003 | 6 | 0.004 | 2.2 | 0.001 | 0.004 | 0.1 | Guideline | 3.71% |
| Total Copper (Cu) | 7440-50-8 | 48.1 | 0.029 | 44.7 | 0.028 | 42 | 0.026 | 0.029 | 50 | Schedule 3 | 0.06% |
| Total Iron (Fe) | 7439-89-6 | 8060 | 4.900 | 11300 | 6.984 | 4210 | 2.615 | 6.984 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 6.8 | 0.004 | 8 | 0.005 | 3.7 | 0.002 | 0.005 | 0.5 | Schedule 3 | 0.99% |
| Total Manganese (Mn) | 7439-96-5 | 238 | 0.145 | 309 | 0.191 | 113 | 0.070 | 0.191 | 0.4 | Guideline | 47.74% |
| Total Nickel (Ni) | 7440-02-0 | 12.6 | 0.008 | 17 | 0.011 | 6.7 | 0.004 | 0.011 | 0.2 | Guideline | 5.25% |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | 10.3 | 0.006 | 13.5 | 0.008 | 5.7 | 0.004 | 0.008 | 2 | Schedule 3 | 0.42% |
| Total Zinc (Zn) | 7440-66-6 | 31.9 | 0.019 | 40.7 | 0.025 | 18.2 | 0.011 | 0.025 | 120 | Schedule 3 | 0.02% |
| Total Particulate | - | 468000 | 284 | 712000 | 440 | 260000 | 161 | 440 | 120 | Schedule 3 | 367% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1645 | | 1618 | | 1610 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.14 | | 1.12 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 15: Summary of Total Suspended Particulate ResultsJune 14, 2024

| Compounds | CAS No. | 14-Jun-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24032811 | Filter ID: | 24032814 | Filter ID: | 24032813 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 72500 | 45 | 301000 | 192 | 69000 | 44 | 192 | 120 | Schedule 3 | 160% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1617 | | 1568 | | 1577 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.09 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 16: Summary of Total Suspended Particulate ResultsJune 17, 2024

| Compounds | CAS No. | 17-Jun-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|--------------------------|-------------------|--------------------------|-----------------|--------------------------|----------------------------------|---|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24032819 | Filter ID: | 24032820 | Filter ID: | 24032821 | | | | |
| | | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | 5.3 | 0.003 | ND | ND | 0.003 | 0.5 | Guideline | 0.67% |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 22.1 | 0.014 | 63.6 | 0.040 | 59 | 0.037 | 0.040 | 50 | Schedule 3 | 0.08% |
| Total Iron (Fe) | 7439-89-6 | 1170 | 0.721 | 3050 | 1.938 | 1130 | 0.712 | 1.938 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 4.8 | 0.003 | 19.9 | 0.013 | 4.7 | 0.003 | 0.013 | 0.5 | Schedule 3 | 2.53% |
| Total Manganese (Mn) | 7439-96-5 | 27.9 | 0.017 | 64.6 | 0.041 | 26.1 | 0.016 | 0.041 | 0.4 | Guideline | 10.26% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | 5.5 | 0.003 | ND | ND | 0.003 | 0.2 | Guideline | 1.75% |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 27.2 | 0.017 | 183 | 0.116 | 32.6 | 0.021 | 0.116 | 120 | Schedule 3 | 0.10% |
| Total Particulate | - | 80800 | 50 | 164000 | 104 | 77200 | 49 | 104 | 120 | Schedule 3 | 87% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) [1] | | 1622 | | 1574 | | 1588 | | | | | |
| Sample Flow Rate (m³/min) | | 1.13 | | 1.09 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 17: Summary of Total Suspended Particulate ResultsJune 20, 2024

| Compounds | CAS No. | 20-Jun-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-----------------|------------------------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24032822 | Filter ID: | 24032824 | Filter ID: | 24032823 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | Invalid | Sample 2 of 4 No Metals Analysis | - | 0.3 | Guideline | - | | | |
| Total Cadmium (Cd) | 7440-43-9 | | | | - | 0.025 | Schedule 3 | - | | | |
| Total Chromium (Cr) | 7440-47-2 | | | | - | 0.5 | Guideline | - | | | |
| Total Cobalt (Co) | 7440-48-4 | | | | - | 0.1 | Guideline | - | | | |
| Total Copper (Cu) | 7440-50-8 | | | | - | 50 | Schedule 3 | - | | | |
| Total Iron (Fe) | 7439-89-6 | | | | - | N/A | N/A | - | | | |
| Total Lead (Pb) | 7439-92-1 | | | | - | 0.5 | Schedule 3 | - | | | |
| Total Manganese (Mn) | 7439-96-5 | | | | - | 0.4 | Guideline | - | | | |
| Total Nickel (Ni) | 7440-02-0 | | | | - | 0.2 | Guideline | - | | | |
| Total Selenium (Se) | 7782-49-2 | | | | - | 10 | Guideline | - | | | |
| Total Vanadium (V) | 7440-62-2 | | | | - | 2 | Schedule 3 | - | | | |
| Total Zinc (Zn) | 7440-66-6 | | | | - | 120 | Schedule 3 | - | | | |
| Total Particulate | - | 48500 | 30 | - | - | 53500 | 34 | 34 | 120 | Schedule 3 | 29% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | - | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1598 | | - | | 1557 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.11 | | - | | 1.08 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 18: Summary of Total Suspended Particulate ResultsJune 23, 2024

| Compounds | CAS No. | 23-Jun-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24050852 | Filter ID: | 24032825 | Filter ID: | 24050851 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 39400 | 24 | 59200 | 37 | 44200 | 28 | 37 | 120 | Schedule 3 | 31% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1626 | | 1600 | | 1580 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.11 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 19: Summary of Total Suspended Particulate ResultsJune 26, 2024

| Compounds | CAS No. | 26-Jun-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|---|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24050853 | Filter ID: | 24050854 | Filter ID: | 2405855 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 35200 | 22 | 38900 | 25 | 35800 | 23 | 25 | 120 | Schedule 3 | 21% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1611 | | 1581 | | 1553 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.10 | | 1.08 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 20: Summary of Total Suspended Particulate ResultsJune 29, 2024

| Compounds | CAS No. | 29-Jun-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|-----------------------|-------------------------------------|-----------------------|-------------------------------------|-----------------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24050858 | Filter ID: | 24050856 | Filter ID: | 24050857 | | | | |
| | | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | Mass (ug) | Concentration (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 30600 | 19 | 34800 | 22 | 34700 | 22 | 22 | 120 | Schedule 3 | 18% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) ^[1] | | 1648 | | 1577 | | 1579 | | | | | |
| Sample Flow Rate (m³/min) | | 1.14 | | 1.10 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT C' is centered within the gray circle.

ATTACHMENT C

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On August 1, 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the June 5, 2024 sampling event. On August 2, 2024, the results were entered and assessed, and it was found that there was one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

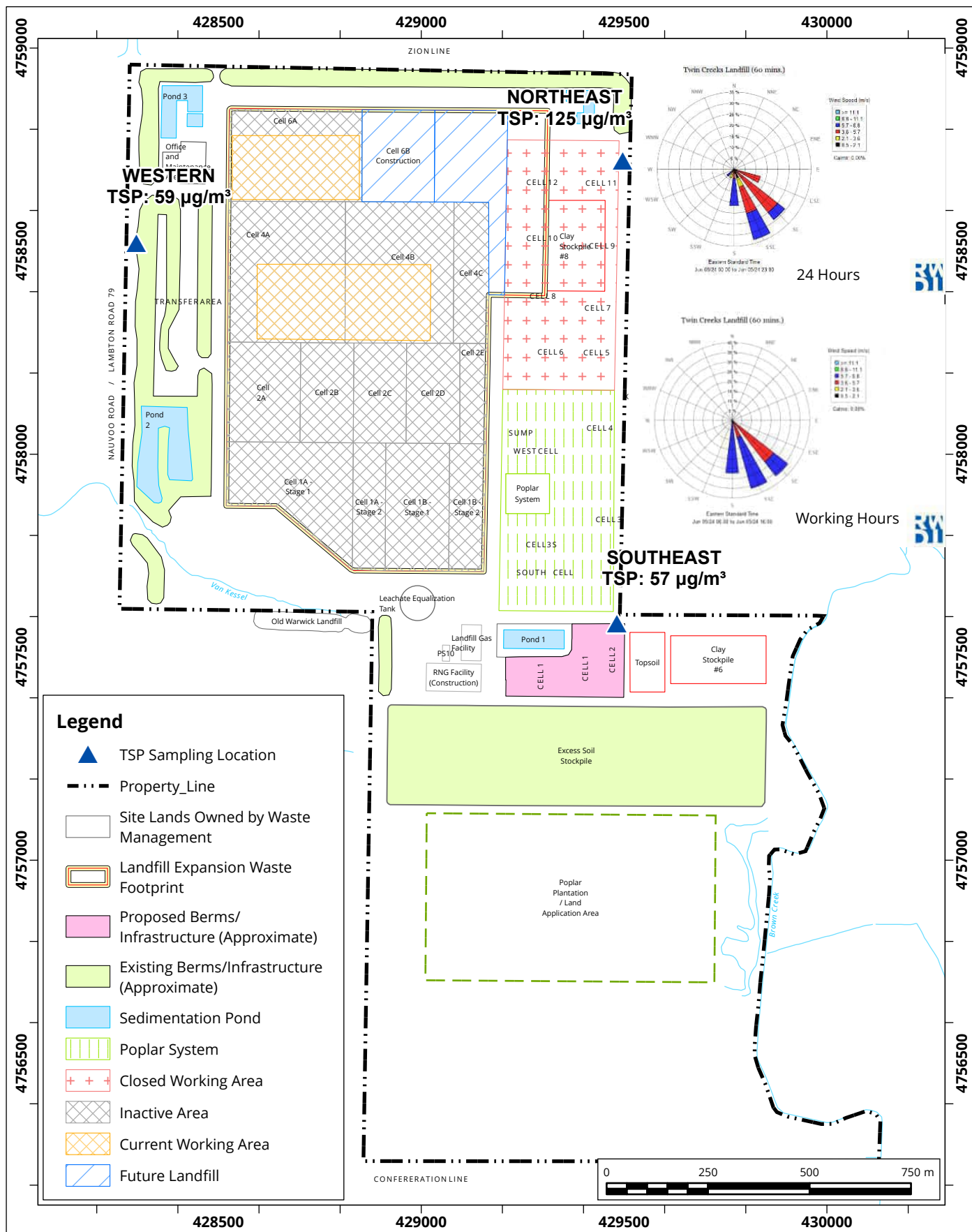
June 5, 2024

On Wednesday June 5, 2024, there was an exceedance of the TSP 24-hour AAQC at the Northeastern sampler. Attached is Figure 1, which presents wind roses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the June 5 sampling date.

1. The measured TSP concentration at the Northeast sampler was 125 ug/m^3 , the Western sampler was 59 ug/m^3 and Southeast sampler (site background) was 57 ug/m^3 . During the 24-hour period, the wind was predominantly from the ESE to S; wind speeds ranged from 6 to 26 km/h and wind gusts reached a maximum of 52 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the SE to S. During this timeframe, the Northeast sampler location was in close proximity to stone stockpiling east of Pond 4.
3. Sweeping and watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Northeast TSP sampler location, predominantly originated from on-site construction activities related to stone stockpiling, with contributions from off-site activities/sources as measured at the site background location (Southeast sampler at 57 ug/m^3 respectively for TSP).



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: June 5, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

True North



| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1 |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Jul 22, 2024 |

Project #: 2402553



General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) August 14, 2024 | Date Exceedence Determined August 2, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|---|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | County/District County of Lambton | Postal Code N0M 2S0 | |
| Geo Reference | | | |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|-----|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, was the ESDM Report prepared to fulfill (select all that apply): <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard <input type="checkbox"/> Other (please specify): _____ | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input type="checkbox"/> Other Location (explain): _____ | |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|--|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 05/06/24 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? <input checked="" type="checkbox"/> Yes If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input checked="" type="checkbox"/> Other Location (explain): Property Line of Facility | | |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.


| | | | |
|--|----------------|---|--|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) _____ | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| | | Postal Code N0M 2S0 | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | E-mail Address amclachl@wm.com |
| Signature  | | Date (dd/mm/yyyy) 14/08/2024 | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|--------------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Northeast Sampler | | 05/06/2024 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Northeast Sampler) | N/A | Hi-Vol | 125 | 24 | 12 | Visibility | AAQC | 104% | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On August 1, 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the June 11, 2024 sampling event. On August 2, 2024, the results were entered and assessed, and it was found that there were three (3) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

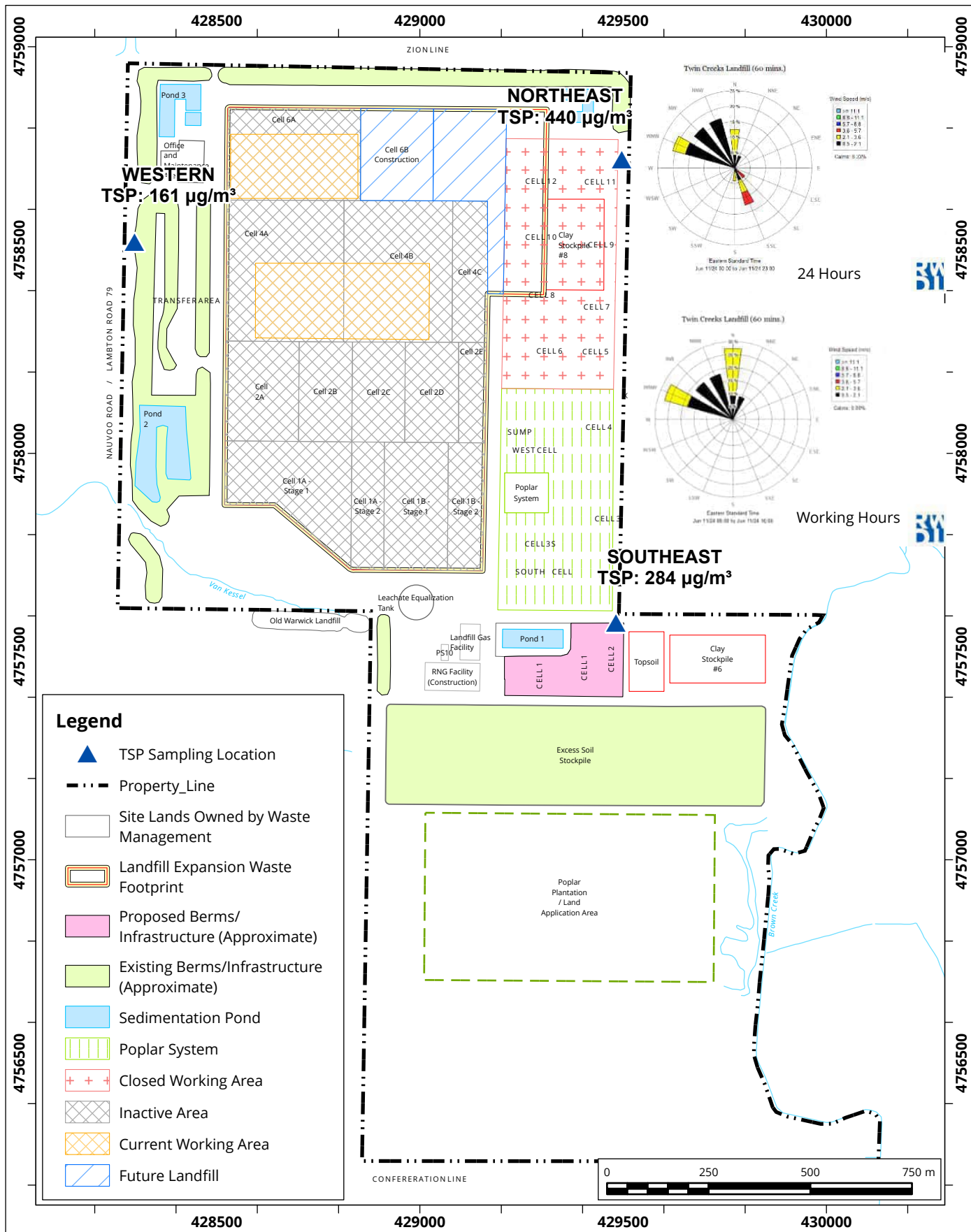
June 11, 2024

On Tuesday June 11, 2024, there was an exceedance of the TSP 24-hour AAQC at the Southeastern, Northeastern and Western samplers. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the June 11 sampling date.

1. The measured TSP concentration at the Southeast sampler was 284 ug/m^3 , the Northeast sampler was 440 ug/m^3 and Western sampler was 161 ug/m^3 . During the 24-hour period, the wind was predominantly from the SSE and WNW to N; wind speeds ranged from 1 to 14 km/h and wind gusts reached a maximum of 19 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the WNW to N. During this timeframe, the Northeast sampler location was in close proximity to stone stockpiling east of Pond 4. The southeast sampler was downwind and influenced by the stockpiling activities and associated road traffic.
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at all sampling locations, predominantly originated from on-site construction activities related stone stockpiling, with contributions from off-site activities/sources as measured at the site background location (Western sampler at 161 ug/m^3).



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: June 11, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------------------|-----------|
| Drawn by: AXT | Figure: 1 |
| Approx. Scale: 1:13,000 | |
| Date Revised: Jul 23, 2024 | |



General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) August 14, 2024 | Date Exceedence Determined August 2, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|---|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | County/District County of Lambton | Postal Code N0M 2S0 | |
| Geo Reference | | | |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|-----|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, was the ESDM Report prepared to fulfill (select all that apply): <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard <input type="checkbox"/> Other (please specify): _____ | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input type="checkbox"/> Other Location (explain): _____ | |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|--|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 11/06/24 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? <input checked="" type="checkbox"/> Yes If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input checked="" type="checkbox"/> Other Location (explain): Property Line of Facility | | |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.


| | | | |
|--|----------------|---|--|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) _____ | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| | | Postal Code N0M 2S0 | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | E-mail Address amclachl@wm.com |
| Signature  | | Date (dd/mm/yyyy) 14/08/2024 | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|---|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Northeast, Southeast and Western Samplers | | 11/06/2024 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Northeast Sampler) | N/A | Hi-Vol | 440 | 24 | 120 | Visibility | AAQC | 367% | |
| 2 TSP (Southeast Sampler) | N/A | Hi-Vol | 284 | 24 | 120 | Visibility | AAQC | 237% | |
| 3 TSP (Western Sampler) | N/A | Hi-Vol | 161 | 24 | 120 | Visibility | AAQC | 134% | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On August 1 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the June 14, 2024 sampling event. On August 2 2024, the results were entered and assessed, and it was found that there were one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

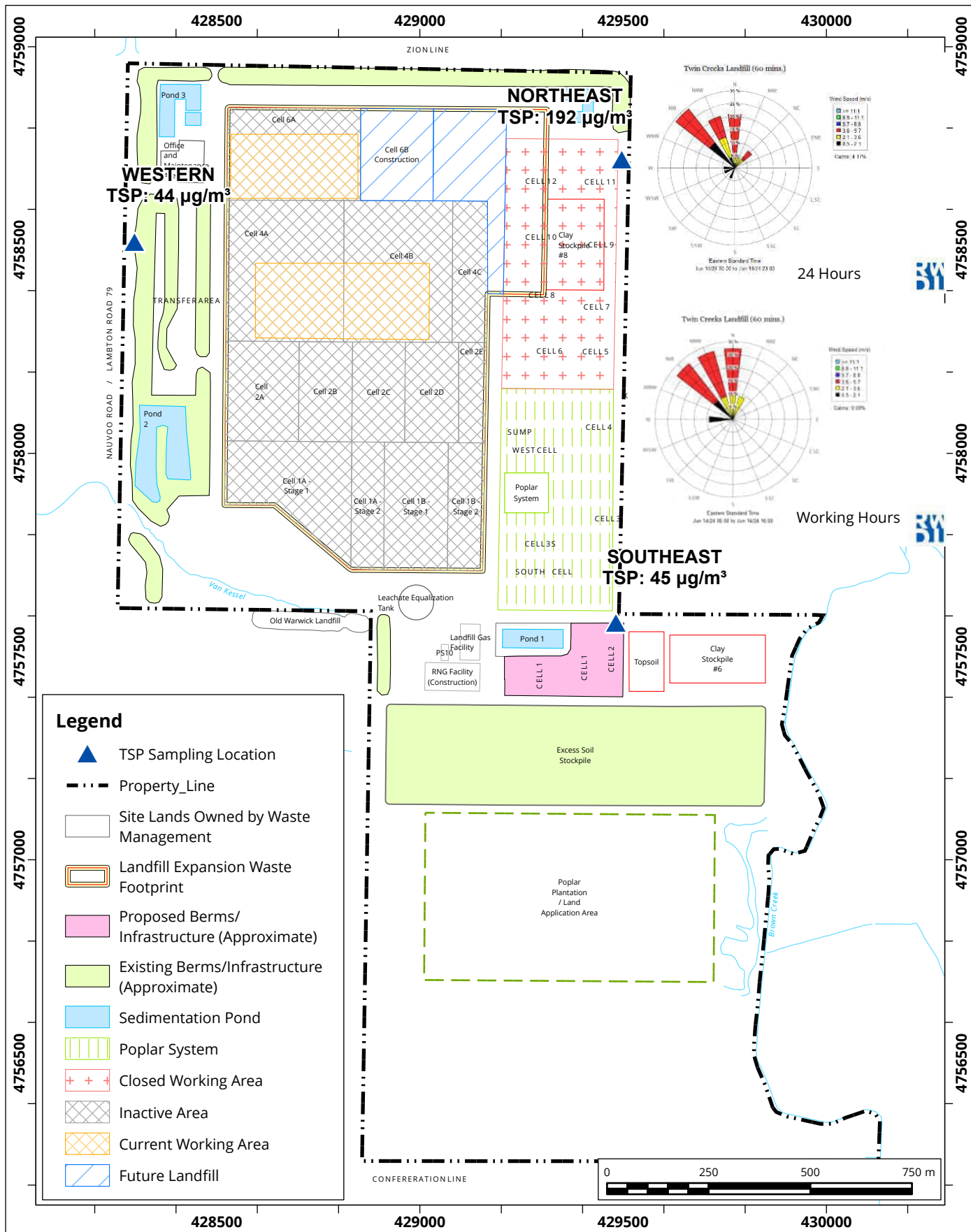
June 14, 2024

On Friday June 14, 2024, there was an exceedance of the TSP 24-hour AAQC at the Northeastern sampler. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the June 14 sampling date.

1. The measured TSP concentration at the Northeast sampler was 192 ug/m^3 , the Southeast sampler was 45 ug/m^3 and Western sampler (site background) was 44 ug/m^3 . During the 24-hour period, the wind was predominantly from the NW to N; wind speeds ranged from 2 to 24 km/h and wind gusts reached a maximum of 37 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the NW to N. During this timeframe, the Northeast sampler location was in close proximity to site construction activities associated with stone stockpiling at the stone stockpile east of Pond 4.
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Northeast TSP sampler location, predominantly originated from on-site construction activities related to stone stockpiling, with contributions from off-site activities/sources as measured at the site background location (Southeast and Western samplers at 45 ug/m^3 and 44 ug/m^3 respectively for TSP).



General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) August 14, 2024 | Date Exceedence Determined August 2, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|---|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | County/District County of Lambton | Postal Code N0M 2S0 | |
| Geo Reference | | | |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|-----|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, was the ESDM Report prepared to fulfill (select all that apply): | |
| <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> | |
| <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities | |
| <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director | |
| <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report | |
| <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence | |
| <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard | |
| <input type="checkbox"/> Other (please specify): _____ | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility |
| <input type="checkbox"/> Child Care Facility | <input type="checkbox"/> Educational Facility |
| <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): _____ | <input type="checkbox"/> Other Location (explain): _____ |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|---|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 14/06/24 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? | | |
| <input checked="" type="checkbox"/> Yes | If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | |
| <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): | | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility | <input type="checkbox"/> Child Care Facility |
| <input type="checkbox"/> Educational Facility | <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): _____ | <input checked="" type="checkbox"/> Other Location (explain): Property Line of Facility | |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.


| | | | |
|---|----------------|---|--|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| Postal Code N0M 2S0 | | | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | E-mail Address amclachl@wm.com |
| Signature  | | Date (dd/mm/yyyy) 14/08/2024 | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|--------------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Northeast Sampler | | 14/06/2024 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Northeast Sampler) | N/A | Hi-Vol | 192 | 24 | 120 | Visibility | AAQC | 160% | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

The graphic for Appendix G3 features a large, light gray circular shape on the right side of the page. To its left is a blue triangular shape pointing towards the top-left corner. A thin white curved line separates the blue triangle from the gray circle. The text 'APPENDIX G3' is centered within the gray circle in a blue, sans-serif font.

APPENDIX G3



600 Southgate Drive
Guelph, ON N1G 4P6
Canada

Tel: +1.519.823.1311
Fax: +1.519.823.1316
E-mail: solutions@rwdi.com

November 18, 2024

Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
5768 Nauvoo Road (Watford)
Warwick Township, County of Lambton N0M 2S0
E: amclachl@wm.com

**Re: Third Quarter 2024 TSP and Metals Report
July, August and September of 2024
Twin Creeks Environmental Centre – Watford, Ontario
RWDI Reference No. 2402553.02**

Dear Ms. McLachlan,

RWDI AIR Inc. (RWDI) was retained by Waste Management of Canada Corporation (WM) to complete the Total Suspended Particulate Matter (TSP) and Airborne Metal (Metals) sampling required under the Environmental Compliance Approval A032203, dated December 16, 2023 (Waste ECA). The sampling program is being completed, as approved by the Ontario Ministry of the Environment, Conservation and Parks (MECP) per Condition 13.8 of the Waste ECA. The station locations were approved by the MECP, as noted under Schedule "A" Reference 85 in the Waste ECA. The sampler locations for the TSP samplers are illustrated in the figures section of this report. These locations remained fixed for the duration of the sampling program. This report outlines the results from the third quarter (Q3) samples collected from July 1 to September 30, 2024.

SAMPLING PROGRAM OVERVIEW

Consistent with the Waste ECA dated December 16, 2023 and the AAQMP dated May 18, 2017, the samplers are run on a 6-day schedule from January 1 to May 31 and October 1 to December 31 of each year and run on a 3-day cycle from June 1 to September 30 of each year. A copy of the most recently amended AAQMP can be found in **Attachment A**.

Each sample location has two (2) High Volume Air samplers (Hi-Vols) which run on an alternating 6-day or 3-day schedule, depending on the time of year. Each sample period consists of a 24-hour (midnight to midnight) sample that operates in concurrence with the NAPS sampling schedule.

During the month of July, a total of ten (10) sample sets or thirty (30) samples were initiated, twenty-seven (27) of which are valid.

During the month of August, a total of eleven (11) sample sets or thirty-three (33) samples were initiated thirty-three (33) of which are valid.



During the month of September, a total of ten (10) sample sets or thirty (30) samples were initiated, twenty-six (27) of which are valid.

In Q3, a total of ninety-three (93) samples were initiated, eighty-seven (87) samples of which were valid. This indicates, that 93% of the total samples were successful. Sample validity at the Southeast, Northeast and Western Stations were 87%, 97% and 97% respectively, which means that every sampling station had a valid quarter ($\geq 75\%$ validity). **Table 1** below summarizes the measured TSP concentrations for the eighty-seven (87) valid samples as collected from the Southeast, Northeast, and Western samplers.

Table 1 also indicates the direction of the wind at each sampling location relative to the active landfill cell. The Downwind designation indicates that the sampler was located predominantly downwind of the active landfill cell during the sampling period. Under these conditions the landfilling operations are likely to contribute to the measured concentrations. The Upwind designation indicates that the sampler was located predominantly upwind from the active cell. The Crosswind designation indicates that the wind was blowing in a direction that did not put the sampler either upwind or downwind with respect to the active cell or that the sampler was not located upwind or downwind for a significant period of time. Under the Upwind and Crosswind conditions the landfilling operations are unlikely to make a significant contribution to the measured concentrations. **Table 2** summarizes the significant cardinal wind directions observed during each sampling period.

Table 1: Summary of Meteorological Conditions and Measured TSP Concentrations for July, August and September of 2024

| Sample Date | Southeast TSP Concentration and Sample Location ^[1] ($\mu\text{g}/\text{m}^3$) | Northeast TSP Concentration and Sample Location ^[1] ($\mu\text{g}/\text{m}^3$) | Western TSP Concentration and Sample Location ^[1] ($\mu\text{g}/\text{m}^3$) |
|-------------|---|---|---|
| 2-Jul-24 | 18 $\mu\text{g}/\text{m}^3$ Upwind | 17 $\mu\text{g}/\text{m}^3$ Crosswind | 45 $\mu\text{g}/\text{m}^3$ Downwind |
| 5-Jul-24 | 29 $\mu\text{g}/\text{m}^3$ Crosswind | 53 $\mu\text{g}/\text{m}^3$ Crosswind | 52 $\mu\text{g}/\text{m}^3$ Crosswind |
| 8-Jul-24 | 31 $\mu\text{g}/\text{m}^3$ Upwind | 46 $\mu\text{g}/\text{m}^3$ Crosswind | 45 $\mu\text{g}/\text{m}^3$ Crosswind |
| 11-Jul-24 | 15 $\mu\text{g}/\text{m}^3$ Downwind | 20 $\mu\text{g}/\text{m}^3$ Crosswind | 20 $\mu\text{g}/\text{m}^3$ Crosswind |
| 14-Jul-24 | Invalid Crosswind | 22 $\mu\text{g}/\text{m}^3$ Crosswind | 23 $\mu\text{g}/\text{m}^3$ Crosswind |
| 17-Jul-24 | Invalid Downwind | 22 $\mu\text{g}/\text{m}^3$ Crosswind | 21 $\mu\text{g}/\text{m}^3$ Crosswind |
| 20-Jul-24 | 19 $\mu\text{g}/\text{m}^3$ Crosswind | 24 $\mu\text{g}/\text{m}^3$ Downwind | 26 $\mu\text{g}/\text{m}^3$ Upwind |
| 23-Jul-24 | Invalid Upwind | 36 $\mu\text{g}/\text{m}^3$ Crosswind | 40 $\mu\text{g}/\text{m}^3$ Crosswind |
| 26-Jul-24 | 13 $\mu\text{g}/\text{m}^3$ Crosswind | 22 $\mu\text{g}/\text{m}^3$ Crosswind | 66 $\mu\text{g}/\text{m}^3$ Crosswind |
| 29-Jul-24 | 19 $\mu\text{g}/\text{m}^3$ Upwind | 26 $\mu\text{g}/\text{m}^3$ Crosswind | 28 $\mu\text{g}/\text{m}^3$ Crosswind |
| 1-Aug-24 | 31 $\mu\text{g}/\text{m}^3$ Crosswind | 40 $\mu\text{g}/\text{m}^3$ Downwind | 30 $\mu\text{g}/\text{m}^3$ Upwind |



| Sample Date | Southeast TSP Concentration and Sample Location ^[1] (µg/m ³) | Northeast TSP Concentration and Sample Location ^[1] (µg/m ³) | Western TSP Concentration and Sample Location ^[1] (µg/m ³) |
|-------------|--|--|---|
| 4-Aug-24 | 28 µg/m ³ Crosswind | 34 µg/m ³ Downwind | 28 µg/m ³ Upwind |
| 7-Aug-24 | 10 µg/m ³ Crosswind | 19 µg/m ³ Upwind | 32 µg/m ³ Downwind |
| 10-Aug-24 | 16 µg/m ³ Crosswind | 20 µg/m ³ Downwind | 16 µg/m ³ Upwind |
| 13-Aug-24 | 21 µg/m ³ Crosswind | 27 µg/m ³ Crosswind | 63 µg/m ³ Downwind |
| 16-Aug-24 | 25 µg/m ³ Upwind | 29 µg/m ³ Crosswind | 44 µg/m ³ Downwind |
| 19-Aug-24 | 20 µg/m ³ Crosswind | 17 µg/m ³ Crosswind | 28 µg/m ³ Crosswind |
| 22-Aug-24 | 42 µg/m ³ Crosswind | 78 µg/m ³ Downwind | 19 µg/m ³ Upwind |
| 25-Aug-24 | 33 µg/m ³ Crosswind | 25 µg/m ³ Crosswind | 25 µg/m ³ Upwind |
| 28-Aug-24 | 19 µg/m ³ Crosswind | 12 µg/m ³ Crosswind | 18 µg/m ³ Crosswind |
| 31-Aug-24 | 20 µg/m ³ Downwind | 4 µg/m ³ Crosswind | 22 µg/m ³ Upwind |
| 3-Sep-24 | 16 µg/m ³ Crosswind | 16 µg/m ³ Upwind | 90 µg/m ³ Downwind |
| 6-Sep-24 | 19 µg/m ³ Crosswind | 26 µg/m ³ Crosswind | 18 µg/m ³ Crosswind |
| 9-Sep-24 | 59 µg/m ³ Crosswind | 69 µg/m ³ Downwind | 24 µg/m ³ Upwind |
| 12-Sep-24 | 19 µg/m ³ Crosswind | Invalid Crosswind | 64 µg/m ³ Downwind |
| 15-Sep-24 | 21 µg/m ³ Upwind | 57 µg/m ³ Crosswind | 29 µg/m ³ Downwind |
| 18-Sep-24 | 22 µg/m ³ Crosswind | 303 µg/m ³ Upwind | 103 µg/m ³ Downwind |
| 21-Sep-24 | Invalid Crosswind | 49 µg/m ³ Upwind | 36 µg/m ³ Downwind |
| 24-Sep-24 | 11 µg/m ³ Upwind | 9 µg/m ³ Crosswind | 32 µg/m ³ Downwind |
| 27-Sep-24 | 30 µg/m ³ Crosswind | 29 µg/m ³ Upwind | 48 µg/m ³ Downwind |
| 30-Sep-24 | 16 µg/m ³ Crosswind | 18 µg/m ³ Upwind | Invalid Downwind |

Notes: [1] Directional references indicate the direction of the wind at each sampling location during the sampling period relative to the active landfill cell, as described above.



Table 2: Summary of Meteorological Conditions for the Sample Dates in July, August and September of 2024

| Sample Date | Range of Mean Wind Speeds ^[1] (km/h) | Dominant Wind Direction ^[2] (compass) |
|-------------|--|---|
| 2-Jul-24 | 6-23 | ESE, S, SSE |
| 5-Jul-24 | 1-14 | SSE, SW |
| 8-Jul-24 | 3-19 | SE, SSE, S |
| 11-Jul-24 | 2-23 | NW, NNW |
| 14-Jul-24 | 9-20 | SSE, S, SSW, SW, WSW |
| 17-Jul-24 | 2-12 | NW, NNW |
| 20-Jul-24 | 2-11 | S, SSE, WSW, W, WNW |
| 23-Jul-24 | 2-17 | SE, SSE, S, SW |
| 26-Jul-24 | 1-13 | N, NNE, NE, E |
| 29-Jul-24 | 5-15 | ESE, SE, SSE |
| 1-Aug-24 | 2-10 | SW, WSW, W |
| 4-Aug-24 | 4-9 | S, WSW, W, WNW, NW |
| 7-Aug-24 | 5-22 | NE, ENE |
| 10-Aug-24 | 7-21 | SW, WSW, W |
| 13-Aug-24 | 2-10 | NNW, N, NNE, ENE, ESE, SSW |
| 16-Aug-24 | 6-21 | ESE, SE, SSE |
| 19-Aug-24 | 7-22 | N, NNE, NW, NNW |
| 22-Aug-24 | 0-8 | S, SW, WSW, W, NW |
| 25-Aug-24 | 3-15 | ESE, SE, SSE |
| 28-Aug-24 | 4-13 | N, SW, NW, NNW |
| 31-Aug-24 | 2-13 | ESE, WNW, NW |
| 3-Sep-24 | 0-11 | E, ESE, SE, SSE |
| 6-Sep-24 | 3-20 | WNW, NW, NNW |
| 9-Sep-24 | 3-18 | N, NNW, SE, SSE, S, SSE, SW, WSW |
| 12-Sep-24 | 4-14 | E, ESE, SE |
| 15-Sep-24 | 4-18 | ESE, SE, SSE |
| 18-Sep-24 | 2-13 | E, ESE |
| 21-Sep-24 | 3-15 | E, ESE, SE, SSE, NW |
| 24-Sep-24 | 2-19 | E, ESE, SE, SSE |
| 27-Sep-24 | 9-28 | ENE, E |
| 30-Sep-24 | 2-20 | ENE, E, ESE |

Notes: [1] Based on average wind speed per wind direction.

[2] Based on the direction from which the wind is blowing.

Calm - Less than 1.8 kilometers per hour.

Figures 1a through **2e**, found in the **figure section** of this report, illustrate the sample location, measured TSP concentration, and the wind-rose depicting the wind conditions for each sample period. The wind-roses express the percentage of time the wind is blowing from each direction and provides the distribution of wind speeds observed for each direction.

A summary of the calculated statistics for measured concentrations at the Twin Creeks Environmental Centre sampling locations is presented in **Table 3**.



Table 3: Calculated Statistics for Measured 24-hour Averaged TSP Concentrations ($\mu\text{g}/\text{m}^3$)

| Sample Locations | No. of Valid Samples | Percentiles (%) | | | Maximum | Arithmetic Mean | Number of Measurements Above the AAQC ($120 \mu\text{g}/\text{m}^3$) |
|------------------|----------------------|-----------------|----|----|---------|-----------------|--|
| | | 50 | 70 | 90 | | | |
| Southeast | 27 | 20 | 26 | 32 | 59 | 23 | 0 |
| Northeast | 30 | 25 | 34 | 58 | 303 | 39 | 1 |
| Western | 30 | 30 | 44 | 64 | 103 | 38 | 0 |

The MECP 24-hour Ambient Air Quality Criteria (AAQC) for TSP ($120 \mu\text{g}/\text{m}^3$) was exceeded one (1) time during the third quarter sampling period:

- On September 18th, 2024, the AAQC was exceeded at the Northeastern station, with a concentration of $303 \mu\text{g}/\text{m}^3$.

Consistent with the MECP approved monitoring/reporting requirements for TSP at the landfill, the exceedances were reported to the MECP within the 2-week notification requirements.

Further details of the notification and discussion of the event are provided in **Attachment C**.

In agreement with the Warwick Township Technical Review Team, only the highest TSP filter weight for each station was analyzed for airborne metal concentrations per 4 sample sets.

During the third quarter, airborne metals were assessed on July 5 (Northeast and Western), July 8 (Southeast), July 20 ((Southeast, Northeast and Western), July 26 (Western), August 1 (Southeast and Northeast), August 4 (Southeast & Northeast), August 13 (Western), August 16 (Western). August 22 (Southeast & Northeast), August 31 (Southeast), September 3 (Western), September 6 (Northeast), September 9 (Southeast), September 18 (Northeast and Western), September 21 (Southeast), September 27 (Southeast and Western). All measured concentrations of airborne metals were below their respective AAQC's as outlined in Ontario Regulation 419. The summary of Q3 total suspended particulate and metals results are provided in **Attachment B**. Laboratory analytical reports will be provided in the Annual Report.

CURRENT MITIGATION MEASURES

The Twin Creeks Environmental Centre has created a Best Management Practices Plan for dust that is implemented at the site. All Site employees are trained in the contents of the plan. Through the combined efforts of the mitigation measures and implementation of the Dust Management Plan, Twin Creeks Environmental Centre plans on limiting the number of TSP exceedances during the periods of heavy construction and beyond.



Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2402553
November 18, 2024

Currently, particulate emission mitigation measures are in place at the Twin Creeks Environmental Centre and consist of watering on-site roadways and construction sites as well as a number of other practices as outlined in the Best Management Practices Plan for dust. The practices listed above will not occur if precipitation events cause these activities to become redundant or if the ground is sufficiently wet from previous precipitation events.

CLOSING

Please feel free to contact us with any questions or comments that you may have with respect to this submission.

Yours very truly,

RWDI AIR Inc.

A handwritten signature in black ink, appearing to read 'Khalid Hussein', is positioned below the company name.

Khalid Hussein, P.Eng.
Project Manager

KAMH/klm

Attach.



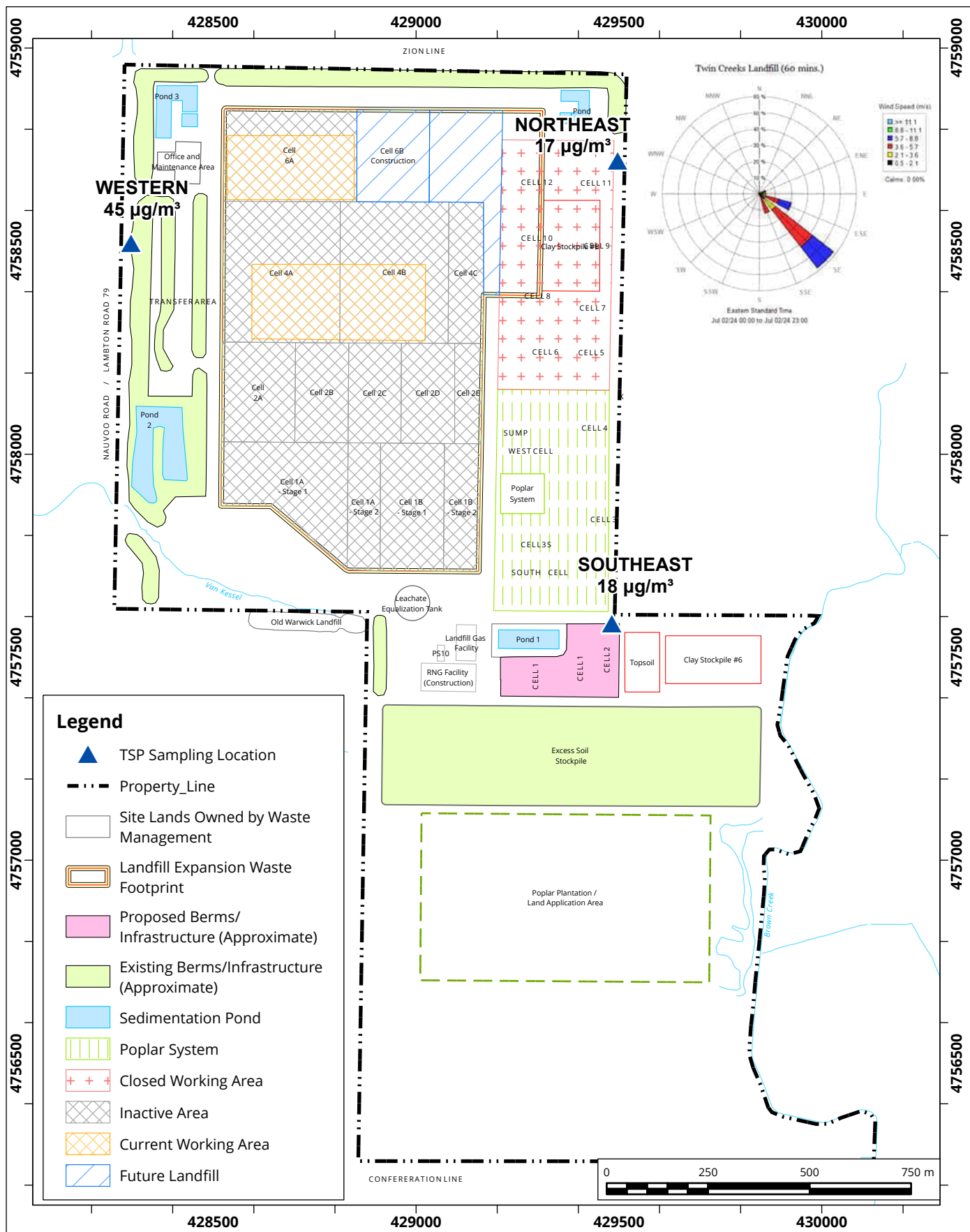
GENERAL STATEMENT OF LIMITATIONS

This report entitled “Third Quarter 2024 TSP and Metals Report”, dated November 18, 2024, was prepared by RWDI AIR Inc. (“RWDI”) for Waste Management of Canada Corporation (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). This report was prepared using scientific principles, published methodologies and professional judgment in assessing available information and data. The findings presented within this document are based on available data within the limits of the existing information, budgeted scope of work, and schedule. The conclusions contained in this report are based on the information available to RWDI when this report was prepared; subsequent changes made by the Client after the date of this report have not been reflected in the conclusions.

This report was prepared for the exclusive use of Waste Management of Canada Corporation and the MECP. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. RWDI accepts no responsibility for damages, if any, suffered by any third party as result of decisions made or actions based on this report.



FIGURES



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: July 2, 2024

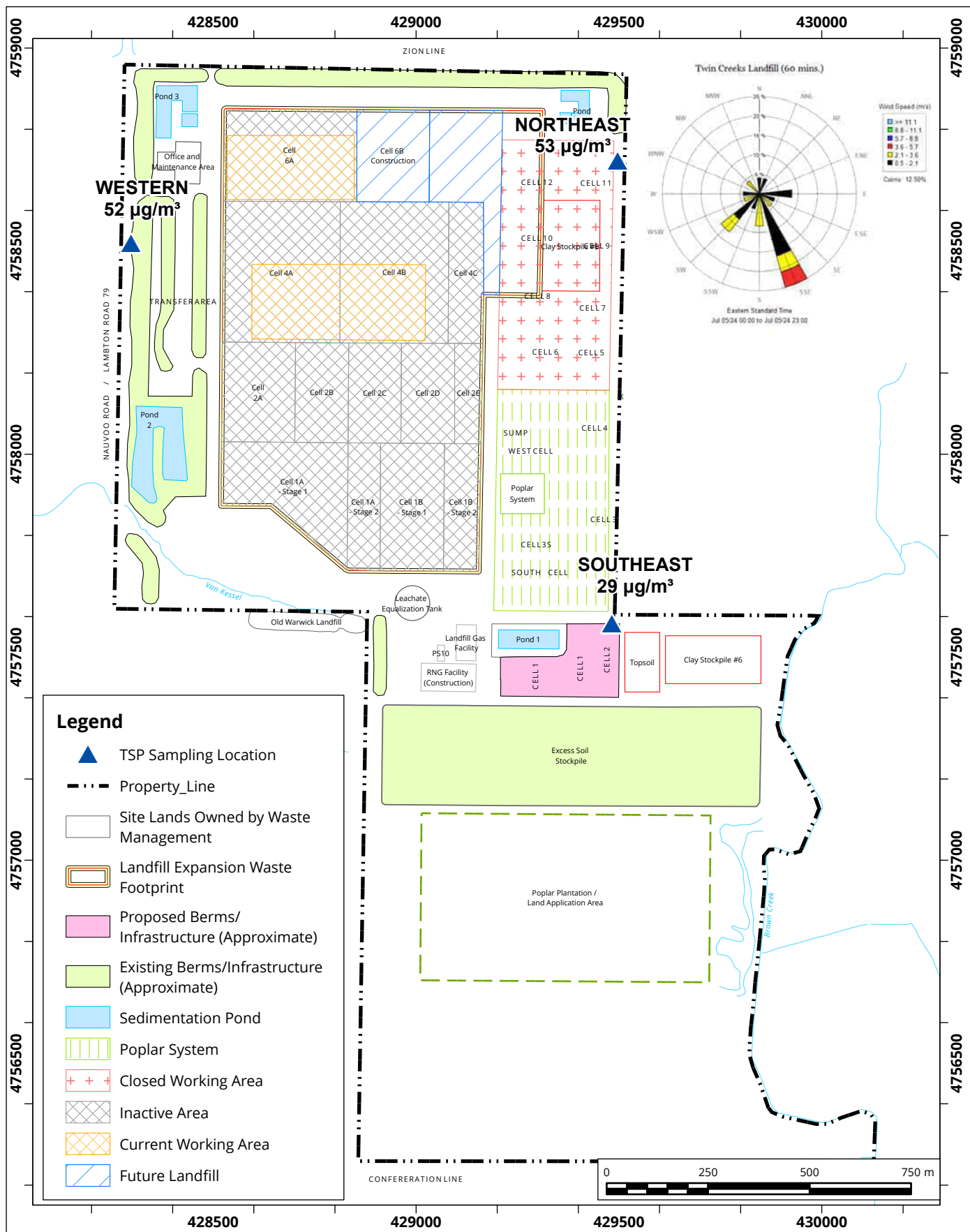
Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1a |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: July 5, 2024

Map Projection: NAD 1983 UTM Zone 17N

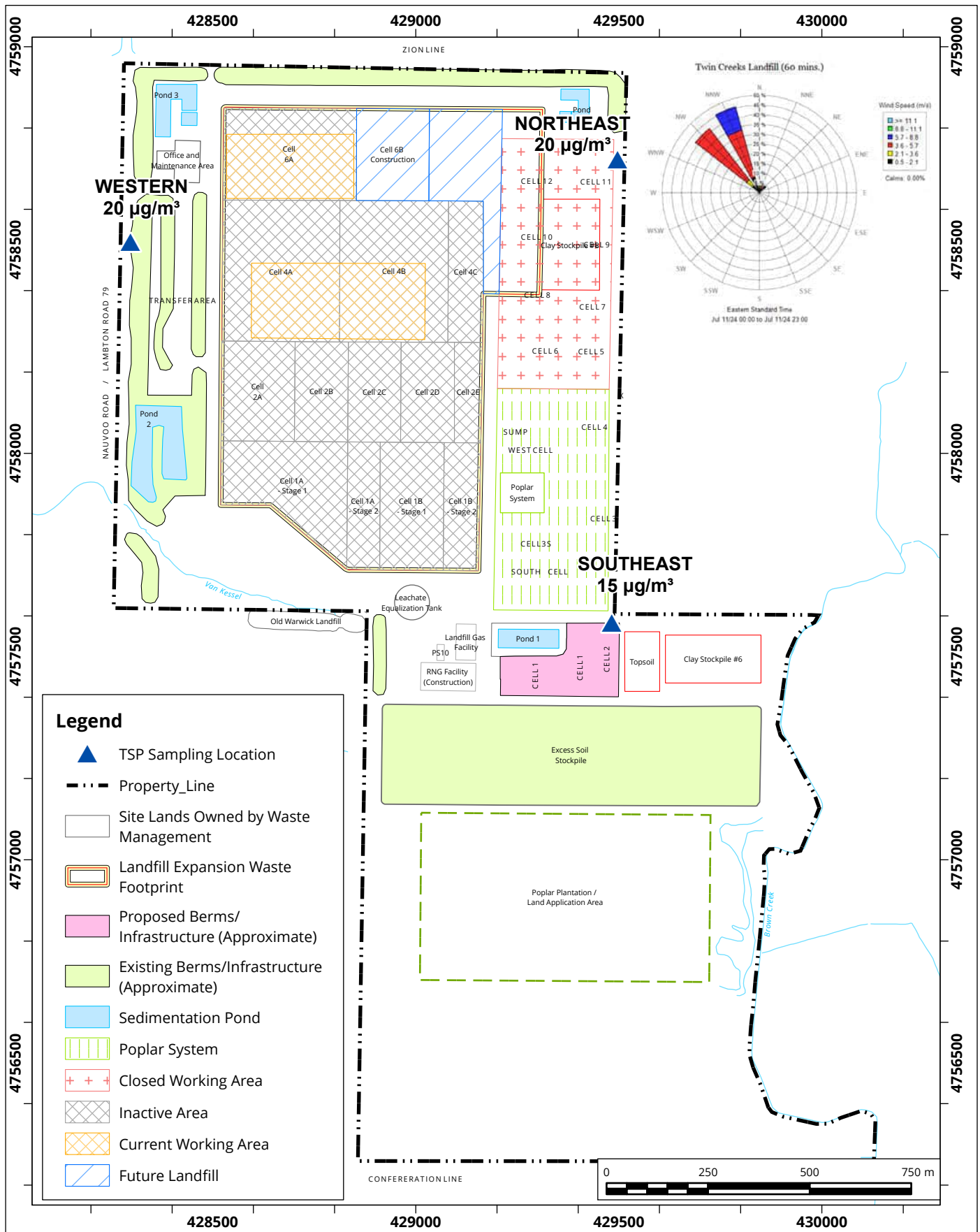
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1b |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: July 11, 2024

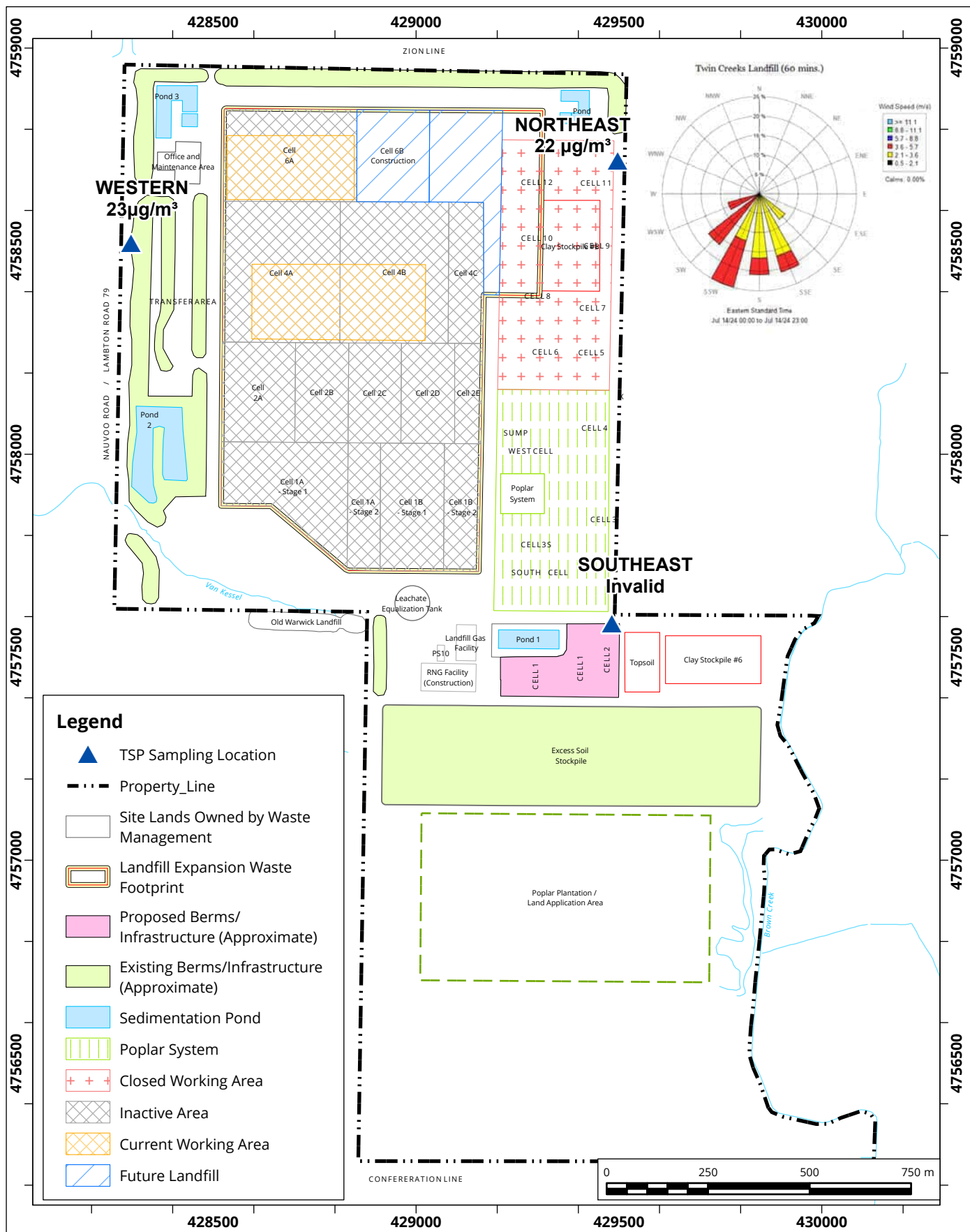
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1d |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: July 14, 2024

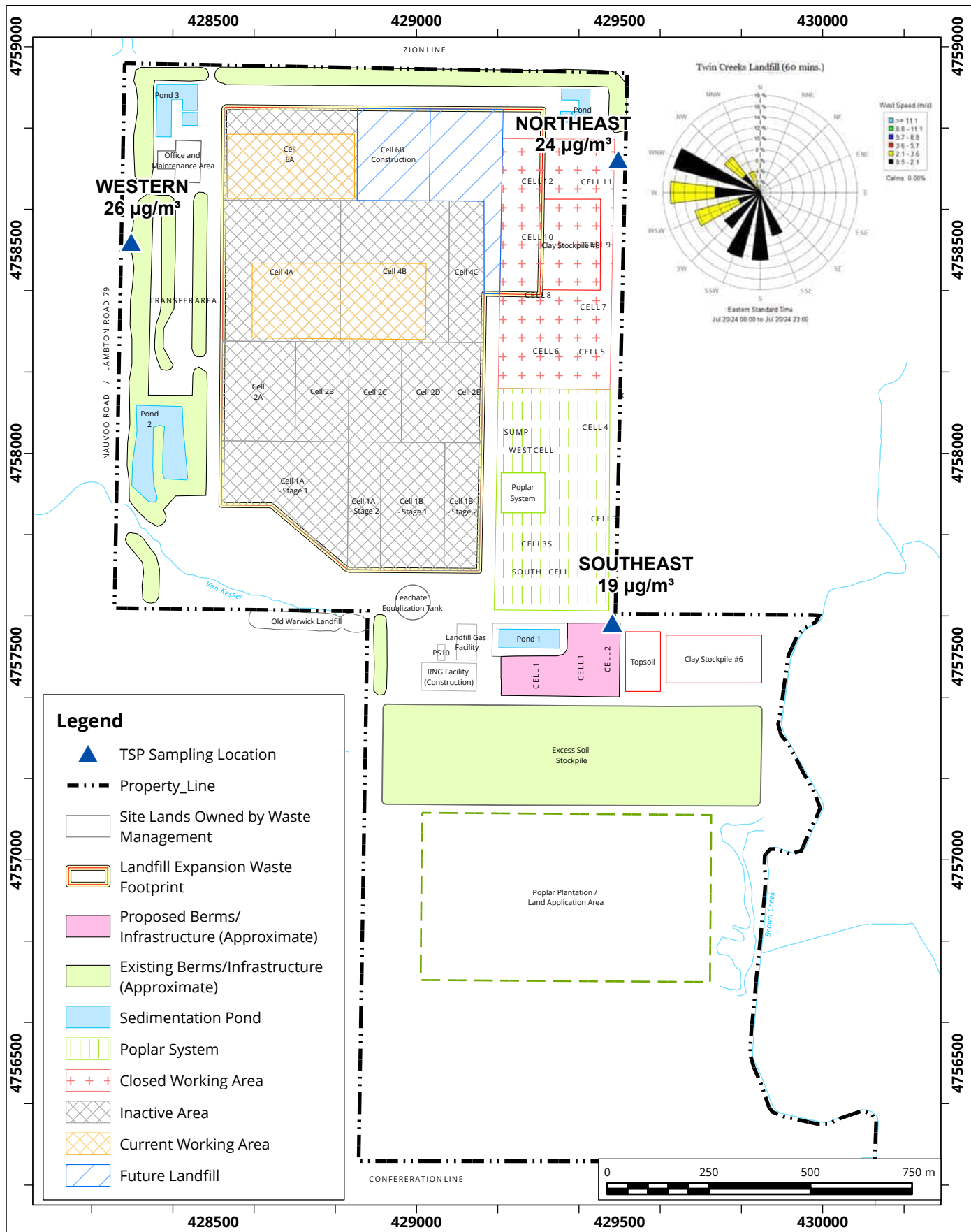
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1e |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





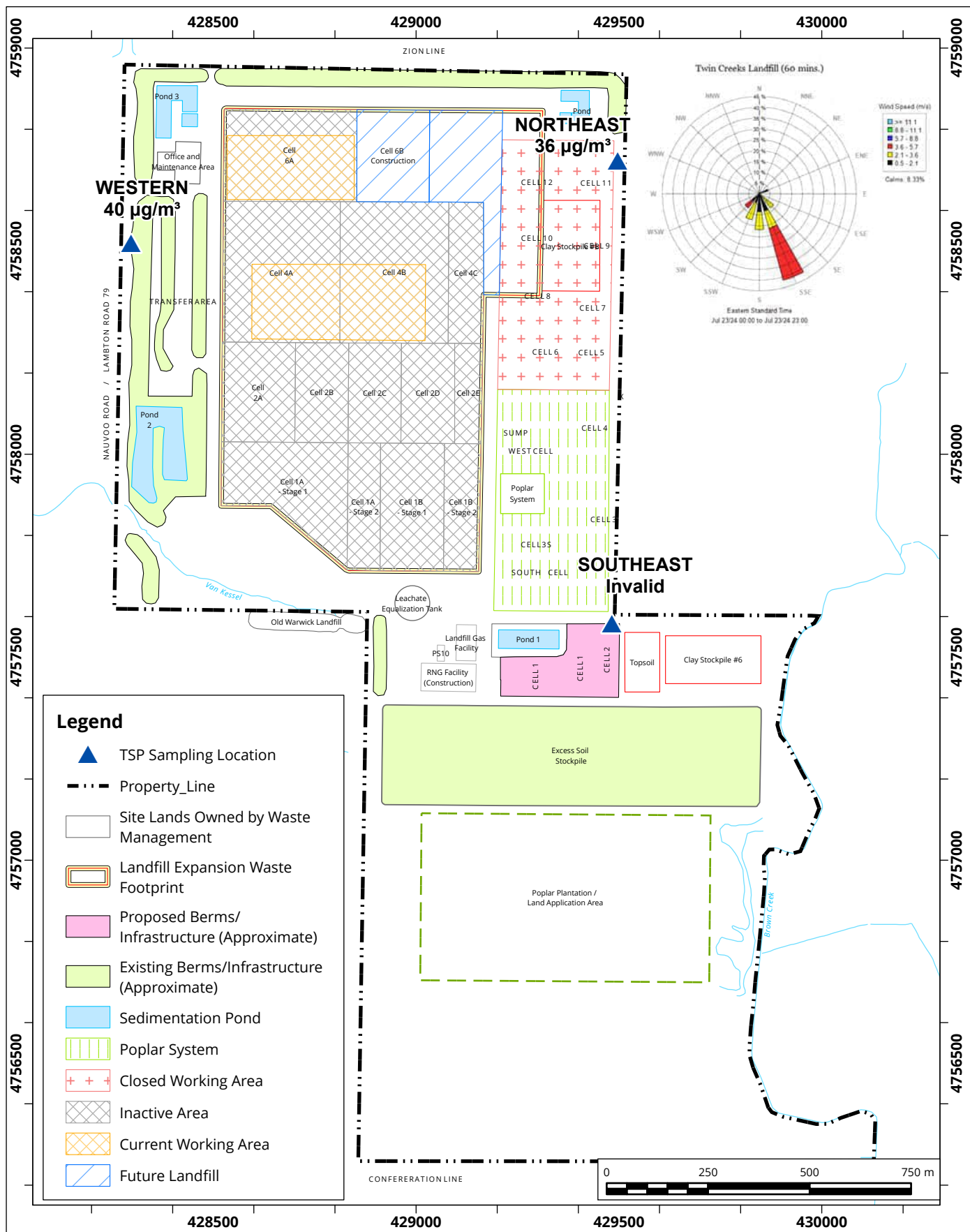
Site Plan Showing Sampling Locations and Wind Rose Sampling Period: July 20, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: July 23, 2024

Map Projection: NAD 1983 UTM Zone 17N

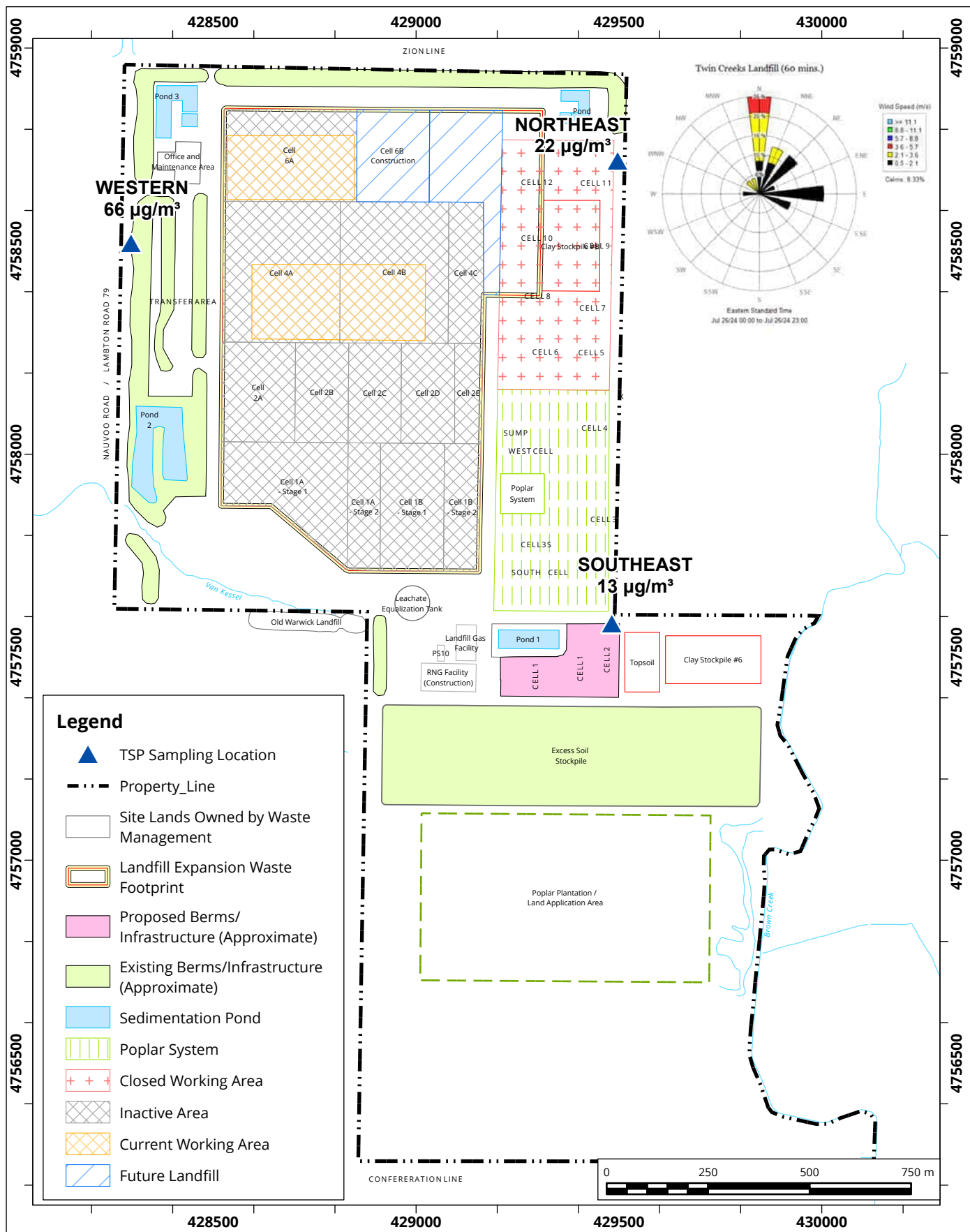
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|---------------------------|------------|
| Drawn by: AXT | Figure: 1h |
| Approx. Scale: 1:13,000 | |
| Date Revised: Oct 9, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: July 26, 2024

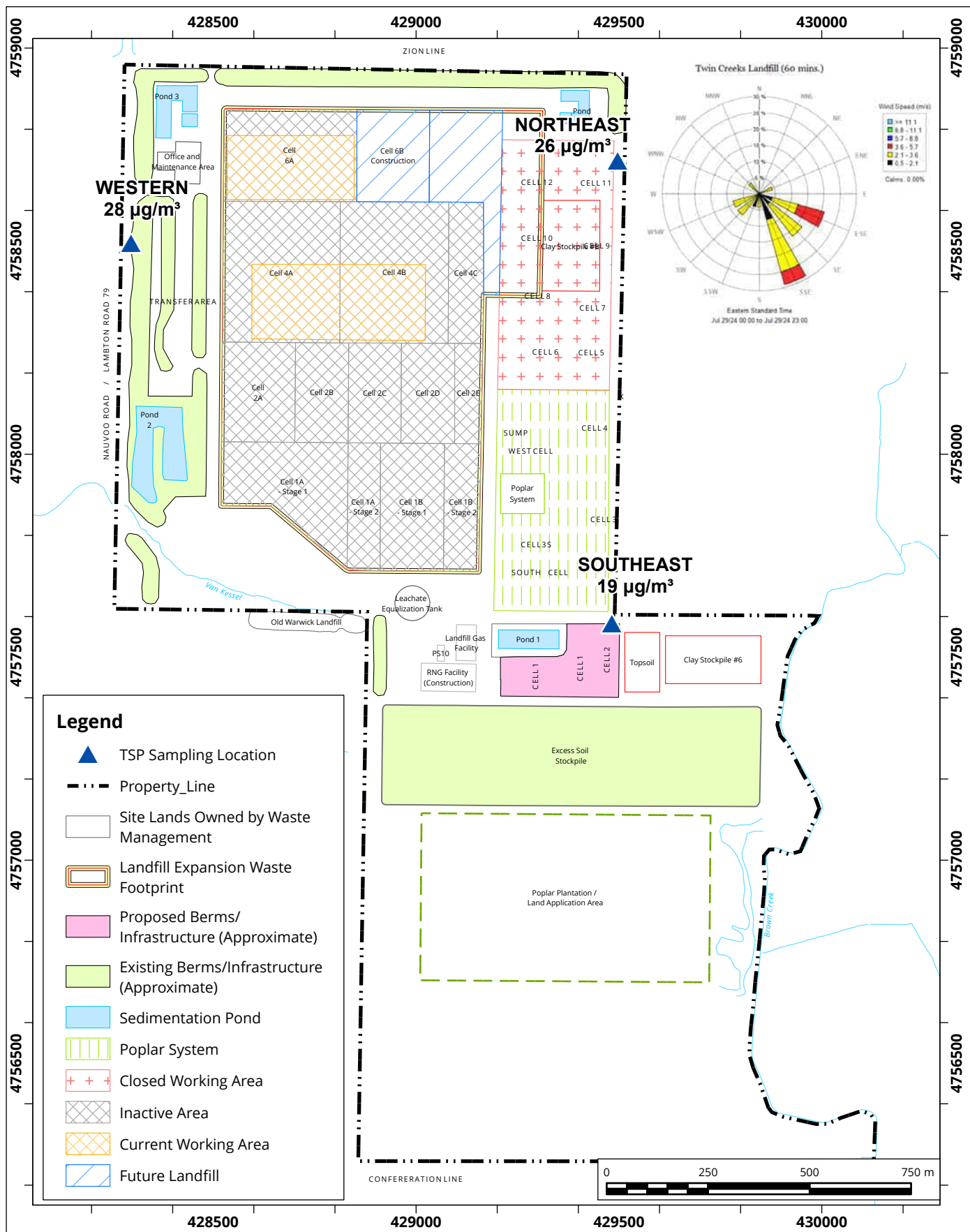
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1i |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: July 29, 2024

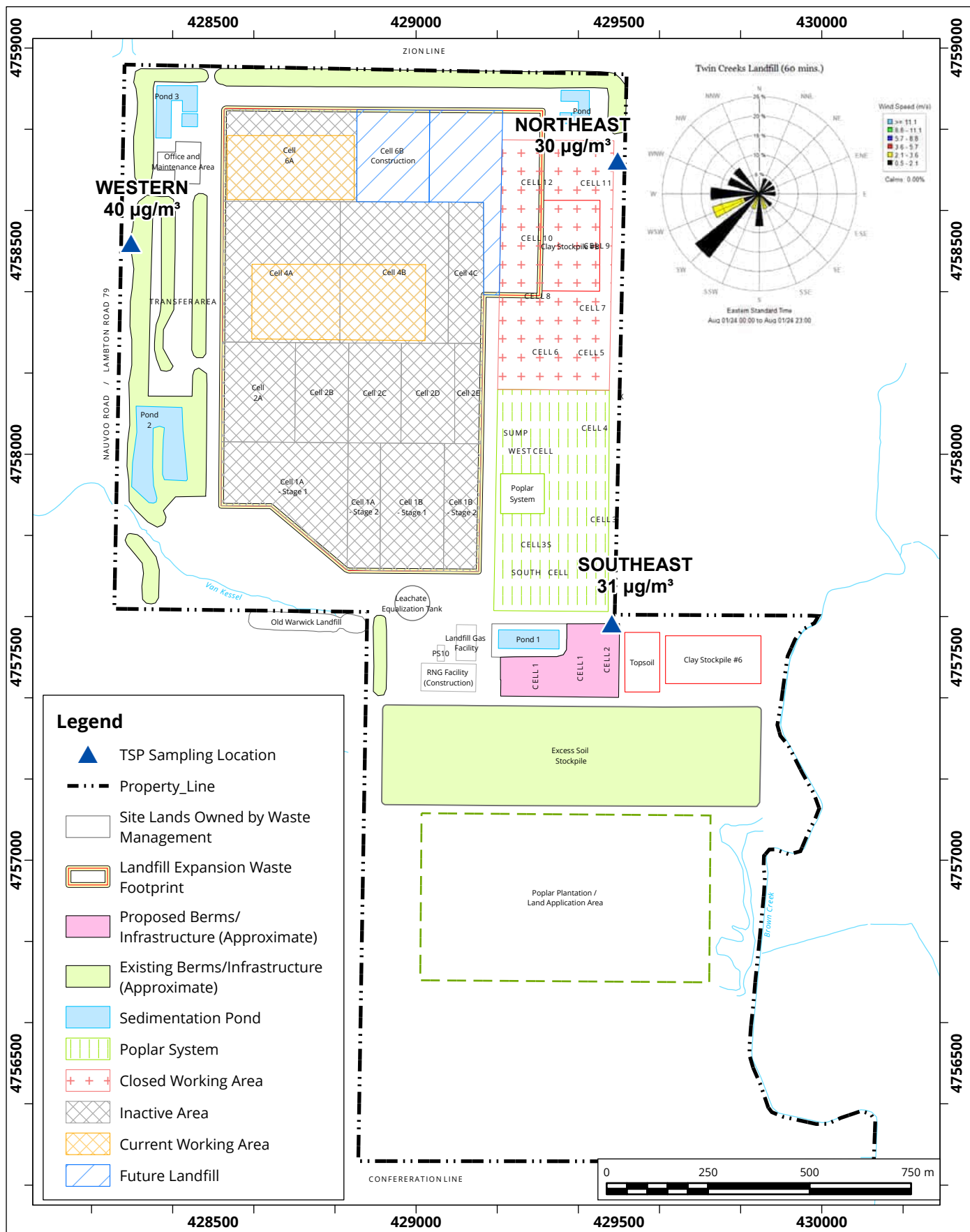
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1j |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 1, 2024

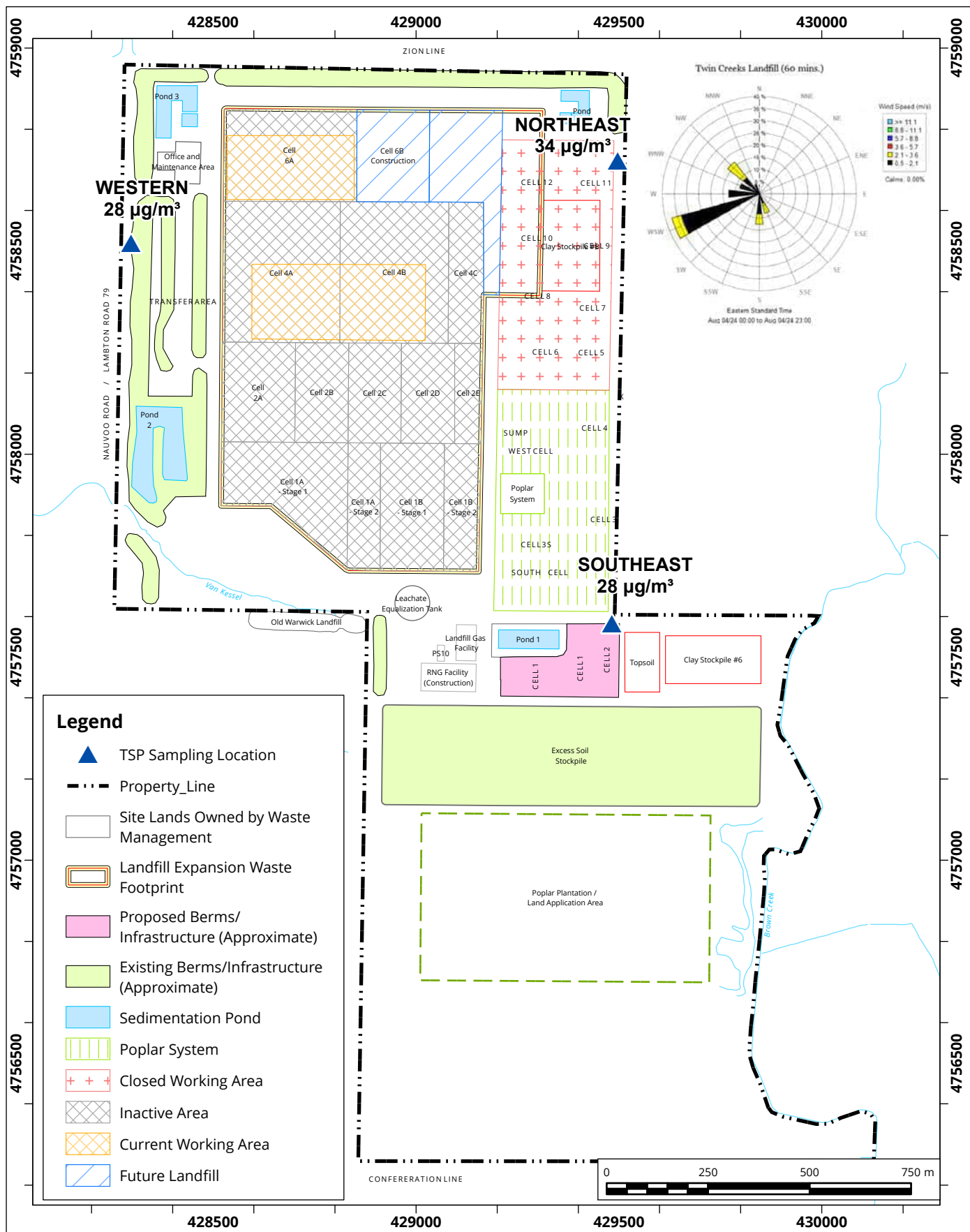
Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1k |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Nov 18, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 4, 2024

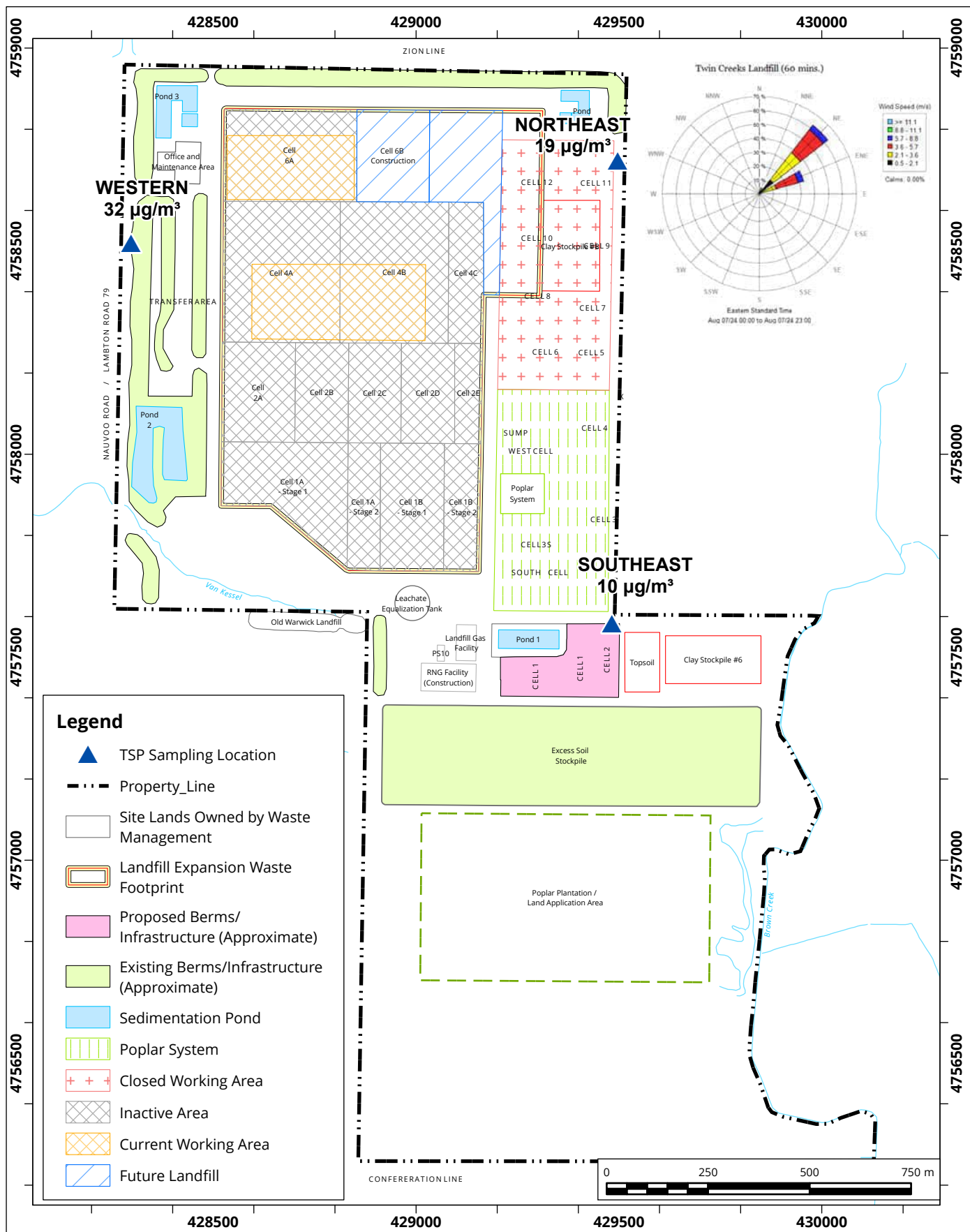
Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1I |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 7, 2024

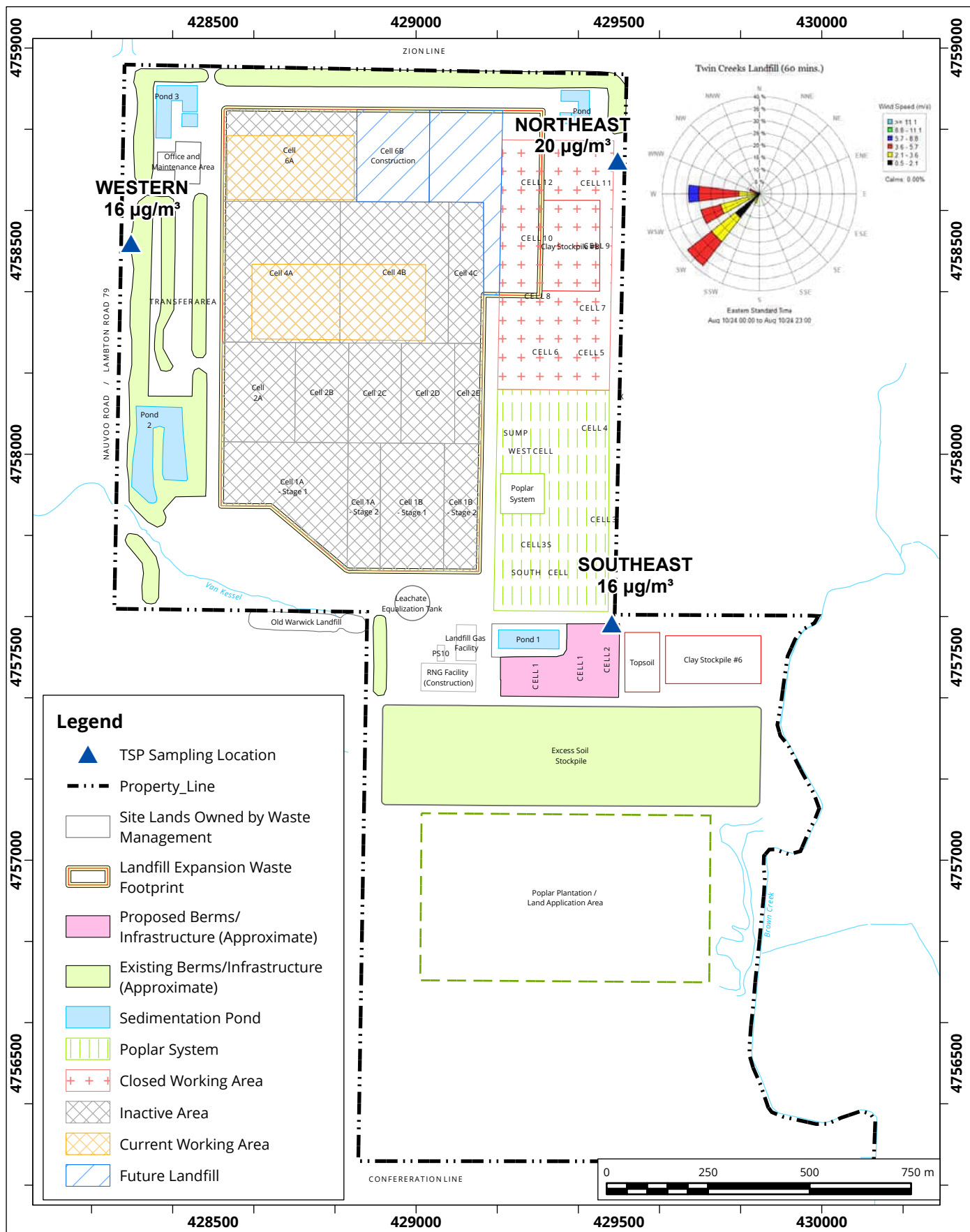
Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1m |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 10, 2024

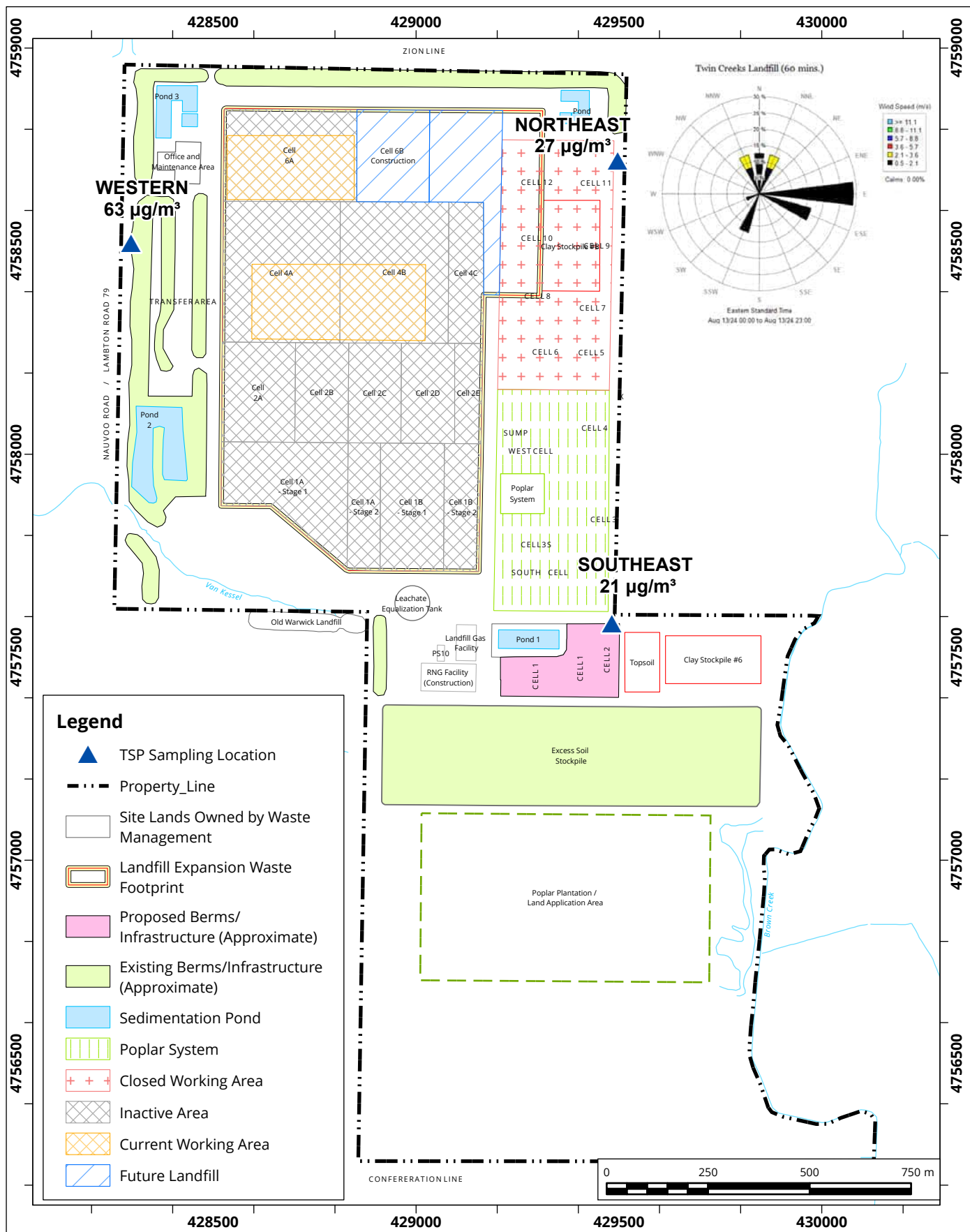
Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1n |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 13, 2024

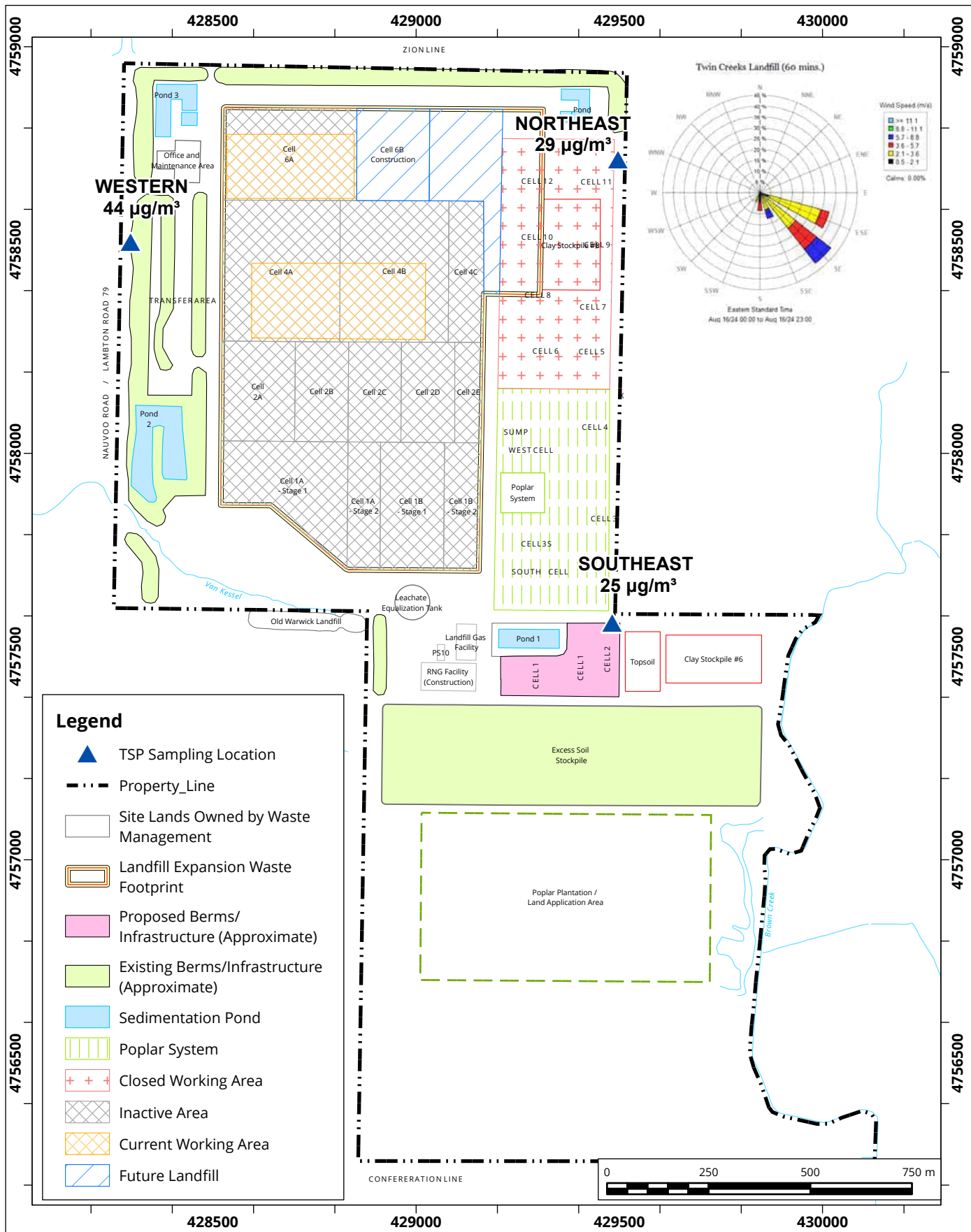
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1o |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 16, 2024

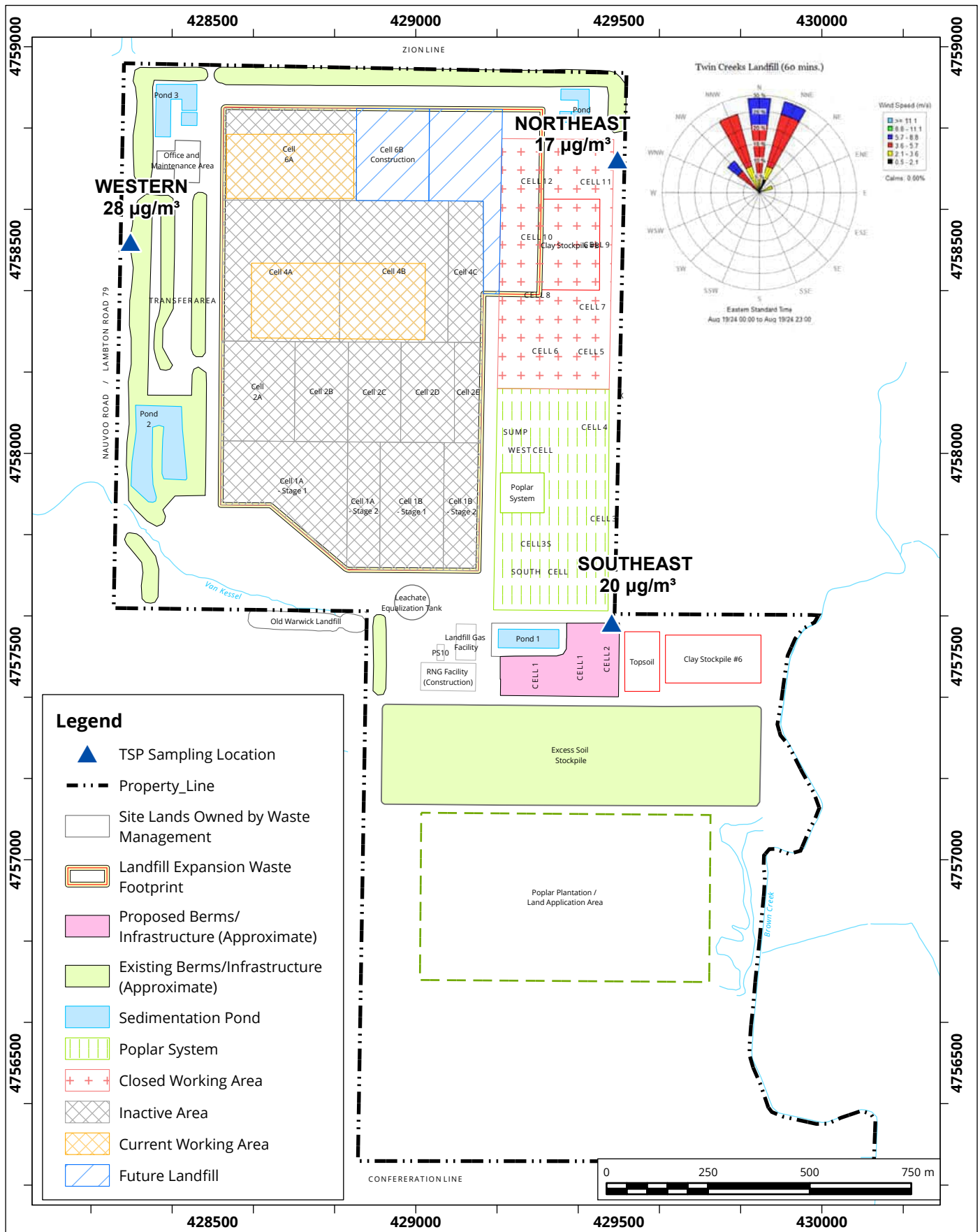
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|---------------------------|------------|
| Drawn by: AXT | Figure: 1p |
| Approx. Scale: 1:13,000 | |
| Date Revised: Oct 9, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 19, 2024

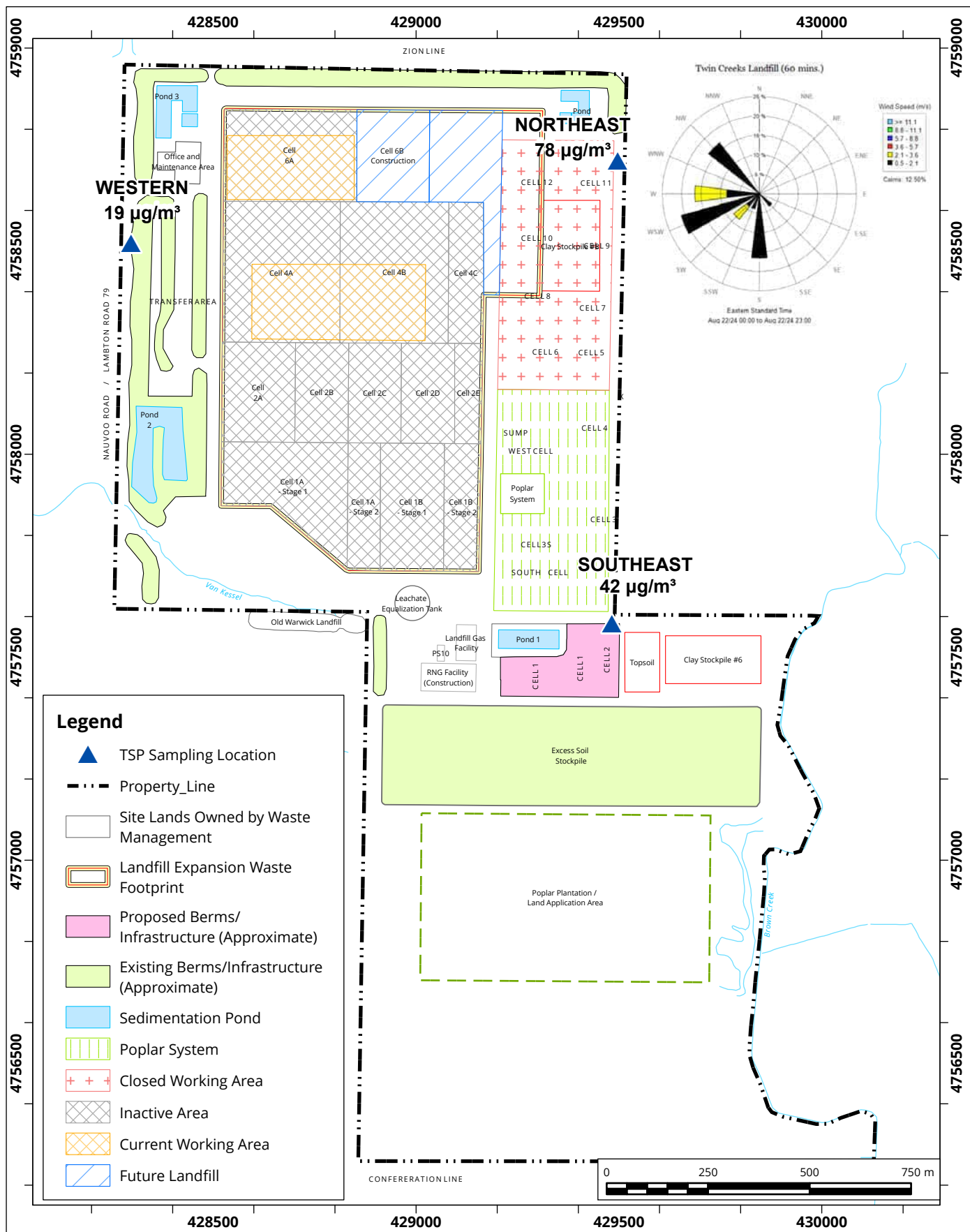
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|---------------------------|------------|
| Drawn by: AXT | Figure: 1q |
| Approx. Scale: 1:13,000 | |
| Date Revised: Oct 9, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 22, 2024

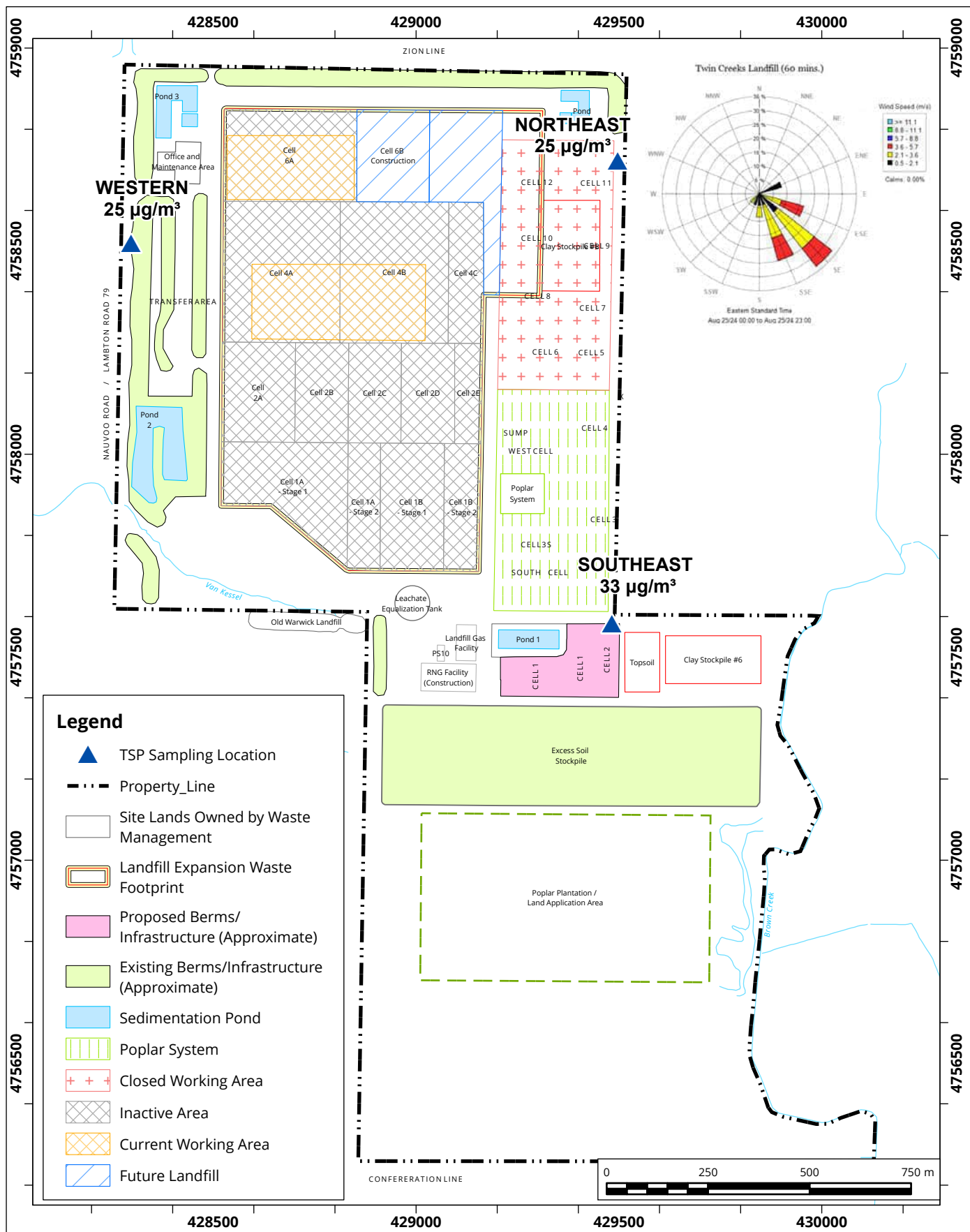
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1r |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 25, 2024

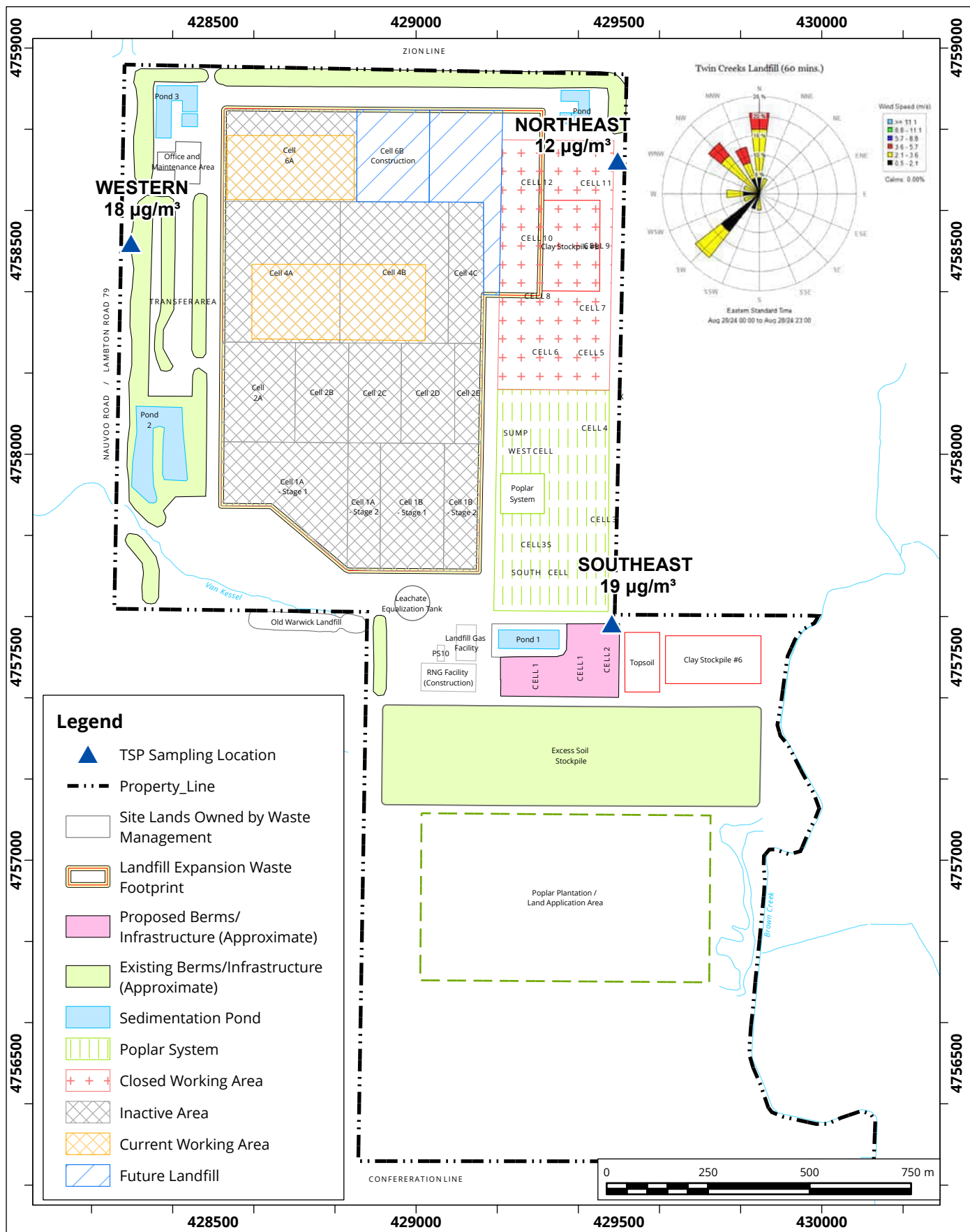
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|---------------------------|------------|
| Drawn by: AXT | Figure: 1s |
| Approx. Scale: 1:13,000 | |
| Date Revised: Oct 9, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 28, 2024

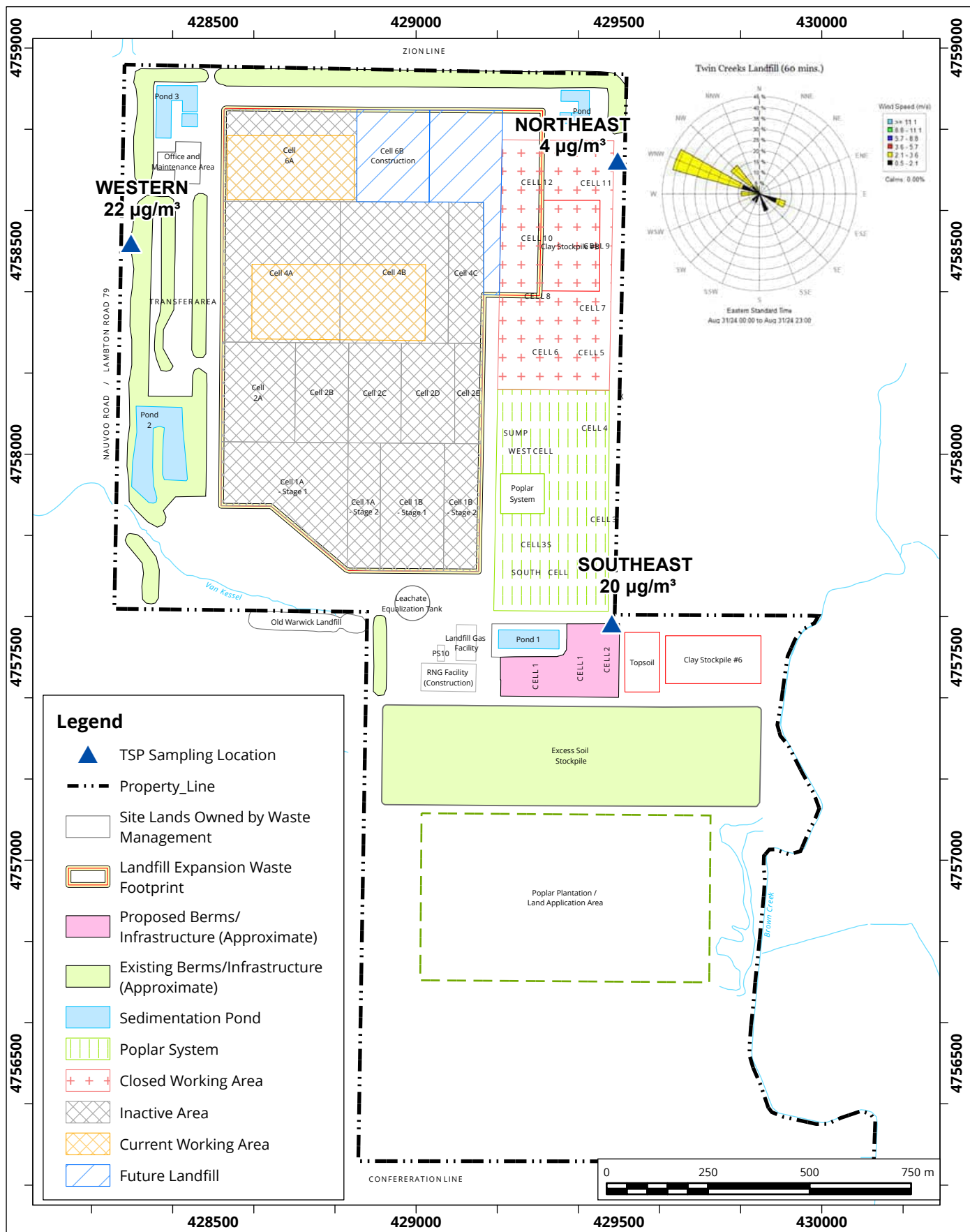
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1t |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 9, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: August 31, 2024

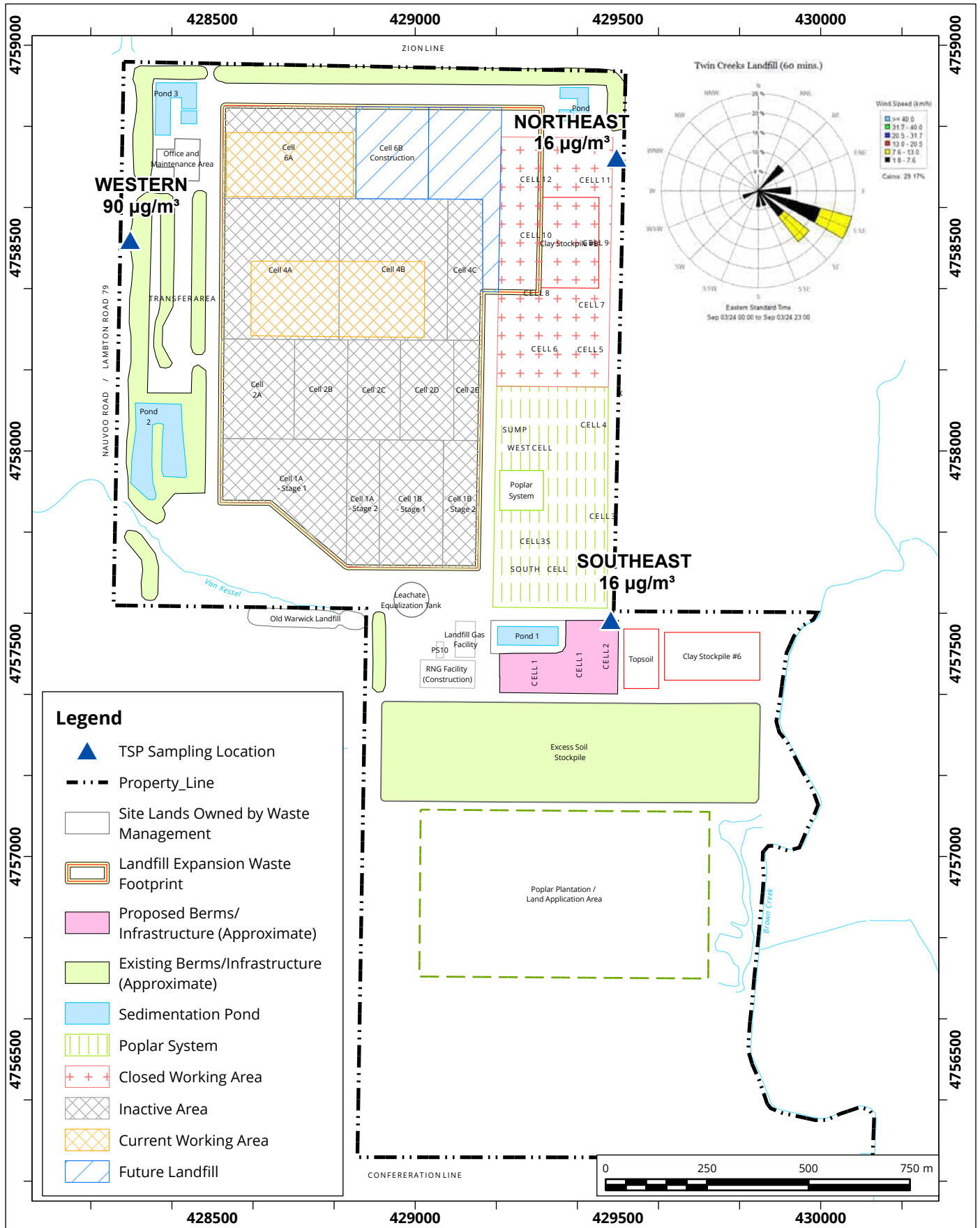
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|---------------------------|------------|
| Drawn by: AXT | Figure: 1u |
| Approx. Scale: 1:13,000 | |
| Date Revised: Oct 9, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 3, 2024

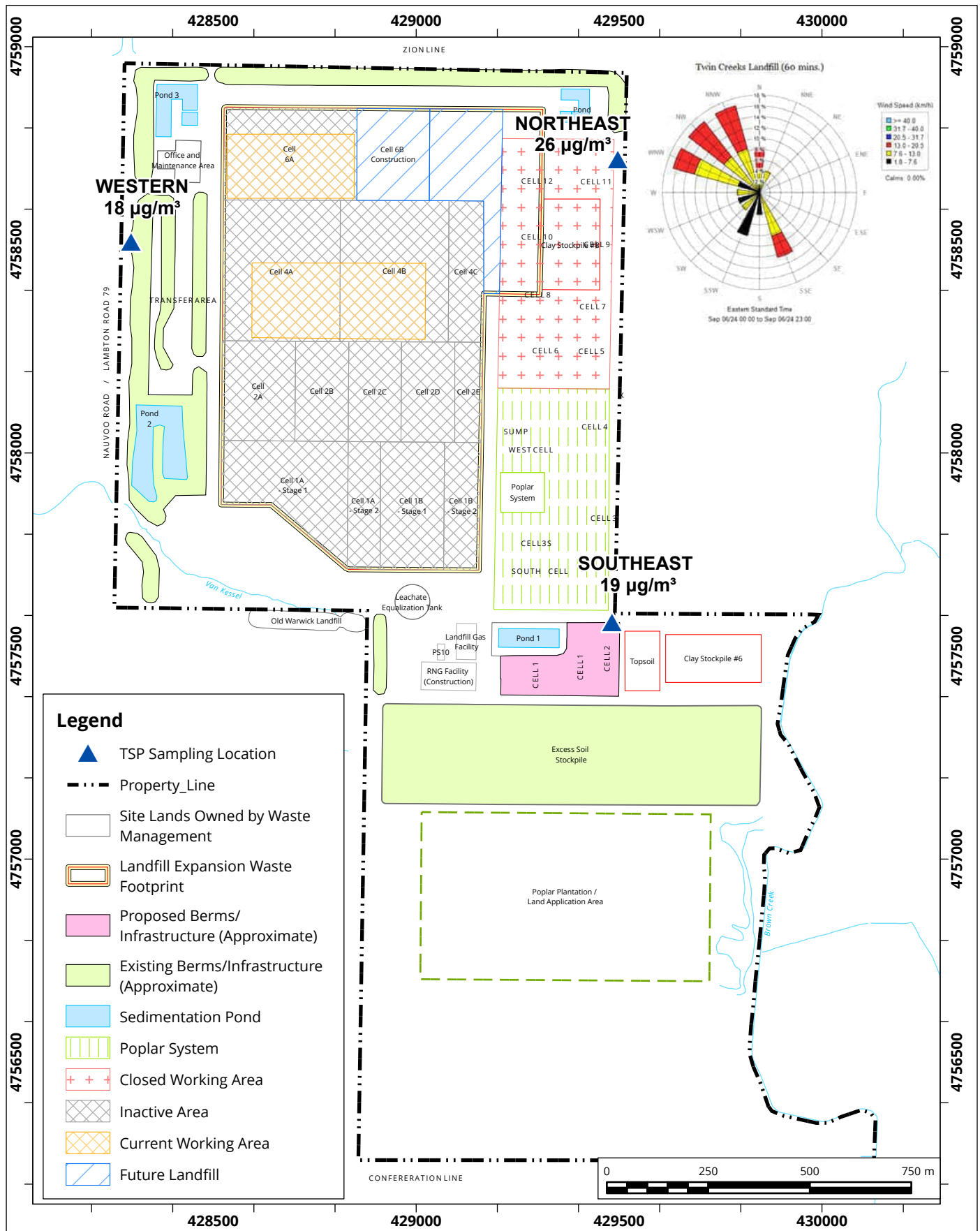
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1v |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 24, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 6, 2024

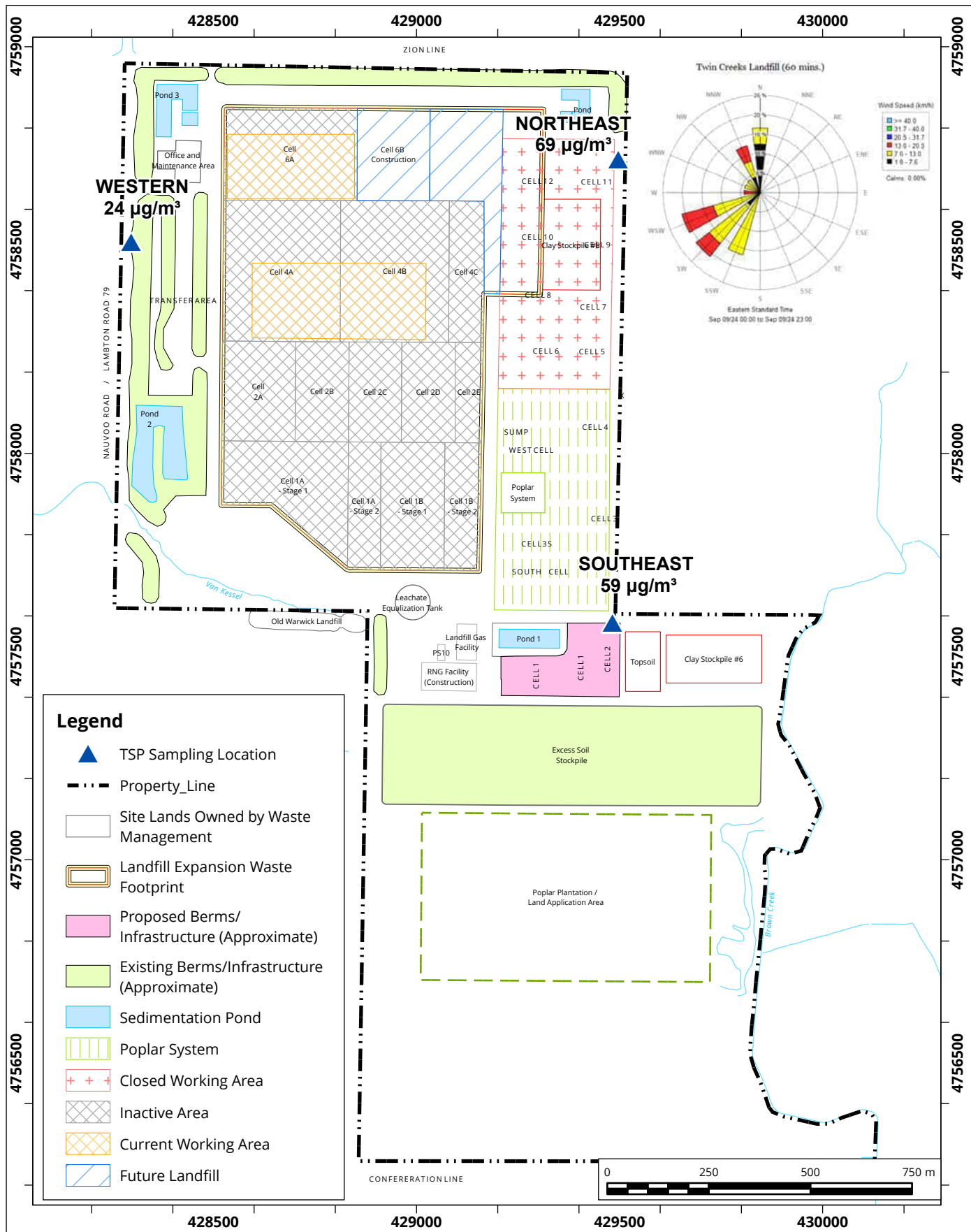
Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1w |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 24, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 9, 2024

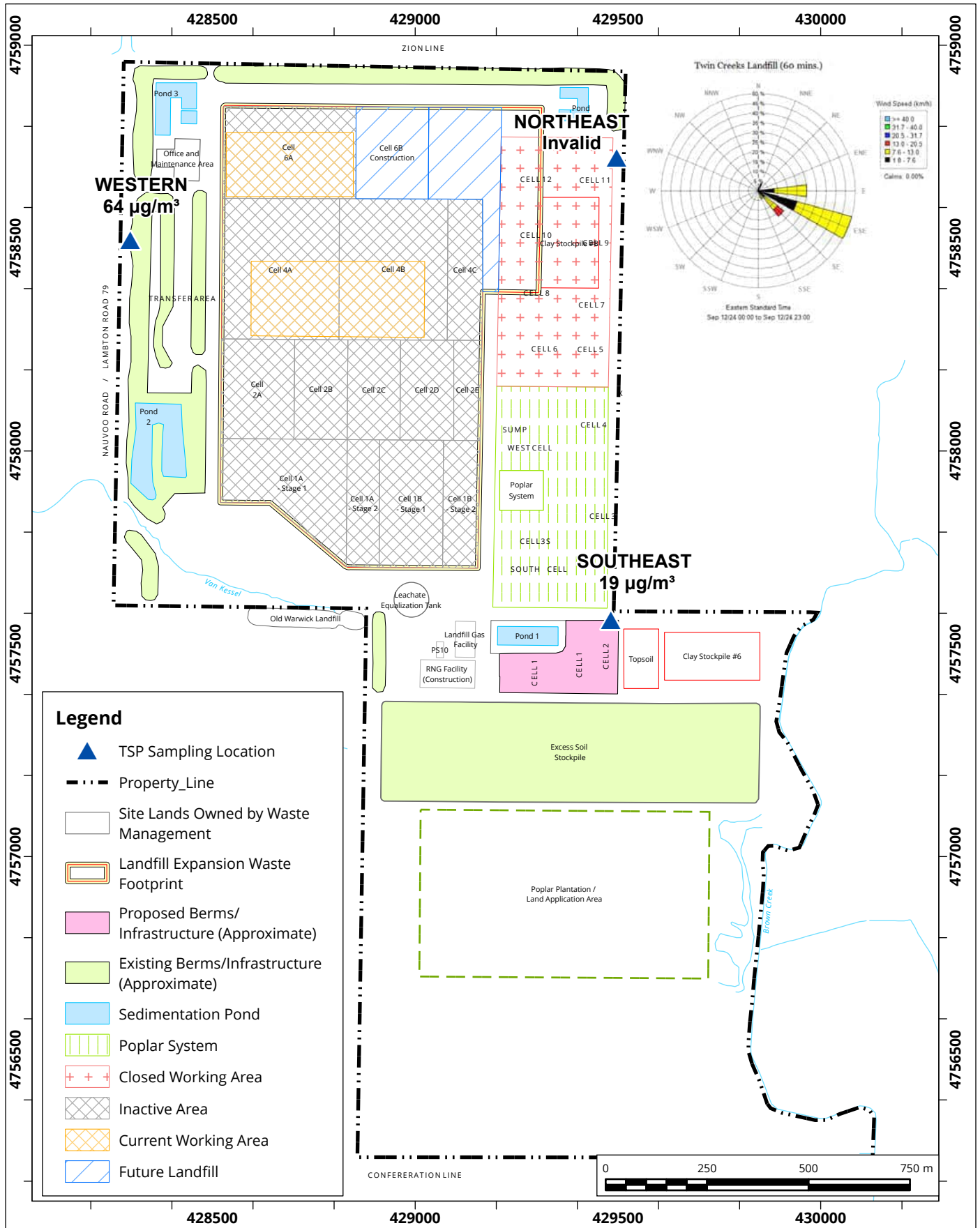
Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1x |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 24, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 12, 2024

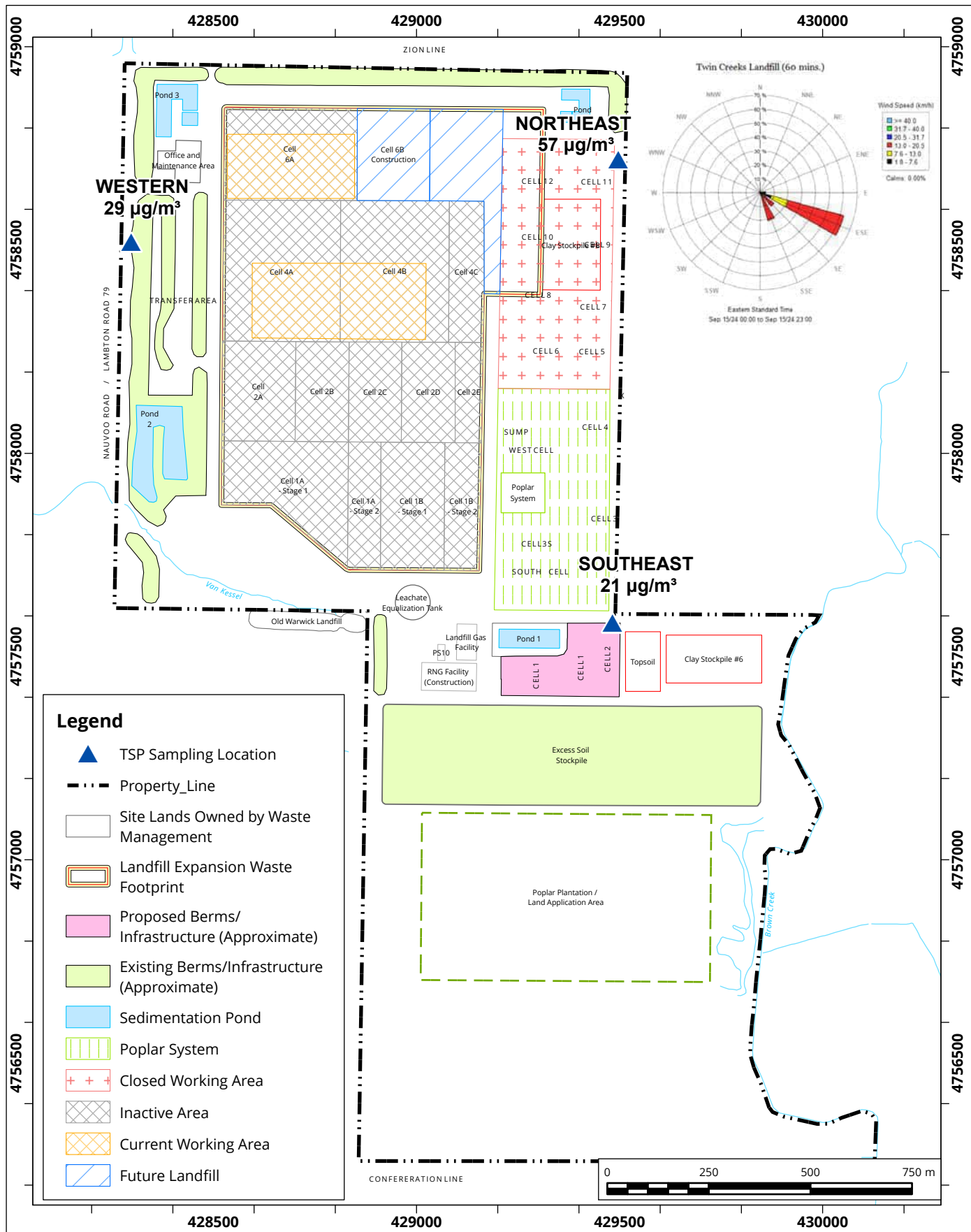
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1y |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 24, 2024 |





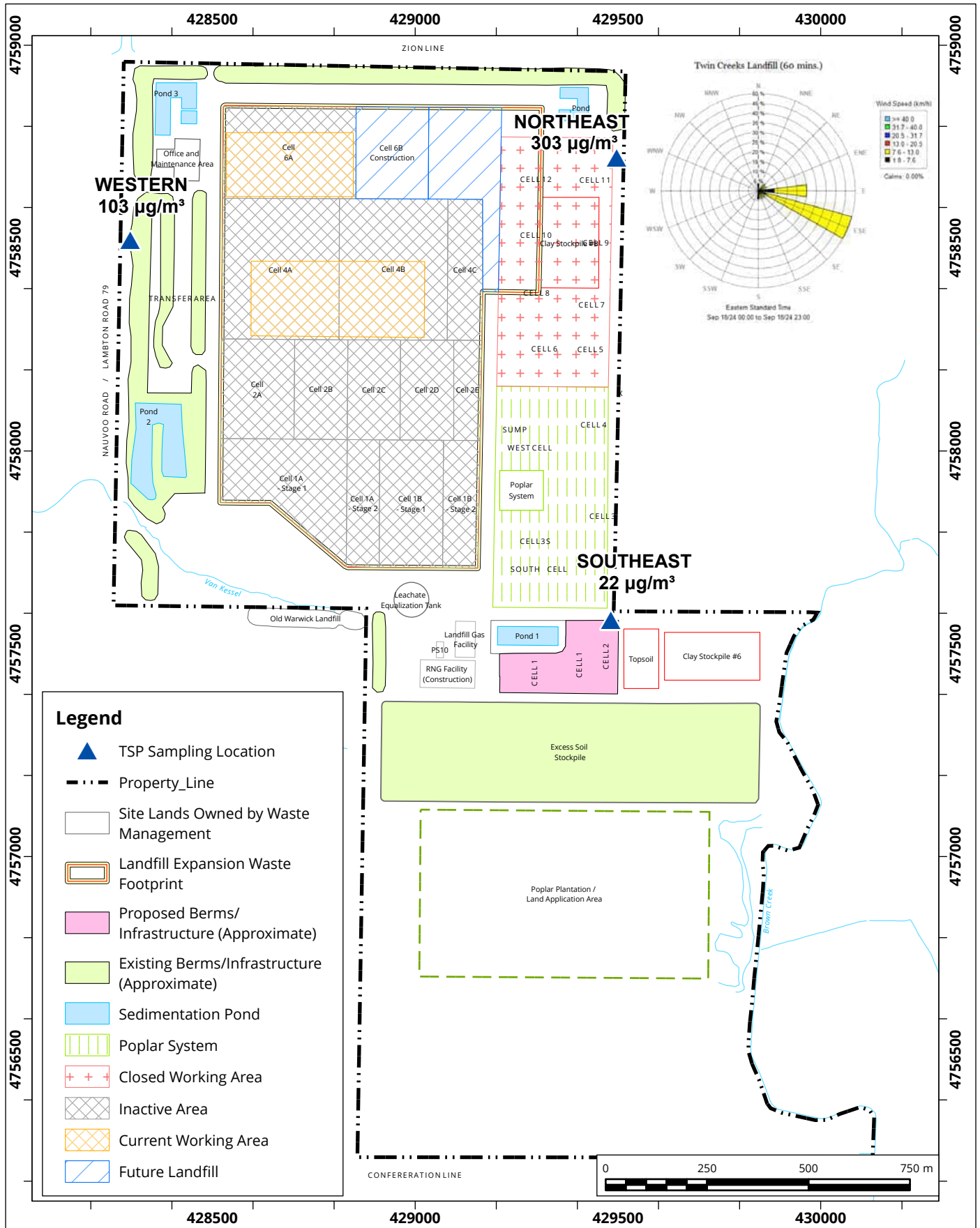
Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 15, 2024

Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario

True North
 Project #: 2402553

Drawn by: AXT
 Figure: 1z
 Approx. Scale: 1:13,000
 Date Revised: Oct 24, 2024





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 18, 2024

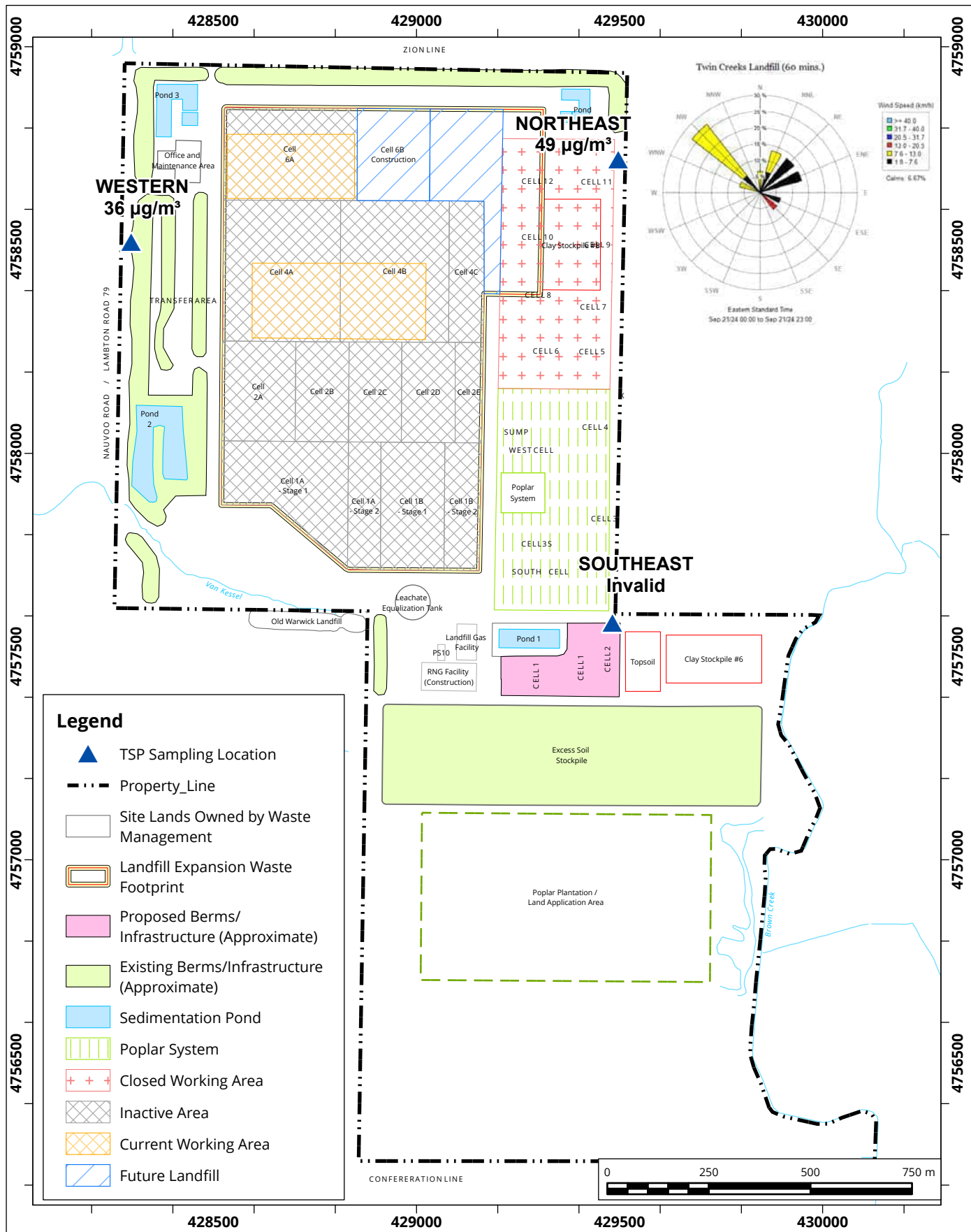
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 2a |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 24, 2024 |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 21, 2024

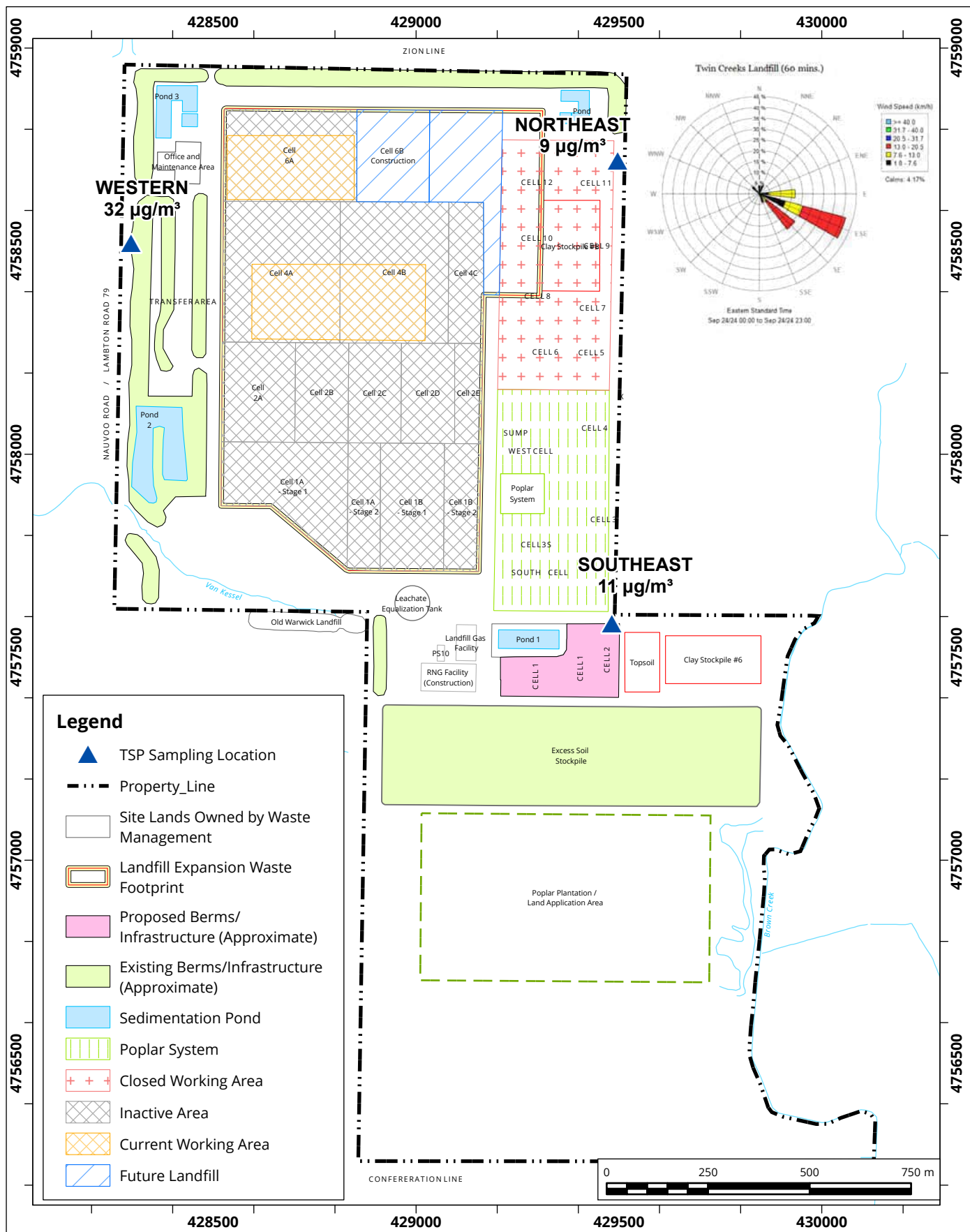
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 2b |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 24, 2024 |





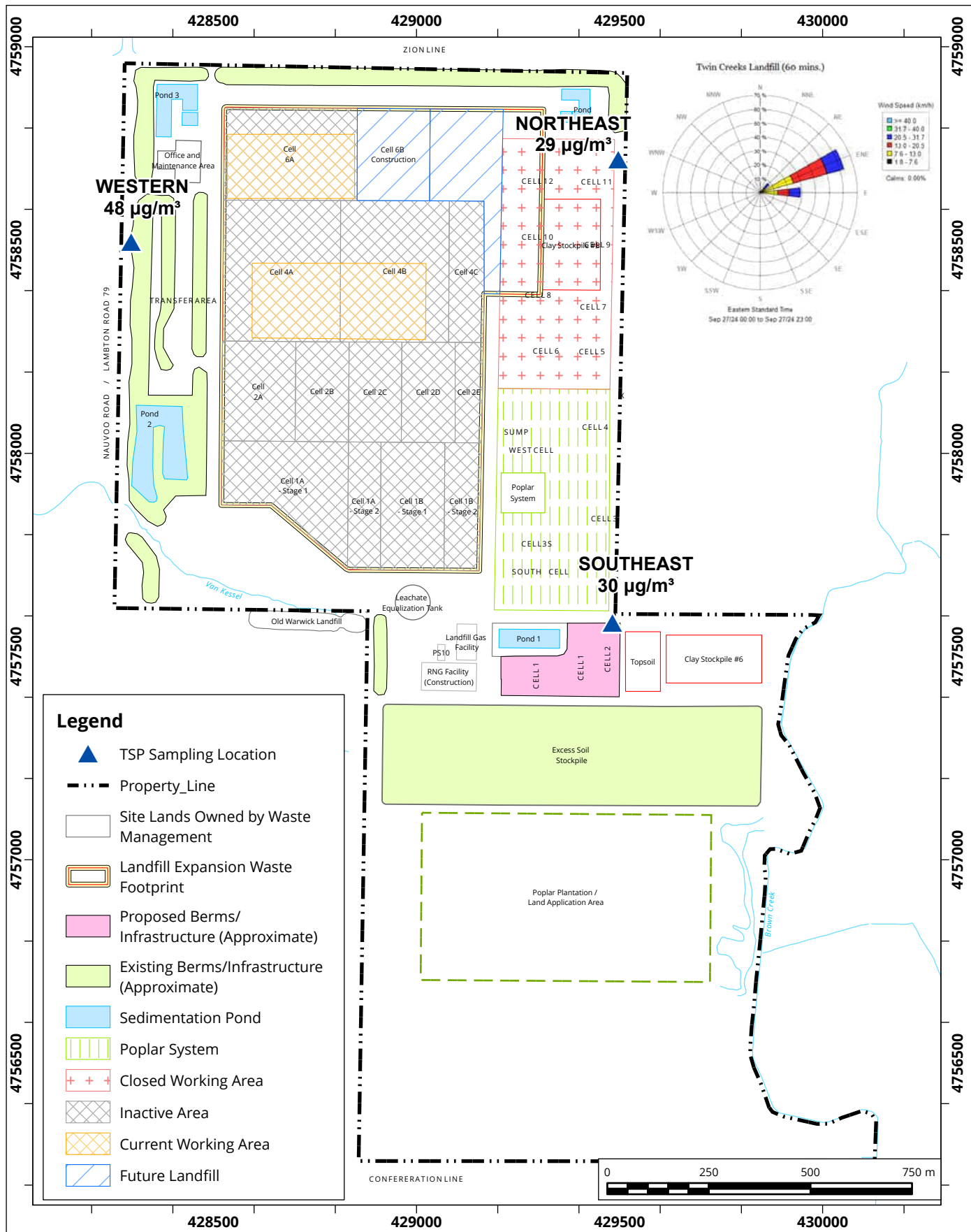
Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 24, 2024

Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario

True North
 Project #: 2402553

Drawn by: AXT
 Figure: 2c
 Approx. Scale: 1:13,000
 Date Revised: Oct 24, 2024





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 27, 2024

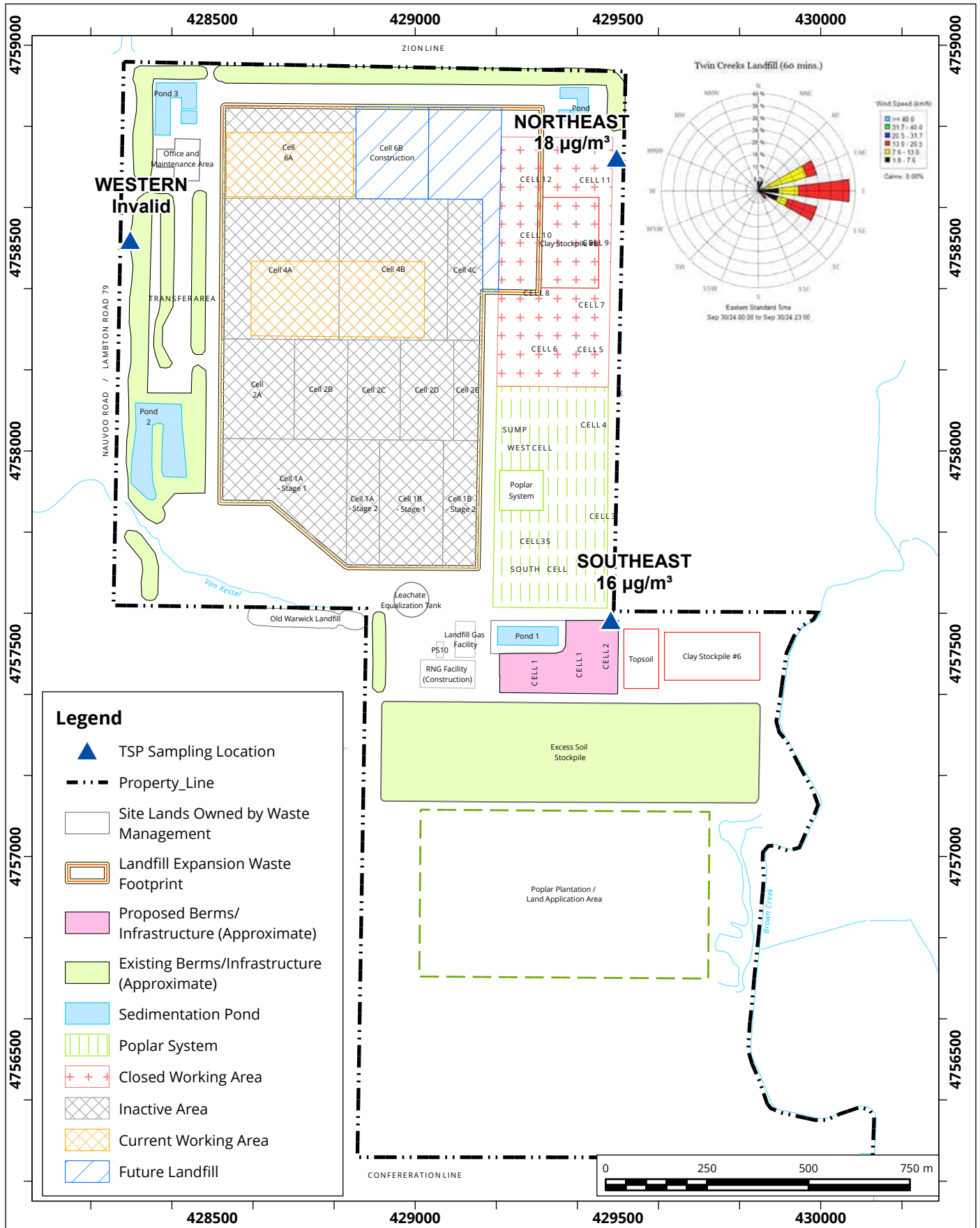
Map Projection: NAD 1983 UTM Zone 17N
 Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------------------|------------|
| Drawn by: AXT | Figure: 2d |
| Approx. Scale: 1:13,000 | |
| Date Revised: Oct 24, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 30, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------------------|------------|
| Drawn by: AXT | Figure: 2e |
| Approx. Scale: 1:13,000 | |
| Date Revised: Oct 24, 2024 | |



A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

ATTACHMENT A

WASTE MANAGEMENT OF CANADA CORPORATION

WATFORD, ONTARIO

TWIN CREEKS LANDFILL SITE: AMBIENT AIR QUALITY MONITORING PLAN [REVISION #3]

RWDI #1600984

May 18, 2017

SUBMITTED TO

Wayne Jenken
Area Landfill Engineer
wjenken@wm.com

**Waste Management of Canada
Corporation | Twin Creeks Landfill**
8039 Zion Line
Watford, Ontario N0M 2S0

T: 519.849.5810
C: 519.381.3017
F: 519.849.6816

SUBMITTED BY

Brad Bergeron, A.Sc.T., d.E.T.
Senior Project Manager | Principal
Brad.Bergeron@rwdi.com

**RWDI AIR Inc.
Consulting Engineers & Scientists**
600 Southgate Drive
Guelph, Ontario N1G 4P6

T: 519.823.1311, ext. 2428
F: 519.823.1316



TABLE OF CONTENTS

1 **TOTAL HYDROCARBON “WALKABOUT” SURVEY.....1**

2 **DUST MONITORING3**

2.1 Additional Dust Monitoring Provisions..... 5

3 **VOC MONITORING.....5**

4 **COMPLAINT RECORDING PROCESS.....7**

5 **REFERENCES.....8**

LIST OF TABLES

Table 1: List of Monitored VOCs.....5

LIST OF FIGURES

Figure 1: Walkabout Pattern.....2

Figure 2: Dust Monitor Locations.....4



1 TOTAL HYDROCARBON “WALKABOUT” SURVEY

The “Walkabout” survey will consist of a grid survey of the entire landfill mound using a handheld THC analyzer (FID). A portable FID will be used throughout the surveys. The FID will be calibrated using a methane gas standard and zeroed using ultra zero pure air. The instrument used will have the following characteristics:

- a response time of no greater than 15 seconds
- an accuracy of 3 percent or better
- a minimum detectable limit of 5 ppmv (or lower)
- a flame-out indicator, audible and visual

The “Walkabout” survey will be completed in a grid like formation gathering data at 7.6 cm or lower (3 inches or lower) above the ground. “Hotspots” of “breakout points” consisting of cracks, fissures, areas of bubbling surface water, or patches of dead (brunt) vegetation on the mound will be visually observed and notes for THC concentrations exceeding 500 ppm (methane). The “walkabout” surveys should be completed at winds less than 8 kilometers per hour (5 miles per hour) and during dry conditions (no measurable precipitation for the proceeding 72 hours prior to sampling). In addition, for the instantaneous readings, the surveys should be completed when the ambient temperatures are within 0 to 50 degrees Celsius.

THC concentrations 500 ppm or greater should be considered of concern during the instantaneous measurements. Therefore, THC concentrations less than 500 ppm will not be noted during the survey. Locations where the THC concentrations are 500 ppm or greater should assist WMI in determining all potential and existing landfill gas release points that require remedial action.

All THC concentrations measured will be expressed as methane on the calibration standard used. After the ‘hotspot’ or “breakout points” are fixed, documentation of the corrective actions taken as well as confirmation of adequate actions taken (THC concentrations less than 500 ppm) will be presented to the MOECC. The “walkabout” survey will include the following:

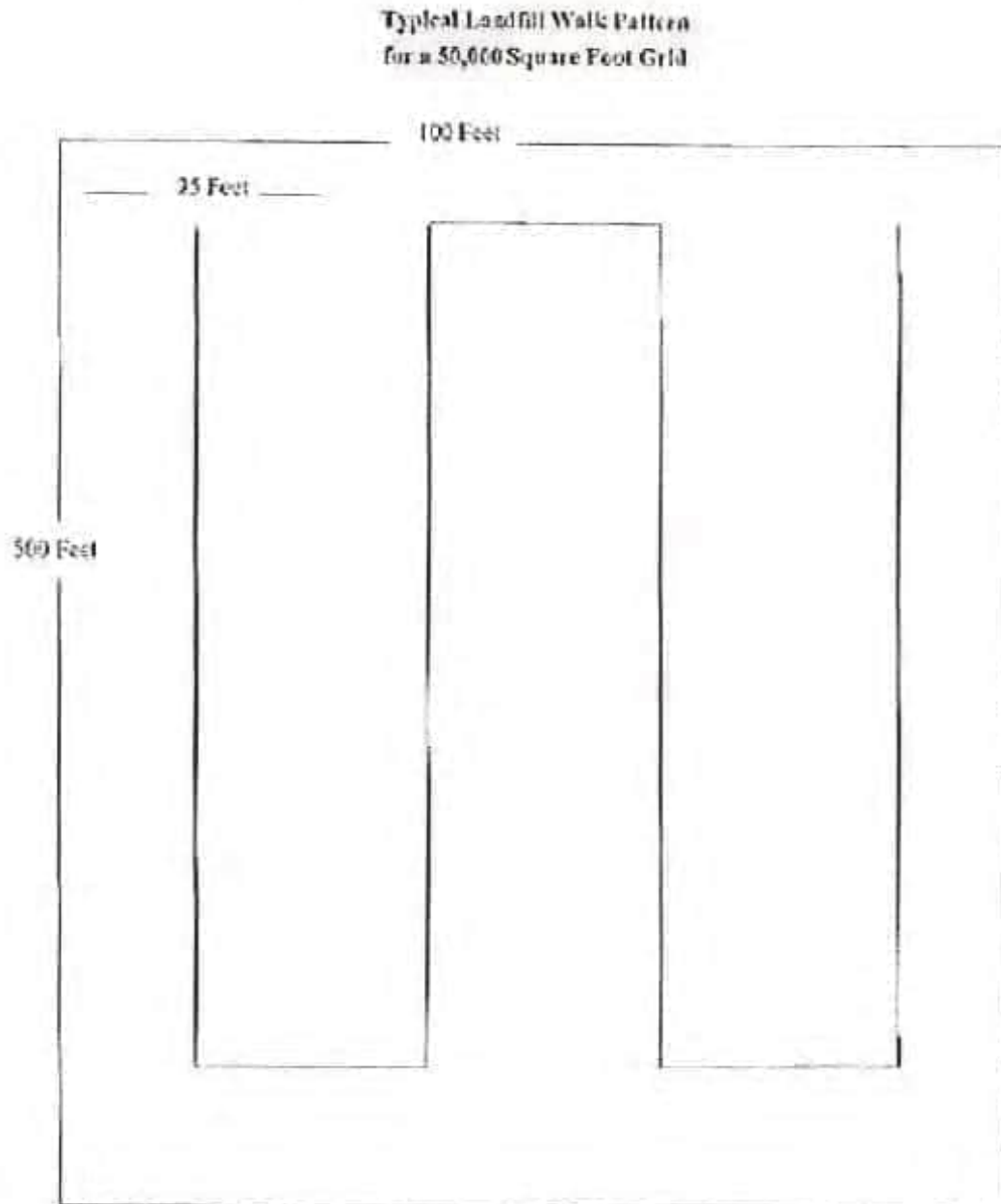
- precise locations of all sampling sites on the site map
- identification of all data obtained in the field measurements
- documentation of all remedial action

The “walkabout” survey should be done in the spring and the early fall. The measured areas should include areas where landfill cover is complete. Problem areas identified should be repaired within two (2) months of identification. Once repairs are completed, a follow-up survey on the specific locations will be completed to validate success of the remediation action(s). The process is important in minimizing odour and VOC emissions.

The “Walkabout” surveys will be performed twice per year or in response to otherwise unexplained odour events. As outlined in the Odour Best Management Practices Plan, routine visual inspections of the landfill cap integrity will also occur on a monthly basis to identify possible problem areas.

Figure 1 includes the walkabout pattern.

Figure 1: Walkabout Pattern





2 DUST MONITORING

The monitoring for Total Suspended Particulate (TSP) will be completed on an on-going basis at three locations around the landfill footprint. The TSP monitor locations are shown in **Figure 2**.

Total Suspended Particulate samples will be taken on a six-day interval during the months of October through May and samples will be taken on a three-day interval during the months of June through September. The sampling will be in concurrence with the U.S EPA National Air Pollutant Surveillance (NAPS) monitoring schedule. The sampling will include the entire year (sampling during 12 months per year). In addition, the analysis for airborne metals will be completed for 11 of the collected TSP samples per station (total of 33 metal samples per year). For each of the 11 sets of samples collected, the particulate analysis will be completed prior to the metal analysis and the highest particulate loaded filters from each station will undergo the analysis for airborne metals.

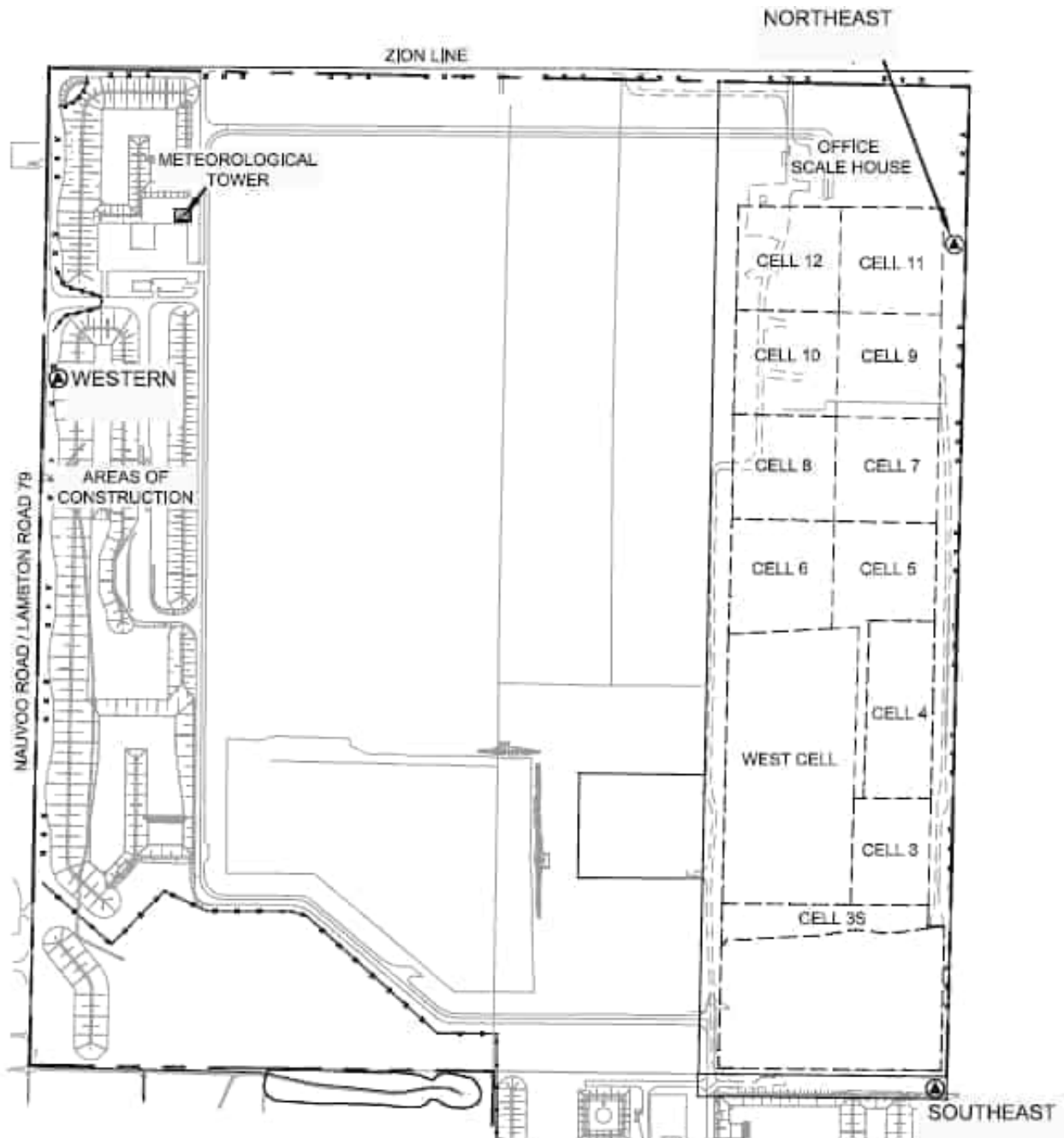
The monitoring method will comply with the metals specified by U.S. EPA Method 10-2. The 24-hour samples would be collected on standard hi-volume air samplers. The station siting requirements and sampling procedures will follow the most recent version of the U.S. EPA methods as well as the Ministry of the Environment's Operations Manual for Point Source Air Quality Monitoring as approved by the MOECC at the onset on the monitoring. The U.S. EPA methods are referenced in the MOECC document as appropriate reference methods to follow for air quality monitoring programs.

The results will be presented in quarterly summary letters and an annual report. The report will include the data in tabular format with a description of the program, quality assurance documentation, details regarding data recovery, abnormal site conditions, etc. As well, any days when the ambient air quality criterion for TSP was exceeded would be reported to the District MOECC office within two (2) weeks of receiving results. In order to enhance the notification of elevated TSP Levels, WM will copy the Township of Warwick on any future elevated TSP level reporting provided to the MOECC.

As part of the dust control strategy, the shift supervisor will be responsible to see that a record of roadway sweeping and watering is maintained. The control measure will be initiated whenever a visible plume behind vehicles is longer than $\frac{1}{4}$ the length of the vehicle. These logs will be kept on-site for a period of not less than two (2) years and will be made available for inspection should the MOECC wish to see them.

When the facility receives a complaint, the shift supervisor will see that the relevant information is recorded, including any remedial action taken as a result of the complaint. A sample complaint log sheet is included in the Best Management Practices Plan (Dust).

Figure 2: Dust Monitor Locations





2.1 Additional Dust Monitoring Provisions

As discussed with stakeholders during the consultation for the annual fill rate increase for the site, the following provisions were made for additional monitoring to be completed under specific conditions. The following notes the agreed to provisions for the additional monitoring. This provision will also be included in the Dust Best Management Practices Plan (BMPP). In the event that the provisions are triggered, WM will prepare an updated Air Quality Monitoring Plan to layout the specific agreed to monitoring at the time the additional monitoring provision is required.

As agreed to with stakeholders, in the event that 2 measured exceedances (trigger), that can be attributed to WM operations, in any quarter (excluding periods when on-site cell construction is occurring) occurs, WM is committing to reviewing the data with the Township of Warwick. Upon confirmation that the exceedances can be attributed to WM operations, and are not related to cell construction, WM will complete the installation of continuous dust monitors.

If continuous dust monitors are to be installed, WM will work with the Township of Warwick to update the following documents:

- Air Quality Monitoring Plan – updated for equipment change as well as trigger for shorter duration alerts to be issued to WM as warnings for higher dust levels; and
- Best Management Practices Plan (Dust) – to be updated to link dust alerts to dust control initiatives.

3 VOC MONITORING

It is proposed that monitoring for VOC's be conducted through the summer months, with samples to be taken in upwind and downwind pairs, during normal operating hours of the landfill. There would be a total of 5 sample pairs taken between June and September. No more than two (2) samples will be collected in any calendar month. The samples will be 24-hours in duration and compared to their respective Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List.

The samples will be collected and analyzed using methods defined in U.S. EPA Method TO-14/15. Vinyl chloride is of particular concern with these types of samples and vinyl chloride will be analyzed in selective ion mode (SIM). Sampling for VOC samples will be collected during periods of light wind conditions (less than 15 kilometers per hour) and during dry conditions (no measureable precipitation for the proceeding 48 hours prior to sampling). The list of VOC's monitored is presented in Table 1.

Table 1: List of Monitored VOCs

| CAS No. | Compound | CAS No. | Compound |
|------------|---------------------------------------|-------------------|------------------------|
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 620-14-4/622-96-8 | m/p-Ethyl Toluene |
| 526-73-8 | 1,2,3-Trimethyl Benzene | 108-38-3/106-42-3 | m/p-Xylene |
| 95-63-6 | 1,2,4 -Trimethyl Benzene | 535-77-3 | m-Cymene |
| 108-67-8 | 1,3,5 -Trimethyl Benzene | 78-93-3 | MEK |
| 591-76-4 | 2-Methyl Hexane | 108-87-2 | Methyl Cyclohexane |
| 107-83-5 | 2-Methyl Pentane | 108-10-1 | MIBK |
| 78-78-4 | 2-Methyl Butane | 75-45-6 | Chlorodifluoromethane |
| 96-14-0 | 3-Methyl Pentane | 123-72-8 | n-Butanol |
| 589-34-4 | 3-Methyl Hexane | 91-20-3 | Naphthalene |
| 67-64-1 | Acetone | 111-84-2 | Nonane |
| 71-43-2 | Benzene | 611-14-3 | o-Ethyl Toluene |
| 123-86-4 | Butyl Acetate | 95-47-6 | o-Xylene |
| 124-18-5 | Decane | 109-66-0 | Pentane |
| 25915-78-0 | Dichlorodifluoromethane | 64-17-5 | Ethanol |
| 75-09-2 | Dichloromethane | 103-65-1 | Propyl Benzene |
| 100-41-4 | Ethyl Benzene | 100-42-5 | Styrene |
| 142-82-5 | Heptane | 127-18-4 | Tetrachloroethylene |
| 110-54-3 | Hexane | 108-88-3 | Toluene |
| 67-63-0 | Isopropyl Alcohol | 75-69-4 | Trichlorofluoromethane |
| 138-86-3 | Limonene | 79-01-6 | Trichloroethylene |
| 75-01-4 | Vinyl Chloride | 141-78-6 | Ethyl Acetate |
| 56-23-5 | Carbon Tetrachloride | 71-55-6 | 1,1,1-Trichloroethane |
| 67-66-3 | Chloroform | 75-35-4 | Vinylidene Chloride |
| 106-93-4 | Ethylene Dibromide | 540-59-0 | 1,2-Dichloroethene |
| 107-6-2 | Ethylene Dichloride | Na | Total VOCs |

As the MOECC updates Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List in the Province of Ontario, the measured values will be compared to the most stringent limits available at the time of testing. For compounds that do not have Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List, the measured values will be compared to the predicated concentrations provided and approved by the MOECC for the Section 9 EPA approval supporting documentation to demonstrate compliance. As all compounds identified without Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List are subject to review by the MOECC's Standard Development Branch, these levels should be considered acceptable.



4 COMPLAINT RECORDING PROCESS

Waste Management of Canada has outlined Best Practices Plans of Odour, Litter and Dust. Within each plan the procedures for outlining the responsibilities and recordkeeping. For further details, please refer to the most recent versions of the Best Management Practices Plan. [1,2,3]. Please note that like this air quality monitoring plan, the Best Management Plans are intended to be updates to endure continuous improvements are being documented at the site.



5 REFERENCES

1. RWDI AIR Inc. Best Management Practices Plan (Odour), Twin Creeks Landfill Site, Watford, ON – Revision 7, dated May 18, 2017.
2. RWDI AIR Inc. Best Management Practices Plan (Dust), Twin Creeks Landfill Site, Watford, ON – Revision 5, dated May 18, 2017.
3. RWDI AIR Inc. Best Management Practices Plan (Litter), Twin Creeks Landfill Site, Watford, ON – Revision 4, dated December 11, 2007.



RWDI aims to accommodate. If you require this document in a different format in order to aid accessibility, please contact the sender of this document, email solutions@rwdi.com or call +1.519.823.1311

A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray semi-circle that overlaps the square and extends towards the right edge of the page.

ATTACHMENT B

Table 1: Summary of Total Suspended Particulate Results July 2, 2024

| Compounds | CAS No. | 2-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24050860 | Filter ID: | 24050859 | Filter ID: | 24050861 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 27800 | 18 | 27000 | 17 | 70000 | 45 | 45 | 120 | Schedule 3 | 37% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1573 | | 1588 | | 1565 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.09 | | 1.10 | | 1.09 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 2: Summary of Total Suspended Particulate Results July 5, 2024

| Compounds | CAS No. | 5-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------|----------------------|-----------------|----------------------|---|--|------------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24050864 | Filter ID: | 24050863 | Filter ID: | 24050862 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | ND | ND | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | ND | ND | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | 140 | 0.089 | 160 | 0.101 | 0.10 | 50 | Schedule 3 | 0.20% |
| Total Iron (Fe) | 7439-89-6 | | | 1230 | 0.784 | 1140 | 0.722 | 0.78 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | 14.3 | 0.009 | 10.6 | 0.007 | 0.01 | 0.5 | Schedule 3 | 1.82% |
| Total Manganese (Mn) | 7439-96-5 | | | 34.1 | 0.022 | 32.3 | 0.020 | 0.02 | 0.4 | Guideline | 5.44% |
| Total Nickel (Ni) | 7440-02-0 | | | ND | ND | ND | ND | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | 90.6 | 0.058 | 70.7 | 0.045 | 0.06 | 120 | Schedule 3 | 0.05% |
| Total Particulate | - | 47800 | 29 | 83300 | 53 | 82500 | 52 | 53 | 120 | Schedule 3 | 44% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1628 | | 1568 | | 1580 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.09 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 3: Summary of Total Suspended Particulate ResultsJuly 8, 2024

| Compounds | CAS No. | 8-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24050866 | Filter ID: | 24050865 | Filter ID: | 24050867 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | | | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | | | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | | | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 68.4 | 0.043 | | | | | 0.043 | 50 | Schedule 3 | 0.09% |
| Total Iron (Fe) | 7439-89-6 | 605 | 0.381 | | | | | 0.381 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 3.2 | 0.002 | | | | | 0.002 | 0.5 | Schedule 3 | 0.40% |
| Total Manganese (Mn) | 7439-96-5 | 16.5 | 0.010 | | | | | 0.010 | 0.4 | Guideline | 2.60% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | | | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | | | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | | | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 18.2 | 0.011 | | | | | 0.011 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 49000 | 31 | 71000 | 46 | 67800 | 45 | 46 | 120 | Schedule 3 | 39% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1589 | | 1535 | | 1498 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.10 | | 1.07 | | 1.04 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 4: Summary of Total Suspended Particulate ResultsJuly 11, 2024

| Compounds | CAS No. | 11-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24050868 | Filter ID: | 24050869 | Filter ID: | 24050870 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 24900 | 15 | 30700 | 20 | 32000 | 20 | 20 | 120 | Schedule 3 | 17% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1623 | | 1573 | | 1571 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.09 | | 1.09 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 5: Summary of Total Suspended Particulate ResultsJuly 14, 2024

| Compounds | CAS No. | 14-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|---------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24050871 | Filter ID: | 24050873 | Filter ID: | 24050872 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Invalid | | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 1.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 2.5 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 2 | Schedule 3 | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | - | - | 33500 | 22 | 34500 | 23 | 23 | 120 | Schedule 3 | 19% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | - | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | - | | 1553 | | 1524 | | | | | |
| Sample Flow Rate (m ³ /min) | | - | | 1.08 | | 1.06 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 6: Summary of Total Suspended Particulate ResultsJuly 17, 2024

| Compounds | CAS No. | 17-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|-------------------------------------|-------------------------------------|----------------------|-----------------|----------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24050874 | Filter ID: | 24050875 | Filter ID: | 24050876 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Invalid | Sample 3 of 4 No Metals Analysis | Sample 3 of 4 No Metals Analysis | - | 0.3 | Guideline | - | | | |
| Total Cadmium (Cd) | 7440-43-9 | | | | - | 0.025 | Schedule 3 | - | | | |
| Total Chromium (Cr) | 7440-47-2 | | | | - | 1.5 | Guideline | - | | | |
| Total Cobalt (Co) | 7440-48-4 | | | | - | 0.1 | Guideline | - | | | |
| Total Copper (Cu) | 7440-50-8 | | | | - | 50 | Schedule 3 | - | | | |
| Total Iron (Fe) | 7439-89-6 | | | | - | N/A | N/A | - | | | |
| Total Lead (Pb) | 7439-92-1 | | | | - | 0.5 | Schedule 3 | - | | | |
| Total Manganese (Mn) | 7439-96-5 | | | | - | 2.5 | Guideline | - | | | |
| Total Nickel (Ni) | 7440-02-0 | | | | - | 2 | Schedule 3 | - | | | |
| Total Selenium (Se) | 7782-49-2 | | | | - | 10 | Guideline | - | | | |
| Total Vanadium (V) | 7440-62-2 | | | | - | 2 | Schedule 3 | - | | | |
| Total Zinc (Zn) | 7440-66-6 | | | | - | 120 | Schedule 3 | - | | | |
| Total Particulate | - | - | - | 36100 | 22 | 33000 | 21 | 22 | 120 | Schedule 3 | 18% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | - | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | - | | 1628 | | 1582 | | | | | |
| Sample Flow Rate (m ³ /min) | | - | | 1.13 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 7: Summary of Total Suspended Particulate ResultsJuly 20, 2024

| Compounds | CAS No. | 20-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-----------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24050878 | Filter ID: | 24050879 | Filter ID: | 24050877 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | ND | ND | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 174 | 0.110 | 102 | 0.066 | 51.6 | 0.034 | 0.110 | 50 | Schedule 3 | 0.22% |
| Total Iron (Fe) | 7439-89-6 | 301 | 0.190 | 452 | 0.291 | 479 | 0.317 | 0.317 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | ND | ND | 3.2 | 0.002 | ND | ND | 0.002 | 0.5 | Schedule 3 | 0.41% |
| Total Manganese (Mn) | 7439-96-5 | 8.9 | 0.006 | 13 | 0.008 | 15.5 | 0.010 | 0.010 | 0.4 | Guideline | 2.56% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | 3.6 | 0.002 | ND | ND | 0.002 | 0.2 | Guideline | 1.16% |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 14.2 | 0.009 | 23 | 0.015 | 23.2 | 0.015 | 0.015 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 29300 | 19 | 37800 | 24 | 39800 | 26 | 26 | 120 | Schedule 3 | 22% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1582 | | 1553 | | 1511 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.10 | | 1.08 | | 1.05 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 8: Summary of Total Suspended Particulate ResultsJuly 23, 2024

| Compounds | CAS No. | 23-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24050885 | Filter ID: | 24050884 | Filter ID: | 24050886 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Invalid | | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | - | 0.3 | Guideline | - | |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | - | 0.025 | Schedule 3 | - | |
| Total Chromium (Cr) | 7440-47-2 | | | | | | - | 0.5 | Guideline | - | |
| Total Cobalt (Co) | 7440-48-4 | | | | | | - | 0.1 | Guideline | - | |
| Total Copper (Cu) | 7440-50-8 | | | | | | - | 50 | Schedule 3 | - | |
| Total Iron (Fe) | 7439-89-6 | | | | | | - | N/A | N/A | - | |
| Total Lead (Pb) | 7439-92-1 | | | | | | - | 0.5 | Schedule 3 | - | |
| Total Manganese (Mn) | 7439-96-5 | | | | | | - | 0.4 | Guideline | - | |
| Total Nickel (Ni) | 7440-02-0 | | | | | | - | 0.2 | Guideline | - | |
| Total Selenium (Se) | 7782-49-2 | | | | | | - | 10 | Guideline | - | |
| Total Vanadium (V) | 7440-62-2 | | | | | | - | 2 | Schedule 3 | - | |
| Total Zinc (Zn) | 7440-66-6 | | | | | | - | 120 | Schedule 3 | - | |
| Total Particulate | - | | | | | | - | - | 56900 | 36 | 63000 |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | - | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | - | | 1598 | | 1578 | | | | | |
| Sample Flow Rate (m ³ /min) | | - | | 1.11 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 9: Summary of Total Suspended Particulate ResultsJuly 26, 2024

| Compounds | CAS No. | 26-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-----------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24050883 | Filter ID: | 24050882 | Filter ID: | 24050881 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | 106 | 0.067 | 0.067 | 50 | Schedule 3 | 0.13% |
| Total Iron (Fe) | 7439-89-6 | | | | | 1320 | 0.829 | 0.829 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | 13.3 | 0.008 | 0.008 | 0.5 | Schedule 3 | 1.67% |
| Total Manganese (Mn) | 7439-96-5 | | | | | 38 | 0.024 | 0.024 | 0.4 | Guideline | 5.96% |
| Total Nickel (Ni) | 7440-02-0 | | | | | ND | ND | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | 140 | 0.088 | 0.088 | 120 | Schedule 3 | 0.07% |
| Total Particulate | - | 22200 | 13 | 35700 | 22 | 105000 | 66 | 66 | 120 | Schedule 3 | 55% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1494 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1672 | | 1619 | | 1593 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.12 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 10: Summary of Total Suspended Particulate ResultsJuly 29, 2024

| Compounds | CAS No. | 29-Jul-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24050888 | Filter ID: | 24050887 | Filter ID: | 24050892 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 30100 | 19 | 41600 | 26 | 44800 | 28 | 28 | 120 | Schedule 3 | 23% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1601 | | 1593 | | 1594 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.11 | | 1.11 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 11: Summary of Total Suspended Particulate ResultsAugust 1, 2024

| Compounds | CAS No. | 1-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-------------------------------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24050891 | Filter ID: | 24050890 | Filter ID: | 24050889 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | Sample 4 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | ND | ND | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 107 | 0.068 | 117 | 0.072 | | | 0.072 | 50 | Schedule 3 | 0.14% |
| Total Iron (Fe) | 7439-89-6 | 477 | 0.302 | 883 | 0.541 | | | 0.541 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 3.1 | 0.002 | 5.1 | 0.003 | | | 0.003 | 0.5 | Schedule 3 | 0.63% |
| Total Manganese (Mn) | 7439-96-5 | 14.6 | 0.009 | 24.6 | 0.015 | | | 0.015 | 0.4 | Guideline | 3.77% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | ND | ND | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 29.3 | 0.019 | 45.1 | 0.028 | | | 0.028 | 120 | Schedule 3 | 0.02% |
| Total Particulate | - | 48200 | 31 | 65500 | 40 | 49300 | 30 | 40 | 120 | Schedule 3 | 33% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1579 | | 1632 | | 1639 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.10 | | 1.13 | | 1.14 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 12: Summary of Total Suspended Particulate ResultsAugust 4, 2024

| Compounds | CAS No. | 4-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-------------------------------------|----------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24051301 | Filter ID: | 24050894 | Filter ID: | 24051300 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | Sample 1 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | ND | ND | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 53.2 | 0.033 | 171 | 0.105 | | | 0.105 | 50 | Schedule 3 | 0.21% |
| Total Iron (Fe) | 7439-89-6 | 215 | 0.135 | 485 | 0.297 | | | 0.297 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | ND | ND | ND | ND | | | 0.000 | 0.5 | Schedule 3 | 0.00% |
| Total Manganese (Mn) | 7439-96-5 | 8.6 | 0.005 | 15 | 0.009 | | | 0.009 | 0.4 | Guideline | 2.30% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | ND | ND | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 25.5 | 0.016 | 24.6 | 0.015 | | | 0.016 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 44500 | 28 | 54800 | 34 | 45400 | 28 | 34 | 120 | Schedule 3 | 28% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1596 | | 1633 | | 1601 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.11 | | 1.13 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 13: Summary of Total Suspended Particulate ResultsAugust 7, 2024

| Compounds | CAS No. | 7-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|--|--|------------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24051303 | Filter ID: | 24051302 | Filter ID: | 24051304 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 17200 | 10 | 30700 | 19 | 51800 | 32 | 32 | 120 | Schedule 3 | 27% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Upwind | | Downwind | | | | | |
| Sample Duration (min) | | 1570 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1752 | | 1632 | | 1610 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.13 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 14: Summary of Total Suspended Particulate ResultsAugust 10, 2024

| Compounds | CAS No. | 10-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|---|--|------------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 4051307 | Filter ID: | 24051306 | Filter ID: | 24051305 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 25200 | 16 | 34500 | 20 | 25600 | 16 | 20 | 120 | Schedule 3 | 17% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1602 | | 1722 | | 1617 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.11 | | 1.20 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 15: Summary of Total Suspended Particulate ResultsAugust 13, 2024

| Compounds | CAS No. | 13-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-----------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24051308 | Filter ID: | 24051309 | Filter ID: | 24051312 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | 7.1 | 0.004 | 0.004 | 0.5 | Guideline | 0.88% |
| Total Cobalt (Co) | 7440-48-4 | | | | | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | 108 | 0.067 | 0.067 | 50 | Schedule 3 | 0.13% |
| Total Iron (Fe) | 7439-89-6 | | | | | 1900 | 1.181 | 1.181 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | 16.7 | 0.010 | 0.010 | 0.5 | Schedule 3 | 2.08% |
| Total Manganese (Mn) | 7439-96-5 | | | | | 41.2 | 0.026 | 0.026 | 0.4 | Guideline | 6.40% |
| Total Nickel (Ni) | 7440-02-0 | | | | | 4 | 0.002 | 0.002 | 0.2 | Guideline | 1.24% |
| Total Selenium (Se) | 7782-49-2 | | | | | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | 165 | 0.103 | 0.103 | 120 | Schedule 3 | 0.09% |
| Total Particulate | - | 34000 | 21 | 42700 | 27 | 102000 | 63 | 63 | 120 | Schedule 3 | 53% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1627 | | 1555 | | 1609 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.08 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 16: Summary of Total Suspended Particulate ResultsAugust 16, 2024

| Compounds | CAS No. | 16-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-----------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24051311 | Filter ID: | 24051310 | Filter ID: | 24051313 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | 5 | 0.003 | 0.003 | 0.5 | Guideline | 0.61% |
| Total Cobalt (Co) | 7440-48-4 | | | | | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | 105 | 0.064 | 0.064 | 50 | Schedule 3 | 0.13% |
| Total Iron (Fe) | 7439-89-6 | | | | | 923 | 0.563 | 0.563 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | 8.1 | 0.005 | 0.005 | 0.5 | Schedule 3 | 0.99% |
| Total Manganese (Mn) | 7439-96-5 | | | | | 26.6 | 0.016 | 0.016 | 0.4 | Guideline | 4.05% |
| Total Nickel (Ni) | 7440-02-0 | | | | | ND | ND | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | 84 | 0.051 | 0.051 | 120 | Schedule 3 | 0.04% |
| Total Particulate | - | 40900 | 25 | 47600 | 29 | 72700 | 44 | 44 | 120 | Schedule 3 | 37% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1639 | | 1616 | | 1640 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.14 | | 1.12 | | 1.14 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 17: Summary of Total Suspended Particulate ResultsAugust 19, 2024

| Compounds | CAS No. | 19-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071762 | Filter ID: | 24071763 | Filter ID: | 24071764 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 32400 | 20 | 28400 | 17 | 45200 | 28 | 28 | 120 | Schedule 3 | 23% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1614 | | 1678 | | 1616 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.17 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 17: Summary of Total Suspended Particulate ResultsAugust 22, 2024

| Compounds | CAS No. | 22-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-------------------------------------|----------------------|---|--|------------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24051315 | Filter ID: | 24071760 | Filter ID: | 24071761 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | Sample 3 of 4 No Metals Analysis | ND | 0.3 | Guideline | - | |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | | ND | 0.025 | Schedule 3 | - | |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | ND | ND | | ND | 0.5 | Guideline | - | |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | | ND | 0.1 | Guideline | - | |
| Total Copper (Cu) | 7440-50-8 | 43.7 | 0.028 | 145 | 0.090 | | 0.090 | 50 | Schedule 3 | 0.18% | |
| Total Iron (Fe) | 7439-89-6 | 785 | 0.497 | 1190 | 0.740 | | 0.740 | N/A | N/A | - | |
| Total Lead (Pb) | 7439-92-1 | 4.2 | 0.003 | 4.3 | 0.003 | | 0.003 | 0.5 | Schedule 3 | 0.53% | |
| Total Manganese (Mn) | 7439-96-5 | 21.7 | 0.014 | 44.3 | 0.028 | | 0.028 | 0.4 | Guideline | 6.88% | |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | ND | ND | | ND | 0.2 | Guideline | - | |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | | ND | 10 | Guideline | - | |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | | ND | 2 | Schedule 3 | - | |
| Total Zinc (Zn) | 7440-66-6 | 44.5 | 0.028 | 38.6 | 0.024 | | 0.028 | 120 | Schedule 3 | 0.02% | |
| Total Particulate | - | 66700 | 42 | 125000 | 78 | 30600 | 19 | 78 | 120 | Schedule 3 | 65% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1581 | | 1609 | | 1587 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.10 | | 1.12 | | 1.10 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 18: Summary of Total Suspended Particulate ResultsAugust 25, 2024

| Compounds | CAS No. | 25-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071767 | Filter ID: | 24071765 | Filter ID: | 24071766 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 52000 | 33 | 39700 | 25 | 40500 | 25 | 33 | 120 | Schedule 3 | 27% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1588 | | 1586 | | 1592 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.10 | | 1.10 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 19: Summary of Total Suspended Particulate ResultsAugust 28, 2024

| Compounds | CAS No. | 28-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24071768 | Filter ID: | 24071772 | Filter ID: | 1471770 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 29600 | 19 | 19100 | 12 | 28500 | 18 | 19 | 120 | Schedule 3 | 16% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1441 | | | | | |
| Sample Volume (m ³) [1] | | 1590 | | 1586 | | 1601 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.10 | | 1.10 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 20: Summary of Total Suspended Particulate ResultsAugust 31, 2024

| Compounds | CAS No. | 31-Aug-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|---|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071771 | Filter ID: | 27071773 | Filter ID: | 24071769 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | | | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | | | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | | | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 69.2 | 0.043 | | | | | 0.043 | 50 | Schedule 3 | 0.09% |
| Total Iron (Fe) | 7439-89-6 | 233 | 0.146 | | | | | 0.146 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | ND | ND | | | | | ND | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | 8.8 | 0.006 | | | | | 0.006 | 0.4 | Guideline | 1.38% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | | | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | | | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | | | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 28 | 0.018 | | | | | 0.018 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 32400 | 20 | 6300 | 4 | 34900 | 22 | 22 | 120 | Schedule 3 | 19% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1439 | | | | | |
| Sample Volume (m ³) ^[1] | | 1598 | | 1605 | | 1566 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.11 | | 1.11 | | 1.09 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 21: Summary of Total Suspended Particulate ResultsSeptember 3, 2024

| Compounds | CAS No. | 3-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-----------------|------------------------------------|---|--|------------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24071777 | Filter ID: | 24071778 | Filter ID: | 24071780 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | 179 | 0.112 | 0.112 | 50 | Schedule 3 | 0.22% |
| Total Iron (Fe) | 7439-89-6 | | | | | 2280 | 1.424 | 1.424 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | 14.6 | 0.009 | 0.009 | 0.5 | Schedule 3 | 1.82% |
| Total Manganese (Mn) | 7439-96-5 | | | | | 55.8 | 0.035 | 0.035 | 0.4 | Guideline | 8.71% |
| Total Nickel (Ni) | 7440-02-0 | | | | | 3.2 | 0.002 | 0.002 | 0.2 | Guideline | 1.00% |
| Total Selenium (Se) | 7782-49-2 | | | | | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | 168 | 0.105 | 0.105 | 120 | Schedule 3 | 0.09% |
| Total Particulate | - | 26200 | 16 | 25100 | 16 | 144000 | 90 | 90 | 120 | Schedule 3 | 75% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Upwind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1599 | | 1598 | | 1601 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.11 | | 1.11 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 22: Summary of Total Suspended Particulate ResultsSeptember 6, 2024

| Compounds | CAS No. | 6-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2],[3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------|----------------------|-------------------------------------|----------------------|---|--|------------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071776 | Filter ID: | 24071779 | Filter ID: | 24071775 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | ND | ND | Sample 4 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | ND | ND | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | ND | ND | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | ND | ND | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | 71.4 | 0.043 | | | 0.043 | 50 | Schedule 3 | 0.09% |
| Total Iron (Fe) | 7439-89-6 | | | 435 | 0.261 | | | 0.261 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | 3.1 | 0.002 | | | 0.002 | 0.5 | Schedule 3 | 0.37% |
| Total Manganese (Mn) | 7439-96-5 | | | 16.2 | 0.010 | | | 0.010 | 0.4 | Guideline | 2.43% |
| Total Nickel (Ni) | 7440-02-0 | | | ND | ND | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | ND | ND | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | 29.2 | 0.018 | | | 0.018 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 30600 | 19 | 43200 | 26 | 30400 | 18 | 26 | 120 | Schedule 3 | 22% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1443 | | 1486 | | 1442 | | | | | |
| Sample Volume (m ³) ^[1] | | 1627 | | 1667 | | 1655 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.12 | | 1.15 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 23: Summary of Total Suspended Particulate ResultsSeptember 9, 2024

| Compounds | CAS No. | 9-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|---------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24071782 | Filter ID: | 24071781 | Filter ID: | 24071783 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | 6.8 | 0.004 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | 0.004 | 0.3 | Guideline | 1.41% |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | | | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | | | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | | | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 43.2 | 0.027 | | | | | 0.027 | 50 | Schedule 3 | 0.05% |
| Total Iron (Fe) | 7439-89-6 | 1380 | 0.857 | | | | | 0.857 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 10.1 | 0.006 | | | | | 0.006 | 0.5 | Schedule 3 | 1.25% |
| Total Manganese (Mn) | 7439-96-5 | 60.4 | 0.038 | | | | | 0.038 | 0.4 | Guideline | 9.38% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | | | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | | | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | | | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 57.9 | 0.036 | | | | | 0.036 | 120 | Schedule 3 | 0.03% |
| Total Particulate | - | 95500 | 59 | 112000 | 69 | 38900 | 24 | 69 | 120 | Schedule 3 | 58% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1442 | | 1442 | | 1442 | | | | | |
| Sample Volume (m ³) [1] | | 1610 | | 1618 | | 1620 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.12 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 24: Summary of Total Suspended Particulate ResultsSeptember 12, 2024

| Compounds | CAS No. | 12-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------------------------------|-------------------|---------------------------------------|-------------------------------------|---------------------------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071789 | Filter ID: | 24071788 | Filter ID: | 24071787 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Invalid | | Sample 2 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 31300 | 19 | - | - | 110000 | 64 | 64 | 120 | Schedule 3 | 53% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | - | | 1441 | | | | | |
| Sample Volume (m ³) ^[1] | | 1632 | | - | | 1724 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | - | | 1.20 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 25: Summary of Total Suspended Particulate ResultsSeptember 15, 2024

| Compounds | CAS No. | 15-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24071785 | Filter ID: | 24071784 | Filter ID: | 24071786 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 34600 | 21 | 92300 | 57 | 47700 | 29 | 57 | 120 | Schedule 3 | 48% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1441 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1629 | | 1612 | | 1657 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.12 | | 1.15 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 26: Summary of Total Suspended Particulate ResultsSeptember 18, 2024

| Compounds | CAS No. | 18-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------|----------------------|-----------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071735 | Filter ID: | 24071731 | Filter ID: | 24071730 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - | |
| Total Chromium (Cr) | 7440-47-2 | | 8.8 | 0.005 | 8.3 | 0.005 | 0.005 | 0.5 | Guideline | 1.03% | |
| Total Cobalt (Co) | 7440-48-4 | | 2.2 | 0.001 | ND | ND | 0.000 | 0.1 | Guideline | 0.00% | |
| Total Copper (Cu) | 7440-50-8 | | 99.8 | 0.062 | 75.3 | 0.047 | 0.047 | 50 | Schedule 3 | 0.09% | |
| Total Iron (Fe) | 7439-89-6 | | 5150 | 3.175 | 3050 | 1.890 | 1.890 | N/A | N/A | - | |
| Total Lead (Pb) | 7439-92-1 | | 9.7 | 0.006 | 22.9 | 0.014 | 0.014 | 0.5 | Schedule 3 | 2.84% | |
| Total Manganese (Mn) | 7439-96-5 | | 198 | 0.122 | 79.2 | 0.049 | 0.049 | 0.4 | Guideline | 12.27% | |
| Total Nickel (Ni) | 7440-02-0 | | 8.1 | 0.005 | 5 | 0.003 | 0.003 | 0.2 | Guideline | 1.55% | |
| Total Selenium (Se) | 7782-49-2 | | ND | ND | ND | ND | ND | 10 | Guideline | - | |
| Total Vanadium (V) | 7440-62-2 | | 12.6 | 0.008 | ND | ND | 0.000 | 2 | Schedule 3 | 0.00% | |
| Total Zinc (Zn) | 7440-66-6 | | 62.9 | 0.039 | 171 | 0.106 | 0.106 | 120 | Schedule 3 | 0.09% | |
| Total Particulate | - | 36400 | 22 | 491000 | 303 | 167000 | 103 | 303 | 120 | Schedule 3 | 252% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Upwind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1625 | | 1622 | | 1614 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.13 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 27: Summary of Total Suspended Particulate ResultsSeptember 21, 2024

| Compounds | CAS No. | 21-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-------------------------------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24071734 | Filter ID: | 24071732 | Filter ID: | 24071733 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Invalid | | ND | ND | Sample 1 of 4 No Metals Analysis | ND | 0.3 | Guideline | - | |
| Total Cadmium (Cd) | 7440-43-9 | | | ND | ND | | ND | 0.025 | Schedule 3 | - | |
| Total Chromium (Cr) | 7440-47-2 | | | ND | ND | | ND | 0.5 | Guideline | - | |
| Total Cobalt (Co) | 7440-48-4 | | | ND | ND | | ND | 0.1 | Guideline | - | |
| Total Copper (Cu) | 7440-50-8 | | | 156 | 0.098 | | 0.098 | 50 | Schedule 3 | 0.20% | |
| Total Iron (Fe) | 7439-89-6 | | | 792 | 0.495 | | 0.495 | N/A | N/A | - | |
| Total Lead (Pb) | 7439-92-1 | | | 4.1 | 0.003 | | 0.003 | 0.5 | Schedule 3 | 0.51% | |
| Total Manganese (Mn) | 7439-96-5 | | | 34.2 | 0.021 | | 0.021 | 0.4 | Guideline | 5.35% | |
| Total Nickel (Ni) | 7440-02-0 | | | ND | ND | | ND | 0.2 | Guideline | - | |
| Total Selenium (Se) | 7782-49-2 | | | ND | ND | | ND | 10 | Guideline | - | |
| Total Vanadium (V) | 7440-62-2 | | | ND | ND | | ND | 2 | Schedule 3 | - | |
| Total Zinc (Zn) | 7440-66-6 | | | 28.9 | 0.018 | | 0.018 | 120 | Schedule 3 | 0.02% | |
| Total Particulate | - | - | - | 77600 | 49 | 59000 | 36 | 49 | 120 | Schedule 3 | 40% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Upwind | | Downwind | | | | | |
| Sample Duration (min) | | - | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | - | | 1599 | | 1633 | | | | | |
| Sample Flow Rate (m ³ /min) | | - | | 1.11 | | 1.13 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 28: Summary of Total Suspended Particulate ResultsSeptember 24, 2024

| Compounds | CAS No. | 24-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071739 | Filter ID: | 24071740 | Filter ID: | 24071742 | | | | |
| | | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | Mass (ug) | Concentration (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 18400 | 11 | 14300 | 9 | 51800 | 32 | 32 | 120 | Schedule 3 | 26% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1439 | | 1440 | | 1439 | | | | | |
| Sample Volume (m ³) ^[1] | | 1629 | | 1627 | | 1632 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.13 | | 1.13 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 29: Summary of Total Suspended Particulate ResultsSeptember 27, 2024

| Compounds | CAS No. | 27-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------------------------|----------------------|-----------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24071738 | Filter ID: | 24071741 | Filter ID: | 24071737 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | Sample 3 of 4 No Metals Analysis | | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | | | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | | | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | | | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 43.9 | 0.027 | | | 55.9 | 0.035 | 0.56 | 50 | Schedule 3 | 1.12% |
| Total Iron (Fe) | 7439-89-6 | 287 | 0.178 | | | 904 | 0.560 | 0.18 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | ND | ND | | | 4.2 | 0.003 | 0.02 | 0.5 | Schedule 3 | 3.80% |
| Total Manganese (Mn) | 7439-96-5 | 15.9 | 0.010 | | | 30.7 | 0.019 | 0.01 | 0.4 | Guideline | 2.47% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | | | ND | ND | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | | | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | | | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 21.9 | 0.014 | | | 39 | 0.024 | 48.20 | 120 | Schedule 3 | 40.17% |
| Total Particulate | - | 47500 | 30 | 46500 | 29 | 77800 | 48 | 48 | 120 | Schedule 3 | 40% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Upwind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1610 | | 1611 | | 1614 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.12 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 30: Summary of Total Suspended Particulate ResultsSeptember 30, 2024

| Compounds | CAS No. | 30-Sep-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-----------------|----------------------|--|--|---------------------------|-------------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071759 | Filter ID: | 24071757 | Filter ID: | 24071758 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | Invalid | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 26600 | 16 | 28800 | 18 | - | - | 18 | 120 | Schedule 3 | 15% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Upwind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | - | | | | | |
| Sample Volume (m ³) [1] | | 1620 | | 1570 | | - | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.09 | | - | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

ATTACHMENT C

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On October 24, 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the September 18, 2024 sampling event. On October 24, 2024, the results were entered and assessed, and it was found that there were one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

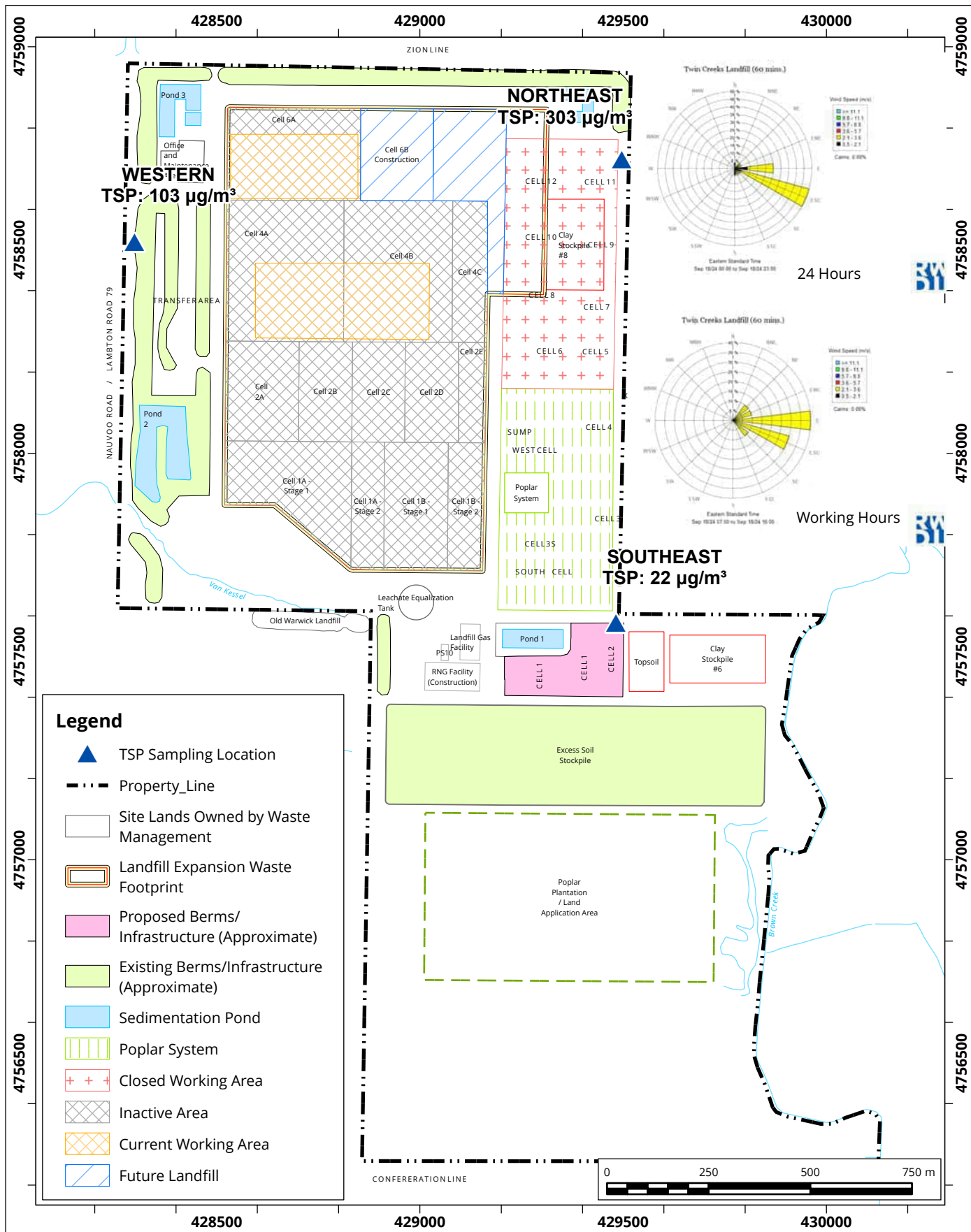
September 18, 2024

On Wednesday September 18, 2024, there was an exceedance of the TSP 24-hour AAQC at the Northeastern sampler. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the September 18 sampling date.

1. The measured TSP concentration at the Northeast sampler was 303 ug/m³, the Southeast sampler (site background) was 22 ug/m³ and Western sampler was 103 ug/m³. During the 24-hour period, the wind was predominantly from the E to ESE; wind speeds ranged from 2 to 13 km/h and wind gusts reached a maximum of 23 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the E to ESE. During this timeframe, the Northeast sampler location was in close proximity to site construction activities associated with stone stockpiling at the stone stockpile east of Pond 4.
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Northeast TSP sampler location, predominantly originated from on-site construction activities related to stone stockpiling, with contributions from off-site activities/sources as measured at the site background locations (Southeast and Western samplers at 22 ug/m³ and 103 ug/m³ respectively for TSP).



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: September 18, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1 |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Oct 24, 2024 |



General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) | Date Exceedence Determined September 18, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|--|--|--|---|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | Business Activity Description <i>(a description of the business endeavour, this may include products sold, services provided, equipment used, etc.)</i> Waste Disposal Site | | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information <i>(address that has civic numbering and street information includes street number, name, type and direction)</i> 5768 Nauvoo Rd | | | Unit Identifier <i>(i.e. suite or apartment number)</i> |
| Survey Address <i>(used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory)</i> | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information <i>(includes any additional information to clarify applicants' physical location)</i> | | | |
| Municipality/Unorganized Township Watford | County/District County of Lambton | Postal Code N0M 2S0 | |
| Geo Reference | | | |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – <i>attach a separate list if more space is required</i> | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|-----|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, was the ESDM Report prepared to fulfill (select all that apply): | |
| <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> | |
| <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities | |
| <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director | |
| <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report | |
| <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence | |
| <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard | |
| <input type="checkbox"/> Other (please specify): | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility |
| <input type="checkbox"/> Child Care Facility | <input type="checkbox"/> Educational Facility |
| <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input type="checkbox"/> Other Location (explain): |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|---|--|
| Type of Monitor / Measurement Type HI-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 18/09/2024 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? | | |
| <input checked="" type="checkbox"/> Yes | If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | |
| <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): | | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility | <input type="checkbox"/> Child Care Facility |
| <input type="checkbox"/> Educational Facility | <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input checked="" type="checkbox"/> Other Location (explain): | Property Line of Facility |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.

| | | | |
|---|----------------|---|--|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| Postal Code N0M 2S0 | | | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | E-mail Address amclachl@wm.com |
| Signature | | Date (dd/mm/yyyy) | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | | | | | | Land Use at Maximum Point of Impingement (if known) | | | |
|--|------------------------------|---|---|-----------------------------|--|---|-------------------------|---|--|
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|--------------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Northeast Sampler | | 18/09/24 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Northeast Sampler) | N/A | Hi-Vol | 303 | 24 | 120 | Visibility | AAQC | 253% | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

The graphic for Appendix G4 features a large, light gray circular shape on the right side of the page. On the left, a blue triangular shape is partially visible, with a white curved line separating it from the gray circle. The text 'APPENDIX G4' is centered in the white space between the blue triangle and the gray circle.

APPENDIX G4



600 Southgate Drive
Guelph, ON N1G 4P6
Canada

Tel: +1.519.823.1311
Fax: +1.519.823.1316
E-mail: solutions@rwdi.com

February 4, 2025

Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
5768 Nauvoo Road (Watford)
Warwick Township, County of Lambton N0M 2S0
E: amclachl@wm.com

**Re: Fourth Quarter 2024 TSP and Metals Report
October, November and December of 2024
Twin Creeks Environmental Centre – Watford, Ontario
RWDI Reference No. 2402553.02**

Dear Ms. McLachlan,

RWDI AIR Inc. (RWDI) was retained by Waste Management of Canada Corporation (WM) to complete the Total Suspended Particulate Matter (TSP) and Airborne Metal (Metals) sampling required under the Environmental Compliance Approval A032203, dated December 16, 2023 (Waste ECA). The sampling program is being completed, as approved by the Ontario Ministry of the Environment, Conservation and Parks (MECP) per Condition 13.8 of the Waste ECA. The station locations were approved by the MECP, as noted under Schedule "A" Reference 85 in the Waste ECA. The sampler locations for the TSP samplers are illustrated in the figures section of this report. These locations remained fixed for the duration of the sampling program. This report outlines the results from the fourth quarter (Q4) samples collected from October 1 to December 31, 2024.

SAMPLING PROGRAM OVERVIEW

Consistent with the Waste ECA dated December 16, 2023 and the AAQMP dated May 18, 2017, the samplers are run on a 6-day schedule from January 1 to May 31 and October 1 to December 31 of each year and run on a 3-day cycle from June 1 to September 30 of each year. A copy of the most recently amended AAQMP can be found in **Attachment A**.

Each sample location has two (2) High Volume Air samplers (Hi-Vols) which run on an alternating 6-day or 3-day schedule, depending on the time of year. Each sample period consists of a 24-hour (midnight to midnight) sample that operates in concurrence with the NAPS sampling schedule.

During the month of October, a total of five (5) sample sets or fifteen (15) samples were initiated, fifteen (15) of which are valid.

During the month of November, a total of five (5) sample sets or fifteen (15) samples were initiated, fifteen (15) of which are valid.



During the month of December, a total of five (5) sample sets or fifteen (15) samples were initiated, fourteen (14) of which are valid.

In Q4, a total of forty-five (45) samples were initiated, forty-four (44) samples of which were valid. This indicates, that 97.8% of the total samples were successful. Sample validity at the Southeast, Northeast and Western Stations were 100%, 100% and 93.3% respectively, which means that every sampling station had a valid quarter ($\geq 75\%$ validity). **Table 1** below summarizes the measured TSP concentrations for the forty-four (44) valid samples as collected from the Southeast, Northeast, and Western samplers.

Table 1 also indicates the direction of the wind at each sampling location relative to the active landfill cell. The Downwind designation indicates that the sampler was located predominantly downwind of the active landfill cell during the sampling period. Under these conditions the landfilling operations are likely to contribute to the measured concentrations. The Upwind designation indicates that the sampler was located predominantly upwind from the active cell. The Crosswind designation indicates that the wind was blowing in a direction that did not put the sampler either upwind or downwind with respect to the active cell or that the sampler was not located upwind or downwind for a significant period of time. Under the Upwind and Crosswind conditions the landfilling operations are unlikely to make a significant contribution to the measured concentrations. **Table 2** summarizes the significant cardinal wind directions observed during each sampling period.

Table 1: Summary of Meteorological Conditions and Measured TSP Concentrations for October, November, And December of 2024

| Sample Date | Southeast TSP Concentration and Sample Location ^[1] ($\mu\text{g}/\text{m}^3$) | Northeast TSP Concentration and Sample Location ^[1] ($\mu\text{g}/\text{m}^3$) | Western TSP Concentration and Sample Location ^[1] ($\mu\text{g}/\text{m}^3$) |
|-------------|--|--|--|
| 3-Oct-24 | 50 $\mu\text{g}/\text{m}^3$ Crosswind | 74 $\mu\text{g}/\text{m}^3$ Crosswind | 39 $\mu\text{g}/\text{m}^3$ Crosswind |
| 9-Oct-24 | 98 $\mu\text{g}/\text{m}^3$ Crosswind | 75 $\mu\text{g}/\text{m}^3$ Crosswind | 21 $\mu\text{g}/\text{m}^3$ Upwind |
| 15-Oct-24 | 11 $\mu\text{g}/\text{m}^3$ Downwind | 18 $\mu\text{g}/\text{m}^3$ Crosswind | 13 $\mu\text{g}/\text{m}^3$ Crosswind |
| 21-Oct-24 | 50 $\mu\text{g}/\text{m}^3$ Crosswind | 103 $\mu\text{g}/\text{m}^3$ Downwind | 52 $\mu\text{g}/\text{m}^3$ Upwind |
| 27-Oct-24 | 30 $\mu\text{g}/\text{m}^3$ Crosswind | 54 $\mu\text{g}/\text{m}^3$ Crosswind | 30 $\mu\text{g}/\text{m}^3$ Crosswind |
| 2-Nov-24 | 34 $\mu\text{g}/\text{m}^3$ Crosswind | 44 $\mu\text{g}/\text{m}^3$ Crosswind | 29 $\mu\text{g}/\text{m}^3$ Crosswind |
| 8-Nov-24 | 135 $\mu\text{g}/\text{m}^3$ Crosswind | 99 $\mu\text{g}/\text{m}^3$ Crosswind | 24 $\mu\text{g}/\text{m}^3$ Upwind |
| 14-Nov-24 | 16 $\mu\text{g}/\text{m}^3$ Upwind | 26 $\mu\text{g}/\text{m}^3$ Crosswind | 26 $\mu\text{g}/\text{m}^3$ Downwind |
| 20-Nov-24 | 10 $\mu\text{g}/\text{m}^3$ Crosswind | 11 $\mu\text{g}/\text{m}^3$ Crosswind | 24 $\mu\text{g}/\text{m}^3$ Downwind |
| 26-Nov-24 | 9 $\mu\text{g}/\text{m}^3$ Crosswind | 14 $\mu\text{g}/\text{m}^3$ Downwind | 14 $\mu\text{g}/\text{m}^3$ Upwind |



| Sample Date | Southeast TSP Concentration and Sample Location ^[1] (µg/m ³) | Northeast TSP Concentration and Sample Location ^[1] (µg/m ³) | Western TSP Concentration and Sample Location ^[1] (µg/m ³) |
|-------------|--|--|---|
| 2-Dec-24 | 21 µg/m ³ Crosswind | 26 µg/m ³ Downwind | 18 µg/m ³ Upwind |
| 8-Dec-24 | 20 µg/m ³ Crosswind | 20 µg/m ³ Downwind | 20 µg/m ³ Upwind |
| 14-Dec-24 | 19 µg/m ³ Crosswind | 18 µg/m ³ Upwind | 41 µg/m ³ Downwind |
| 20-Dec-24 | 10 µg/m ³ Crosswind | 12 µg/m ³ Upwind | Invalid Downwind |
| 26-Dec-24 | 10 µg/m ³ Upwind | 17 µg/m ³ Crosswind | 27 µg/m ³ Downwind |

Notes: [1] Directional references indicate the direction of the wind at each sampling location during the sampling period relative to the active landfill cell, as described above.

Table 2: Summary of Meteorological Conditions for the Sample Dates in October, November, And December of 2024

| Sample Date | Range of Mean Wind Speeds ^[1] (km/h) | Dominant Wind Direction ^[2] (compass) |
|-------------|--|---|
| 3-Oct-24 | 3-14 | SSE, S,SSW,SW |
| 9-Oct-24 | 3-10 | WSW, WNW, NW |
| 15-Oct-24 | 4-18 | NNE, WNW, NW, NNW |
| 21-Oct-24 | 7-16 | SSW, SW |
| 27-Oct-24 | 3-15 | S, SSW, SW, WSW |
| 2-Nov-24 | 3-10 | E, ESE, SE, WNW |
| 8-Nov-24 | 3-26 | SW, WSW, WNW, NW |
| 14-Nov-24 | 12-33 | E, ESE, SE |
| 20-Nov-24 | 4-28 | E, ESE, SW, W |
| 26-Nov-24 | 12-27 | SW, WSW, W, WNW |
| 2-Dec-24 | 10-19 | WSW, W, WNW |
| 8-Dec-24 | 1-26 | ESE, SW, WSW |
| 14-Dec-24 | 6-31 | E,ESE |
| 20-Dec-24 | 8-21 | N, NE, ENE, E |
| 26-Dec-24 | 15-26 | ESE, SE |

Notes: [1] Based on average wind speed per wind direction.

[2] Based on the direction from which the wind is blowing.

Calm – Less than 1.8 kilometers per hour.

Figures 1a through **1o**, found in the **figure section** of this report, illustrate the sample location, measured TSP concentration, and the wind-rose depicting the wind conditions for each sample period. The wind-roses express the percentage of time the wind is blowing from each direction and provides the distribution of wind speeds observed for each direction.

A summary of the calculated statistics for measured concentrations at the Twin Creeks Environmental Centre sampling locations is presented in **Table 3** during Q4.



Table 3: Calculated Statistics for Measured 24-hour Averaged TSP Concentrations ($\mu\text{g}/\text{m}^3$)

| Sample Locations | No. of Valid Samples | Percentiles (%) | | | Maximum | Arithmetic Mean | Number of Measurements Above the AAQC ($120 \mu\text{g}/\text{m}^3$) |
|------------------|----------------------|-----------------|----|----|---------|-----------------|--|
| | | 50 | 70 | 90 | | | |
| Southeast | 15 | 20 | 34 | 79 | 135 | 35 | 1 |
| Northeast | 15 | 26 | 45 | 90 | 103 | 40 | 0 |
| Western | 14 | 25 | 29 | 40 | 52 | 27 | 0 |

The MECP 24-hour Ambient Air Quality Criteria (AAQC) for TSP ($120 \mu\text{g}/\text{m}^3$) was exceeded one (1) time during the fourth quarter sampling period:

- On November 8th, 2024, the AAQC was exceeded at the Southeast station, with a concentration of $135 \mu\text{g}/\text{m}^3$.

Consistent with the MECP approved monitoring/reporting requirements for TSP at the landfill, the exceedances were reported to the MECP within the 2-week notification requirements.

Further details of the notification and discussion of the event are provided in **Attachment C**.

In agreement with the Warwick Township Technical Review Team, only the highest TSP filter weight for each station was analyzed for airborne metal concentrations per 4 sample sets.

During the fourth quarter, airborne metals were assessed on October 9 (Southeast), October 21 (Northeast and Western), October 27 (Western), November 8 (Southeast and Northeast), November 20 (Western), December 2 (Southeast and Northeast), and December 14. All measured concentrations of airborne metals were below their respective AAQC's as outlined in Ontario Regulation 419. The summary of Q4 total suspended particulate and metals results are provided in **Attachment B**. Laboratory analytical reports will be provided in the Annual Report.

CURRENT MITIGATION MEASURES

The Twin Creeks Environmental Centre has created a Best Management Practices Plan for dust that is implemented at the site. All Site employees are trained in the contents of the plan. Through the combined efforts of the mitigation measures and implementation of the Dust Management Plan, Twin Creeks Environmental Centre plans on limiting the number of TSP exceedances during the periods of heavy construction and beyond.

Currently, particulate emission mitigation measures are in place at the Twin Creeks Environmental Centre and consist of watering on-site roadways and construction sites as well as a number of other practices as outlined in the Best Management Practices Plan for dust. The practices listed above will not occur if precipitation events cause these activities to become redundant or if the ground is sufficiently wet from previous precipitation events.



Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2402553
February 4, 2025

CLOSING

Please feel free to contact us with any questions or comments that you may have with respect to this submission.

Yours very truly,

RWDI AIR Inc.

A handwritten signature in black ink, appearing to read 'Khalid Hussein'.

Khalid Hussein, P.Eng.
Project Manager

KAMH/hta

Attach.



Ms. Angela McLachlan | Environmental Compliance Manager
Waste Management of Canada Corporation
RWDI#2402553
February 4, 2025

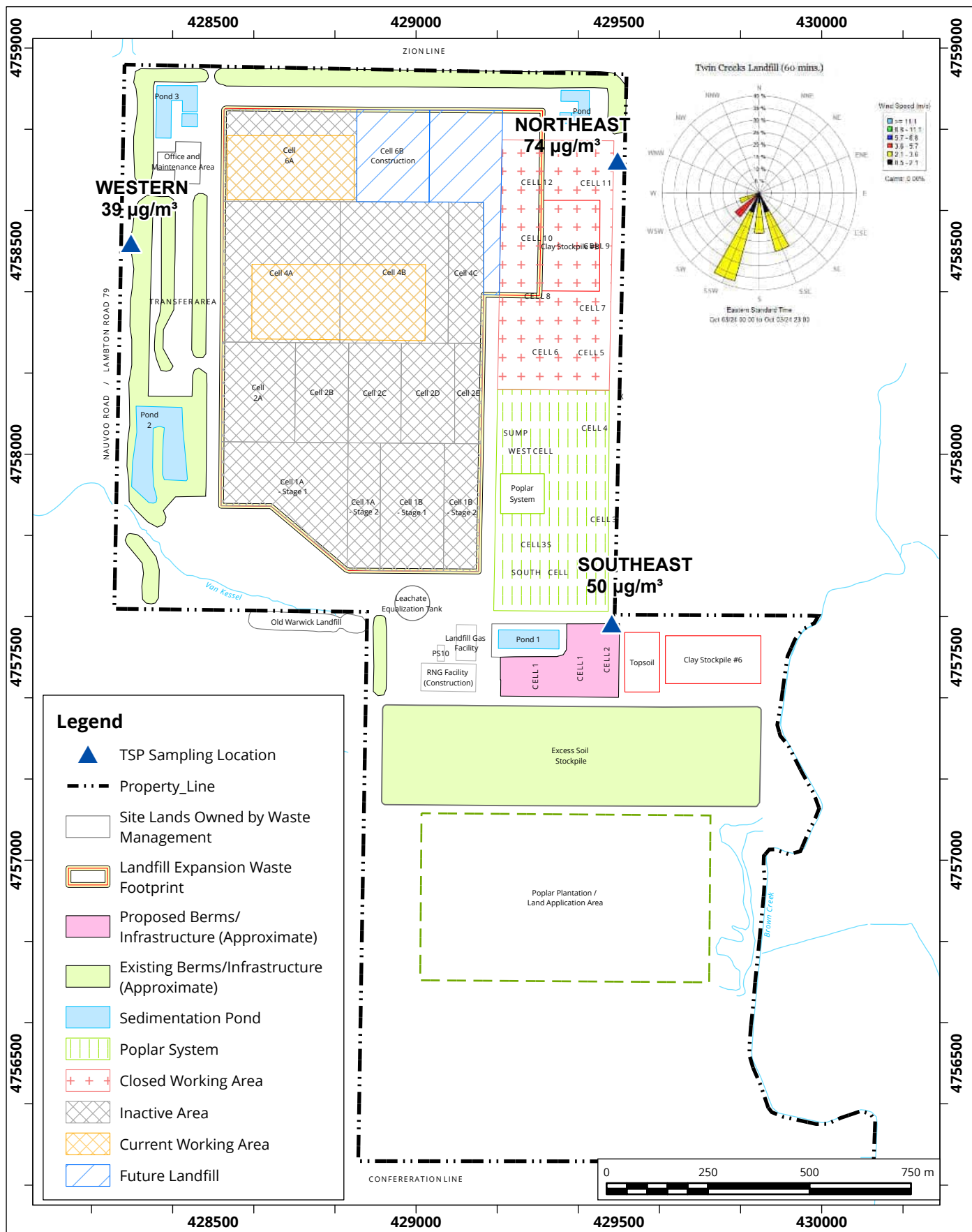
GENERAL STATEMENT OF LIMITATIONS

This report entitled “Fourth Quarter 2024 TSP and Metals Report”, dated February 4, 2025 was prepared by RWDI AIR Inc. (“RWDI”) for Waste Management of Canada Corporation (“Client”). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein (“Project”). This report was prepared using scientific principles, published methodologies and professional judgment in assessing available information and data. The findings presented within this document are based on available data within the limits of the existing information, budgeted scope of work, and schedule. The conclusions contained in this report are based on the information available to RWDI when this report was prepared; subsequent changes made by the Client after the date of this report have not been reflected in the conclusions.

This report was prepared for the exclusive use of Waste Management of Canada Corporation and the MECP. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. RWDI accepts no responsibility for damages, if any, suffered by any third party as result of decisions made or actions based on this report.

A large decorative graphic on the left side of the page. It features a blue triangular shape at the top left, a white curved line separating it from a large light gray circular area, and the word 'FIGURES' in blue text within the gray area.

FIGURES



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: October 3, 2024

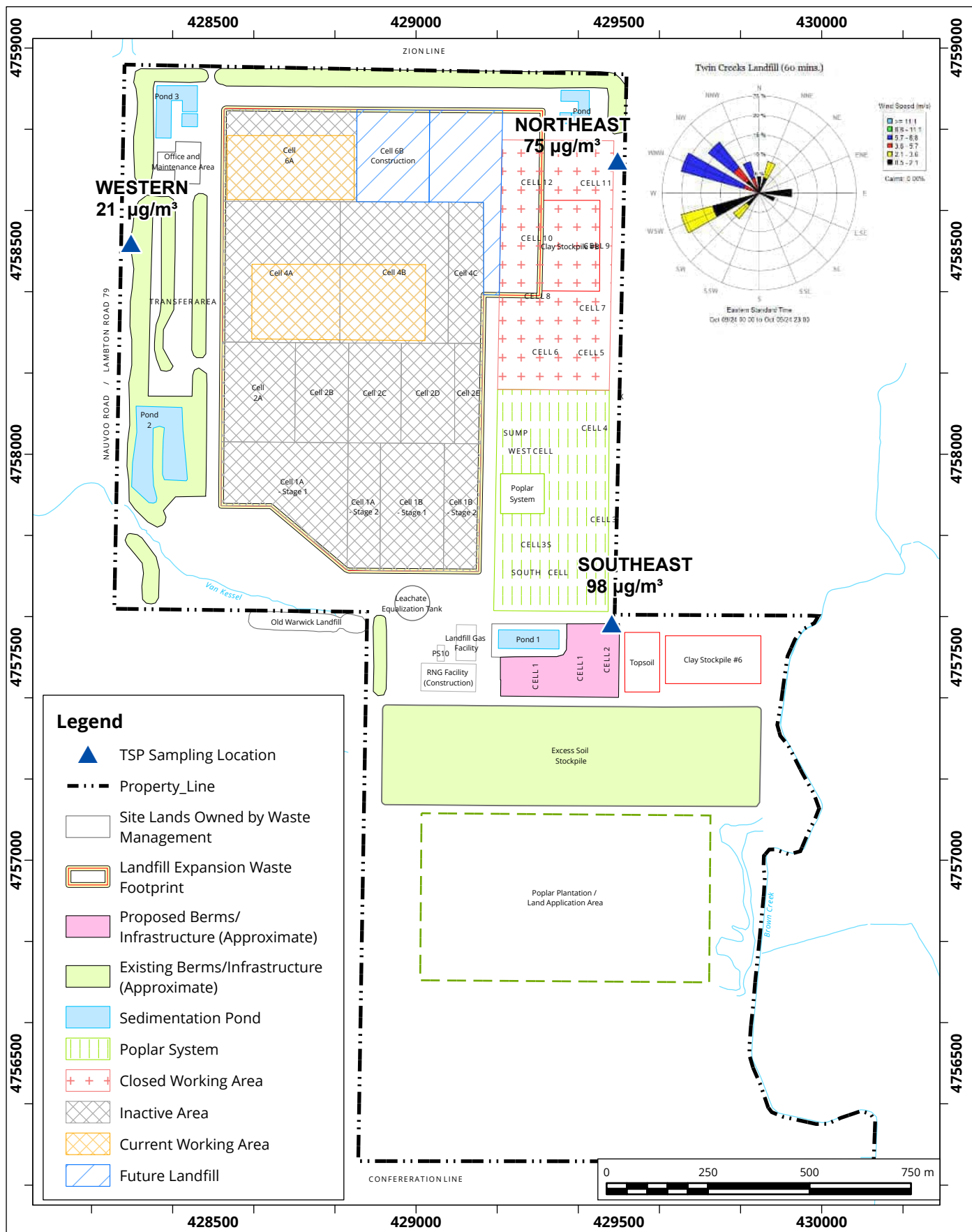
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

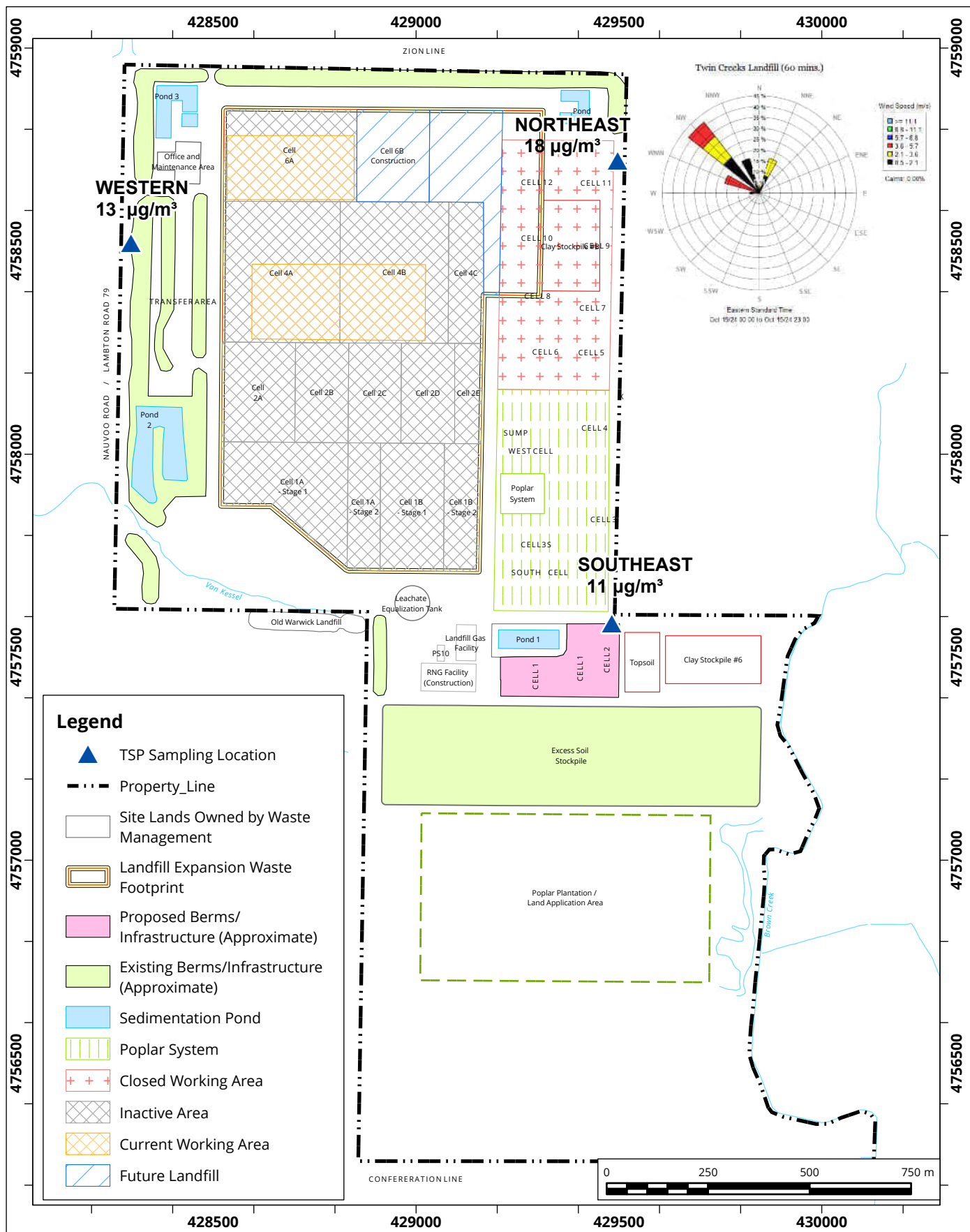


Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1a |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Nov 25, 2024 |







Site Plan Showing Sampling Locations and Wind Rose Sampling Period: October 15, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

True North



Drawn by: AXT

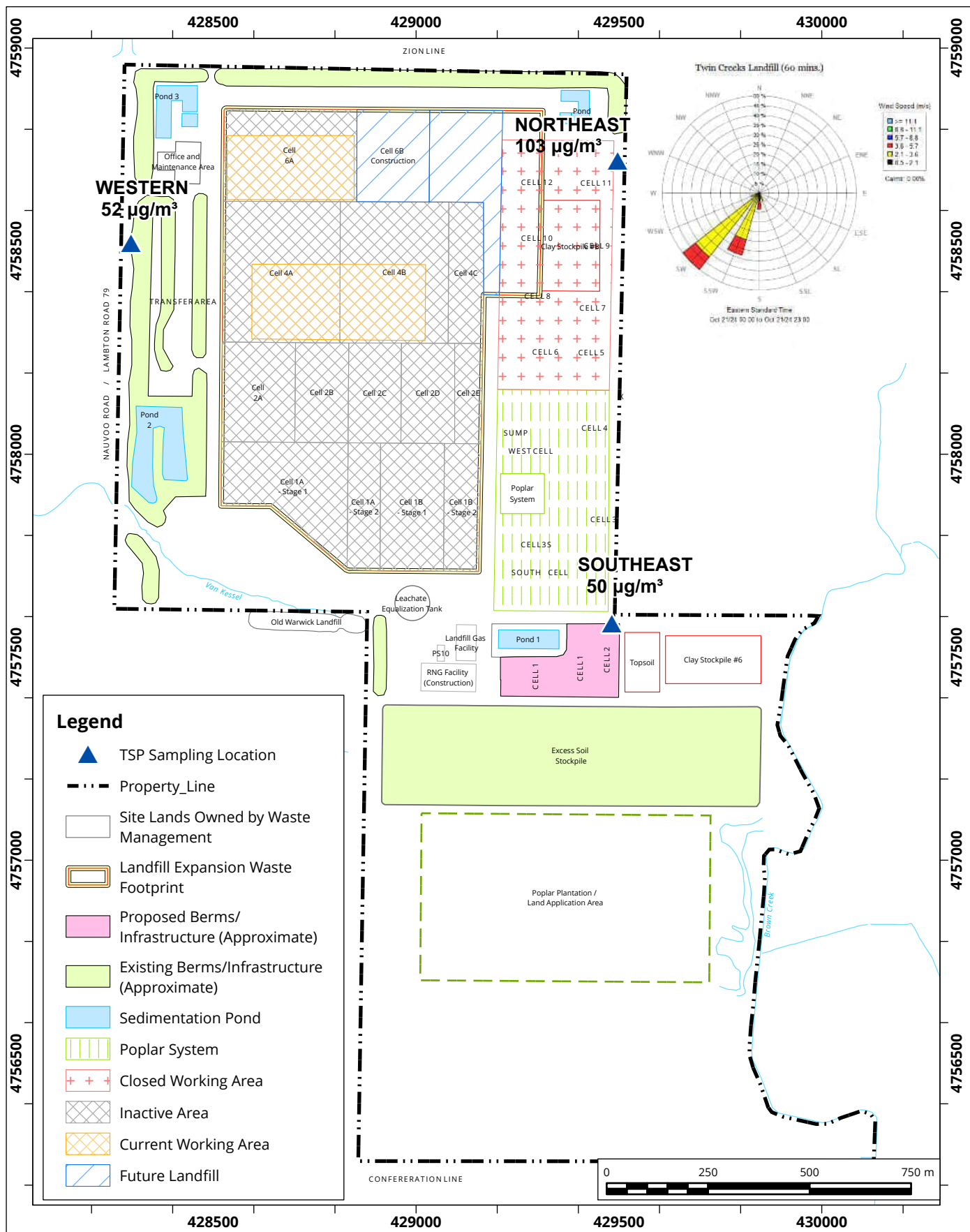
Figure: 1c

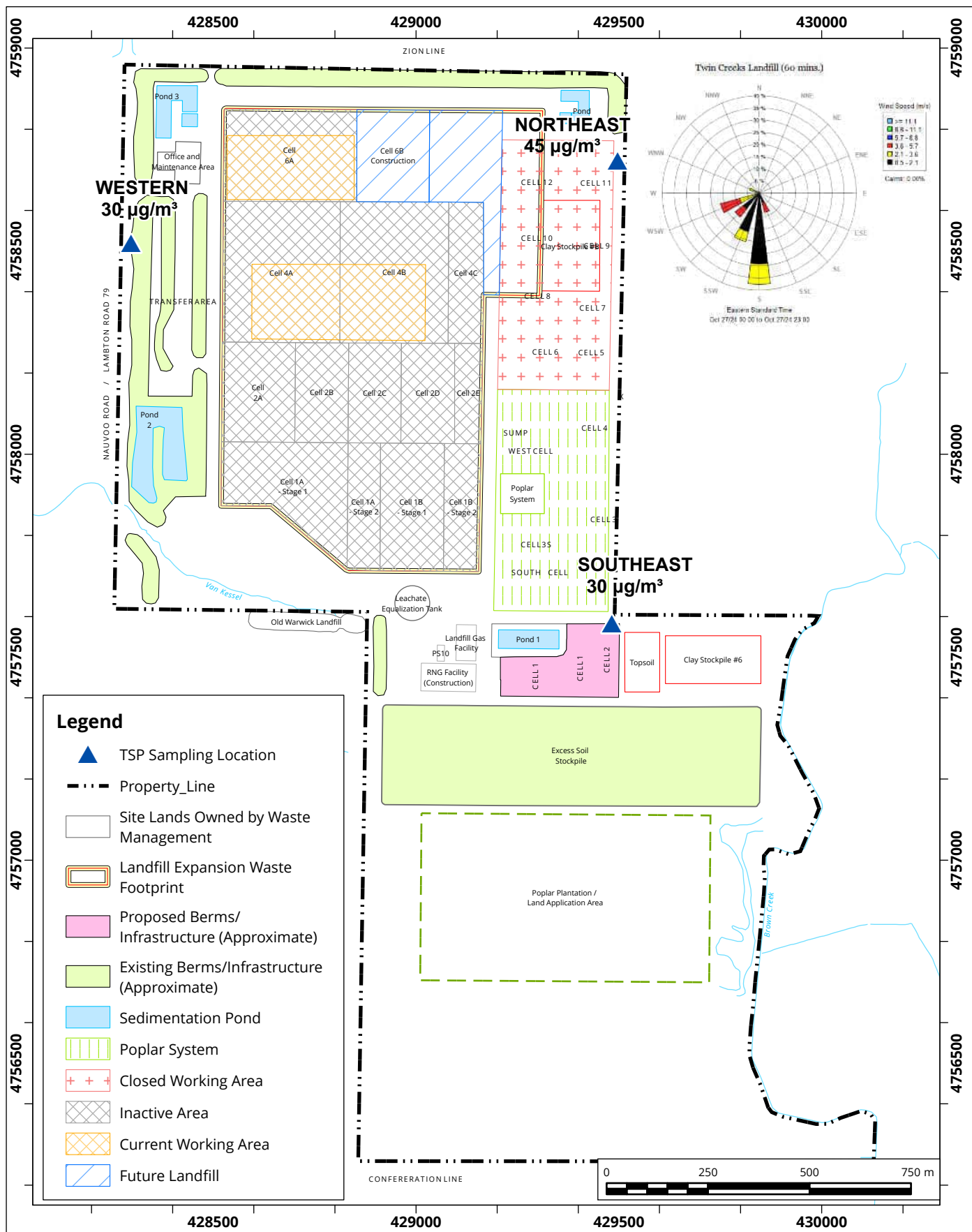
Approx. Scale: 1:13,000

Date Revised: Nov 25, 2024

Project #: 2402553







Site Plan Showing Sampling Locations and Wind Rose Sampling Period: October 27, 2024

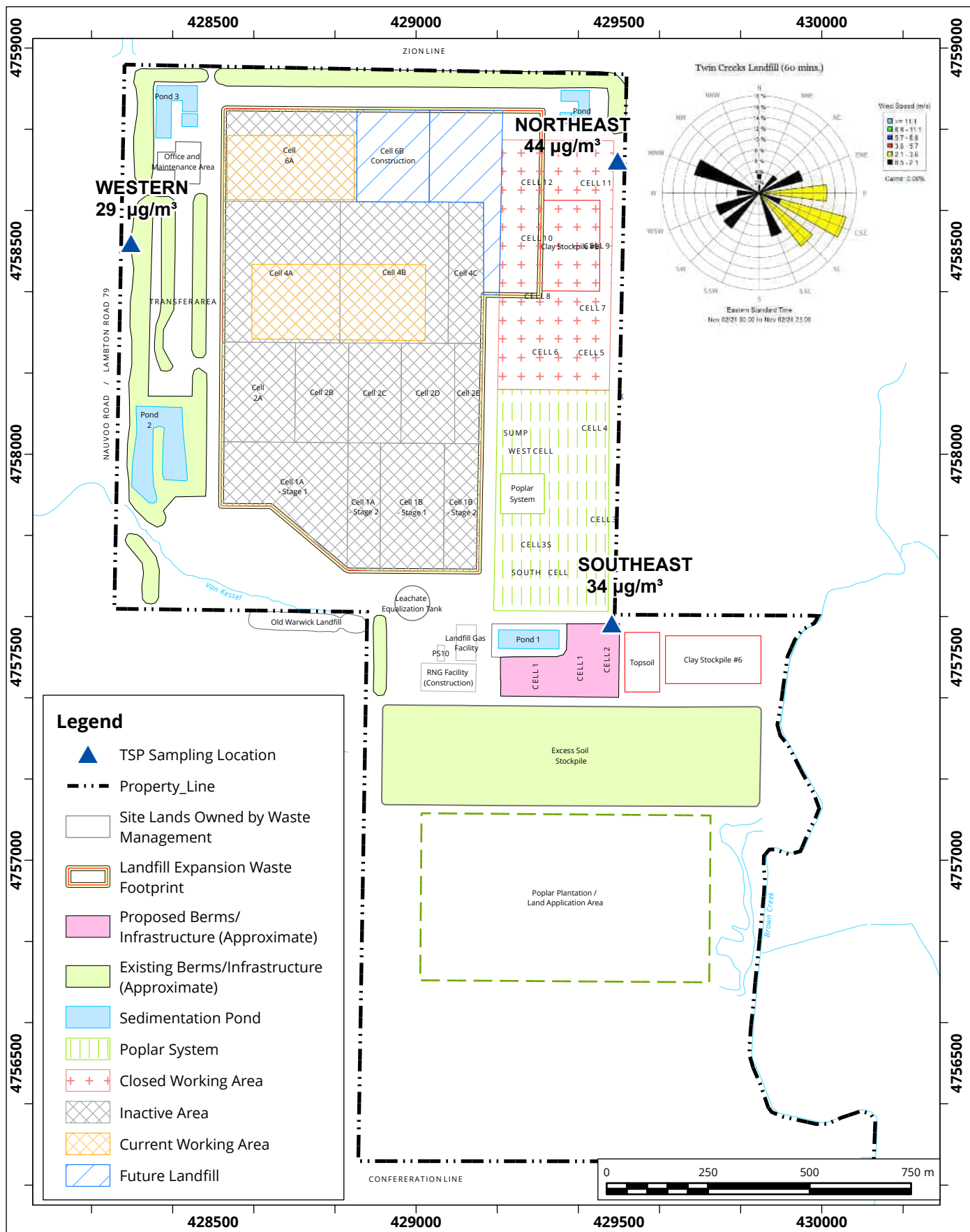
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------------------|------------|
| Drawn by: AXT | Figure: 1e |
| Approx. Scale: 1:13,000 | |
| Date Revised: Nov 25, 2024 | |





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: November 2, 2024

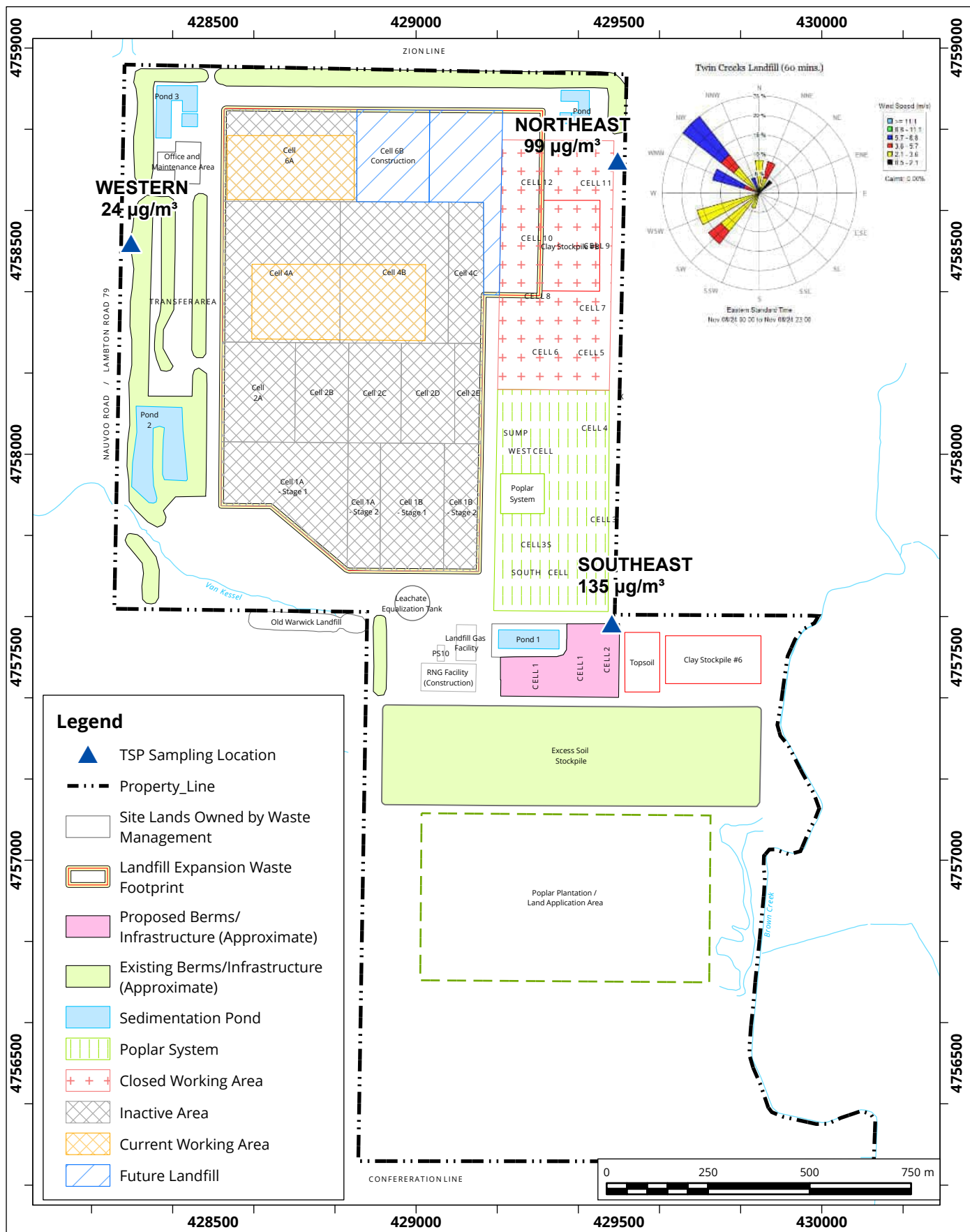
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

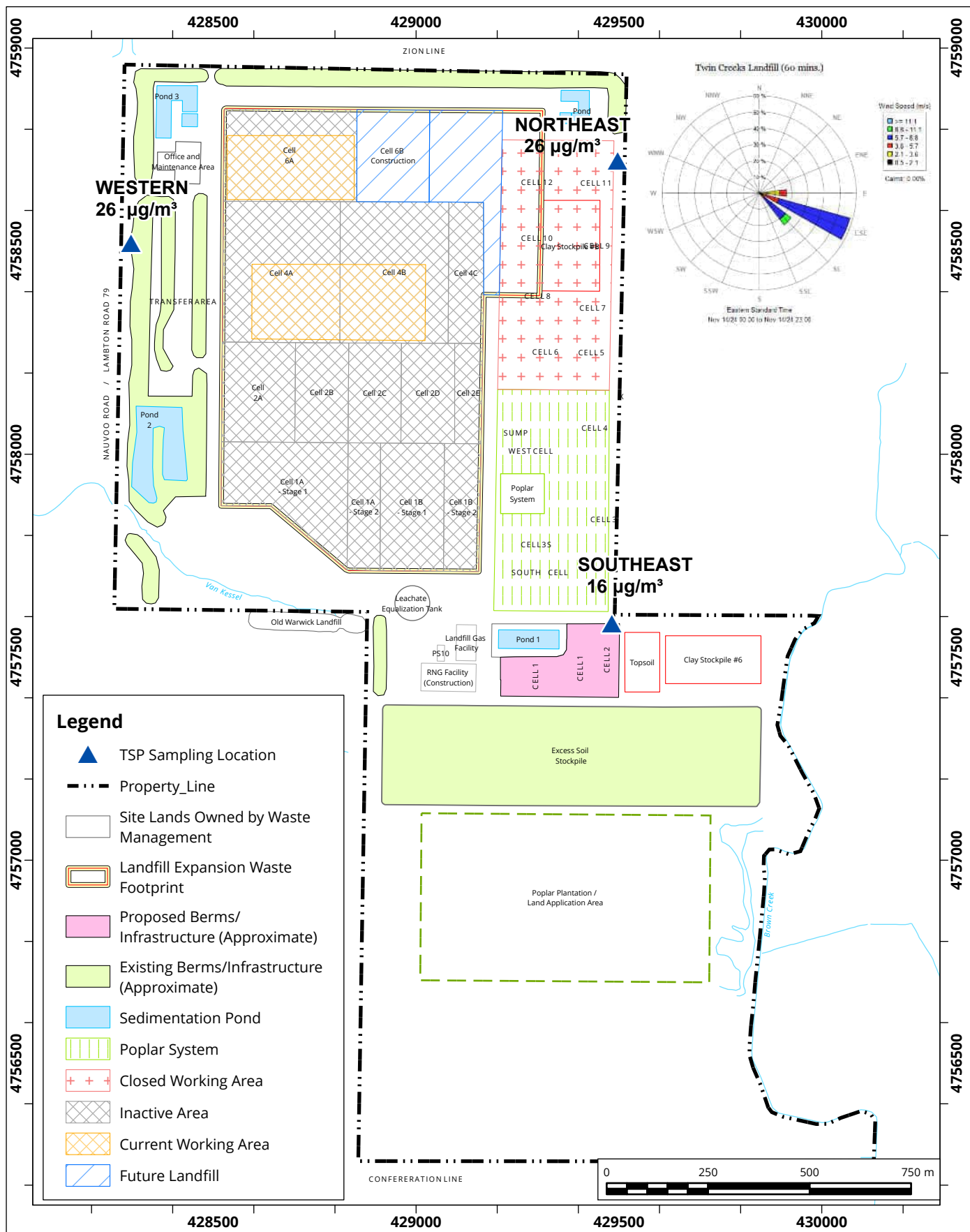


Project #: 2402553

| | |
|----------------------------|------------|
| Drawn by: AXT | Figure: 1f |
| Approx. Scale: 1:13,000 | |
| Date Revised: Nov 25, 2024 | |







Site Plan Showing Sampling Locations and Wind Rose Sampling Period: November 14, 2024

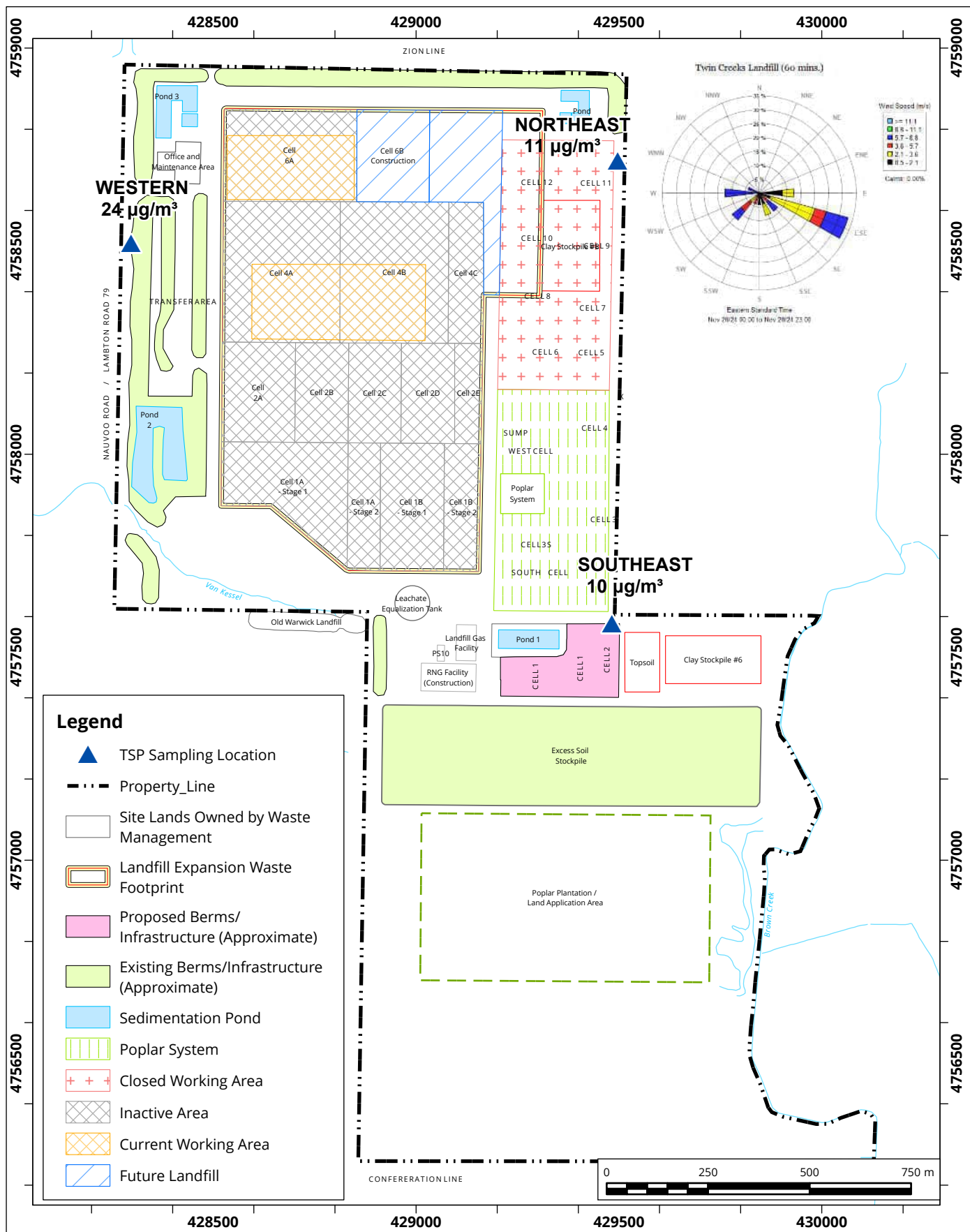
Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

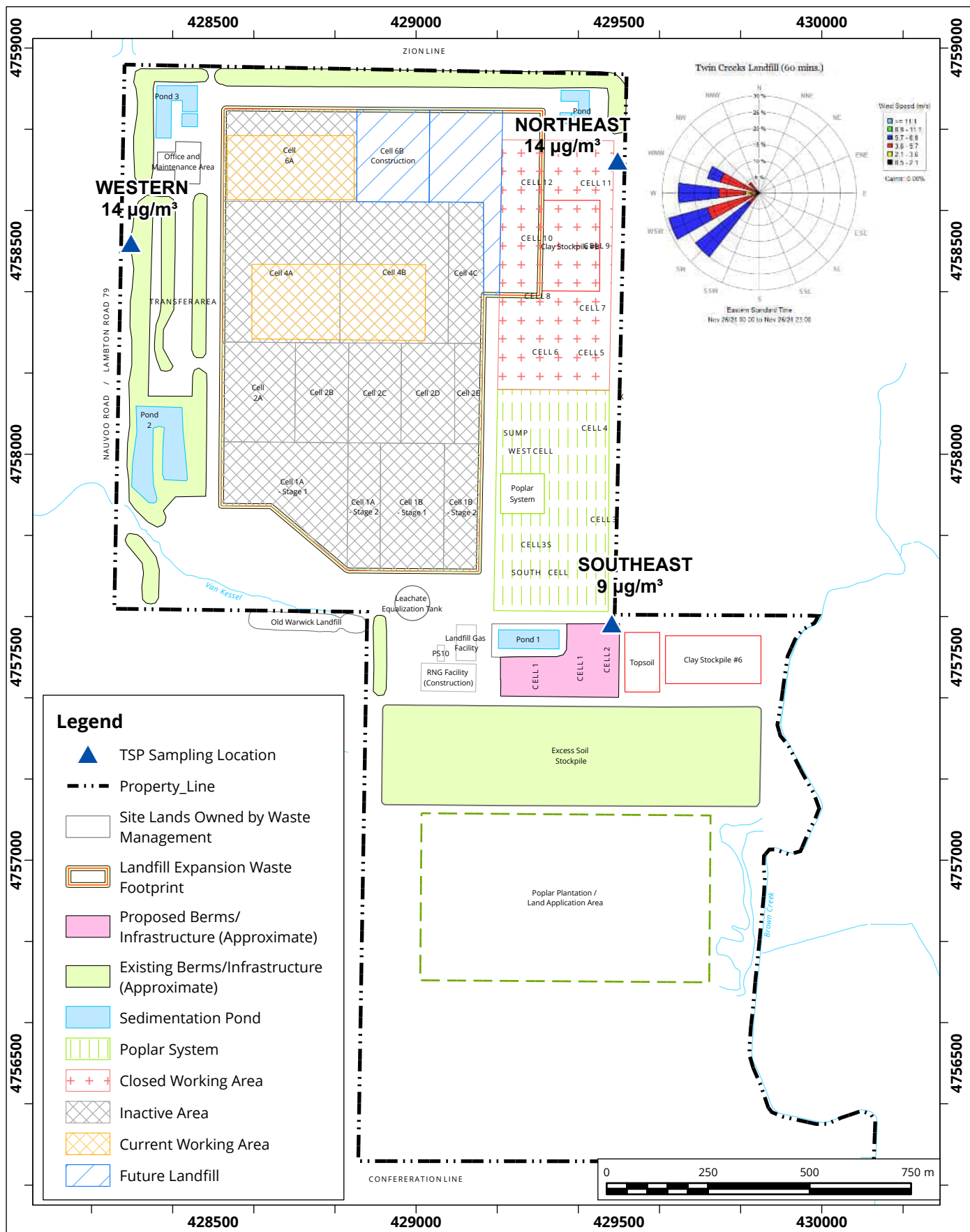
Project #: 2402553

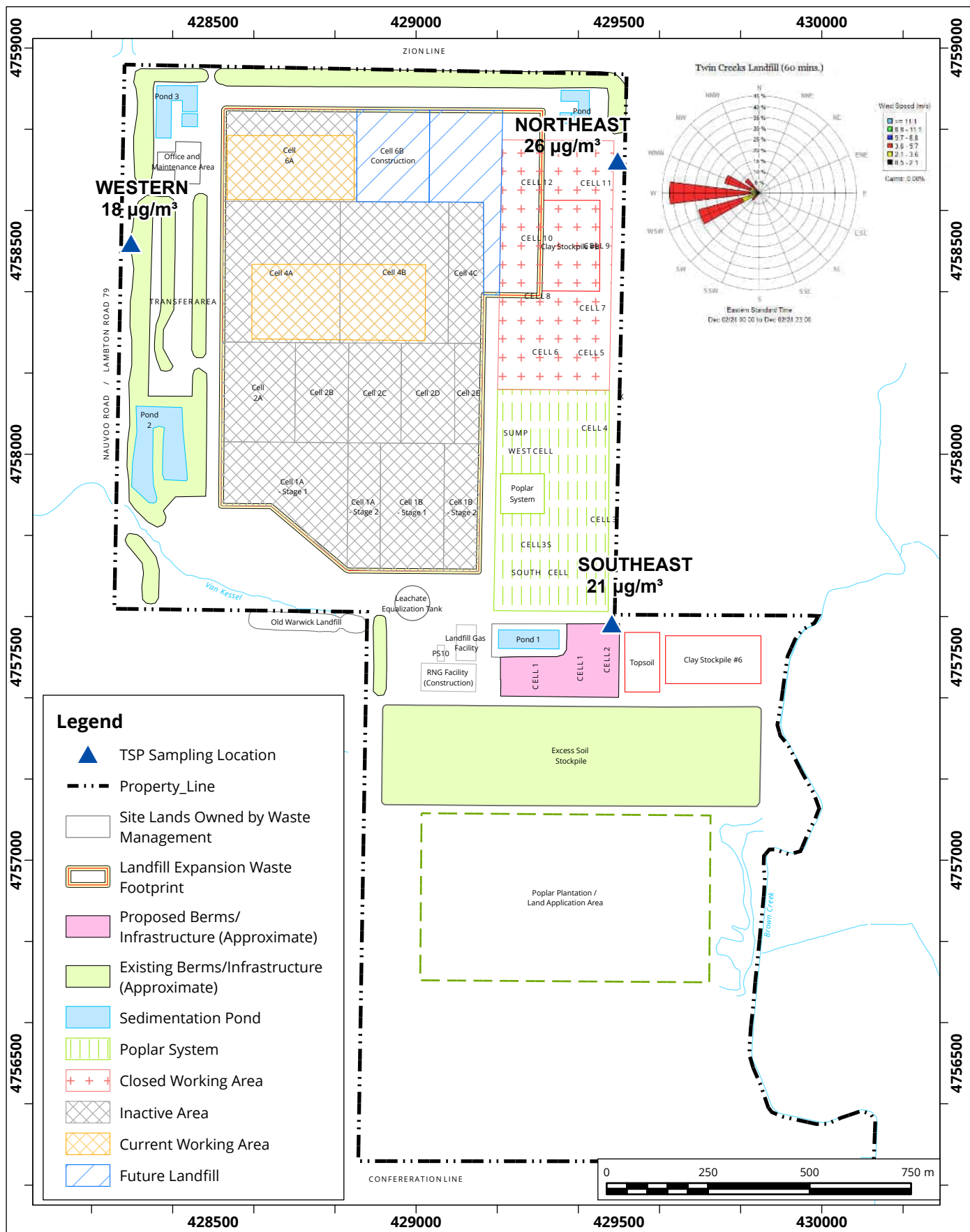


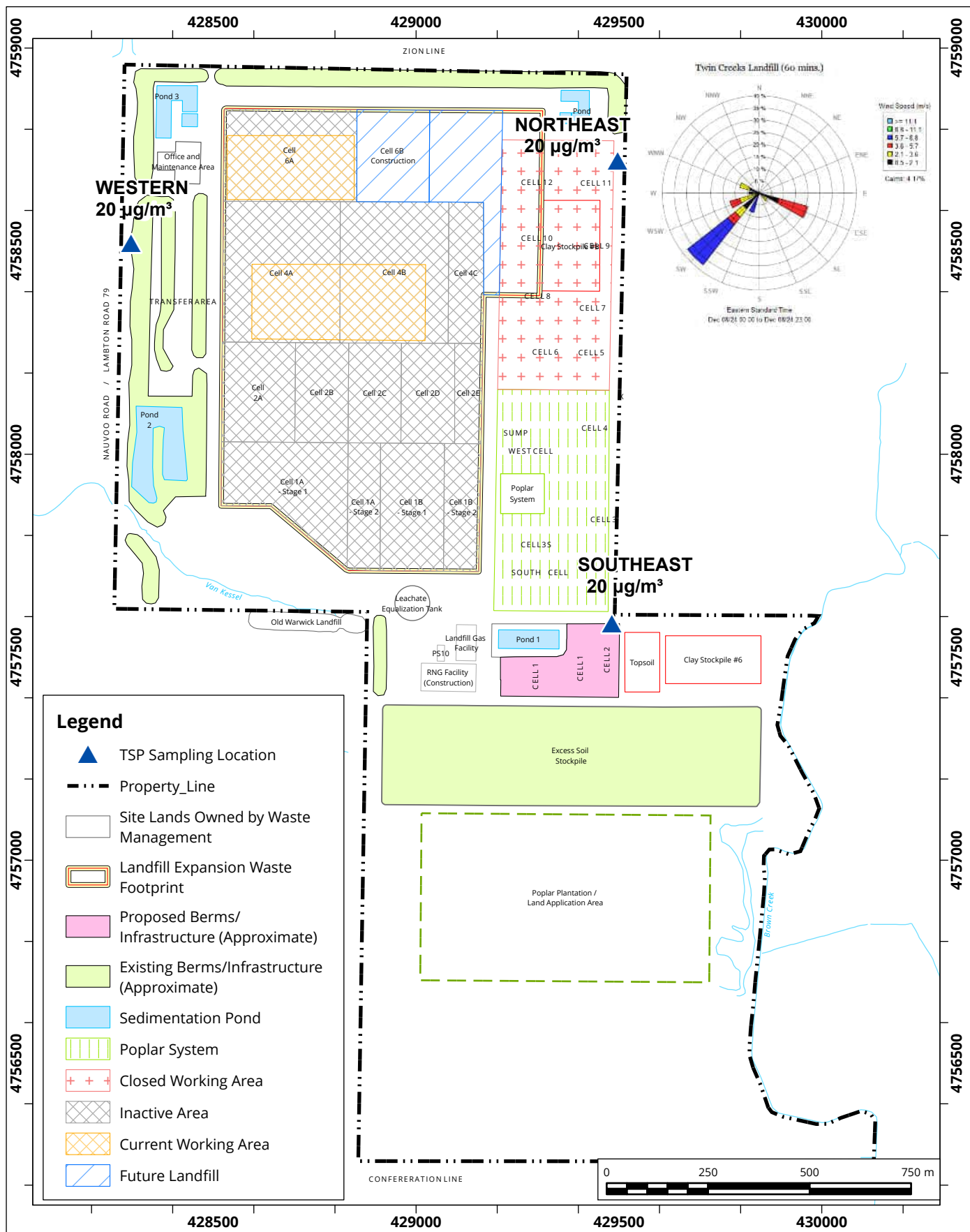
| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1h |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Nov 25, 2024 |











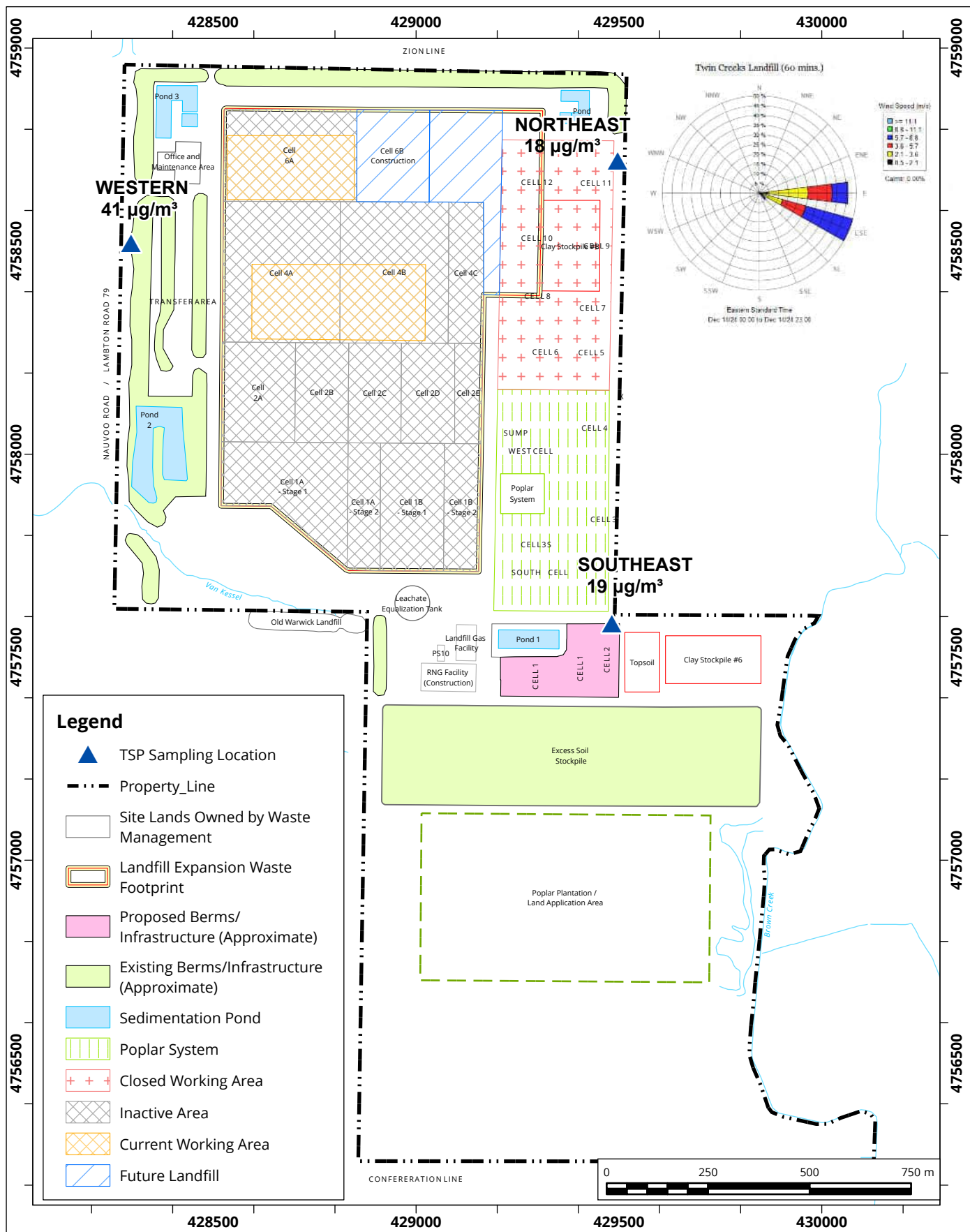
Site Plan Showing Sampling Locations and Wind Rose Sampling Period: December 8, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario

True North
Project #: 2402553

Drawn by: AXT
Figure: 1I
Approx. Scale: 1:13,000
Date Revised: Dec 30, 2024





Site Plan Showing Sampling Locations and Wind Rose Sampling Period: December 14, 2024

Map Projection: NAD 1983 UTM Zone 17N

Twin Creeks Environmental Centre - Watford, Ontario

True North



Drawn by: AXT

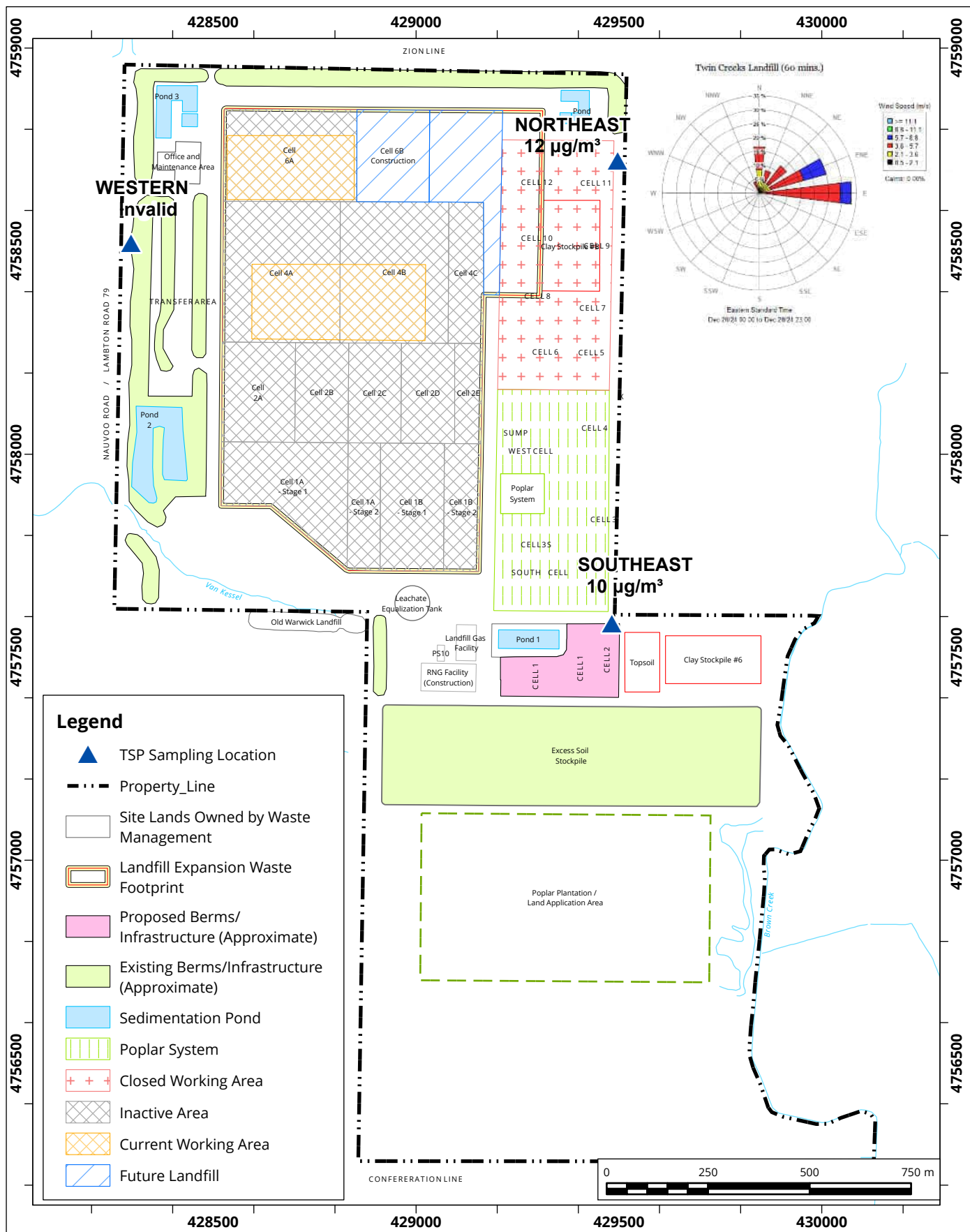
Figure: 1m

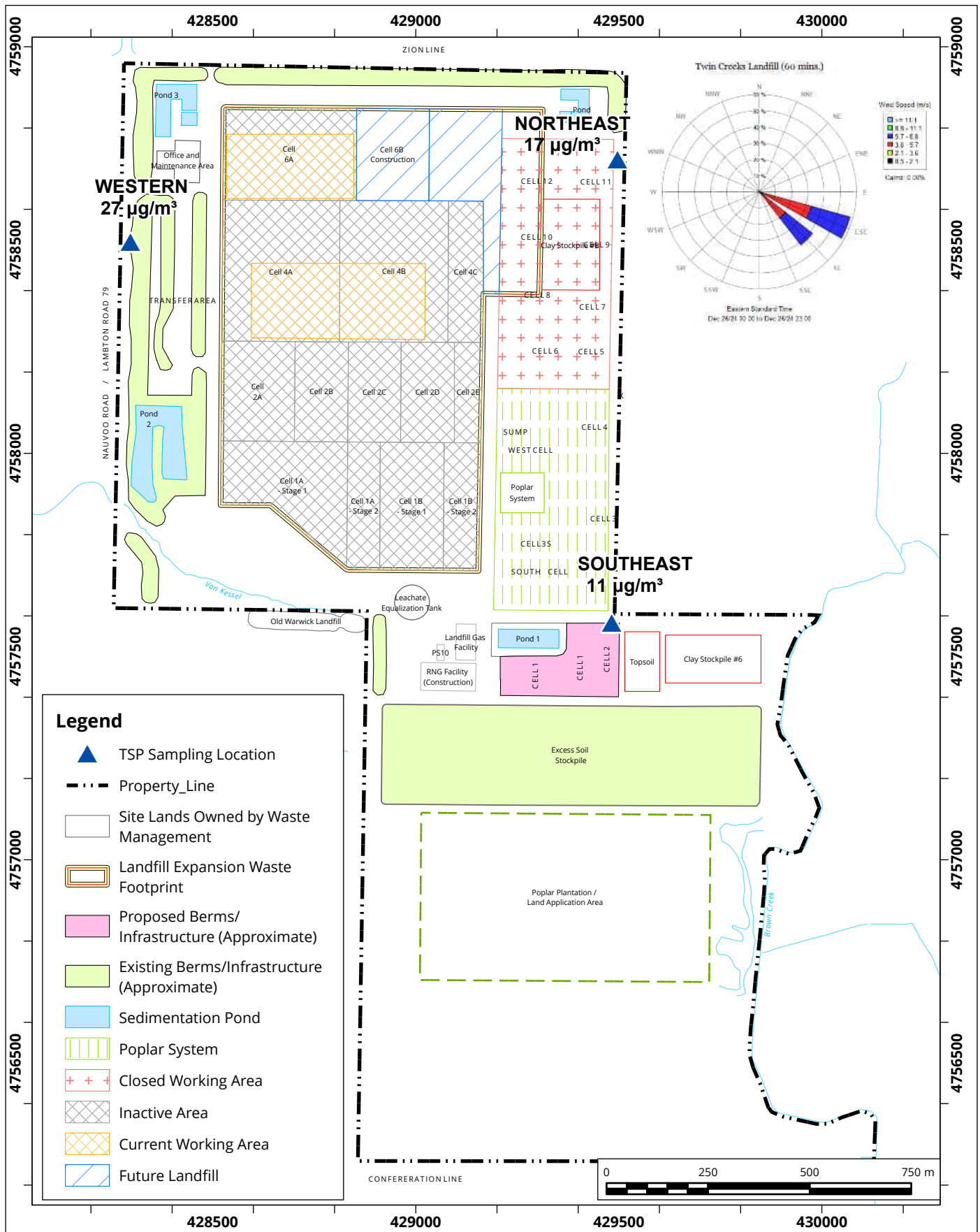
Approx. Scale: 1:13,000

Date Revised: Dec 30, 2024

Project #: 2402553







The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT A' is centered within the gray circle.

ATTACHMENT A

WASTE MANAGEMENT OF CANADA CORPORATION

WATFORD, ONTARIO

TWIN CREEKS LANDFILL SITE: AMBIENT AIR QUALITY MONITORING PLAN [REVISION #3]

RWDI #1600984

May 18, 2017

SUBMITTED TO

Wayne Jenken
Area Landfill Engineer
wjenken@wm.com

**Waste Management of Canada
Corporation | Twin Creeks Landfill**
8039 Zion Line
Watford, Ontario N0M 2S0

T: 519.849.5810
C: 519.381.3017
F: 519.849.6816

SUBMITTED BY

Brad Bergeron, A.Sc.T., d.E.T.
Senior Project Manager | Principal
Brad.Bergeron@rwdi.com

**RWDI AIR Inc.
Consulting Engineers & Scientists**
600 Southgate Drive
Guelph, Ontario N1G 4P6

T: 519.823.1311, ext. 2428
F: 519.823.1316



TABLE OF CONTENTS

1 **TOTAL HYDROCARBON “WALKABOUT” SURVEY.....1**

2 **DUST MONITORING3**

2.1 Additional Dust Monitoring Provisions..... 5

3 **VOC MONITORING.....5**

4 **COMPLAINT RECORDING PROCESS.....7**

5 **REFERENCES.....8**

LIST OF TABLES

Table 1: List of Monitored VOCs.....5

LIST OF FIGURES

Figure 1: Walkabout Pattern.....2

Figure 2: Dust Monitor Locations.....4



1 TOTAL HYDROCARBON “WALKABOUT” SURVEY

The “Walkabout” survey will consist of a grid survey of the entire landfill mound using a handheld THC analyzer (FID). A portable FID will be used throughout the surveys. The FID will be calibrated using a methane gas standard and zeroed using ultra zero pure air. The instrument used will have the following characteristics:

- a response time of no greater than 15 seconds
- an accuracy of 3 percent or better
- a minimum detectable limit of 5 ppmv (or lower)
- a flame-out indicator, audible and visual

The “Walkabout” survey will be completed in a grid like formation gathering data at 7.6 cm or lower (3 inches or lower) above the ground. “Hotspots” of “breakout points” consisting of cracks, fissures, areas of bubbling surface water, or patches of dead (brunt) vegetation on the mound will be visually observed and notes for THC concentrations exceeding 500 ppm (methane). The “walkabout” surveys should be completed at winds less than 8 kilometers per hour (5 miles per hour) and during dry conditions (no measurable precipitation for the proceeding 72 hours prior to sampling). In addition, for the instantaneous readings, the surveys should be completed when the ambient temperatures are within 0 to 50 degrees Celsius.

THC concentrations 500 ppm or greater should be considered of concern during the instantaneous measurements. Therefore, THC concentrations less than 500 ppm will not be noted during the survey. Locations where the THC concentrations are 500 ppm or greater should assist WMI in determining all potential and existing landfill gas release points that require remedial action.

All THC concentrations measured will be expressed as methane on the calibration standard used. After the ‘hotspot’ or “breakout points” are fixed, documentation of the corrective actions taken as well as confirmation of adequate actions taken (THC concentrations less than 500 ppm) will be presented to the MOECC. The “walkabout” survey will include the following:

- precise locations of all sampling sites on the site map
- identification of all data obtained in the field measurements
- documentation of all remedial action

The “walkabout” survey should be done in the spring and the early fall. The measured areas should include areas where landfill cover is complete. Problem areas identified should be repaired within two (2) months of identification. Once repairs are completed, a follow-up survey on the specific locations will be completed to validate success of the remediation action(s). The process is important in minimizing odour and VOC emissions.

The “Walkabout” surveys will be performed twice per year or in response to otherwise unexplained odour events. As outlined in the Odour Best Management Practices Plan, routine visual inspections of the landfill cap integrity will also occur on a monthly basis to identify possible problem areas.

RW
DIRW
DI



2 DUST MONITORING

The monitoring for Total Suspended Particulate (TSP) will be completed on an on-going basis at three locations around the landfill footprint. The TSP monitor locations are shown in **Figure 2**.

Total Suspended Particulate samples will be taken on a six-day interval during the months of October through May and samples will be taken on a three-day interval during the months of June through September. The sampling will be in concurrence with the U.S EPA National Air Pollutant Surveillance (NAPS) monitoring schedule. The sampling will include the entire year (sampling during 12 months per year). In addition, the analysis for airborne metals will be completed for 11 of the collected TSP samples per station (total of 33 metal samples per year). For each of the 11 sets of samples collected, the particulate analysis will be completed prior to the metal analysis and the highest particulate loaded filters from each station will undergo the analysis for airborne metals.

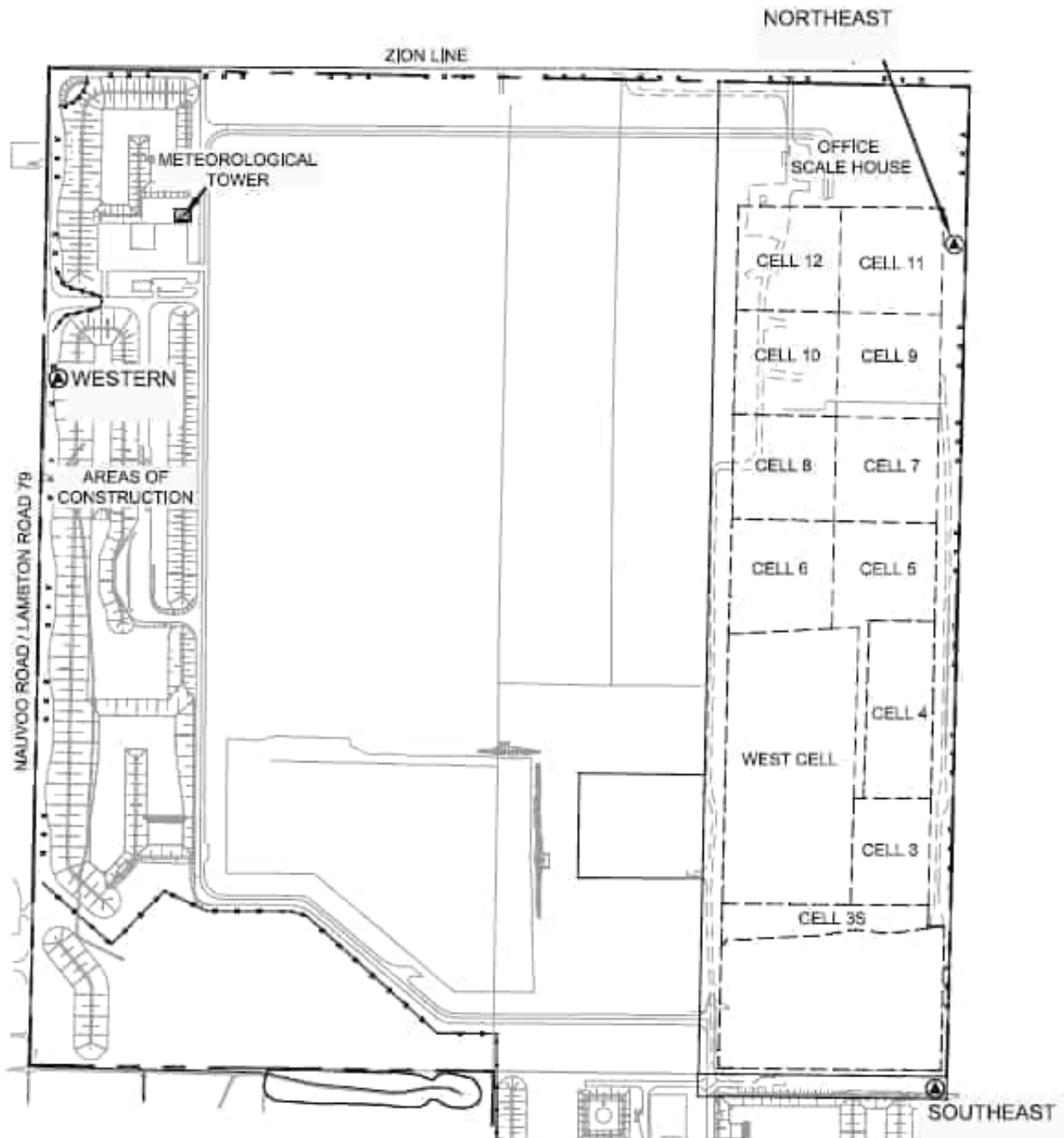
The monitoring method will comply with the metals specified by U.S. EPA Method 10-2. The 24-hour samples would be collected on standard hi-volume air samplers. The station siting requirements and sampling procedures will follow the most recent version of the U.S. EPA methods as well as the Ministry of the Environment's Operations Manual for Point Source Air Quality Monitoring as approved by the MOECC at the onset on the monitoring. The U.S. EPA methods are referenced in the MOECC document as appropriate reference methods to follow for air quality monitoring programs.

The results will be presented in quarterly summary letters and an annual report. The report will include the data in tabular format with a description of the program, quality assurance documentation, details regarding data recovery, abnormal site conditions, etc. As well, any days when the ambient air quality criterion for TSP was exceeded would be reported to the District MOECC office within two (2) weeks of receiving results. In order to enhance the notification of elevated TSP Levels, WM will copy the Township of Warwick on any future elevated TSP level reporting provided to the MOECC.

As part of the dust control strategy, the shift supervisor will be responsible to see that a record of roadway sweeping and watering is maintained. The control measure will be initiated whenever a visible plume behind vehicles is longer than $\frac{1}{4}$ the length of the vehicle. These logs will be kept on-site for a period of not less than two (2) years and will be made available for inspection should the MOECC wish to see them.

When the facility receives a complaint, the shift supervisor will see that the relevant information is recorded, including any remedial action taken as a result of the complaint. A sample complaint log sheet is included in the Best Management Practices Plan (Dust).

Figure 2: Dust Monitor Locations





2.1 Additional Dust Monitoring Provisions

As discussed with stakeholders during the consultation for the annual fill rate increase for the site, the following provisions were made for additional monitoring to be completed under specific conditions. The following notes the agreed to provisions for the additional monitoring. This provision will also be included in the Dust Best Management Practices Plan (BMPP). In the event that the provisions are triggered, WM will prepare an updated Air Quality Monitoring Plan to layout the specific agreed to monitoring at the time the additional monitoring provision is required.

As agreed to with stakeholders, in the event that 2 measured exceedances (trigger), that can be attributed to WM operations, in any quarter (excluding periods when on-site cell construction is occurring) occurs, WM is committing to reviewing the data with the Township of Warwick. Upon confirmation that the exceedances can be attributed to WM operations, and are not related to cell construction, WM will complete the installation of continuous dust monitors.

If continuous dust monitors are to be installed, WM will work with the Township of Warwick to update the following documents:

- Air Quality Monitoring Plan – updated for equipment change as well as trigger for shorter duration alerts to be issued to WM as warnings for higher dust levels; and
- Best Management Practices Plan (Dust) – to be updated to link dust alerts to dust control initiatives.

3 VOC MONITORING

It is proposed that monitoring for VOC's be conducted through the summer months, with samples to be taken in upwind and downwind pairs, during normal operating hours of the landfill. There would be a total of 5 sample pairs taken between June and September. No more than two (2) samples will be collected in any calendar month. The samples will be 24-hours in duration and compared to their respective Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List.

The samples will be collected and analyzed using methods defined in U.S. EPA Method TO-14/15. Vinyl chloride is of particular concern with these types of samples and vinyl chloride will be analyzed in selective ion mode (SIM). Sampling for VOC samples will be collected during periods of light wind conditions (less than 15 kilometers per hour) and during dry conditions (no measureable precipitation for the proceeding 48 hours prior to sampling). The list of VOC's monitored is presented in Table 1.



Table 1: List of Monitored VOCs

| CAS No. | Compound | CAS No. | Compound |
|------------|---------------------------------------|-------------------|------------------------|
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 620-14-4/622-96-8 | m/p-Ethyl Toluene |
| 526-73-8 | 1,2,3-Trimethyl Benzene | 108-38-3/106-42-3 | m/p-Xylene |
| 95-63-6 | 1,2,4 -Trimethyl Benzene | 535-77-3 | m-Cymene |
| 108-67-8 | 1,3,5 -Trimethyl Benzene | 78-93-3 | MEK |
| 591-76-4 | 2-Methyl Hexane | 108-87-2 | Methyl Cyclohexane |
| 107-83-5 | 2-Methyl Pentane | 108-10-1 | MIBK |
| 78-78-4 | 2-Methyl Butane | 75-45-6 | Chlorodifluoromethane |
| 96-14-0 | 3-Methyl Pentane | 123-72-8 | n-Butanol |
| 589-34-4 | 3-Methyl Hexane | 91-20-3 | Naphthalene |
| 67-64-1 | Acetone | 111-84-2 | Nonane |
| 71-43-2 | Benzene | 611-14-3 | o-Ethyl Toluene |
| 123-86-4 | Butyl Acetate | 95-47-6 | o-Xylene |
| 124-18-5 | Decane | 109-66-0 | Pentane |
| 25915-78-0 | Dichlorodifluoromethane | 64-17-5 | Ethanol |
| 75-09-2 | Dichloromethane | 103-65-1 | Propyl Benzene |
| 100-41-4 | Ethyl Benzene | 100-42-5 | Styrene |
| 142-82-5 | Heptane | 127-18-4 | Tetrachloroethylene |
| 110-54-3 | Hexane | 108-88-3 | Toluene |
| 67-63-0 | Isopropyl Alcohol | 75-69-4 | Trichlorofluoromethane |
| 138-86-3 | Limonene | 79-01-6 | Trichloroethylene |
| 75-01-4 | Vinyl Chloride | 141-78-6 | Ethyl Acetate |
| 56-23-5 | Carbon Tetrachloride | 71-55-6 | 1,1,1-Trichloroethane |
| 67-66-3 | Chloroform | 75-35-4 | Vinylidene Chloride |
| 106-93-4 | Ethylene Dibromide | 540-59-0 | 1,2-Dichloroethene |
| 107-6-2 | Ethylene Dichloride | Na | Total VOCs |

As the MOECC updates Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List in the Province of Ontario, the measured values will be compared to the most stringent limits available at the time of testing. For compounds that do not have Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List, the measured values will be compared to the predicated concentrations provided and approved by the MOECC for the Section 9 EPA approval supporting documentation to demonstrate compliance. As all compounds identified without Schedule 3 Standards and other guidelines listed in the Ministry document Air Contaminants Benchmarks (ACB) List are subject to review by the MOECC's Standard Development Branch, these levels should be considered acceptable.



4 COMPLAINT RECORDING PROCESS

Waste Management of Canada has outlined Best Practices Plans of Odour, Litter and Dust. Within each plan the procedures for outlining the responsibilities and recordkeeping. For further details, please refer to the most recent versions of the Best Management Practices Plan. [1,2,3]. Please note that like this air quality monitoring plan, the Best Management Plans are intended to be updates to endure continuous improvements are being documented at the site.



5 REFERENCES

1. RWDI AIR Inc. Best Management Practices Plan (Odour), Twin Creeks Landfill Site, Watford, ON – Revision 7, dated May 18, 2017.
2. RWDI AIR Inc. Best Management Practices Plan (Dust), Twin Creeks Landfill Site, Watford, ON – Revision 5, dated May 18, 2017.
3. RWDI AIR Inc. Best Management Practices Plan (Litter), Twin Creeks Landfill Site, Watford, ON – Revision 4, dated December 11, 2007.



RWDI aims to accommodate. If you require this document in a different format in order to aid accessibility, please contact the sender of this document, email solutions@rwdi.com or call +1.519.823.1311

The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT B' is centered within the gray circle.

ATTACHMENT B

Table 1: Summary of Total Suspended Particulate ResultsOctober 3, 2024

| Compounds | CAS No. | 3-Oct-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24071746 | Filter ID: | 24071748 | Filter ID: | 24071747 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 82700 | 50 | 119000 | 74 | 67200 | 39 | 74 | 120 | Schedule 3 | 61% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1456 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1640 | | 1614 | | 1719 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.13 | | 1.12 | | 1.19 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 2: Summary of Total Suspended Particulate ResultsOctober 9, 2024

| Compounds | CAS No. | 9-Oct-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071743 | Filter ID: | 24071744 | Filter ID: | 24071745 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | | | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | 9.2 | 0.006 | | | | | 0.01 | 0.5 | Guideline | 1.11% |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | | | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 53.1 | 0.032 | | | | | 0.03 | 50 | Schedule 3 | 0.06% |
| Total Iron (Fe) | 7439-89-6 | 3110 | 1.868 | | | | | 1.87 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 15.1 | 0.009 | | | | | 0.01 | 0.5 | Schedule 3 | 1.81% |
| Total Manganese (Mn) | 7439-96-5 | 84.6 | 0.051 | | | | | 0.05 | 0.4 | Guideline | 12.70% |
| Total Nickel (Ni) | 7440-02-0 | 4.9 | 0.003 | | | | | 0.00 | 0.2 | Guideline | 1.47% |
| Total Selenium (Se) | 7782-49-2 | ND | ND | | | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | | | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 114 | 0.068 | | | | | 0.07 | 120 | Schedule 3 | 0.06% |
| Total Particulate | - | 164000 | 98 | 125000 | 75 | 34800 | 21 | 98 | 120 | Schedule 3 | 82% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1665 | | 1672 | | 1658 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.16 | | 1.16 | | 1.15 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 3: Summary of Total Suspended Particulate ResultsOctober 15, 2024

| Compounds | CAS No. | 15-Oct-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|----------------------------------|---|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24071756 | Filter ID: | 24071754 | Filter ID: | 24071755 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 16900 | 11 | 28400 | 18 | 21000 | 13 | 18 | 120 | Schedule 3 | 15% |
| Upwind or Downwind Position (based on actual meteorological data) | | Downwind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1456 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) [1] | | 1601 | | 1593 | | 1632 | | | | | |
| Sample Flow Rate (m³/min) | | 1.10 | | 1.11 | | 1.13 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 4: Summary of Total Suspended Particulate ResultsOctober 21, 2024

| Compounds | CAS No. | 21-Oct-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------|-------------------|---------------|-----------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24071751 | Filter ID: | 24071753 | Filter ID: | 24071752 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | ND | ND | ND | ND | ND | 0.3 | Guideline | - | |
| Total Cadmium (Cd) | 7440-43-9 | | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - | |
| Total Chromium (Cr) | 7440-47-2 | | 6.7 | 0.004 | ND | ND | 0.00 | 0.5 | Guideline | 0.85% | |
| Total Cobalt (Co) | 7440-48-4 | | ND | ND | ND | ND | ND | 0.1 | Guideline | - | |
| Total Copper (Cu) | 7440-50-8 | | 43.6 | 0.028 | 197 | 0.123 | 0.12 | 50 | Schedule 3 | 0.25% | |
| Total Iron (Fe) | 7439-89-6 | | 2640 | 1.678 | 1170 | 0.729 | 1.68 | N/A | N/A | - | |
| Total Lead (Pb) | 7439-92-1 | | 14.5 | 0.009 | 8.9 | 0.006 | 0.01 | 0.5 | Schedule 3 | 1.84% | |
| Total Manganese (Mn) | 7439-96-5 | | 79.9 | 0.051 | 40.3 | 0.025 | 0.05 | 0.4 | Guideline | 12.70% | |
| Total Nickel (Ni) | 7440-02-0 | | 4.5 | 0.003 | ND | ND | 0.00 | 0.2 | Guideline | 1.43% | |
| Total Selenium (Se) | 7782-49-2 | | ND | ND | ND | ND | ND | 10 | Guideline | - | |
| Total Vanadium (V) | 7440-62-2 | | ND | ND | ND | ND | ND | 2 | Schedule 3 | - | |
| Total Zinc (Zn) | 7440-66-6 | | 108 | 0.069 | 76.9 | 0.048 | 0.07 | 120 | Schedule 3 | 0.06% | |
| Total Particulate | - | 81000 | 50 | 162000 | 103 | 83100 | 52 | 103 | 120 | Schedule 3 | 86% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) ^[1] | | 1617 | | 1573 | | 1605 | | | | | |
| Sample Flow Rate (m³/min) | | 1.12 | | 1.09 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa
^[2] O.Reg 419/05 Schedule 13
^[3] Ontario's Ambient Air Quality Criteria Guideline
N/A - not applicable (No current standards for Total Iron)
ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 5: Summary of Total Suspended Particulate ResultsOctober 27, 2024

| Compounds | CAS No. | 27-Oct-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|-------------------------------------|-------------------|---------------|-----------------|---------------|----------------------------------|---|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24090440 | Filter ID: | 24090439 | Filter ID: | 24090441 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | Sample 1 of 4 No Metals Analysis | ND | ND | ND | 0.3 | Guideline | - | | |
| Total Cadmium (Cd) | 7440-43-9 | | | ND | ND | ND | 0.025 | Schedule 3 | - | | |
| Total Chromium (Cr) | 7440-47-2 | | | ND | ND | ND | 0.5 | Guideline | - | | |
| Total Cobalt (Co) | 7440-48-4 | | | ND | ND | ND | 0.1 | Guideline | - | | |
| Total Copper (Cu) | 7440-50-8 | | | 182 | 0.114 | 0.11 | 50 | Schedule 3 | 0.23% | | |
| Total Iron (Fe) | 7439-89-6 | | | 654 | 0.408 | 0.41 | N/A | N/A | - | | |
| Total Lead (Pb) | 7439-92-1 | | | 4.6 | 0.003 | 0.00 | 0.5 | Schedule 3 | 0.57% | | |
| Total Manganese (Mn) | 7439-96-5 | | | 20.1 | 0.013 | 0.01 | 0.4 | Guideline | 3.14% | | |
| Total Nickel (Ni) | 7440-02-0 | | | ND | ND | ND | 0.2 | Guideline | - | | |
| Total Selenium (Se) | 7782-49-2 | | | ND | ND | ND | 10 | Guideline | - | | |
| Total Vanadium (V) | 7440-62-2 | | | ND | ND | ND | 2 | Schedule 3 | - | | |
| Total Zinc (Zn) | 7440-66-6 | | | 47.8 | 0.030 | 0.03 | 120 | Schedule 3 | 0.02% | | |
| Total Particulate | - | | | 47400 | 30 | 71300 | 45 | 48200 | 30 | 45 | 120 |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) [1] | | 1572 | | 1584 | | 1601 | | | | | |
| Sample Flow Rate (m³/min) | | 1.09 | | 1.10 | | 1.11 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 6: Summary of Total Suspended Particulate ResultsNovember 2, 2024

| Compounds | CAS No. | 2-Nov-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------|-----------------|----------------------|--|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24090442 | Filter ID: | 24090444 | Filter ID: | 24090443 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | Sample 2 of 4 No Metals Analysis | Sample 2 of 4 No Metals Analysis | - | 0.3 | Guideline | - | | | |
| Total Cadmium (Cd) | 7440-43-9 | | | | - | 0.025 | Schedule 3 | - | | | |
| Total Chromium (Cr) | 7440-47-2 | | | | - | 0.5 | Guideline | - | | | |
| Total Cobalt (Co) | 7440-48-4 | | | | - | 0.1 | Guideline | - | | | |
| Total Copper (Cu) | 7440-50-8 | | | | - | 50 | Schedule 3 | - | | | |
| Total Iron (Fe) | 7439-89-6 | | | | - | N/A | N/A | - | | | |
| Total Lead (Pb) | 7439-92-1 | | | | - | 0.5 | Schedule 3 | - | | | |
| Total Manganese (Mn) | 7439-96-5 | | | | - | 0.4 | Guideline | - | | | |
| Total Nickel (Ni) | 7440-02-0 | | | | - | 0.2 | Guideline | - | | | |
| Total Selenium (Se) | 7782-49-2 | | | | - | 10 | Guideline | - | | | |
| Total Vanadium (V) | 7440-62-2 | | | | - | 2 | Schedule 3 | - | | | |
| Total Zinc (Zn) | 7440-66-6 | | | | - | 120 | Schedule 3 | - | | | |
| Total Particulate | - | | | | 55300 | 34 | 71400 | 44 | 45700 | 29 | 44 |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Crosswind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1606 | | 1629 | | 1574 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.13 | | 1.09 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 7: Summary of Total Suspended Particulate ResultsNovember 8, 2024

| Compounds | CAS No. | 8-Nov-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|----------------------|-------------------|----------------------|-------------------------------------|----------------------|---|--|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24090446 | Filter ID: | 24090445 | Filter ID: | 24090447 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | Sample 3 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | 8.1 | 0.005 | ND | ND | | | 0.01 | 0.5 | Guideline | 1.01% |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 37.7 | 0.024 | 100 | 0.062 | | | 0.06 | 50 | Schedule 3 | 0.12% |
| Total Iron (Fe) | 7439-89-6 | 4650 | 2.910 | 2670 | 1.658 | | | 2.91 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | 21.7 | 0.014 | 5.6 | 0.003 | | | 0.01 | 0.5 | Schedule 3 | 2.72% |
| Total Manganese (Mn) | 7439-96-5 | 109 | 0.068 | 73.9 | 0.046 | | | 0.07 | 0.4 | Guideline | 17.05% |
| Total Nickel (Ni) | 7440-02-0 | 7.1 | 0.004 | 3.8 | 0.002 | | | 0.00 | 0.2 | Guideline | 2.22% |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | 6 | 0.004 | ND | ND | | | 0.00 | 2 | Schedule 3 | 0.19% |
| Total Zinc (Zn) | 7440-66-6 | 183 | 0.115 | 39.4 | 0.024 | | | 0.11 | 120 | Schedule 3 | 0.10% |
| Total Particulate | - | 215000 | 135 | 160000 | 99 | | | 39700 | 24 | 135 | 120 |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) ^[1] | | 1598 | | 1610 | | 1643 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.11 | | 1.12 | | 1.14 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 8: Summary of Total Suspended Particulate ResultsNovember 14, 2024

| Compounds | CAS No. | 14-Nov-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------|-------------------------------------|---------------|-----------------|---------------|----------------------------------|---|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24090448 | Filter ID: | 24090526 | Filter ID: | 24090525 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | - | 0.3 | Guideline | - | | |
| Total Cadmium (Cd) | 7440-43-9 | | | | | - | 0.025 | Schedule 3 | - | | |
| Total Chromium (Cr) | 7440-47-2 | | | | | - | 0.5 | Guideline | - | | |
| Total Cobalt (Co) | 7440-48-4 | | | | | - | 0.1 | Guideline | - | | |
| Total Copper (Cu) | 7440-50-8 | | | | | - | 50 | Schedule 3 | - | | |
| Total Iron (Fe) | 7439-89-6 | | | | | - | N/A | N/A | - | | |
| Total Lead (Pb) | 7439-92-1 | | | | | - | 0.5 | Schedule 3 | - | | |
| Total Manganese (Mn) | 7439-96-5 | | | | | - | 0.4 | Guideline | - | | |
| Total Nickel (Ni) | 7440-02-0 | | | | | - | 0.2 | Guideline | - | | |
| Total Selenium (Se) | 7782-49-2 | | | | | - | 10 | Guideline | - | | |
| Total Vanadium (V) | 7440-62-2 | | | | | - | 2 | Schedule 3 | - | | |
| Total Zinc (Zn) | 7440-66-6 | | | | | - | 120 | Schedule 3 | - | | |
| Total Particulate | - | 25700 | 16 | 41500 | 26 | 41300 | 26 | 26 | 120 | Schedule 3 | 21% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) [1] | | 1622 | | 1622 | | 1612 | | | | | |
| Sample Flow Rate (m³/min) | | 1.13 | | 1.13 | | 1.12 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 9: Summary of Total Suspended Particulate ResultsNovember 20, 2024

| Compounds | CAS No. | 20-Nov-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-----------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24090532 | Filter ID: | 24090530 | Filter ID: | 24090531 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 1 of 4 No Metals Analysis | | Sample 1 of 4 No Metals Analysis | | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | 32.2 | 0.019 | 0.02 | 50 | Schedule 3 | 0.04% |
| Total Iron (Fe) | 7439-89-6 | | | | | 499 | 0.301 | 0.30 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | 3.2 | 0.002 | 0.00 | 0.5 | Schedule 3 | 0.39% |
| Total Manganese (Mn) | 7439-96-5 | | | | | 14.4 | 0.009 | 0.01 | 0.4 | Guideline | 2.17% |
| Total Nickel (Ni) | 7440-02-0 | | | | | ND | ND | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | 31.6 | 0.019 | 0.02 | 120 | Schedule 3 | 0.02% |
| Total Particulate | - | 16400 | 10 | 17900 | 11 | 39600 | 24 | 24 | 120 | Schedule 3 | 20% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m ³) [1] | | 1611 | | 1633 | | 1656 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.12 | | 1.13 | | 1.15 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 10: Summary of Total Suspended Particulate ResultsNovember 26, 2024

| Compounds | CAS No. | 26-Nov-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24090529 | Filter ID: | 24090528 | Filter ID: | 24090527 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 15100 | 9 | 22600 | 14 | 22500 | 14 | 14 | 120 | Schedule 3 | 11% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1441 | | | | | |
| Sample Volume (m³) ^[1] | | 1656 | | 1644 | | 1646 | | | | | |
| Sample Flow Rate (m³/min) | | 1.15 | | 1.14 | | 1.14 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 11: Summary of Total Suspended Particulate ResultsDecember 2, 2024

| Compounds | CAS No. | 2-Dec-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------|---------------|-------------------|---------------|-------------------------------------|---------------|----------------------------------|---|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24090534 | Filter ID: | 24090535 | Filter ID: | 24090536 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | Sample 3 of 4 No Metals Analysis | | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | | | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | ND | ND | | | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | | | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | 17.8 | 0.011 | 15.3 | 0.009 | | | 0.01 | 50 | Schedule 3 | 0.02% |
| Total Iron (Fe) | 7439-89-6 | 617 | 0.369 | 324 | 0.195 | | | 0.37 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | ND | ND | ND | ND | | | ND | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | 17 | 0.010 | 9 | 0.005 | | | 0.01 | 0.4 | Guideline | 2.54% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | ND | ND | | | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | | | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | | | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 27.7 | 0.017 | 9.8 | 0.006 | | | 0.02 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 35900 | 21 | 42700 | 26 | | | 30400 | 18 | 26 | 120 |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) [1] | | 1670 | | 1662 | | 1710 | | | | | |
| Sample Flow Rate (m³/min) | | 1.16 | | 1.15 | | 1.19 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 12: Summary of Total Suspended Particulate ResultsDecember 8, 2024

| Compounds | CAS No. | 8-Dec-24 | | | | | | Maximum Concentration (ug/m ³) | Air Quality Standard or POI Limit (ug/m ³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|----------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|--|---------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24090539 | Filter ID: | 24090537 | Filter ID: | 24090538 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m ³) | (ug) | (µg/m ³) | (ug) | (µg/m ³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | Sample 4 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 33200 | 20 | 32700 | 20 | 33500 | 20 | 20 | 120 | Schedule 3 | 17% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Downwind | | Upwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1441 | | | | | |
| Sample Volume (m ³) [1] | | 1672 | | 1659 | | 1683 | | | | | |
| Sample Flow Rate (m ³ /min) | | 1.16 | | 1.15 | | 1.17 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 13: Summary of Total Suspended Particulate ResultsDecember 14, 2024

| Compounds | CAS No. | 14-Dec-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------|---------------|-------------------|---------------|-----------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24090543 | Filter ID: | 24090544 | Filter ID: | 24090545 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | ND | ND | ND | ND | ND | ND | ND | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | ND | ND | ND | ND | ND | ND | ND | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | ND | ND | ND | ND | ND | ND | ND | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | ND | ND | ND | ND | ND | ND | ND | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | ND | ND | 20.7 | 0.012 | 18.3 | 0.011 | 0.01 | 50 | Schedule 3 | 0.02% |
| Total Iron (Fe) | 7439-89-6 | 72 | 0.044 | 87 | 0.052 | 292 | 0.170 | 0.17 | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | ND | ND | ND | ND | ND | ND | ND | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | 2.8 | 0.002 | 3.4 | 0.002 | 10.7 | 0.006 | 0.01 | 0.4 | Guideline | 1.56% |
| Total Nickel (Ni) | 7440-02-0 | ND | ND | ND | ND | ND | ND | ND | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | ND | ND | ND | ND | ND | ND | ND | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | ND | ND | ND | ND | ND | ND | ND | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | 12.8 | 0.008 | 9.8 | 0.006 | 17.5 | 0.010 | 0.01 | 120 | Schedule 3 | 0.01% |
| Total Particulate | - | 31700 | 19 | 29900 | 18 | 70200 | 41 | 41 | 120 | Schedule 3 | 34% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Upwind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) ^[1] | | 1653 | | 1678 | | 1714 | | | | | |
| Sample Flow Rate (m³/min) | | 1.15 | | 1.17 | | 1.19 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 14: Summary of Total Suspended Particulate ResultsDecember 20, 2024

| Compounds | CAS No. | 20-Dec-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit ^{[2][3]} | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------|-------------------------------------|---------------|-----------------|---------------|-------------------------------|---|-----------------------------------|----------------------------|
| | | Southeast - WMI-6 | | Northeast - WMI-3 | | Western - WMI-5 | | | | | |
| | | Filter ID: | 24090541 | Filter ID: | 24090542 | Filter ID: | 24090540 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 2 of 4 No Metals Analysis | | Sample 2 of 4 No Metals Analysis | | Invalid | - | 0.3 | Guideline | - | |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | - | 0.025 | Schedule 3 | - | |
| Total Chromium (Cr) | 7440-47-2 | | | | | | - | 0.5 | Guideline | - | |
| Total Cobalt (Co) | 7440-48-4 | | | | | | - | 0.1 | Guideline | - | |
| Total Copper (Cu) | 7440-50-8 | | | | | | - | 50 | Schedule 3 | - | |
| Total Iron (Fe) | 7439-89-6 | | | | | | - | N/A | N/A | - | |
| Total Lead (Pb) | 7439-92-1 | | | | | | - | 0.5 | Schedule 3 | - | |
| Total Manganese (Mn) | 7439-96-5 | | | | | | - | 0.4 | Guideline | - | |
| Total Nickel (Ni) | 7440-02-0 | | | | | | - | 0.2 | Guideline | - | |
| Total Selenium (Se) | 7782-49-2 | | | | | | - | 10 | Guideline | - | |
| Total Vanadium (V) | 7440-62-2 | | | | | | - | 2 | Schedule 3 | - | |
| Total Zinc (Zn) | 7440-66-6 | | | | | | - | 120 | Schedule 3 | - | |
| Total Particulate | - | 16400 | 10 | 20400 | 12 | - | - | 12 | 120 | Schedule 3 | 10% |
| Upwind or Downwind Position (based on actual meteorological data) | | Crosswind | | Upwind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | - | | | | | |
| Sample Volume (m³) ^[1] | | 1687 | | 1654 | | - | | | | | |
| Sample Flow Rate (m³/min) | | 1.17 | | 1.15 | | - | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

Table 15: Summary of Total Suspended Particulate ResultsDecember 26, 2024

| Compounds | CAS No. | 26-Dec-24 | | | | | | Maximum Concentration (ug/m³) | Air Quality Standard or POI Limit (ug/m³) | Source of Limit [2][3] | Percentage of Criteria (%) |
|---|-----------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|----------------------------------|---|---------------------------|----------------------------|
| | | Southeast - WMI-4 | | Northeast - WMI-2 | | Western - WMI-1 | | | | | |
| | | Filter ID: | 24090547 | Filter ID: | 24090548 | Filter ID: | 24090500 | | | | |
| | | Mass | Concentration | Mass | Concentration | Mass | Concentration | | | | |
| | | (ug) | (µg/m³) | (ug) | (µg/m³) | (ug) | (µg/m³) | | | | |
| Total Arsenic (As) | 7440-38-2 | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | Sample 3 of 4 No Metals Analysis | | - | 0.3 | Guideline | - |
| Total Cadmium (Cd) | 7440-43-9 | | | | | | | - | 0.025 | Schedule 3 | - |
| Total Chromium (Cr) | 7440-47-2 | | | | | | | - | 0.5 | Guideline | - |
| Total Cobalt (Co) | 7440-48-4 | | | | | | | - | 0.1 | Guideline | - |
| Total Copper (Cu) | 7440-50-8 | | | | | | | - | 50 | Schedule 3 | - |
| Total Iron (Fe) | 7439-89-6 | | | | | | | - | N/A | N/A | - |
| Total Lead (Pb) | 7439-92-1 | | | | | | | - | 0.5 | Schedule 3 | - |
| Total Manganese (Mn) | 7439-96-5 | | | | | | | - | 0.4 | Guideline | - |
| Total Nickel (Ni) | 7440-02-0 | | | | | | | - | 0.2 | Guideline | - |
| Total Selenium (Se) | 7782-49-2 | | | | | | | - | 10 | Guideline | - |
| Total Vanadium (V) | 7440-62-2 | | | | | | | - | 2 | Schedule 3 | - |
| Total Zinc (Zn) | 7440-66-6 | | | | | | | - | 120 | Schedule 3 | - |
| Total Particulate | - | 17400 | 10 | 27800 | 17 | 45300 | 27 | 27 | 120 | Schedule 3 | 22% |
| Upwind or Downwind Position (based on actual meteorological data) | | Upwind | | Crosswind | | Downwind | | | | | |
| Sample Duration (min) | | 1440 | | 1440 | | 1440 | | | | | |
| Sample Volume (m³) [1] | | 1666 | | 1671 | | 1704 | | | | | |
| Sample Flow Rate (m³/min) | | 1.16 | | 1.16 | | 1.18 | | | | | |

^[1] Volume Corrected to 10°C and 101.325 kPa

^[2] O.Reg 419/05 Schedule 13

^[3] Ontario's Ambient Air Quality Criteria Guideline

N/A - not applicable (No current standards for Total Iron)

ND-Not Detected, Results were less than the reportable detection limit (RDL)

The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'ATTACHMENT C' is centered within the gray circle.

ATTACHMENT C

Amanda and Marcelina, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On December 17, 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the November 8, 2024 sampling event. On December 17, 2024, the results were entered and assessed, and it was found that there were one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

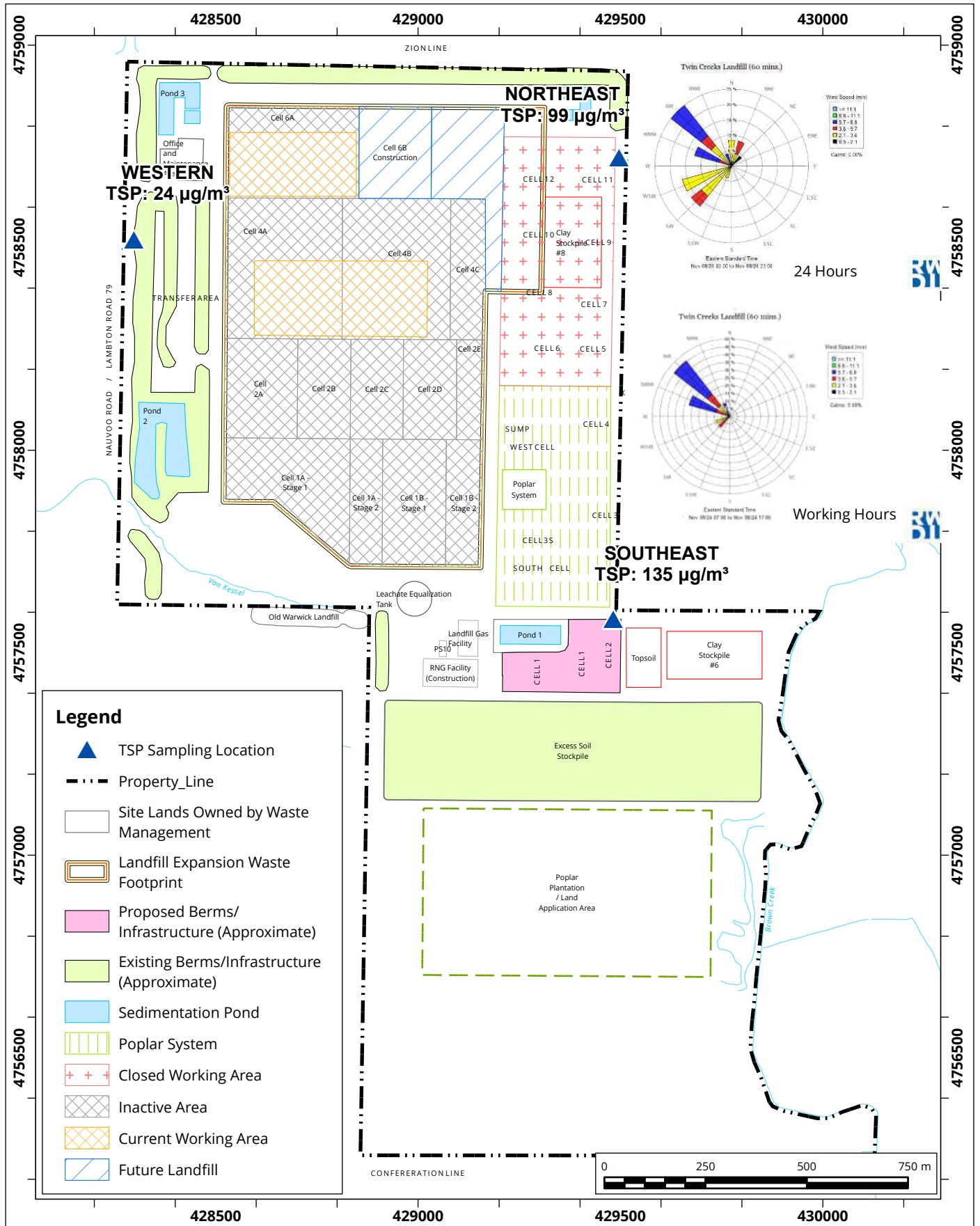
November 8, 2024

On Friday November 8, 2024, there was an exceedance of the TSP 24-hour AAQC at the Southeast sampler. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during November 8 sampling date.

1. The measured TSP concentration at the Northeast sampler was 99 ug/m³, the Southeast sampler was 135 ug/m³ and Western sampler (site background) was 24 ug/m³. During the 24-hour period, the wind was predominantly from the SW to WSW and WNW to NW; wind speeds ranged from 3 to 26 km/h and wind gusts reached a maximum of 39 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the WNW to NW. During this timeframe, the Southeast sampler location was downwind to clay hauling activities related to interim cap management at Cell 3 (which is located on top of Cells 1 and 2) from the Excess Soil Stockpile, as well as clay excavation from Cell 6C to the Excess Soil Stockpile.
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Southeast TSP sampler location, predominantly originated from on-site construction activities related to landfill capping with contributions from off-site activities/sources as measured at the site background locations (Northeast and Western samplers at 99 ug/m³ and 24 ug/m³ respectively for TSP).



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: November 8, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|---------------------------|-----------|
| Drawn by: AXT | Figure: 1 |
| Approx. Scale: 1:13,000 | |
| Date Revised: Dec 6, 2024 | |



General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|--|
| Date Form Submitted (Faxed) | Date Exceedence Determined December 18, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|---|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | County/District County of Lambton | Postal Code N0M 2S0 | |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|---|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | | |
| * Note: The ESDM must be submitted within three months of the discharge | | | |

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, was the ESDM Report prepared to fulfill (select all that apply): | |
| <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> | |
| <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities | |
| <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director | |
| <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report | |
| <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence | |
| <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard | |
| <input type="checkbox"/> Other (please specify): | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility |
| <input type="checkbox"/> Child Care Facility | <input type="checkbox"/> Educational Facility |
| <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input type="checkbox"/> Other Location (explain): |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|---|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 08/11/2024 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? | | |
| <input checked="" type="checkbox"/> Yes | If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | |
| <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): | | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility | <input type="checkbox"/> Child Care Facility |
| <input type="checkbox"/> Educational Facility | <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input checked="" type="checkbox"/> Other Location (explain): | Property Line of Facility |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.

| | | | | |
|---|----------------|---|--------------------------|--|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | | Unit Identifier (i.e. suite or apartment number) |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) | | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada | Postal Code N0M 2S0 |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | | E-mail Address amclachl@wm.com |
| Signature | | | Date (dd/mm/yyyy) | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|--------------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Southeast Sampler | | 08/11/24 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Southeast Sampler) | N/A | Hi-Vol | 135 | 24 | 120 | Visibility | AAQC | 112% | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

The graphic for Appendix G5 features a large, light gray circular shape on the right side of the page. To its left, a blue curved shape, resembling a quarter-circle, is partially visible. The text 'APPENDIX G5' is centered in the space between these two shapes.

APPENDIX G5



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: na

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/03/05
Report #: R8053589
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C417327

Received: 2024/01/18, 10:48

Sample Matrix: Filter
Samples Received: 10

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/01/24 | 2024/01/29 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/01/25 | 2024/01/26 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 9 | N/A | 2024/01/23 | | |
| Particulates on Filter (Method IO-3.1) | 10 | 2024/01/23 | 2024/01/22 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 9 | N/A | 2024/01/22 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: na

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/03/05
Report #: R8053589
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C417327

Received: 2024/01/18, 10:48

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Clayton Johnson, CET LEAD-Air Toxics, Source Evaluation

Email: TMP-Clayton.Johnson@bureauveritas.com

Phone# (905)817-5769

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



BUREAU
VERITAS

Bureau Veritas Job #: C417327
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | YDO733 | YDO734 | YDO735 | YDO736 | YDO737 | YDO738 | YDO739 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/01/01 | 2024/01/07 | 2024/01/07 | 2024/01/07 | 2024/01/01 | 2024/01/01 | 2024/01/13 | | |
| COC Number | | na | na | na | na | na | na | na | | |
| | UNITS | 23110949 | 23110953 | 23110954 | 23110955 | 23110156 | 23110157 | 23110956 | RDL | QC Batch |
| Particulate | ug/m3 | 9 | 19 | 29 | 26 | 21 | 8 | 17 | 3 | 9169551 |
| Particulate Weight on Filter | ug | 14000 | 31200 | 47800 | 42200 | 34800 | 12700 | 29300 | 5000 | 9176566 |
| Volume | m3 | 1646 | 1645 | 1645 | 1652 | 1648 | 1642 | 1688 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |

| Bureau Veritas ID | | YDO740 | YDO741 | | | YDO742 | | |
|--|-------|------------|------------|------|----------|----------|------|----------|
| Sampling Date | | 2024/01/13 | 2024/01/13 | | | | | |
| COC Number | | na | na | | | na | | |
| | UNITS | 23110957 | 23110958 | RDL | QC Batch | 23120595 | RDL | QC Batch |
| Particulate | ug/m3 | 10 | 17 | 3 | 9169551 | | | |
| Particulate Weight on Filter | ug | 16100 | 27600 | 5000 | 9176566 | <5000 | 5000 | 9176566 |
| Volume | m3 | 1660 | 1645 | N/A | ONSITE | | | |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | |



Bureau Veritas Job #: C417327
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | YDO734 | YDO735 | YDO736 | | |
|----------------------------------|-------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/01/07 | 2024/01/07 | 2024/01/07 | | |
| COC Number | | na | na | na | | |
| | UNITS | 23110953 | 23110954 | 23110955 | RDL | QC Batch |
| Metals | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | 6.0 | 9182368 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9182368 |
| Chromium (Cr) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9182368 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9182368 |
| Copper (Cu) | ug | 74.0 | 51.5 | 174 | 5.0 | 9182368 |
| Iron (Fe) | ug | 169 | 227 | 224 | 50 | 9182368 |
| Lead (Pb) | ug | 4.5 | 5.1 | 4.8 | 3.0 | 9182368 |
| Manganese (Mn) | ug | 5.6 | 9.0 | 7.7 | 1.0 | 9182368 |
| Nickel (Ni) | ug | <3.0 | <3.0 | <3.0 | 3.0 | 9182368 |
| Selenium (Se) | ug | <10 | <10 | <10 | 10 | 9182368 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9182368 |
| Zinc (Zn) | ug | 30.5 | 51.1 | 37.4 | 5.0 | 9182368 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C417327
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | YDO734 | YDO735 | YDO736 | | |
|----------------------------------|-------|------------|------------|------------|--------|----------|
| Sampling Date | | 2024/01/07 | 2024/01/07 | 2024/01/07 | | |
| COC Number | | na | na | na | | |
| | UNITS | 23110953 | 23110954 | 23110955 | RDL | QC Batch |
| Metals | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0036 | <0.0036 | <0.0036 | 0.0036 | 9179187 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | <0.0012 | <0.0012 | 0.0012 | 9179187 |
| Total Chromium (Cr) | ug/m3 | <0.0030 | <0.0030 | <0.0030 | 0.0030 | 9179187 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | <0.0012 | <0.0012 | 0.0012 | 9179187 |
| Total Copper (Cu) | ug/m3 | 0.0450 | 0.0313 | 0.105 | 0.0030 | 9179187 |
| Total Iron (Fe) | ug/m3 | 0.103 | 0.138 | 0.135 | 0.030 | 9179187 |
| Total Lead (Pb) | ug/m3 | 0.0027 | 0.0031 | 0.0029 | 0.0018 | 9179187 |
| Total Lithium (Li) | ug/m3 | <0.016 | <0.016 | <0.016 | 0.016 | 9179187 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | <0.0018 | <0.0018 | 0.0018 | 9179187 |
| Total Selenium (Se) | ug/m3 | <0.0061 | <0.0061 | <0.0061 | 0.0061 | 9179187 |
| Total Sulphur (S) | ug/m3 | 0.811 | 0.883 | 0.963 | 0.015 | 9179187 |
| Total Vanadium (V) | ug/m3 | <0.0030 | <0.0030 | <0.0030 | 0.0030 | 9179187 |
| Total Zinc (Zn) | ug/m3 | 0.0185 | 0.0310 | 0.0227 | 0.0030 | 9179187 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C417327
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Sample YDO741 [23110958] : DE Edge of the filter frayed

Results relate only to the items tested.



Bureau Veritas Job #: C417327
Report Date: 2024/03/05

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9182368 | Arsenic (As) | 2024/01/26 | 102 | 75 - 125 | 100 | 85 - 115 | <6.0 | ug | NC (1) | 20 |
| 9182368 | Cadmium (Cd) | 2024/01/26 | 102 | 75 - 125 | 101 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9182368 | Chromium (Cr) | 2024/01/26 | 99 | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | 7.2 (1) | 20 |
| 9182368 | Cobalt (Co) | 2024/01/26 | 98 | 75 - 125 | 99 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9182368 | Copper (Cu) | 2024/01/26 | 99 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 0.092 (1) | 20 |
| 9182368 | Iron (Fe) | 2024/01/26 | 106 | 75 - 125 | 105 | 85 - 115 | <50 | ug | 4.5 (1) | 20 |
| 9182368 | Lead (Pb) | 2024/01/26 | 100 | 75 - 125 | 100 | 85 - 115 | <3.0 | ug | 5.0 (1) | 20 |
| 9182368 | Manganese (Mn) | 2024/01/26 | 99 | 75 - 125 | 100 | 85 - 115 | <1.0 | ug | 3.7 (1) | 20 |
| 9182368 | Nickel (Ni) | 2024/01/26 | 96 | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | 5.1 (1) | 20 |
| 9182368 | Selenium (Se) | 2024/01/26 | 106 | 75 - 125 | 105 | 85 - 115 | <10 | ug | NC (1) | 20 |
| 9182368 | Vanadium (V) | 2024/01/26 | 99 | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | NC (1) | 20 |
| 9182368 | Zinc (Zn) | 2024/01/26 | 102 | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | 1.9 (1) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID



Bureau Veritas Job #: C417327
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Julian Tong, Project Manager Assistant

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 1

INVOICE INFORMATION:

Company Name: Waste Management of Canada Corporation
Contact Name: Lisa Mertick
Address: 5768 Nauvoo Rd, Watford, ON
NOM 2S0
Phone: 519-849-5810 Fax: 519-849-5811
Email: lmertick@wm.com

REPORT INFORMATION (if differs from invoice):

Company Name: RWDI AIR Inc.
Contact Name: Brent Langille
Address: 4510 Rhodes Drive, Suite 530
Windsor, ON, N8W 5K5
Phone: 519-823-1311 x 2618 Fax: 519-823-1316
Email: Jeffery.Cleland@rwdi.com axl@rwdi.com

PROJECT INFORMATION:

Quotation #
P.O. #: 10123733
Project #: 2402553.02
Project Name: Twin Creeks
Location: Twin Creeks
Sampled By: JRA

18-Jan-24 10:48

Patricia Legette



C417327

J_L AIR-RmTmp

REGULATORY CRITERIA

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

☐ MISA Reg. 153 Sewer Use ☒ Other
☐ PWQO ☐ Table 1 ☐ Sanitary site specific
☐ Table 2 ☐ Storm specify
☐ Table 3 Region: _____
☐ Reg. 558

Report Criteria on C of A? ☐ n

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT:

☒ 5 to 7 Working Days

Rush TAT: Rush Confirmation # _____

(call Lab for #)

☐ 1 day ☐ 2 days ☐ 3 days

DATE Required: _____

TIME Required: _____

Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|------------------------------------|---------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 23110949 | 1-Jan-24 | 1646 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 2 23110953 | 7-Jan-24 | 1645 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 3 23110954 | 7-Jan-24 | 1645 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 4 23110955 | 7-Jan-24 | 1652 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 5 23110156 | 1-Jan-24 | 1648 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 6 23110157 | 1-Jan-24 | 1642 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 7 23110956 | 13-Jan-24 | 1688 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 23110957 | 13-Jan-24 | 1660 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 9 23110958 | 13-Jan-24 | 1645 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 10 23120595 | - | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 11 | | | | | | | | | | | | | | | | | | | | | |

RELINQUISHED BY: (Signature/Print)

JRA 16-Jan-24

RECEIVED BY: (Signature/Print)

Date:

16/01/24

Time:

10:48

Laboratory Use Only

Temperature (°C) on Receipt

Condition of Sample on Receipt

☐ OK ☐ SIF

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/03/05
Report #: R8053549
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C442105

Received: 2024/02/12, 09:15

Sample Matrix: Filter
Samples Received: 10

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2024/02/20 | 2024/02/23 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2024/02/22 | 2024/02/23 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 9 | N/A | 2024/02/15 | | |
| Particulates on Filter (Method IO-3.1) | 10 | 2024/02/15 | 2024/02/15 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 9 | N/A | 2024/02/13 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/03/05
Report #: R8053549
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C442105

Received: 2024/02/12, 09:15

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Clayton Johnson, CET LEAD-Air Toxics, Source Evaluation

Email: TMP-Clayton.Johnson@bureauveritas.com

Phone# (905)817-5769

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C442105
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | YIV756 | YIV757 | YIV758 | YIV759 | YIV760 | YIV761 | YIV762 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/01/19 | 2024/01/19 | 2024/01/19 | 2024/01/25 | 2024/01/25 | 2024/01/25 | 2024/01/31 | | |
| COC Number | | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | |
| | UNITS | 23110969 | 23110970 | 23110971 | 23110972 | 23110973 | 23110974 | 23110959 | RDL | QC Batch |
| Particulate | ug/m3 | 15 | 13 | 14 | 16 | 22 | 21 | 11 | 3 | 9219454 |
| Particulate Weight on Filter | ug | 24700 | 22000 | 22400 | 26900 | 36300 | 35000 | 17900 | 5000 | 9222991 |
| Volume | m3 | 1617 | 1647 | 1657 | 1668 | 1660 | 1643 | 1609 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |

| Bureau Veritas ID | | YIV763 | YIV764 | | | YIV768 | | |
|--|-------|------------|------------|------|----------|----------|------|----------|
| Sampling Date | | 2024/01/31 | 2024/01/31 | | | | | |
| COC Number | | n/a | n/a | | | n/a | | |
| | UNITS | 23110977 | 23110978 | RDL | QC Batch | 23120597 | RDL | QC Batch |
| Particulate | ug/m3 | 11 | 10 | 3 | 9219454 | | | |
| Particulate Weight on Filter | ug | 17600 | 16100 | 5000 | 9222991 | <5000 | 5000 | 9222991 |
| Volume | m3 | 1589 | 1606 | N/A | ONSITE | | | |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | |



Bureau Veritas Job #: C442105
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | YIV759 | YIV761 | | |
|----------------------------------|-------|------------|------------|-----|----------|
| Sampling Date | | 2024/01/25 | 2024/01/25 | | |
| COC Number | | n/a | n/a | | |
| | UNITS | 23110972 | 23110974 | RDL | QC Batch |
| Metals | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | 6.0 | 9234540 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | 2.0 | 9234540 |
| Chromium (Cr) | ug | <5.0 | <5.0 | 5.0 | 9234540 |
| Cobalt (Co) | ug | <2.0 | <2.0 | 2.0 | 9234540 |
| Copper (Cu) | ug | 42.2 | 97.2 | 5.0 | 9234540 |
| Iron (Fe) | ug | 199 | 189 | 50 | 9234540 |
| Lead (Pb) | ug | 4.3 | 4.5 | 3.0 | 9234540 |
| Manganese (Mn) | ug | 8.3 | 8.2 | 1.0 | 9234540 |
| Nickel (Ni) | ug | <3.0 | <3.0 | 3.0 | 9234540 |
| Selenium (Se) | ug | <10 | <10 | 10 | 9234540 |
| Vanadium (V) | ug | <5.0 | <5.0 | 5.0 | 9234540 |
| Zinc (Zn) | ug | 40.1 | 50.2 | 5.0 | 9234540 |
| RDL = Reportable Detection Limit | | | | | |
| QC Batch = Quality Control Batch | | | | | |



Bureau Veritas Job #: C442105
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| | | | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | YIV759 | | YIV761 | | |
| Sampling Date | | 2024/01/25 | | 2024/01/25 | | |
| COC Number | | n/a | | n/a | | |
| | UNITS | 23110972 | RDL | 23110974 | RDL | QC Batch |
| Metals | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0036 | 0.0036 | <0.0037 | 0.0037 | 9229673 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9229673 |
| Total Chromium (Cr) | ug/m3 | <0.0030 | 0.0030 | <0.0030 | 0.0030 | 9229673 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9229673 |
| Total Copper (Cu) | ug/m3 | 0.0253 | 0.0030 | 0.0592 | 0.0030 | 9229673 |
| Total Iron (Fe) | ug/m3 | 0.119 | 0.030 | 0.115 | 0.030 | 9229673 |
| Total Lead (Pb) | ug/m3 | 0.0026 | 0.0018 | 0.0027 | 0.0018 | 9229673 |
| Total Lithium (Li) | ug/m3 | <0.016 | 0.016 | <0.016 | 0.016 | 9229673 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | 0.0018 | <0.0018 | 0.0018 | 9229673 |
| Total Selenium (Se) | ug/m3 | <0.0060 | 0.0060 | <0.0061 | 0.0061 | 9229673 |
| Total Sulphur (S) | ug/m3 | 0.442 | 0.015 | 0.692 | 0.015 | 9229673 |
| Total Vanadium (V) | ug/m3 | <0.0030 | 0.0030 | <0.0030 | 0.0030 | 9229673 |
| Total Zinc (Zn) | ug/m3 | 0.0241 | 0.0030 | 0.0305 | 0.0030 | 9229673 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C442105
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Sample YIV760 [23110973] : NPF Filter not properly folded

Results relate only to the items tested.



Bureau Veritas Job #: C442105
Report Date: 2024/03/05

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9234540 | Arsenic (As) | 2024/02/23 | 103 | 75 - 125 | 102 | 85 - 115 | <6.0 | ug | NC (1) | 20 |
| 9234540 | Cadmium (Cd) | 2024/02/23 | 103 | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9234540 | Chromium (Cr) | 2024/02/23 | 100 | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | 8.0 (1) | 20 |
| 9234540 | Cobalt (Co) | 2024/02/23 | 97 | 75 - 125 | 100 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9234540 | Copper (Cu) | 2024/02/23 | 86 | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | 2.3 (1) | 20 |
| 9234540 | Iron (Fe) | 2024/02/23 | 92 | 75 - 125 | 103 | 85 - 115 | <50 | ug | 0.65 (1) | 20 |
| 9234540 | Lead (Pb) | 2024/02/23 | 97 | 75 - 125 | 98 | 85 - 115 | <3.0 | ug | 9.8 (1) | 20 |
| 9234540 | Manganese (Mn) | 2024/02/23 | 97 | 75 - 125 | 102 | 85 - 115 | <1.0 | ug | 0.49 (1) | 20 |
| 9234540 | Nickel (Ni) | 2024/02/23 | 97 | 75 - 125 | 100 | 85 - 115 | <3.0 | ug | 1.1 (1) | 20 |
| 9234540 | Selenium (Se) | 2024/02/23 | 106 | 75 - 125 | 103 | 85 - 115 | <10 | ug | NC (1) | 20 |
| 9234540 | Vanadium (V) | 2024/02/23 | 95 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | NC (1) | 20 |
| 9234540 | Zinc (Zn) | 2024/02/23 | 96 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 1.8 (1) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID



Bureau Veritas Job #: C442105
Report Date: 2024/03/05

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink, appearing to read "Anastassia Hamanov", written over a horizontal line.

Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 1

| INVOICE INFORMATION: | REPORT INFORMATION (if differs from invoice): | PROJECT INFORMATION: | MAXXAM JOB NUMBER: |
|---|--|---------------------------|---------------------|
| Company Name: Waste Management of Canada Corporation | Company Name: RWDI AIR Inc. | Quotation # | |
| Contact Name: Lisa Mertick | Contact Name: Brent Langille | P.O. #: 10123733 | |
| Address: 5768 Nauvoo Rd, Watford, ON | Address: 4510 Rhodes Drive, Suite 530 | Project #: 2402553.02 | CHAIN OF CUSTODY #: |
| N0M 2S0 | Windsor, ON, N8W 5K5 | Project Name: Twin Creeks | |
| Phone: 519-849-5810 Fax: 519-849-5811 | Phone: 519-823-1311 x 2618 Fax: 519-823-1316 | Location: Twin Creeks | |
| Email: lmertick@wm.com | Email: Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: JRA | |


| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|--|--|
| <i>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i> | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific | | Regular (Standard) TAT: |
| <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm | | <input checked="" type="checkbox"/> 5 to 7 Working Days |
| <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 Region: _____ | | Rush TAT: Rush Confirmation # _____ |
| Report Criteria on C of A ? <input type="checkbox"/> n | | (call Lab for #) |
| | | <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days |
| | | DATE Required: _____ |
| | | TIME Required: _____ |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|------------|-------------------------|
| 1 23110969 | 19-Jan-24 | 1617 | TSP | N | N | X | X | 1 | |
| 2 23110970 | 19-Jan-24 | 1647 | TSP | N | N | X | X | 1 | |
| 3 23110971 | 19-Jan-24 | 1657 | TSP | N | N | X | X | 1 | |
| 4 23110972 | 25-Jan-24 | 1668 | TSP | N | N | X | X | 1 | |
| 5 23110973 | 25-Jan-24 | 1660 | TSP | N | N | X | X | 1 | |
| 6 23110974 | 25-Jan-24 | 1643 | TSP | N | N | X | X | 1 | |
| 7 23110959 | 31-Jan-24 | 1609 | TSP | N | N | X | X | 1 | |
| 8 23110977 | 31-Jan-24 | 1589 | TSP | N | N | X | X | 1 | |
| 9 23110978 | 31-Jan-24 | 1606 | TSP | N | N | X | X | 1 | |
| 10 23110960 | 6-Feb-24 | 1594 | TSP | N | N | X | X | 1 | |
| 11 23110961 | 6-Feb-24 | 1598 | TSP | N | N | X | X | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only |
|------------------------------------|--------------------------------|---------|-------|--|
| JRA 9-Feb-24 | | 10/2/24 | 09:15 | Temperature (°C) on Receipt |
| | | | | Condition of Sample on Receipt |
| | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

Write: Maxxam Yellow: Mail Pink: Client

| | | | | | |
|------------------------------------|---|---------|-------|-----------------------------|--|
| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
| JRA 9-Feb-24 |  | 6/21/24 | 0915 | Temperature (°C) on Receipt | Condition of Sample on Receipt <input type="checkbox"/> OK <input type="checkbox"/> SIF |
| | | | | | |
| | | | | | |

Page 10 of 10



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/04/01
Report #: R8088201
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C442105

Received: 2024/02/12, 09:15

Sample Matrix: Filter
Samples Received: 4

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2024/02/20 | 2024/02/23 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2024/02/22 | 2024/02/23 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 3 | N/A | 2024/02/15 | | |
| Particulates on Filter (Method IO-3.1) | 4 | 2024/02/15 | 2024/02/15 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/02/13 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/04/01
Report #: R8088201
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C442105

Received: 2024/02/12, 09:15

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C442105
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | YIV765 | YIV766 | YIV767 | | | YIV768 | | |
|--|-------|------------|------------|------------|------|----------|----------|------|----------|
| Sampling Date | | 2024/02/06 | 2024/02/06 | 2024/02/06 | | | | | |
| COC Number | | n/a | n/a | n/a | | | n/a | | |
| | UNITS | 23110960 | 23110961 | 23110962 | RDL | QC Batch | 23120597 | RDL | QC Batch |
| Particulate | ug/m3 | 10 | 39 | 5 | 3 | 9219454 | | | |
| Particulate Weight on Filter | ug | 16400 | 61700 | 9100 | 5000 | 9222991 | <5000 | 5000 | 9222991 |
| Volume | m3 | 1594 | 1598 | 1724 | N/A | ONSITE | | | |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |



Bureau Veritas Job #: C442105
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | YIV766 | | |
| Sampling Date | | 2024/02/06 | | |
| COC Number | | n/a | | |
| | UNITS | 23110961 | RDL | QC Batch |
| Metals | | | | |
| Arsenic (As) | ug | <6.0 | 6.0 | 9234540 |
| Cadmium (Cd) | ug | <2.0 | 2.0 | 9234540 |
| Chromium (Cr) | ug | <5.0 | 5.0 | 9234540 |
| Cobalt (Co) | ug | <2.0 | 2.0 | 9234540 |
| Copper (Cu) | ug | 39.4 | 5.0 | 9234540 |
| Iron (Fe) | ug | 685 | 50 | 9234540 |
| Lead (Pb) | ug | 4.6 | 3.0 | 9234540 |
| Manganese (Mn) | ug | 21.7 | 1.0 | 9234540 |
| Nickel (Ni) | ug | <3.0 | 3.0 | 9234540 |
| Selenium (Se) | ug | <10 | 10 | 9234540 |
| Vanadium (V) | ug | <5.0 | 5.0 | 9234540 |
| Zinc (Zn) | ug | 31.0 | 5.0 | 9234540 |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C442105
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | YIV766 | | |
| Sampling Date | | 2024/02/06 | | |
| COC Number | | n/a | | |
| | UNITS | 23110961 | RDL | QC Batch |
| Metals | | | | |
| Total Arsenic (As) | ug/m3 | <0.0038 | 0.0038 | 9229673 |
| Total Cadmium (Cd) | ug/m3 | <0.0013 | 0.0013 | 9229673 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | 9229673 |
| Total Cobalt (Co) | ug/m3 | <0.0013 | 0.0013 | 9229673 |
| Total Copper (Cu) | ug/m3 | 0.0246 | 0.0031 | 9229673 |
| Total Iron (Fe) | ug/m3 | 0.429 | 0.031 | 9229673 |
| Total Lead (Pb) | ug/m3 | 0.0029 | 0.0019 | 9229673 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | 9229673 |
| Total Nickel (Ni) | ug/m3 | <0.0019 | 0.0019 | 9229673 |
| Total Selenium (Se) | ug/m3 | <0.0063 | 0.0063 | 9229673 |
| Total Sulphur (S) | ug/m3 | 0.558 | 0.016 | 9229673 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | 9229673 |
| Total Zinc (Zn) | ug/m3 | 0.0194 | 0.0031 | 9229673 |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C442105
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C442105
Report Date: 2024/04/01

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9234540 | Arsenic (As) | 2024/02/23 | 103 | 75 - 125 | 102 | 85 - 115 | <6.0 | ug | NC (1) | 20 |
| 9234540 | Cadmium (Cd) | 2024/02/23 | 103 | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9234540 | Chromium (Cr) | 2024/02/23 | 100 | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | 8.0 (1) | 20 |
| 9234540 | Cobalt (Co) | 2024/02/23 | 97 | 75 - 125 | 100 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9234540 | Copper (Cu) | 2024/02/23 | 86 | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | 2.3 (1) | 20 |
| 9234540 | Iron (Fe) | 2024/02/23 | 92 | 75 - 125 | 103 | 85 - 115 | <50 | ug | 0.65 (1) | 20 |
| 9234540 | Lead (Pb) | 2024/02/23 | 97 | 75 - 125 | 98 | 85 - 115 | <3.0 | ug | 9.8 (1) | 20 |
| 9234540 | Manganese (Mn) | 2024/02/23 | 97 | 75 - 125 | 102 | 85 - 115 | <1.0 | ug | 0.49 (1) | 20 |
| 9234540 | Nickel (Ni) | 2024/02/23 | 97 | 75 - 125 | 100 | 85 - 115 | <3.0 | ug | 1.1 (1) | 20 |
| 9234540 | Selenium (Se) | 2024/02/23 | 106 | 75 - 125 | 103 | 85 - 115 | <10 | ug | NC (1) | 20 |
| 9234540 | Vanadium (V) | 2024/02/23 | 95 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | NC (1) | 20 |
| 9234540 | Zinc (Zn) | 2024/02/23 | 96 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 1.8 (1) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID



Bureau Veritas Job #: C442105

Report Date: 2024/04/01

RWDI

Client Project #: 2402553.02

Site Location: TWIN CREEKS

Your P.O. #: 13254248

Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink, appearing to read "Anastassia Hamanov", written over a horizontal line.

Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 1

| INVOICE INFORMATION: | REPORT INFORMATION (if differs from invoice): | PROJECT INFORMATION: | MAXXAM JOB NUMBER: |
|---|--|---------------------------|---------------------|
| Company Name: Waste Management of Canada Corporation | Company Name: RWDI AIR Inc. | Quotation # | |
| Contact Name: Lisa Mertick | Contact Name: Brent Langille | P.O. #: 10123733 | |
| Address: 5768 Nauvoo Rd, Watford, ON | Address: 4510 Rhodes Drive, Suite 530 | Project #: 2402553.02 | CHAIN OF CUSTODY #: |
| N0M 2S0 | Windsor, ON, N8W 5K5 | Project Name: Twin Creeks | |
| Phone: 519-849-5810 Fax: 519-849-5811 | Phone: 519-823-1311 x 2618 Fax: 519-823-1316 | Location: Twin Creeks | |
| Email: lmertick@wm.com | Email: Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: JRA | |


| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|--|--|
| <i>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i> | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific | | Regular (Standard) TAT: |
| <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm | | <input checked="" type="checkbox"/> 5 to 7 Working Days |
| <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 Region: _____ | | Rush TAT: Rush Confirmation # _____ |
| Report Criteria on C of A ? <input type="checkbox"/> n | | (call Lab for #) |
| | | <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days |
| | | DATE Required: _____ |
| | | TIME Required: _____ |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|------------|-------------------------|
| 1 23110969 | 19-Jan-24 | 1617 | TSP | N | N | X | X | 1 | |
| 2 23110970 | 19-Jan-24 | 1647 | TSP | N | N | X | X | 1 | |
| 3 23110971 | 19-Jan-24 | 1657 | TSP | N | N | X | X | 1 | |
| 4 23110972 | 25-Jan-24 | 1668 | TSP | N | N | X | X | 1 | |
| 5 23110973 | 25-Jan-24 | 1660 | TSP | N | N | X | X | 1 | |
| 6 23110974 | 25-Jan-24 | 1643 | TSP | N | N | X | X | 1 | |
| 7 23110959 | 31-Jan-24 | 1609 | TSP | N | N | X | X | 1 | |
| 8 23110977 | 31-Jan-24 | 1589 | TSP | N | N | X | X | 1 | |
| 9 23110978 | 31-Jan-24 | 1606 | TSP | N | N | X | X | 1 | |
| 10 23110960 | 6-Feb-24 | 1594 | TSP | N | N | X | X | 1 | |
| 11 23110961 | 6-Feb-24 | 1598 | TSP | N | N | X | X | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only |
|------------------------------------|--------------------------------|---------|-------|--|
| JRA 9-Feb-24 | | 10/2/24 | 09:15 | Temperature (°C) on Receipt |
| | | | | Condition of Sample on Receipt |
| | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

Write: Maxxam Yellow: Mail Pink: Client

| | | | | | |
|------------------------------------|---|-----------|-------|-----------------------------|--|
| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
| JRA 9-Feb-24 |  | 6/21/2022 | 0915 | Temperature (°C) on Receipt | Condition of Sample on Receipt <input type="checkbox"/> OK <input type="checkbox"/> SIF |
| | | | | | |
| | | | | | |



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/04/01
Report #: R8088204
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C471342

Received: 2024/03/08, 10:00

Sample Matrix: Filter
Samples Received: 7

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/03/18 | 2024/03/20 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/03/19 | 2024/03/20 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 7 | N/A | 2024/03/14 | | |
| Particulates on Filter (Method IO-3.1) | 7 | 2024/03/14 | 2024/03/14 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 7 | N/A | 2024/03/09 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/04/01
Report #: R8088204
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C471342

Received: 2024/03/08, 10:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C471342
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | | | |
|----------------------------------|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Bureau Veritas ID | | YOV407 | YOV408 | YOV409 | YOV410 | YOV411 | YOV412 | YOV413 | | |
| Sampling Date | | 2024/02/12 | 2024/02/12 | 2024/02/18 | 2024/02/18 | 2024/02/24 | 2024/02/24 | 2024/02/24 | | |
| COC Number | | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | |
| | UNITS | 23110963 | 23110965 | 23110966 | 23110967 | 23120598 | 23120599 | 23122700 | RDL | QC Batch |
| | | | | | | | | | | |
| Particulate | ug/m3 | 31 | 30 | 15 | 21 | 12 | 13 | 14 | 3 | 9265358 |
| Particulate Weight on Filter | ug | 49600 | 48400 | 23200 | 36100 | 19800 | 19800 | 21700 | 5000 | 9273821 |
| Volume | m3 | 1623 | 1597 | 1530 | 1735 | 1636 | 1583 | 1594 | N/A | ONSITE |
| RDL = Reportable Detection Limit | | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | | |
| N/A = Not Applicable | | | | | | | | | | |



Bureau Veritas Job #: C471342
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | YOV407 | YOV408 | YOV409 | | |
|----------------------------------|-------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/02/12 | 2024/02/12 | 2024/02/18 | | |
| COC Number | | n/a | n/a | n/a | | |
| | UNITS | 23110963 | 23110965 | 23110966 | RDL | QC Batch |
| Metals | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | 6.0 | 9282391 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9282391 |
| Chromium (Cr) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9282391 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9282391 |
| Copper (Cu) | ug | 50.1 | 167 | 8.2 | 5.0 | 9282391 |
| Iron (Fe) | ug | 675 | 726 | 439 | 50 | 9282391 |
| Lead (Pb) | ug | <3.0 | 5.0 | <3.0 | 3.0 | 9282391 |
| Manganese (Mn) | ug | 20.6 | 19.8 | 13.8 | 1.0 | 9282391 |
| Nickel (Ni) | ug | <3.0 | <3.0 | <3.0 | 3.0 | 9282391 |
| Selenium (Se) | ug | <10 | <10 | <10 | 10 | 9282391 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9282391 |
| Zinc (Zn) | ug | 37.8 | 43.2 | 26.4 | 5.0 | 9282391 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C471342
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | YOV407 | | YOV408 | | YOV409 | | |
|----------------------------------|-------|------------|--------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/02/12 | | 2024/02/12 | | 2024/02/18 | | |
| COC Number | | n/a | | n/a | | n/a | | |
| | UNITS | 23110963 | RDL | 23110965 | RDL | 23110966 | RDL | QC Batch |
| Metals | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0037 | 0.0037 | <0.0038 | 0.0038 | <0.0039 | 0.0039 | 9280301 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | 9280301 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | <0.0033 | 0.0033 | 9280301 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | 9280301 |
| Total Copper (Cu) | ug/m3 | 0.0309 | 0.0031 | 0.105 | 0.0031 | 0.0054 | 0.0033 | 9280301 |
| Total Iron (Fe) | ug/m3 | 0.416 | 0.031 | 0.455 | 0.031 | 0.287 | 0.033 | 9280301 |
| Total Lead (Pb) | ug/m3 | <0.0018 | 0.0018 | 0.0031 | 0.0019 | <0.0020 | 0.0020 | 9280301 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.017 | 0.017 | <0.018 | 0.018 | 9280301 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | 0.0018 | <0.0019 | 0.0019 | <0.0020 | 0.0020 | 9280301 |
| Total Selenium (Se) | ug/m3 | <0.0062 | 0.0062 | <0.0063 | 0.0063 | <0.0065 | 0.0065 | 9280301 |
| Total Sulphur (S) | ug/m3 | 0.728 | 0.015 | 0.660 | 0.016 | 0.318 | 0.016 | 9280301 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | <0.0033 | 0.0033 | 9280301 |
| Total Zinc (Zn) | ug/m3 | 0.0233 | 0.0031 | 0.0271 | 0.0031 | 0.0173 | 0.0033 | 9280301 |
| RDL = Reportable Detection Limit | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | |



Bureau Veritas Job #: C471342
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Sample YOV408 [23110965] : NPF Filter not properly folded

Results relate only to the items tested.



Bureau Veritas Job #: C471342
Report Date: 2024/04/01

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9282391 | Arsenic (As) | 2024/03/20 | 105 (1) | 75 - 125 | 105 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9282391 | Cadmium (Cd) | 2024/03/20 | 104 (1) | 75 - 125 | 103 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9282391 | Chromium (Cr) | 2024/03/20 | 103 (1) | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9282391 | Cobalt (Co) | 2024/03/20 | 101 (1) | 75 - 125 | 101 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9282391 | Copper (Cu) | 2024/03/20 | 99 (1) | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | 3.6 (3) | 20 |
| 9282391 | Iron (Fe) | 2024/03/20 | 105 (1) | 75 - 125 | 105 | 85 - 115 | <50 | ug | 3.2 (3) | 20 |
| 9282391 | Lead (Pb) | 2024/03/20 | 98 (1) | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | 10 (3) | 20 |
| 9282391 | Manganese (Mn) | 2024/03/20 | 100 (1) | 75 - 125 | 100 | 85 - 115 | <1.0 | ug | 2.9 (3) | 20 |
| 9282391 | Nickel (Ni) | 2024/03/20 | 96 (1) | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9282391 | Selenium (Se) | 2024/03/20 | 106 (1) | 75 - 125 | 105 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9282391 | Vanadium (V) | 2024/03/20 | 106 (1) | 75 - 125 | 104 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9282391 | Zinc (Zn) | 2024/03/20 | 100 (1) | 75 - 125 | 101 | 85 - 115 | <5.0 | ug | 2.8 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Matrix Spike Parent ID [YOV408-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [YOV408-01]



Bureau Veritas Job #: C471342
Report Date: 2024/04/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 1

| INVOICE INFORMATION: | REPORT INFORMATION (if differs from invoice): | PROJECT INFORMATION: | MAXXAM JOB NUMBER: |
|---|--|---------------------------|---------------------|
| Company Name: Waste Management of Canada Corporation | Company Name: RWDI AIR Inc. | Quotation # | |
| Contact Name: Lisa Mertick | Contact Name: Brent Langille | P.O. #: 10123733 | |
| Address: 5768 Nauvoo Rd, Watford, ON | Address: 4510 Rhodes Drive, Suite 530 | Project #: 2402553.02 | CHAIN OF CUSTODY #: |
| NOM 2S0 | Windsor, ON, N8W 5K5 | Project Name: Twin Creeks | |
| Phone: 519-849-5810 Fax: 519-849-5811 | Phone: 519-823-1311 x 2618 Fax: 519-823-1316 | Location: Twin Creeks | |
| Email: lmertick@wm.com | Email: Jeffery.Cleland@rwdi.com ; axl@rwdi.com | Sampled By: JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific | 08-Mar-24 10:00 | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days |
| <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm | Patricia Legette | Rush TAT: Rush Confirmation # (call Lab for #) |
| <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 Region: _____ | | <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days |
| <input type="checkbox"/> Reg. 558 Report Criteria on C of A? <input type="checkbox"/> n | C471342 | DATE Required: _____ |

| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | Regulated D | Metals Field | TSP | Metals (**Co analysis**) | RUK | | | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | |
|--|-----------------------|--------------|---------------|-----------------------------|-------------|--------------|-----|--------------------------|-----|--|--|--|--|--|--|--|--|--|--|---|
| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | | | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
| 1 | 23110963 | 12-Feb-24 | 1623 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 2 | 23110965 | 12-Feb-24 | 1597 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 3 | 23110966 | 18-Feb-24 | 1530 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 4 | 23110967 | 18-Feb-24 | 1735 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 5 | 23120596 | 18-Feb-24 | 1638 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 6 | 23120598 | 24-Feb-24 | 1636 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 7 | 23120599 | 24-Feb-24 | 1583 | TSP | N | N | X | X | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 23122700 | 24-Feb-24 | 1594 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 9 | 23122701 | 1-Mar-24 | 1729 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 10 | 23122702 | 1-Mar-24 | 1582 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 11 | 24012938 | 6-Mar-24 | - | TSP | N | N | X | X | | | | | | | | | | | 1 | Field Blank |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA 6-Mar-24 | SUGAR SALVAN | 2024/03/08 | 10:00 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/04/30
Report #: R8129729
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C471342

Received: 2024/03/08, 10:00

Sample Matrix: Filter
Samples Received: 3

| Analyses | Date | | Date Analyzed | Laboratory Method | Analytical Method |
|--|----------|------------|---------------|-------------------|-------------------|
| | Quantity | Extracted | | | |
| Particulates on Hi-Vol Filters | 2 | N/A | 2024/03/14 | | |
| Particulates on Filter (Method IO-3.1) | 3 | 2024/03/14 | 2024/03/14 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 2 | N/A | 2024/03/09 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/04/30
Report #: R8129729
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C471342

Received: 2024/03/08, 10:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C471342
Report Date: 2024/04/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | |
|--|--------------|-----------------|-----------------|------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | YOV414 | YOV415 | | | YOV416 | | |
| Sampling Date | | 2024/03/01 | 2024/03/01 | | | 2024/03/06 | | |
| COC Number | | n/a | n/a | | | n/a | | |
| | UNITS | 23122701 | 23122702 | RDL | QC Batch | 24012938 | RDL | QC Batch |
| | | | | | | | | |
| Particulate | ug/m3 | 15 | 27 | 3 | 9265358 | | | |
| Particulate Weight on Filter | ug | 26700 | 42200 | 5000 | 9273821 | <5000 | 5000 | 9273821 |
| Volume | m3 | 1729 | 1582 | N/A | ONSITE | | | |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | |



Bureau Veritas Job #: C471342
Report Date: 2024/04/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C471342
Report Date: 2024/04/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in cursive script that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 10123733 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axl@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|---|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Table 3 | 08-Mar-24 10:00 Patricia Legette C471342 RUK AIR-RmTmp | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |
| Report Criteria on C of A ? <input checked="" type="checkbox"/> n | | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y/N) | Metals Field Filtered ? (Y/N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | RUK | AIR-RmTmp | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|----------------------------------|-------------------------------|-----|--|-----|-----------|------------|---|
| 1 | 23110963 | 12-Feb-24 | 1623 | TSP | N | N | X | X | | | 1 | |
| 2 | 23110965 | 12-Feb-24 | 1597 | TSP | N | N | X | X | | | 1 | |
| 3 | 23110966 | 18-Feb-24 | 1530 | TSP | N | N | X | X | | | 1 | |
| 4 | 23110967 | 18-Feb-24 | 1735 | TSP | N | N | X | X | | | 1 | |
| 5 | 23120596 | 18-Feb-24 | 1638 | TSP | N | N | X | X | | | 1 | |
| 6 | 23120598 | 24-Feb-24 | 1636 | TSP | N | N | X | X | | | 1 | |
| 7 | 23120599 | 24-Feb-24 | 1583 | TSP | N | N | X | X | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 23122700 | 24-Feb-24 | 1594 | TSP | N | N | X | X | | | 1 | |
| 9 | 23122701 | 1-Mar-24 | 1729 | TSP | N | N | X | X | | | 1 | |
| 10 | 23122702 | 1-Mar-24 | 1582 | TSP | N | N | X | X | | | 1 | |
| 11 | 24012938 | 6-Mar-24 | - | TSP | N | N | X | X | | | 1 | Field Blank |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA 6-Mar-24 | <i>SUGAR SALVAN</i> | 2024/03/08 | 10:00 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |



Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Your P.O. #: 13254248
Your Project #: 2402553.02
Site#: TWIN CREEKS
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Report Date: 2024/04/30
Report #: R8129744
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4A9916

Received: 2024/04/13, 12:30

Sample Matrix: Filter
Samples Received: 16

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/04/23 | 2024/04/30 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/04/26 | 2024/04/30 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 15 | N/A | 2024/04/22 | | |
| Particulates on Filter (Method IO-3.1) | 16 | 2024/04/18 | 2024/04/18 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 15 | N/A | 2024/04/15 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Your P.O. #: 13254248
Your Project #: 2402553.02
Site#: TWIN CREEKS
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Report Date: 2024/04/30
Report #: R8129744
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4A9916

Received: 2024/04/13, 12:30

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4A9916
Report Date: 2024/04/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | YWU795 | YWU796 | YWU797 | YWU798 | YWU799 | YWU800 | YWU801 | | |
| Sampling Date | | 2024/03/13 | 2024/03/13 | 2024/03/13 | 2024/03/07 | 2024/03/07 | 2024/03/07 | 2024/03/25 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 23122704 | 23122705 | 23122706 | 23122707 | 23122708 | 23122709 | 23122710 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------|
| Particulate | ug/m3 | 26 | 39 | 45 | 62 | 14 | 18 | 9 | 3 | 9333163 |
| Particulate Weight on Filter | ug | 41800 | 61400 | 79100 | 99400 | 21900 | 28500 | 16100 | 5000 | 9346974 |
| Volume | m3 | 1594 | 1575 | 1748 | 1609 | 1582 | 1587 | 1737 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | YWU802 | YWU803 | YWU804 | YWU805 | YWU806 | | | YWU807 | | |
| Sampling Date | | 2024/03/25 | 2024/03/19 | 2024/03/19 | 2024/03/19 | 2024/03/25 | | | | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | | | N/A | | |
| | UNITS | 23122711 | 23122712 | 23122713 | 23122714 | 24012937 | RDL | QC Batch | 24012945 | RDL | QC Batch |

| | | | | | | | | | | | |
|------------------------------|-------|--------|-------|-------|-------|-------|------|---------|-------|------|---------|
| Particulate | ug/m3 | 122 | 32 | 21 | 18 | 11 | 3 | 9333163 | | | |
| Particulate Weight on Filter | ug | 191000 | 49700 | 33000 | 29000 | 17900 | 5000 | 9346974 | <5000 | 5000 | 9346974 |
| Volume | m3 | 1563 | 1561 | 1588 | 1610 | 1597 | N/A | ONSITE | | | |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | YWU808 | YWU809 | YWU810 | | |
| Sampling Date | | 2024/03/31 | 2024/03/31 | 2024/03/31 | | |
| COC Number | | N/A | N/A | N/A | | |
| | UNITS | 24012939 | 24012940 | 24012941 | RDL | QC Batch |

| | | | | | | |
|------------------------------|-------|-------|-------|------|------|---------|
| Particulate | ug/m3 | 6 | 11 | 5 | 3 | 9333163 |
| Particulate Weight on Filter | ug | 10100 | 18300 | 7800 | 5000 | 9346974 |
| Volume | m3 | 1604 | 1613 | 1568 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



Bureau Veritas Job #: C4A9916
Report Date: 2024/04/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | YWU795 | YWU797 | YWU803 | | |
|----------------------------------|-------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/03/13 | 2024/03/13 | 2024/03/19 | | |
| COC Number | | N/A | N/A | N/A | | |
| | UNITS | 23122704 | 23122706 | 23122712 | RDL | QC Batch |
| Metals | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | 6.0 | 9357803 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9357803 |
| Chromium (Cr) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9357803 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9357803 |
| Copper (Cu) | ug | 27.5 | 70.3 | 18.7 | 5.0 | 9357803 |
| Iron (Fe) | ug | 524 | 1060 | 705 | 50 | 9357803 |
| Lead (Pb) | ug | 3.7 | 5.2 | <3.0 | 3.0 | 9357803 |
| Manganese (Mn) | ug | 19.8 | 37.5 | 26.1 | 1.0 | 9357803 |
| Nickel (Ni) | ug | <3.0 | <3.0 | <3.0 | 3.0 | 9357803 |
| Selenium (Se) | ug | <10 | <10 | <10 | 10 | 9357803 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9357803 |
| Zinc (Zn) | ug | 36.6 | 45.5 | 42.7 | 5.0 | 9357803 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4A9916
Report Date: 2024/04/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | YWU795 | | YWU797 | | YWU803 | | |
|----------------------------------|-------|------------|--------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/03/13 | | 2024/03/13 | | 2024/03/19 | | |
| COC Number | | N/A | | N/A | | N/A | | |
| | UNITS | 23122704 | RDL | 23122706 | RDL | 23122712 | RDL | QC Batch |
| Metals | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0038 | 0.0038 | <0.0034 | 0.0034 | <0.0038 | 0.0038 | 9349877 |
| Total Cadmium (Cd) | ug/m3 | <0.0013 | 0.0013 | <0.0011 | 0.0011 | <0.0013 | 0.0013 | 9349877 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | <0.0029 | 0.0029 | <0.0032 | 0.0032 | 9349877 |
| Total Cobalt (Co) | ug/m3 | <0.0013 | 0.0013 | <0.0011 | 0.0011 | <0.0013 | 0.0013 | 9349877 |
| Total Copper (Cu) | ug/m3 | 0.0172 | 0.0031 | 0.0402 | 0.0029 | 0.0120 | 0.0032 | 9349877 |
| Total Iron (Fe) | ug/m3 | 0.329 | 0.031 | 0.606 | 0.029 | 0.451 | 0.032 | 9349877 |
| Total Lead (Pb) | ug/m3 | 0.0023 | 0.0019 | 0.0030 | 0.0017 | <0.0019 | 0.0019 | 9349877 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.015 | 0.015 | <0.017 | 0.017 | 9349877 |
| Total Nickel (Ni) | ug/m3 | <0.0019 | 0.0019 | <0.0017 | 0.0017 | <0.0019 | 0.0019 | 9349877 |
| Total Selenium (Se) | ug/m3 | <0.0063 | 0.0063 | <0.0057 | 0.0057 | <0.0064 | 0.0064 | 9349877 |
| Total Sulphur (S) | ug/m3 | 0.427 | 0.016 | 0.457 | 0.014 | 0.347 | 0.016 | 9349877 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | <0.0029 | 0.0029 | <0.0032 | 0.0032 | 9349877 |
| Total Zinc (Zn) | ug/m3 | 0.0230 | 0.0031 | 0.0261 | 0.0029 | 0.0274 | 0.0032 | 9349877 |
| RDL = Reportable Detection Limit | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | |



Bureau Veritas Job #: C4A9916
Report Date: 2024/04/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

GENERAL COMMENTS

Sample YWU799 [23122708] : FT Filter torn.
All of the pieces of the filter appear to have been received.
Results are bias low due to filter material missing.

Sample YWU800 [23122709] : FT Filter torn.
All of the pieces of the filter appear to have been received.
Results are bias low due to filter material missing”.

Results relate only to the items tested.



Bureau Veritas Job #: C4A9916
Report Date: 2024/04/30

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9357803 | Arsenic (As) | 2024/04/30 | 98 (1) | 75 - 125 | 100 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9357803 | Cadmium (Cd) | 2024/04/30 | 101 (1) | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9357803 | Chromium (Cr) | 2024/04/30 | 100 (1) | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9357803 | Cobalt (Co) | 2024/04/30 | 97 (1) | 75 - 125 | 100 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9357803 | Copper (Cu) | 2024/04/30 | 95 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 0.58 (3) | 20 |
| 9357803 | Iron (Fe) | 2024/04/30 | 100 (1) | 75 - 125 | 102 | 85 - 115 | <50 | ug | 0.085 (3) | 20 |
| 9357803 | Lead (Pb) | 2024/04/30 | 97 (1) | 75 - 125 | 99 | 85 - 115 | <3.0 | ug | 17 (3) | 20 |
| 9357803 | Manganese (Mn) | 2024/04/30 | 98 (1) | 75 - 125 | 101 | 85 - 115 | <1.0 | ug | 0.24 (3) | 20 |
| 9357803 | Nickel (Ni) | 2024/04/30 | 95 (1) | 75 - 125 | 98 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9357803 | Selenium (Se) | 2024/04/30 | 103 (1) | 75 - 125 | 104 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9357803 | Vanadium (V) | 2024/04/30 | 96 (1) | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9357803 | Zinc (Zn) | 2024/04/30 | 97 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 0.40 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [YWU797-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [YWU797-01]



Bureau Veritas Job #: C4A9916
Report Date: 2024/04/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Julian Tong, Project Manager Assistant

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 1

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. # | 10123733 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project # | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|--|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> PWQO <input type="checkbox"/> Reg. 558 | <input checked="" type="checkbox"/> Other site specific specify _____ Report Criteria on C of A ? <input type="checkbox"/> n | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|------------|---|
| 1 23122704 | 13-Mar-24 | 1594 | TSP | N | N | X | X | 1 | |
| 2 23122705 | 13-Mar-24 | 1575 | TSP | N | N | X | X | 1 | |
| 3 23122706 | 13-Mar-24 | 1748 | TSP | N | N | X | X | 1 | |
| 4 23122707 | 7-Mar-24 | 1609 | TSP | N | N | X | X | 1 | |
| 5 23122708 | 7-Mar-24 | 1582 | TSP | N | N | X | X | 1 | |
| 6 23122709 | 7-Mar-24 | 1587 | TSP | N | N | X | X | 1 | |
| 7 23122710 | 25-Mar-24 | 1737 | TSP | N | N | X | X | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 23122711 | 25-Mar-24 | 1563 | TSP | N | N | X | X | 1 | |
| 9 23122712 | 19-Mar-24 | 1561 | TSP | N | N | X | X | 1 | |
| 10 23122713 | 19-Mar-24 | 1588 | TSP | N | N | X | X | 1 | |
| 11 23122714 | 19-Mar-24 | 1610 | TSP | N | N | X | X | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-------------------------------------|---|
| JRA 12-Apr-24 | SUGAR SALVATI | 2024/04/13 | 12:30 | Temperature (°C) on Receipt 11/A | Condition of Sample on Receipt <input checked="" type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 10123733 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|-----------------------|--------------------------------|---------------|-----------------------------|--|---|-------|---|---|--|--|--|--|--|--|--|--|--|---|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | | | | # of Cont. COMMENTS / TAT COMMENTS | |
| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | | | | | | | | | | | | | | | | | |
| 1 | 24012937 | 25-Mar-24 | 1597 | TSP | N | N | X | X | | | | | | | | | | | 1 | | |
| 2 | 24012945 | - | - | TSP | N | N | X | X | | | | | | | | | | | 1 | Field blank | |
| 3 | 24012939 | 31-Mar-24 | 1604 | TSP | N | N | X | X | | | | | | | | | | | 1 | | |
| 4 | 24012940 | 31-Mar-24 | 1613 | TSP | N | N | X | X | | | | | | | | | | | 1 | | |
| 5 | 24012941 | 31-Mar-24 | 1568 | TSP | N | N | X | X | | | | | | | | | | | 1 | | |
| 6 | 24012942 | 6-Apr-24 | 1720 | TSP | N | N | X | X | | | | | | | | | | | 1 | | |
| 7 | 24012943 | 6-Apr-24 | 1587 | TSP | N | N | X | X | | | | | | | | | | | 1 | | |
| 8 | 24012944 | 6-Apr-24 | 1603 | TSP | N | N | X | X | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | | Date: | | Time: | | Laboratory Use Only | | | | | | | | | | | | |
| JRA 12-Apr-24 | | SUGAR SALVAN | | | 2024/04/13 | | 12:30 | | Temperature (°C) on Receipt: 14/15 Condition of Sample on Receipt: <input checked="" type="checkbox"/> OK <input type="checkbox"/> SIF | | | | | | | | | | | | |



Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Your P.O. #: 13254248
Your Project #: 2402553.02
Site#: TWIN CREEKS
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Report Date: 2024/05/31
Report #: R8172297
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4A9916

Received: 2024/04/13, 12:30

Sample Matrix: Filter
Samples Received: 3

| Analyses | Date | | Date Analyzed | Laboratory Method | Analytical Method |
|--|----------|------------|---------------|-------------------|-------------------|
| | Quantity | Extracted | | | |
| Particulates on Hi-Vol Filters | 3 | N/A | 2024/04/22 | | |
| Particulates on Filter (Method IO-3.1) | 3 | 2024/04/18 | 2024/04/18 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/04/15 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Your P.O. #: 13254248
Your Project #: 2402553.02
Site#: TWIN CREEKS
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Report Date: 2024/05/31
Report #: R8172297
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4A9916

Received: 2024/04/13, 12:30

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2

Page 2 of 7

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



Bureau Veritas Job #: C4A9916
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF FILTER

| | | | | | | |
|----------------------------------|--------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | YWU811 | YWU812 | YWU813 | | |
| Sampling Date | | 2024/04/06 | 2024/04/06 | 2024/04/06 | | |
| COC Number | | N/A | N/A | N/A | | |
| | UNITS | 24012942 | 24012943 | 24012944 | RDL | QC Batch |
| | | | | | | |
| Particulate | ug/m3 | 4 | 10 | 3 | 3 | 9333163 |
| Particulate Weight on Filter | ug | 6200 | 15400 | 5600 | 5000 | 9346974 |
| Volume | m3 | 1720 | 1587 | 1603 | N/A | ONSITE |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |
| N/A = Not Applicable | | | | | | |



Bureau Veritas Job #: C4A9916
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4A9916
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Julian Tong, Project Manager Assistant

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 1

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. # | 10123733 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project # | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|--|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> PWQO <input type="checkbox"/> Reg. 558 | <input checked="" type="checkbox"/> Other site specific specify _____ Report Criteria on C of A ? <input type="checkbox"/> n | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|------------|-------------------------|
| 1 23122704 | 13-Mar-24 | 1594 | TSP | N | N | X | X | 1 | |
| 2 23122705 | 13-Mar-24 | 1575 | TSP | N | N | X | X | 1 | |
| 3 23122706 | 13-Mar-24 | 1748 | TSP | N | N | X | X | 1 | |
| 4 23122707 | 7-Mar-24 | 1609 | TSP | N | N | X | X | 1 | |
| 5 23122708 | 7-Mar-24 | 1582 | TSP | N | N | X | X | 1 | |
| 6 23122709 | 7-Mar-24 | 1587 | TSP | N | N | X | X | 1 | |
| 7 23122710 | 25-Mar-24 | 1737 | TSP | N | N | X | X | 1 | |
| 8 23122711 | 25-Mar-24 | 1563 | TSP | N | N | X | X | 1 | |
| 9 23122712 | 19-Mar-24 | 1561 | TSP | N | N | X | X | 1 | |
| 10 23122713 | 19-Mar-24 | 1588 | TSP | N | N | X | X | 1 | |
| 11 23122714 | 19-Mar-24 | 1610 | TSP | N | N | X | X | 1 | |

13-Apr-24 12:30
Patricia Legette
C4A9916
JDK AIR-RmTm

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-------------------------------------|---|
| JRA 12-Apr-24 | SUGAR SALVATI | 2024/04/13 | 12:30 | Temperature (°C) on Receipt 11/1 | Condition of Sample on Receipt <input checked="" type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 10123733 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|-----------------------|--------------------------------|---------------|-----------------------------|--|---|-------|---|---|--|--|--|--|--|--|--|--|--|--|--|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | | | | # of Cont. COMMENTS / TAT COMMENTS | |
| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | | | | | | | | | | | | | | | | | |
| 1 | 24012937 | 25-Mar-24 | 1597 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 2 | 24012945 | - | - | TSP | N | N | X | X | | | | | | | | | | | | 1 | Field blank |
| 3 | 24012939 | 31-Mar-24 | 1604 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 4 | 24012940 | 31-Mar-24 | 1613 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 5 | 24012941 | 31-Mar-24 | 1568 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 6 | 24012942 | 6-Apr-24 | 1720 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 7 | 24012943 | 6-Apr-24 | 1587 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 8 | 24012944 | 6-Apr-24 | 1603 | TSP | N | N | X | X | | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | | Date: | | Time: | | Laboratory Use Only | | | | | | | | | | | | |
| JRA 12-Apr-24 | | SUGAR SALVAN | | | 2024/04/13 | | 12:30 | | Temperature (°C) on Receipt: 14/15 Condition of Sample on Receipt: <input checked="" type="checkbox"/> OK <input type="checkbox"/> SIF | | | | | | | | | | | | |



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/05/31
Report #: R8172236
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4C0067

Received: 2024/04/23, 10:08

Sample Matrix: Filter
Samples Received: 6

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/04/30 | 2024/05/03 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/05/01 | 2024/05/03 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 6 | N/A | 2024/04/29 | | |
| Particulates on Filter (Method IO-3.1) | 6 | 2024/04/24 | 2024/04/25 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 6 | N/A | 2024/04/23 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/05/31
Report #: R8172236
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4C0067

Received: 2024/04/23, 10:08

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2

Page 2 of 9

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



Bureau Veritas Job #: C4C0067
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | YYX068 | YYX069 | YYX070 | YYX071 | YYX072 | YYX073 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/04/12 | 2024/04/12 | 2024/04/12 | 2024/04/18 | 2024/04/18 | 2024/04/18 | | |
| | UNITS | 24012946 | 24012947 | 24012948 | 24012949 | 24012950 | 24012951 | RDL | QC Batch |
| Particulate | ug/m3 | 9 | 7 | 12 | 25 | 20 | 17 | 3 | 9350643 |
| Particulate Weight on Filter | ug | 14700 | 11800 | 19500 | 40700 | 32000 | 28800 | 5000 | 9361687 |
| Volume | m3 | 1599 | 1653 | 1595 | 1623 | 1624 | 1662 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |



Bureau Veritas Job #: C4C0067
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | YYX071 | YYX072 | YYX073 | | |
|----------------------------------|-------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/04/18 | 2024/04/18 | 2024/04/18 | | |
| | UNITS | 24012949 | 24012950 | 24012951 | RDL | QC Batch |
| Metals | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | 6.0 | 9366241 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9366241 |
| Chromium (Cr) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9366241 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9366241 |
| Copper (Cu) | ug | 29.0 | 21.4 | 59.7 | 5.0 | 9366241 |
| Iron (Fe) | ug | 523 | 442 | 340 | 50 | 9366241 |
| Lead (Pb) | ug | 6.0 | 5.2 | 5.1 | 3.0 | 9366241 |
| Manganese (Mn) | ug | 14.6 | 13.0 | 11.4 | 1.0 | 9366241 |
| Nickel (Ni) | ug | <3.0 | <3.0 | <3.0 | 3.0 | 9366241 |
| Selenium (Se) | ug | <10 | <10 | <10 | 10 | 9366241 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9366241 |
| Zinc (Zn) | ug | 43.9 | 32.9 | 21.6 | 5.0 | 9366241 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4C0067
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | YYX071 | YYX072 | | YYX073 | | |
|----------------------------------|-------|------------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/04/18 | 2024/04/18 | | 2024/04/18 | | |
| | UNITS | 24012949 | 24012950 | RDL | 24012951 | RDL | QC Batch |
| Metals | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0037 | <0.0037 | 0.0037 | <0.0036 | 0.0036 | 9363736 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9363736 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | <0.0031 | 0.0031 | <0.0030 | 0.0030 | 9363736 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9363736 |
| Total Copper (Cu) | ug/m3 | 0.0179 | 0.0132 | 0.0031 | 0.0359 | 0.0030 | 9363736 |
| Total Iron (Fe) | ug/m3 | 0.322 | 0.272 | 0.031 | 0.204 | 0.030 | 9363736 |
| Total Lead (Pb) | ug/m3 | 0.0037 | 0.0032 | 0.0018 | 0.0031 | 0.0018 | 9363736 |
| Total Lithium (Li) | ug/m3 | <0.017 | <0.017 | 0.017 | <0.016 | 0.016 | 9363736 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | <0.0018 | 0.0018 | <0.0018 | 0.0018 | 9363736 |
| Total Selenium (Se) | ug/m3 | <0.0062 | <0.0062 | 0.0062 | <0.0060 | 0.0060 | 9363736 |
| Total Sulphur (S) | ug/m3 | 0.358 | 0.325 | 0.015 | 0.340 | 0.015 | 9363736 |
| Total Vanadium (V) | ug/m3 | <0.0031 | <0.0031 | 0.0031 | <0.0030 | 0.0030 | 9363736 |
| Total Zinc (Zn) | ug/m3 | 0.0270 | 0.0203 | 0.0031 | 0.0130 | 0.0030 | 9363736 |
| RDL = Reportable Detection Limit | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | |



Bureau Veritas Job #: C4C0067
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C4C0067

Report Date: 2024/05/31

QUALITY ASSURANCE REPORT

RWDI

Client Project #: 2402553.02

Site Location: TWIN CREEKS

Your P.O. #: 13254248

Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9366241 | Arsenic (As) | 2024/05/03 | 104 | 75 - 125 | 103 | 85 - 115 | <6.0 | ug | 1.6 (1) | 20 |
| 9366241 | Cadmium (Cd) | 2024/05/03 | 104 | 75 - 125 | 104 | 85 - 115 | <2.0 | ug | 2.1 (1) | 20 |
| 9366241 | Chromium (Cr) | 2024/05/03 | 106 | 75 - 125 | 105 | 85 - 115 | <5.0 | ug | 1.7 (1) | 20 |
| 9366241 | Cobalt (Co) | 2024/05/03 | 101 | 75 - 125 | 101 | 85 - 115 | <2.0 | ug | 2.0 (1) | 20 |
| 9366241 | Copper (Cu) | 2024/05/03 | 106 | 75 - 125 | 105 | 85 - 115 | <5.0 | ug | 2.4 (1) | 20 |
| 9366241 | Iron (Fe) | 2024/05/03 | 107 | 75 - 125 | 103 | 85 - 115 | <50 | ug | 1.7 (1) | 20 |
| 9366241 | Lead (Pb) | 2024/05/03 | 100 | 75 - 125 | 100 | 85 - 115 | <3.0 | ug | 1.9 (1) | 20 |
| 9366241 | Manganese (Mn) | 2024/05/03 | 106 | 75 - 125 | 104 | 85 - 115 | <1.0 | ug | 1.9 (1) | 20 |
| 9366241 | Nickel (Ni) | 2024/05/03 | 103 | 75 - 125 | 102 | 85 - 115 | <3.0 | ug | 1.8 (1) | 20 |
| 9366241 | Selenium (Se) | 2024/05/03 | 105 | 75 - 125 | 105 | 85 - 115 | <10 | ug | 1.2 (1) | 20 |
| 9366241 | Vanadium (V) | 2024/05/03 | 102 | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | 2.0 (1) | 20 |
| 9366241 | Zinc (Zn) | 2024/05/03 | 101 | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | 2.5 (1) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

(1) Duplicate Parent ID



Bureau Veritas Job #: C4C0067
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Julian Tong, Project Manager Assistant

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

White: Maxxam Yellow: Mail Pink: Client

White: Maxxam Yellow: Mail Pink: Client

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|--------------|--------------------------------|-----------------------------|---|---|-------------------------|-------|--|---|--|--|--|--|--|--|--|--|---|---|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> <div> <input type="checkbox"/> MISA <input type="checkbox"/> Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> site specific <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm <input type="checkbox"/> specify <input type="checkbox"/> Table 3 <input type="checkbox"/> Region _____ </div> <p>Report Criteria on C of A ? <input type="checkbox"/> n</p> | | | | | <div> <div>Regulated Drinking Water ? (Y / N)</div> <div>Metals Field Filtered ? (Y / N)</div> <div>TSP</div> <div>Metals (**Contact RWDI prior to metals analysis**)</div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> | | | | | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____</p> <p>Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.</p> | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | # of Cont. | COMMENTS / TAT COMMENTS | | | | | | | | | | | | | |
| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | | | | | | | | | | | | | | | | |
| 24012946 | 12-Apr-24 | 1599 | TSP | N | N | X | X | | | | | | | | | | | 1 | Volumes will be provided to lab via E-mail |
| 24012947 | 12-Apr-24 | 1653 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 24012948 | 12-Apr-24 | 1595 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 24012949 | 18-Apr-24 | 1623 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 24012950 | 18-Apr-24 | 1624 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 24012951 | 18-Apr-24 | 1662 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| | | | | | | | | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| | | | | | | | | | | | | | | | | | | 1 | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | | Date: | | Time: | | Laboratory Use Only | | | | | | | | | | |
| JRA 19-Apr-24 | | | | | | | | | Temperature (°C) on Receipt Condition of Sample on Receipt <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | | | | | | | | |



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/05/31
Report #: R8172235
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4E7544

Received: 2024/05/16, 11:10

Sample Matrix: Filter
Samples Received: 3

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2024/05/24 | 2024/05/30 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2024/05/30 | 2024/05/30 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 3 | N/A | 2024/05/23 | | |
| Particulates on Filter (Method IO-3.1) | 3 | 2024/05/14 | 2024/05/22 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/05/16 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/05/31
Report #: R8172235
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4E7544

Received: 2024/05/16, 11:10

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4E7544
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

RESULTS OF ANALYSES OF FILTER

| | | | | | | |
|----------------------------------|--------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZEP044 | ZEP045 | ZEP046 | | |
| Sampling Date | | 2024/04/24 | 2024/04/24 | 2024/04/24 | | |
| COC Number | | n/a | n/a | n/a | | |
| | UNITS | 24012923 | 24012925 | 24012928 | RDL | QC Batch |
| | | | | | | |
| Particulate | ug/m3 | 16 | 16 | 40 | 3 | 9399239 |
| Particulate Weight on Filter | ug | 26200 | 26800 | 67200 | 5000 | 9408203 |
| Volume | m3 | 1654 | 1630 | 1679 | N/A | ONSITE |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |
| N/A = Not Applicable | | | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

ELEMENTS BY ICP-AES (FILTER)

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZEP046 | | |
| Sampling Date | | 2024/04/24 | | |
| COC Number | | n/a | | |
| | UNITS | 24012928 | RDL | QC Batch |
| Metals | | | | |
| Arsenic (As) | ug | <6.0 | 6.0 | 9423035 |
| Cadmium (Cd) | ug | <2.0 | 2.0 | 9423035 |
| Chromium (Cr) | ug | <5.0 | 5.0 | 9423035 |
| Cobalt (Co) | ug | <2.0 | 2.0 | 9423035 |
| Copper (Cu) | ug | 18.7 | 5.0 | 9423035 |
| Iron (Fe) | ug | 1390 | 50 | 9423035 |
| Lead (Pb) | ug | <3.0 | 3.0 | 9423035 |
| Manganese (Mn) | ug | 30.2 | 1.0 | 9423035 |
| Nickel (Ni) | ug | <3.0 | 3.0 | 9423035 |
| Selenium (Se) | ug | <10 | 10 | 9423035 |
| Vanadium (V) | ug | <5.0 | 5.0 | 9423035 |
| Zinc (Zn) | ug | 16.1 | 5.0 | 9423035 |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

CALCULATED ELEMENTS (FILTER)

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZEP046 | | |
| Sampling Date | | 2024/04/24 | | |
| COC Number | | n/a | | |
| | UNITS | 24012928 | RDL | QC Batch |
| Metals | | | | |
| Total Arsenic (As) | ug/m3 | <0.0036 | 0.0036 | 9411876 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | 9411876 |
| Total Chromium (Cr) | ug/m3 | <0.0030 | 0.0030 | 9411876 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | 9411876 |
| Total Copper (Cu) | ug/m3 | 0.0111 | 0.0030 | 9411876 |
| Total Iron (Fe) | ug/m3 | 0.829 | 0.030 | 9411876 |
| Total Lead (Pb) | ug/m3 | <0.0018 | 0.0018 | 9411876 |
| Total Lithium (Li) | ug/m3 | <0.016 | 0.016 | 9411876 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | 0.0018 | 9411876 |
| Total Selenium (Se) | ug/m3 | <0.0060 | 0.0060 | 9411876 |
| Total Sulphur (S) | ug/m3 | 0.326 | 0.015 | 9411876 |
| Total Vanadium (V) | ug/m3 | <0.0030 | 0.0030 | 9411876 |
| Total Zinc (Zn) | ug/m3 | 0.0096 | 0.0030 | 9411876 |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

GENERAL COMMENTS

Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C4E7544

Report Date: 2024/05/31

QUALITY ASSURANCE REPORT

RWDI

Client Project #: 2402553.02

Site Location: TWIN CREEKS

Your P.O. #: 13254248

Sampler Initials: EWA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9423035 | Arsenic (As) | 2024/05/30 | 103 (1) | 75 - 125 | 100 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9423035 | Cadmium (Cd) | 2024/05/30 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9423035 | Chromium (Cr) | 2024/05/30 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9423035 | Cobalt (Co) | 2024/05/30 | 100 (1) | 75 - 125 | 101 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9423035 | Copper (Cu) | 2024/05/30 | 99 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 3.6 (3) | 20 |
| 9423035 | Iron (Fe) | 2024/05/30 | 102 (1) | 75 - 125 | 102 | 85 - 115 | <50 | ug | 0.73 (3) | 20 |
| 9423035 | Lead (Pb) | 2024/05/30 | 99 (1) | 75 - 125 | 100 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9423035 | Manganese (Mn) | 2024/05/30 | 101 (1) | 75 - 125 | 101 | 85 - 115 | <1.0 | ug | 1.6 (3) | 20 |
| 9423035 | Nickel (Ni) | 2024/05/30 | 100 (1) | 75 - 125 | 101 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9423035 | Selenium (Se) | 2024/05/30 | 102 (1) | 75 - 125 | 103 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9423035 | Vanadium (V) | 2024/05/30 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9423035 | Zinc (Zn) | 2024/05/30 | 100 (1) | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | NC (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Matrix Spike Parent ID [ZEP047-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ZEP047-01]



Bureau Veritas Job #: C4E7544
Report Date: 2024/05/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

White: Maxxam Yellow: Mail Pink: Client



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 2

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | EW/AXT | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axl@rwdi.com | | | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | | |
|--|--------------|---------------|-----------------------------|--------------------------------------|--|-----|--|---|--|--|--|--|--|--|--|--|--|------------|--|--|--|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | | | | | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS | | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm <input type="checkbox"/> Table 3 Region _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | | | | | | | | | | | | | | | | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days | | Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | | |
| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS | | | | |
| 1 | 24012936 | 12-May-24 | - | TSP | N | N | X | X | | | | | | | | | | 1 | Volumes will be provided to lab via E-mail | | | | |
| 2 | 24032806 | - | - | TSP | N | N | X | X | | | | | | | | | | 1 | Field Blank | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | |

| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--|--------------------------------|--|-----------|-------|-----------------------------|--|
| JCL 15-May-24 | | | | 15-May-24 | 14:30 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

CHAIN OF CUSTODY #:

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT:

x 5 to 7 Working Days

Rush TAT: Rush Confirmation #

(call Lab for #) _____

☐ 1 day ☐ 2 days ☐ 3 days

DATE Required: _____

DATE Required. _____

TIME Required: _____

**SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING
UNTIL DELIVERY TO MAXXAM**

Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

| # of Cont. | COMMENTS / TAT COMMENTS |
|------------|-------------------------|
|------------|-------------------------|

| | |
|---|--|
| 1 | Volumes will be provided to lab via E-mail |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|---|
| 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct |
|---|---|

| | |
|---|--|
| 1 | conducting metals analysis. RWDT will instruct which filter(s) to proceed with metal analysis at |
|---|--|

| | |
|---|-----------------|
| 1 | that point***** |
| 4 | |

| | |
|---|--|
| 1 | |
| 1 | |

| | |
|---|--|
| 1 | |
|---|--|

RELINQUISHED BY: (Signature/Print)

RECEIVED BY: (Signature/Print)Date:Time:Laboratory Use Only

| Temperature (°C) on Receipt | Condition of Sample on Receipt |
|-----------------------------|--------------------------------|
|-----------------------------|--------------------------------|

☐ OK ☐ SIF

☐ OK ☐ SIF

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: | |
|---|--|--|--|---------------------------|--|-----------------------------|--|
| Company Name: Waste Management of Canada Corporation | | Company Name: RWDI AIR Inc. | | Quotation # | | | |
| Contact Name: Lisa Mertick | | Contact Name: Brent Langille | | P.O. #: 13254248 | | | |
| Address: 5768 Nauvoo Rd, Watford, ON | | Address: 4510 Rhodes Drive, Suite 530 | | Project #: 2402553.02 | | CHAIN OF CUSTODY # : | |
| N0M 2S0 | | Windsor, ON, N8W 5K5 | | Project Name: Twin Creeks | | | |
| Phone: 519-849-5810 Fax: 519-849-5811 | | Phone: 519-823-1311 x 2618 Fax: 519-823-1316 | | Location: Twin Creeks | | | |
| Email: lmertick@wm.com | | Email: Jeffery.Cleland@rwdi.com ; axt@rwdi.com | | Sampled By: EW/AXT | | | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|---|--|
| <i>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i> | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> <input type="checkbox"/> Table 3 Region _____ <div style="text-align: right;">Report Criteria on C of A ? <input type="checkbox"/> n</div> | <div style="display: flex; flex-direction: row-reverse;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Regulated Drinking Water ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals Field Filtered ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TSP</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals (**Contact RWDI prior to metals analysis**)</div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ <div style="text-align: right;">(call Lab for #)</div> <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |

| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | |
|--|-----------------------|--------------|---------------|-----------------------------|-----------------------|-----------------------|-----|--|--|--|--|--|--|--|--|--|--|---|--|
| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Contaminant | Metals Field Filtered | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. |
| 1 | 24012936 | 12-May-24 | 1646 | TSP | N | N | X | X | | | | | | | | | | 1 | Volumes will be provided to lab via E-mail |
| 2 | 24032806 | - | - | TSP | N | N | X | X | | | | | | | | | | 1 | Field Blank |
| 3 | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** | |
| 8 | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|-------|-------|-----------------------------|--|
| | | | | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| JCL 15-May-24 | | | | | |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/06/04
Report #: R8176041
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4E7544

Received: 2024/05/16, 11:10

Sample Matrix: Filter
Samples Received: 6

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2024/05/24 | 2024/05/30 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2024/05/30 | 2024/05/30 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 6 | N/A | 2024/05/23 | | |
| Particulates on Filter (Method IO-3.1) | 6 | 2024/05/14 | 2024/05/22 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 6 | N/A | 2024/05/16 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/06/04
Report #: R8176041
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4E7544

Received: 2024/05/16, 11:10

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/04

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | ZEP044 | ZEP045 | ZEP046 | ZEP047 | ZEP048 | ZEP049 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/04/24 | 2024/04/24 | 2024/04/24 | 2024/04/30 | 2024/04/30 | 2024/04/30 | | |
| COC Number | | n/a | n/a | n/a | n/a | n/a | n/a | | |
| | UNITS | 24012923 | 24012925 | 24012928 | 24012924 | 24012931 | 24012927 | RDL | QC Batch |
| Particulate | ug/m3 | 16 | 16 | 40 | 28 | 17 | 32 | 3 | 9399239 |
| Particulate Weight on Filter | ug | 26200 | 26800 | 67200 | 43500 | 26600 | 52400 | 5000 | 9408203 |
| Volume | m3 | 1654 | 1630 | 1679 | 1561 | 1605 | 1641 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/04

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | ZEP046 | ZEP047 | | |
|----------------------------------|-------|------------|------------|-----|----------|
| Sampling Date | | 2024/04/24 | 2024/04/30 | | |
| COC Number | | n/a | n/a | | |
| | UNITS | 24012928 | 24012924 | RDL | QC Batch |
| Metals | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | 6.0 | 9423035 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | 2.0 | 9423035 |
| Chromium (Cr) | ug | <5.0 | <5.0 | 5.0 | 9423035 |
| Cobalt (Co) | ug | <2.0 | <2.0 | 2.0 | 9423035 |
| Copper (Cu) | ug | 18.7 | 37.9 | 5.0 | 9423035 |
| Iron (Fe) | ug | 1390 | 497 | 50 | 9423035 |
| Lead (Pb) | ug | <3.0 | <3.0 | 3.0 | 9423035 |
| Manganese (Mn) | ug | 30.2 | 17.0 | 1.0 | 9423035 |
| Nickel (Ni) | ug | <3.0 | <3.0 | 3.0 | 9423035 |
| Selenium (Se) | ug | <10 | <10 | 10 | 9423035 |
| Vanadium (V) | ug | <5.0 | <5.0 | 5.0 | 9423035 |
| Zinc (Zn) | ug | 16.1 | 25.2 | 5.0 | 9423035 |
| RDL = Reportable Detection Limit | | | | | |
| QC Batch = Quality Control Batch | | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/04

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

CALCULATED ELEMENTS (FILTER)

| | | | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZEP046 | | ZEP047 | | |
| Sampling Date | | 2024/04/24 | | 2024/04/30 | | |
| COC Number | | n/a | | n/a | | |
| | UNITS | 24012928 | RDL | 24012924 | RDL | QC Batch |
| Metals | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0036 | 0.0036 | <0.0038 | 0.0038 | 9411876 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | 9411876 |
| Total Chromium (Cr) | ug/m3 | <0.0030 | 0.0030 | <0.0032 | 0.0032 | 9411876 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | 9411876 |
| Total Copper (Cu) | ug/m3 | 0.0111 | 0.0030 | 0.0243 | 0.0032 | 9411876 |
| Total Iron (Fe) | ug/m3 | 0.829 | 0.030 | 0.318 | 0.032 | 9411876 |
| Total Lead (Pb) | ug/m3 | <0.0018 | 0.0018 | <0.0019 | 0.0019 | 9411876 |
| Total Lithium (Li) | ug/m3 | <0.016 | 0.016 | <0.017 | 0.017 | 9411876 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | 0.0018 | <0.0019 | 0.0019 | 9411876 |
| Total Selenium (Se) | ug/m3 | <0.0060 | 0.0060 | <0.0064 | 0.0064 | 9411876 |
| Total Sulphur (S) | ug/m3 | 0.326 | 0.015 | 0.315 | 0.016 | 9411876 |
| Total Vanadium (V) | ug/m3 | <0.0030 | 0.0030 | <0.0032 | 0.0032 | 9411876 |
| Total Zinc (Zn) | ug/m3 | 0.0096 | 0.0030 | 0.0161 | 0.0032 | 9411876 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/04

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

GENERAL COMMENTS

Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C4E7544

Report Date: 2024/06/04

QUALITY ASSURANCE REPORT

RWDI

Client Project #: 2402553.02

Site Location: TWIN CREEKS

Your P.O. #: 13254248

Sampler Initials: EWA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9423035 | Arsenic (As) | 2024/05/30 | 103 (1) | 75 - 125 | 100 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9423035 | Cadmium (Cd) | 2024/05/30 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9423035 | Chromium (Cr) | 2024/05/30 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9423035 | Cobalt (Co) | 2024/05/30 | 100 (1) | 75 - 125 | 101 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9423035 | Copper (Cu) | 2024/05/30 | 99 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 3.6 (3) | 20 |
| 9423035 | Iron (Fe) | 2024/05/30 | 102 (1) | 75 - 125 | 102 | 85 - 115 | <50 | ug | 0.73 (3) | 20 |
| 9423035 | Lead (Pb) | 2024/05/30 | 99 (1) | 75 - 125 | 100 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9423035 | Manganese (Mn) | 2024/05/30 | 101 (1) | 75 - 125 | 101 | 85 - 115 | <1.0 | ug | 1.6 (3) | 20 |
| 9423035 | Nickel (Ni) | 2024/05/30 | 100 (1) | 75 - 125 | 101 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9423035 | Selenium (Se) | 2024/05/30 | 102 (1) | 75 - 125 | 103 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9423035 | Vanadium (V) | 2024/05/30 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9423035 | Zinc (Zn) | 2024/05/30 | 100 (1) | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | NC (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Matrix Spike Parent ID [ZEP047-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ZEP047-01]



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/04

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

White: Maxxam Yellow: Mail Pink: Client



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 2

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | EW/AXT | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axl@rwdi.com | | | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|-----------------------|--------------|---------------|-----------------------------|--|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|------------|---|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | | | | | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm <input type="checkbox"/> Table 3 Region _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | | | | | | | | | | | | | | | | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | |
| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS | |
| 1 | 24012936 | 12-May-24 | - | TSP | N | N | X | X | | | | | | | | | | | 1 | Volumes will be provided to lab via E-mail | |
| 2 | 24032806 | - | - | TSP | N | N | X | X | | | | | | | | | | | 1 | Field Blank | |
| 3 | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |

| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--|--------------------------------|--|-----------|-------|-----------------------------|--|
| JCL 15-May-24 | | | | 15-May-24 | 14:30 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

| REGULATORY CRITERIA | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <i>Note: for regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i> | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> <input type="checkbox"/> Table 3 Region _____ <div style="text-align: right;">Report Criteria on C of A ? <input type="checkbox"/> n</div> | | | | <div style="display: flex; justify-content: space-between;"> <div> drinking Water ? (Y / N) Filtered ? (Y / N) contact RWDI prior to metals </div> <div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> </div> | | | | | | | | | | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ <div style="text-align: right;">(call Lab for #)</div> <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |

**SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING
UNTIL DELIVERY TO MAXXAM**

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regu | Metal | TSP | Metal analy | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|------|-------|-----|-------------|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24012923 | 24-Apr-24 | 1654 | TSP | N | N | X | X | | | | | | | | | | | 1 | Volumes will be provided to lab via E-mail |
| 2 | 24012925 | 24-Apr-24 | 1630 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 3 | 24012928 | 24-Apr-24 | 1679 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 4 | 24012924 | 30-Apr-24 | 1561 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 5 | 24012931 | 30-Apr-24 | 1605 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 6 | 24012927 | 30-Apr-24 | 1641 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 7 | 24012929 | 6-May-24 | 1608 | TSP | N | N | X | X | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24012930 | 6-May-24 | 1592 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 9 | 24012926 | 6-May-24 | 1653 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 10 | 24022396 | 12-May-24 | 1615 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 11 | 24012932 | 12-May-24 | 1567 | TSP | N | N | X | X | | | | | | | | | | | 1 | |

| | | | | | |
|------------------------------------|--------------------------------|-------|-------|-----------------------------|--|
| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
| | | | | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| JCL 15-May-24 | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |
| | | | | | |
| | | | | | |

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | CHAIN OF CUSTODY # : |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| | Fax: 519-849-5811 | | Fax: 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: | EW/AXT | |

| REGULATORY CRITERIA | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|
| <i>Note: for regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i> | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> <input type="checkbox"/> Table 3 Region _____ <div style="text-align: right;">Report Criteria on C of A ? <input type="checkbox"/> n</div> | | | | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Drinking Water ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Filtered ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Contact RWDI prior to metals</div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> | | | | | | | | | | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ <div style="text-align: right;">(call Lab for #)</div> <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |

[illegible]

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|-------|-------|-----------------------------|--|
| | | | | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| JCL 15-May-24 | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |
| | | | | | |
| | | | | | |



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/06/21
Report #: R8201350
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4E7544

Received: 2024/05/16, 11:10

Sample Matrix: Filter
Samples Received: 7

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2024/05/24 | 2024/05/30 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2024/05/30 | 2024/05/30 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 6 | N/A | 2024/05/23 | | |
| Particulates on Filter (Method IO-3.1) | 7 | 2024/05/14 | 2024/05/22 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/05/16 | | |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/05/17 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/06/21
Report #: R8201350
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4E7544

Received: 2024/05/16, 11:10

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | ZEP050 | ZEP051 | ZEP052 | ZEP053 | ZEP054 | ZEP055 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/05/06 | 2024/05/06 | 2024/05/06 | 2024/05/12 | 2024/05/12 | 2024/05/12 | | |
| COC Number | | n/a | n/a | n/a | n/a | n/a | n/a | | |
| | UNITS | 24012929 | 24012930 | 24012926 | 24022396 | 24012932 | 24012936 | RDL | QC Batch |
| Particulate | ug/m3 | 21 | 70 | 24 | 10 | 14 | 11 | 3 | 9399239 |
| Particulate Weight on Filter | ug | 33600 | 112000 | 40300 | 15500 | 21400 | 18600 | 5000 | 9408203 |
| Volume | m3 | 1608 | 1592 | 1653 | 1615 | 1567 | 1646 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |

| Bureau Veritas ID | | ZEP056 | | |
|--|-------|----------|------|----------|
| Sampling Date | | | | |
| COC Number | | n/a | | |
| | UNITS | 24032806 | RDL | QC Batch |
| Particulate Weight on Filter | ug | <5000 | 5000 | 9408203 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

ELEMENTS BY ICP-AES (FILTER)

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZEP051 | | |
| Sampling Date | | 2024/05/06 | | |
| COC Number | | n/a | | |
| | UNITS | 24012930 | RDL | QC Batch |
| Metals | | | | |
| Arsenic (As) | ug | <6.0 | 6.0 | 9423035 |
| Cadmium (Cd) | ug | <2.0 | 2.0 | 9423035 |
| Chromium (Cr) | ug | 5.3 | 5.0 | 9423035 |
| Cobalt (Co) | ug | <2.0 | 2.0 | 9423035 |
| Copper (Cu) | ug | 86.4 | 5.0 | 9423035 |
| Iron (Fe) | ug | 1960 | 50 | 9423035 |
| Lead (Pb) | ug | 9.1 | 3.0 | 9423035 |
| Manganese (Mn) | ug | 56.7 | 1.0 | 9423035 |
| Nickel (Ni) | ug | 3.6 | 3.0 | 9423035 |
| Selenium (Se) | ug | <10 | 10 | 9423035 |
| Vanadium (V) | ug | <5.0 | 5.0 | 9423035 |
| Zinc (Zn) | ug | 101 | 5.0 | 9423035 |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

CALCULATED ELEMENTS (FILTER)

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZEP051 | | |
| Sampling Date | | 2024/05/06 | | |
| COC Number | | n/a | | |
| | UNITS | 24012930 | RDL | QC Batch |
| Metals | | | | |
| Total Arsenic (As) | ug/m3 | <0.0038 | 0.0038 | 9411876 |
| Total Cadmium (Cd) | ug/m3 | <0.0013 | 0.0013 | 9411876 |
| Total Chromium (Cr) | ug/m3 | 0.0033 | 0.0031 | 9411876 |
| Total Cobalt (Co) | ug/m3 | <0.0013 | 0.0013 | 9411876 |
| Total Copper (Cu) | ug/m3 | 0.0543 | 0.0031 | 9411876 |
| Total Iron (Fe) | ug/m3 | 1.23 | 0.031 | 9411876 |
| Total Lead (Pb) | ug/m3 | 0.0057 | 0.0019 | 9411876 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | 9411876 |
| Total Nickel (Ni) | ug/m3 | 0.0023 | 0.0019 | 9411876 |
| Total Selenium (Se) | ug/m3 | <0.0063 | 0.0063 | 9411876 |
| Total Sulphur (S) | ug/m3 | 0.509 | 0.016 | 9411876 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | 9411876 |
| Total Zinc (Zn) | ug/m3 | 0.0635 | 0.0031 | 9411876 |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

GENERAL COMMENTS

Sample ZEP055 [24012936] : Filter torn.

Results relate only to the items tested.



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/21

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9423035 | Arsenic (As) | 2024/05/30 | 103 (1) | 75 - 125 | 100 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9423035 | Cadmium (Cd) | 2024/05/30 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9423035 | Chromium (Cr) | 2024/05/30 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9423035 | Cobalt (Co) | 2024/05/30 | 100 (1) | 75 - 125 | 101 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9423035 | Copper (Cu) | 2024/05/30 | 99 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 3.6 (3) | 20 |
| 9423035 | Iron (Fe) | 2024/05/30 | 102 (1) | 75 - 125 | 102 | 85 - 115 | <50 | ug | 0.73 (3) | 20 |
| 9423035 | Lead (Pb) | 2024/05/30 | 99 (1) | 75 - 125 | 100 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9423035 | Manganese (Mn) | 2024/05/30 | 101 (1) | 75 - 125 | 101 | 85 - 115 | <1.0 | ug | 1.6 (3) | 20 |
| 9423035 | Nickel (Ni) | 2024/05/30 | 100 (1) | 75 - 125 | 101 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9423035 | Selenium (Se) | 2024/05/30 | 102 (1) | 75 - 125 | 103 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9423035 | Vanadium (V) | 2024/05/30 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9423035 | Zinc (Zn) | 2024/05/30 | 100 (1) | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | NC (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [ZEP047-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ZEP047-01]



Bureau Veritas Job #: C4E7544
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EWA

VALIDATION SIGNATURE PAGE

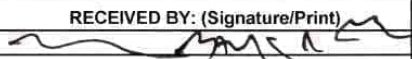
The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Cristina Carriere, Senior Scientific Specialist

Julian Tong, Project Manager Assistant

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

| INVOICE INFORMATION | | | | REPORT INFORMATION (if differs from invoice): | | | | PROJECT INFORMATION | | | | | | | | | | | | | | | | |
|--|----------|--|--|---|--|---------------|-----------------------------|---|---|----------|---|--|--|--|-------|--|--|-------------------------|---|---|--|--|--|--|
| Company Name: Waste Management of Canada Corporation | | | | Company Name: RWDI AIR Inc. | | | | Quotation # | | | | | | | | | | | | | | | | |
| Contact Name: Lisa Mertick | | | | Contact Name: Brent Langille | | | | P.O. #: 13254248 | | | | | | | | | | | | | | | | |
| Address: 5768 Nauvoo Rd, Watford, ON | | | | Address: 4510 Rhodes Drive, Suite 530 | | | | Project #: 2402553.02 | | | | | | | | | | | | | | | | |
| NOM 2S0 | | | | Windsor, ON, N8W 5K5 | | | | Project Name: Twin Creeks | | | | | | | | | | | | | | | | |
| Phone: 519-849-5810 Fax: 519-849-5811 | | | | Phone: 519-823-1311 x 2618 Fax: 519-823-1316 | | | | Location: Twin Creeks | | | | | | | | | | | | | | | | |
| Email: lmertick@wm.com | | | | Email: Jeffery.Cleland@rwdi.com ; axt@rwdi.com | | | | Sampled By: EW/AXT | | | | | | | | | | | | | | | | |
| REGULATORY CRITERIA | | | | ANALYSIS REQUESTED (Please be specific): | | | | TURNAROUND TIME (TAT) REQUIRED: | | | | | | | | | | | | | | | | |
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> PWQO <input type="checkbox"/> Reg. 558 </div> <div> <input type="checkbox"/> Table 1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 </div> <div> <input type="checkbox"/> Sewer Use <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm Region _____ </div> <div> <input checked="" type="checkbox"/> Other site specific specify _____ </div> </div> <div style="text-align: right;">Report Criteria on C of A ? <input type="checkbox"/> n</div> | | | | <div style="display: flex;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Regulated Drinking Water ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals Field Filtered ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TSP</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals (**Contact RWDI prior to metals analysis**)</div> </div> | | | | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | | | | | | | | | | | | | | | | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | | | | | | | | | | | | | | | |
| Sample Identification | | | | | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | # of Cont. | | | | | | | | | | COMMENTS / TAT COMMENTS | | | | | | |
| 1 | 24012923 | | | | 24-Apr-24 | 1654 | TSP | N | N | X | X | | | | | | | | 1 | Volumes will be provided to lab via E-mail | | | | |
| 2 | 24012925 | | | | 24-Apr-24 | 1630 | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| 3 | 24012928 | | | | 24-Apr-24 | 1679 | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| 4 | 24012924 | | | | 30-Apr-24 | 1561 | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| 5 | 24012931 | | | | 30-Apr-24 | 1605 | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| 6 | 24012927 | | | | 30-Apr-24 | 1641 | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| 7 | 24012929 | | | | 6-May-24 | 1608 | TSP | N | N | X | X | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** | | | | |
| 8 | 24012930 | | | | 6-May-24 | 1592 | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| 9 | 24012926 | | | | 6-May-24 | 1653 | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| 10 | 24022396 | | | | 12-May-24 | - | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| 11 | 24012932 | | | | 12-May-24 | - | TSP | N | N | X | X | | | | | | | | 1 | | | | | |
| RELINQUISHED BY: (Signature/Print) | | | | | RECEIVED BY: (Signature/Print) | | | | | Date: | | | | | Time: | | | | | Laboratory Use Only | | | | |
| JCL 15-May-24 | | | | |  | | | | | 15/05/21 | | | | | 11:10 | | | | | Temperature (°C) on Receipt Condition of Sample on Receipt <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | | |

entry fee. The

White Maxxam Yellow Mail Pink Client



6740 Campobello Road Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 2

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | EW/AXT | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axl@rwdi.com | | | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|--------------|---------------|-----------------------------|--------------------------------------|--|-----|--|---|--|--|--|--|--|--|--|--|--|------------|--|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | | | | | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm <input type="checkbox"/> Table 3 Region _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | | | | | | | | | | | | | | | | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | | | | Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |
| | | | | | | | | | | | | | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | |
| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS | | |
| 1 | 24012936 | 12-May-24 | - | TSP | N | N | X | X | | | | | | | | | | 1 | Volumes will be provided to lab via E-mail | | |
| 2 | 24032806 | - | - | TSP | N | N | X | X | | | | | | | | | | 1 | Field Blank | | |
| 3 | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |

| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--|--------------------------------|--|-----------|-------|-----------------------------|--|
| JCL 15-May-24 | | | | 15-May-24 | 14:30 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

CHAIN OF CUSTODY #:

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT:☒ 5 to 7 Working DaysPush TAT: Push Confirmation #

Rush TAT: Rush Confirmation # _____
(call lab for #)

(call Lab for #)

☐ 1 day ☐ 2 days ☐ 3 daysDATE Required: _____

TIME Required: _____

[illegible]

Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

- 1

[illegible]

| | |
|-------|--|
| Cont. | |
| 1 | Volumes will be provided to lab via E-mail |

| | |
|--|---|
| | <p>volumes will be provided to lab via E-mail</p> |
|--|---|

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

[illegible]

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

| | |
|--|--|
| | |
| | |

1 *****Send particulate results to RWDI prior to

| | |
|---|---|
| 1 | conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis and |
|---|---|

| | |
|---|---|
| | which filter(s) to proceed with metal analysis at |
| 1 | that point***** |

that point

| | |
|---|--|
| 1 | |
|---|--|

| | |
|---|--|
| 1 | |
|---|--|

[illegible]Laboratory Use Only

| | |
|---------------------------------------|--|
| Temperature ($^{\circ}\text{C}$) on | |
|---------------------------------------|--|

| | |
|-----------------------------|--------------------------------|
| Temperature (°C) on Receipt | Condition of Sample on Receipt |
|-----------------------------|--------------------------------|

☐ OK ☐ CIE

| | | | | | |
|--|--|--|----|--|-----|
| | | | OK | | SIF |
|--|--|--|----|--|-----|

[illegible]

White: Maxxam Yellow: Mail Pink: Client

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: | |
|---|--|--|--|---------------------------|--|----------------------|--|
| Company Name: Waste Management of Canada Corporation | | Company Name: RWDI AIR Inc. | | Quotation # | | | |
| Contact Name: Lisa Mertick | | Contact Name: Brent Langille | | P.O. #: 13254248 | | | |
| Address: 5768 Nauvoo Rd, Watford, ON | | Address: 4510 Rhodes Drive, Suite 530 | | Project #: 2402553.02 | | CHAIN OF CUSTODY # : | |
| N0M 2S0 | | Windsor, ON, N8W 5K5 | | Project Name: Twin Creeks | | | |
| Phone: 519-849-5810 Fax: 519-849-5811 | | Phone: 519-823-1311 x 2618 Fax: 519-823-1316 | | Location: Twin Creeks | | | |
| Email: lmertick@wm.com | | Email: Jeffery.Cleland@rwdi.com ; axt@rwdi.com | | Sampled By: EW/AXT | | | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|---|--|---|--|--|--|--|--|--|--|--|--|--|--|---|--|
| <i>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i> | | <div style="display: flex; flex-direction: row-reverse;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Regulated Drinking Water ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals Field Filtered ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TSP</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals (**Contact RWDI prior to metals analysis**)</div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 3 Region _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | | | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | |

| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|--|-----------------------|--------------|---------------|-----------------------------|---|---|---|---|--|--|--|--|--|--|--|--|------------|---|
| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | | | | | | | | | | | | | | |
| 1 | 24012936 | 12-May-24 | 1646 | TSP | N | N | X | X | | | | | | | | | 1 | Volumes will be provided to lab via E-mail |
| 2 | 24032806 | - | - | TSP | N | N | X | X | | | | | | | | | 1 | Field Blank |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |

| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--|--------------------------------|--|-------|-------|-----------------------------|--|
| | | | | | | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| JCL 15-May-24 | | | | | | | |
| | | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/06/21
Report #: R8201373
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4H1418

Received: 2024/06/07, 11:23

Sample Matrix: Filter
Samples Received: 9

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/06/13 | 2024/06/19 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/06/18 | 2024/06/19 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 9 | N/A | 2024/06/11 | | |
| Particulates on Filter (Method IO-3.1) | 9 | 2024/06/11 | 2024/06/11 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 9 | N/A | 2024/06/07 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: n/a

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/06/21
Report #: R8201373
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4H1418

Received: 2024/06/07, 11:23

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4H1418
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | | | |
|----------------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZJO428 | ZJO429 | ZJO430 | ZJO431 | ZJO432 | ZJO433 | ZJO434 | | |
| Sampling Date | | 2024/05/18 | 2024/05/18 | 2024/05/18 | 2024/05/24 | 2024/05/24 | 2024/05/24 | 2024/05/30 | | |
| COC Number | | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | |
| | UNITS | 24012934 | 24012935 | 24012933 | 24032800 | 24032801 | 24032802 | 24022397 | RDL | QC Batch |
| | | | | | | | | | | |
| Particulate | ug/m3 | 41 | 40 | 33 | 111 | 99 | 77 | 29 | 3 | 9442412 |
| Particulate Weight on Filter | ug | 65900 | 63800 | 54100 | 181000 | 159000 | 129000 | 45500 | 5000 | 9447864 |
| Volume | m3 | 1593 | 1597 | 1626 | 1627 | 1603 | 1675 | 1553 | N/A | ONSITE |
| RDL = Reportable Detection Limit | | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | | |
| N/A = Not Applicable | | | | | | | | | | |

| | | | | | |
|----------------------------------|--------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZJO435 | ZJO436 | | |
| Sampling Date | | 2024/05/30 | 2024/05/30 | | |
| COC Number | | n/a | n/a | | |
| | UNITS | 24022398 | 24022399 | RDL | QC Batch |
| | | | | | |
| Particulate | ug/m3 | 23 | 82 | 3 | 9442412 |
| Particulate Weight on Filter | ug | 38600 | 129000 | 5000 | 9447864 |
| Volume | m3 | 1654 | 1577 | N/A | ONSITE |
| RDL = Reportable Detection Limit | | | | | |
| QC Batch = Quality Control Batch | | | | | |
| N/A = Not Applicable | | | | | |



Bureau Veritas Job #: C4H1418
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | ZJO431 | ZJO432 | ZJO433 | | |
|----------------------------------|-------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/05/24 | 2024/05/24 | 2024/05/24 | | |
| COC Number | | n/a | n/a | n/a | | |
| | UNITS | 24032800 | 24032801 | 24032802 | RDL | QC Batch |
| Metals | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | 6.0 | 9461697 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9461697 |
| Chromium (Cr) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9461697 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9461697 |
| Copper (Cu) | ug | 113 | 58.8 | 52.3 | 5.0 | 9461697 |
| Iron (Fe) | ug | 2700 | 2540 | 2440 | 50 | 9461697 |
| Lead (Pb) | ug | 6.5 | 7.1 | 6.1 | 3.0 | 9461697 |
| Manganese (Mn) | ug | 79.3 | 65.7 | 61.2 | 1.0 | 9461697 |
| Nickel (Ni) | ug | 3.9 | 3.5 | 3.2 | 3.0 | 9461697 |
| Selenium (Se) | ug | <10 | <10 | <10 | 10 | 9461697 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9461697 |
| Zinc (Zn) | ug | 38.1 | 56.4 | 56.6 | 5.0 | 9461697 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4H1418
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

CALCULATED ELEMENTS (FILTER)

| | | | | | | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|-----------------|------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZJO431 | | | ZJO432 | | ZJO433 | | |
| Sampling Date | | 2024/05/24 | | | 2024/05/24 | | 2024/05/24 | | |
| COC Number | | n/a | | | n/a | | n/a | | |
| | UNITS | 24032800 | RDL | QC Batch | 24032801 | RDL | 24032802 | RDL | QC Batch |
| Metals | | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0037 | 0.0037 | 9452946 | <0.0037 | 0.0037 | <0.0036 | 0.0036 | 9452947 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | 9452946 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9452947 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | 9452946 | <0.0031 | 0.0031 | <0.0030 | 0.0030 | 9452947 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | 9452946 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9452947 |
| Total Copper (Cu) | ug/m3 | 0.0692 | 0.0031 | 9452946 | 0.0367 | 0.0031 | 0.0312 | 0.0030 | 9452947 |
| Total Iron (Fe) | ug/m3 | 1.66 | 0.031 | 9452946 | 1.58 | 0.031 | 1.46 | 0.030 | 9452947 |
| Total Lead (Pb) | ug/m3 | 0.0040 | 0.0018 | 9452946 | 0.0044 | 0.0019 | 0.0036 | 0.0018 | 9452947 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | 9452946 | <0.017 | 0.017 | <0.016 | 0.016 | 9452947 |
| Total Nickel (Ni) | ug/m3 | 0.0024 | 0.0018 | 9452946 | 0.0022 | 0.0019 | 0.0019 | 0.0018 | 9452947 |
| Total Selenium (Se) | ug/m3 | <0.0061 | 0.0061 | 9452946 | <0.0062 | 0.0062 | <0.0060 | 0.0060 | 9452947 |
| Total Sulphur (S) | ug/m3 | 0.512 | 0.015 | 9452946 | 0.521 | 0.016 | 0.448 | 0.015 | 9452947 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | 9452946 | <0.0031 | 0.0031 | <0.0030 | 0.0030 | 9452947 |
| Total Zinc (Zn) | ug/m3 | 0.0234 | 0.0031 | 9452946 | 0.0352 | 0.0031 | 0.0338 | 0.0030 | 9452947 |
| RDL = Reportable Detection Limit | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | |



Bureau Veritas Job #: C4H1418
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4H1418
Report Date: 2024/06/21

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9461697 | Arsenic (As) | 2024/06/19 | 100 | 75 - 125 | 102 | 85 - 115 | <6.0 | ug | 0.20 (1) | 20 |
| 9461697 | Cadmium (Cd) | 2024/06/19 | 102 | 75 - 125 | 101 | 85 - 115 | <2.0 | ug | 0.49 (1) | 20 |
| 9461697 | Chromium (Cr) | 2024/06/19 | 100 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 0.30 (1) | 20 |
| 9461697 | Cobalt (Co) | 2024/06/19 | 99 | 75 - 125 | 99 | 85 - 115 | <2.0 | ug | 0.41 (1) | 20 |
| 9461697 | Copper (Cu) | 2024/06/19 | 101 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 0.60 (1) | 20 |
| 9461697 | Iron (Fe) | 2024/06/19 | 101 | 75 - 125 | 100 | 85 - 115 | <50 | ug | 0.70 (1) | 20 |
| 9461697 | Lead (Pb) | 2024/06/19 | 99 | 75 - 125 | 98 | 85 - 115 | <3.0 | ug | 0.31 (1) | 20 |
| 9461697 | Manganese (Mn) | 2024/06/19 | 103 | 75 - 125 | 102 | 85 - 115 | <1.0 | ug | 0.88 (1) | 20 |
| 9461697 | Nickel (Ni) | 2024/06/19 | 99 | 75 - 125 | 99 | 85 - 115 | <3.0 | ug | 0.80 (1) | 20 |
| 9461697 | Selenium (Se) | 2024/06/19 | 106 | 75 - 125 | 105 | 85 - 115 | <10 | ug | 1.7 (1) | 20 |
| 9461697 | Vanadium (V) | 2024/06/19 | 100 | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | 1.1 (1) | 20 |
| 9461697 | Zinc (Zn) | 2024/06/19 | 100 | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | 0.40 (1) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

(1) Duplicate Parent ID



Bureau Veritas Job #: C4H1418
Report Date: 2024/06/21

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Patricia Legette
C4H1418

10 Road Mississauga, ON L5N 2L8
-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 1

RPK AIR-RmTnp

Company Name: Waste Management of Canada Corporation
Contact Name: Lisa Mertick
Address: 5768 Nauvoo Rd, Watford, ON
NOM 2S0
Phone: 519-849-5810 Fax: 519-849-5811
Email: lmertick@wm.com

REPORT INFORMATION (if differs from invoice):
Company Name: RWDI AIR Inc.
Contact Name: Brent Langille
Address: 4510 Rhodes Drive, Suite 530
Windsor, ON, N8W 5K5
Phone: 519-823-1311 x 2618 Fax: 519-823-1316
Email: Jeffery.Cleland@rwdi.com; axi@rwdi.com

PROJECT INFORMATION:
Quotation #: 13254248
P.O. #: 2402553.02
Project #: 2402553.02
Project Name: Twin Creeks
Location: Twin Creeks
Sampled By: EW/AXT/JRA

MAXXAM JOB NUMBER:

CHAIN OF CUSTODY #:

REGULATORY CRITERIA

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

☐ MISA Reg. 153 ☐ Sewer Use
☐ PWQO ☐ Table 1 ☐ Sanitary
☐ Table 2 ☐ Storm
☐ Reg. 558 ☐ Table 3 Region:
☒ Other site specific specify

Report Criteria on C of A ? ☐ n

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT:

☒ 5 to 7 Working Days

Rush TAT: Rush Confirmation #

(call Lab for #)

☐ 1 day ☐ 2 days ☐ 3 days

DATE Required: _____

TIME Required: _____

Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 24012934 | 18-May-24 | 1593 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Volumes will be provided to lab via E-mail |
| 2 24012935 | 18-May-24 | 1597 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 3 24012933 | 18-May-24 | 1626 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 4 24035800 | 24-May-24 | 1627 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 5 24032801 | 24-May-24 | 1603 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 6 24032802 | 24-May-24 | 1675 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 7 24022397 | 30-May-24 | 1553 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 24022398 | 30-May-24 | 1654 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 9 24022399 | 30-May-24 | 1577 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 10 24032818 | 3-Jun-24 | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Field Blank |
| 11 | | | | N | N | | | | | | | | | | | | | | | 1 | |

RELINQUISHED BY: (Signature/Print)

JRA 4-Jun-24

RECEIVED BY: (Signature/Print)

Date:

Time:

Laboratory Use Only

Temperature (°C) on Receipt

Condition of Sample on Receipt

☐ OK ☐ SIF

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/07/31
Report #: R8258281
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4L4698

Received: 2024/07/15, 10:20

Sample Matrix: Filter
Samples Received: 22

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 6 | 2024/07/23 | 2024/07/31 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 6 | 2024/07/29 | 2024/07/30 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 22 | N/A | 2024/07/19 | | |
| Particulates on Filter (Method IO-3.1) | 22 | 2024/07/17 | 2024/07/19 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 22 | N/A | 2024/07/16 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/07/31
Report #: R8258281
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4L4698

Received: 2024/07/15, 10:20

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2

Page 2 of 11

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



Bureau Veritas Job #: C4L4698
Report Date: 2024/07/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | ZSK832 | ZSK833 | ZSK834 | ZSK835 | ZSK836 | ZSK837 | ZSK838 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/06/08 | 2024/06/05 | 2024/06/08 | 2024/06/05 | 2024/06/08 | 2024/06/05 | 2024/06/11 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24032805 | 24032807 | 24032808 | 24032809 | 24032810 | 24032812 | 24032815 | RDL | QC Batch |
| Particulate | ug/m3 | 37 | 125 | 32 | 57 | 22 | 59 | 161 | 3 | 9517737 |
| Particulate Weight on Filter | ug | 57500 | 206000 | 52100 | 94700 | 34900 | 96100 | 260000 | 5000 | 9524937 |
| Volume | m3 | 1567 | 1650 | 1642 | 1669 | 1601 | 1630 | 1610 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |

| Bureau Veritas ID | | ZSK839 | ZSK840 | ZSK841 | ZSK842 | ZSK843 | ZSK844 | ZSK845 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/06/11 | 2024/06/11 | 2024/06/14 | 2024/06/14 | 2024/06/14 | 2024/06/17 | 2024/06/17 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24032816 | 24032817 | 24032811 | 24032813 | 24032814 | 24032819 | 24032820 | RDL | QC Batch |
| Particulate | ug/m3 | 284 | 434 | 45 | 44 | 192 | 50 | 104 | 3 | 9517737 |
| Particulate Weight on Filter | ug | 468000 | 712000 | 72500 | 69000 | 301000 | 80800 | 164000 | 5000 | 9524937 |
| Volume | m3 | 1645 | 1640 | 1614 | 1571 | 1568 | 1622 | 1576 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |

| Bureau Veritas ID | | ZSK846 | ZSK847 | ZSK848 | ZSK849 | ZSK850 | ZSK851 | ZSK852 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/06/17 | 2024/06/20 | 2024/06/20 | 2024/06/23 | 2024/06/23 | 2024/06/23 | 2024/06/26 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24032821 | 24032822 | 24032823 | 24032825 | 24032851 | 24032852 | 24032853 | RDL | QC Batch |
| Particulate | ug/m3 | 49 | 30 | 34 | 37 | 28 | 24 | 22 | 3 | 9517737 |
| Particulate Weight on Filter | ug | 77200 | 48500 | 53500 | 59200 | 44200 | 39400 | 35200 | 5000 | 9524937 |
| Volume | m3 | 1588 | 1598 | 1557 | 1600 | 1580 | 1626 | 1611 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |



Bureau Veritas Job #: C4L4698
Report Date: 2024/07/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

RESULTS OF ANALYSES OF FILTER

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZSK853 | | |
| Sampling Date | | 2024/06/26 | | |
| COC Number | | N/A | | |
| | UNITS | 24032854 | RDL | QC Batch |
| | | | | |
| Particulate | ug/m3 | 25 | 3 | 9517737 |
| Particulate Weight on Filter | ug | 38900 | 5000 | 9524937 |
| Volume | m3 | 1581 | N/A | ONSITE |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |
| N/A = Not Applicable | | | | |



Bureau Veritas Job #: C4L4698
Report Date: 2024/07/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | ZSK838 | ZSK839 | ZSK840 | ZSK844 | ZSK845 | ZSK846 | | |
|----------------------------------|-------|------------|------------|------------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/06/11 | 2024/06/11 | 2024/06/11 | 2024/06/17 | 2024/06/17 | 2024/06/17 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24032815 | 24032816 | 24032817 | 24032819 | 24032820 | 24032821 | RDL | QC Batch |
| Metals | | | | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | <6.0 | <6.0 | <6.0 | 6.0 | 9543554 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9543554 |
| Chromium (Cr) | ug | 6.4 | 9.7 | 13.6 | <5.0 | 5.3 | <5.0 | 5.0 | 9543554 |
| Cobalt (Co) | ug | 2.2 | 4.7 | 6.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9543554 |
| Copper (Cu) | ug | 42.0 | 48.1 | 44.7 | 22.1 | 63.6 | 59.0 | 5.0 | 9543554 |
| Iron (Fe) | ug | 4210 | 8060 | 11300 | 1170 | 3050 | 1130 | 50 | 9543554 |
| Lead (Pb) | ug | 3.7 | 6.8 | 8.0 | 4.8 | 19.9 | 4.7 | 3.0 | 9543554 |
| Manganese (Mn) | ug | 113 | 238 | 309 | 27.9 | 64.6 | 26.1 | 1.0 | 9543554 |
| Nickel (Ni) | ug | 6.7 | 12.6 | 17.0 | <3.0 | 5.5 | <3.0 | 3.0 | 9543554 |
| Selenium (Se) | ug | <10 | <10 | <10 | <10 | <10 | <10 | 10 | 9543554 |
| Vanadium (V) | ug | 5.7 | 10.3 | 13.5 | <5.0 | <5.0 | <5.0 | 5.0 | 9543554 |
| Zinc (Zn) | ug | 18.2 | 31.9 | 40.7 | 27.2 | 183 | 32.6 | 5.0 | 9543554 |
| RDL = Reportable Detection Limit | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | |



Bureau Veritas Job #: C4L4698
Report Date: 2024/07/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | ZSK838 | | ZSK839 | | ZSK840 | | ZSK844 | | |
|----------------------------------|-------|------------|--------|------------|--------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/06/11 | | 2024/06/11 | | 2024/06/11 | | 2024/06/17 | | |
| COC Number | | N/A | | N/A | | N/A | | N/A | | |
| | UNITS | 24032815 | RDL | 24032816 | RDL | 24032817 | RDL | 24032819 | RDL | QC Batch |
| Metals | | | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0037 | 0.0037 | <0.0036 | 0.0036 | <0.0037 | 0.0037 | <0.0037 | 0.0037 | 9531863 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9531863 |
| Total Chromium (Cr) | ug/m3 | 0.0040 | 0.0031 | 0.0059 | 0.0030 | 0.0083 | 0.0030 | <0.0031 | 0.0031 | 9531863 |
| Total Cobalt (Co) | ug/m3 | 0.0013 | 0.0012 | 0.0029 | 0.0012 | 0.0037 | 0.0012 | <0.0012 | 0.0012 | 9531863 |
| Total Copper (Cu) | ug/m3 | 0.0261 | 0.0031 | 0.0292 | 0.0030 | 0.0272 | 0.0030 | 0.0136 | 0.0031 | 9531863 |
| Total Iron (Fe) | ug/m3 | 2.61 | 0.031 | 4.90 | 0.030 | 6.86 | 0.030 | 0.720 | 0.031 | 9531863 |
| Total Lead (Pb) | ug/m3 | 0.0023 | 0.0019 | 0.0041 | 0.0018 | 0.0049 | 0.0018 | 0.0029 | 0.0019 | 9531863 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.016 | 0.016 | <0.016 | 0.016 | <0.017 | 0.017 | 9531863 |
| Total Nickel (Ni) | ug/m3 | 0.0042 | 0.0019 | 0.0076 | 0.0018 | 0.0104 | 0.0018 | <0.0019 | 0.0019 | 9531863 |
| Total Selenium (Se) | ug/m3 | <0.0062 | 0.0062 | <0.0061 | 0.0061 | <0.0061 | 0.0061 | <0.0062 | 0.0062 | 9531863 |
| Total Sulphur (S) | ug/m3 | 0.120 | 0.016 | 0.223 | 0.015 | 0.289 | 0.015 | 0.648 | 0.015 | 9531863 |
| Total Vanadium (V) | ug/m3 | 0.0035 | 0.0031 | 0.0063 | 0.0030 | 0.0082 | 0.0030 | <0.0031 | 0.0031 | 9531863 |
| Total Zinc (Zn) | ug/m3 | 0.0113 | 0.0031 | 0.0194 | 0.0030 | 0.0248 | 0.0030 | 0.0168 | 0.0031 | 9531863 |
| RDL = Reportable Detection Limit | | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | | |

| Bureau Veritas ID | | ZSK845 | | ZSK846 | | |
|----------------------------------|-------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/06/17 | | 2024/06/17 | | |
| COC Number | | N/A | | N/A | | |
| | UNITS | 24032820 | RDL | 24032821 | RDL | QC Batch |
| Metals | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0038 | 0.0038 | <0.0038 | 0.0038 | 9531863 |
| Total Cadmium (Cd) | ug/m3 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | 9531863 |
| Total Chromium (Cr) | ug/m3 | 0.0034 | 0.0032 | <0.0031 | 0.0031 | 9531863 |
| Total Cobalt (Co) | ug/m3 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | 9531863 |
| Total Copper (Cu) | ug/m3 | 0.0404 | 0.0032 | 0.0372 | 0.0031 | 9531863 |
| Total Iron (Fe) | ug/m3 | 1.93 | 0.032 | 0.711 | 0.031 | 9531863 |
| Total Lead (Pb) | ug/m3 | 0.0126 | 0.0019 | 0.0030 | 0.0019 | 9531863 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.017 | 0.017 | 9531863 |
| Total Nickel (Ni) | ug/m3 | 0.0035 | 0.0019 | <0.0019 | 0.0019 | 9531863 |
| Total Selenium (Se) | ug/m3 | <0.0063 | 0.0063 | <0.0063 | 0.0063 | 9531863 |
| Total Sulphur (S) | ug/m3 | 0.947 | 0.016 | 0.653 | 0.016 | 9531863 |
| Total Vanadium (V) | ug/m3 | <0.0032 | 0.0032 | <0.0031 | 0.0031 | 9531863 |
| Total Zinc (Zn) | ug/m3 | 0.116 | 0.0032 | 0.0205 | 0.0031 | 9531863 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4L4698
Report Date: 2024/07/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4L4698
Report Date: 2024/07/31

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9543554 | Arsenic (As) | 2024/07/30 | 97 | 75 - 125 | 95 | 85 - 115 | <6.0 | ug | NC (1) | 20 |
| 9543554 | Cadmium (Cd) | 2024/07/30 | 97 | 75 - 125 | 97 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9543554 | Chromium (Cr) | 2024/07/30 | 89 | 75 - 125 | 87 | 85 - 115 | <5.0 | ug | NC (1) | 20 |
| 9543554 | Cobalt (Co) | 2024/07/30 | 94 | 75 - 125 | 95 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9543554 | Copper (Cu) | 2024/07/30 | 93 | 75 - 125 | 94 | 85 - 115 | <5.0 | ug | 5.1 (1) | 20 |
| 9543554 | Iron (Fe) | 2024/07/30 | 92 | 75 - 125 | 93 | 85 - 115 | <50 | ug | 0.52 (1) | 20 |
| 9543554 | Lead (Pb) | 2024/07/30 | 95 | 75 - 125 | 96 | 85 - 115 | <3.0 | ug | 7.7 (1) | 20 |
| 9543554 | Manganese (Mn) | 2024/07/30 | 93 | 75 - 125 | 95 | 85 - 115 | <1.0 | ug | 2.2 (1) | 20 |
| 9543554 | Nickel (Ni) | 2024/07/30 | 95 | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | NC (1) | 20 |
| 9543554 | Selenium (Se) | 2024/07/30 | 101 | 75 - 125 | 96 | 85 - 115 | <10 | ug | NC (1) | 20 |
| 9543554 | Vanadium (V) | 2024/07/30 | 89 | 75 - 125 | 91 | 85 - 115 | <5.0 | ug | NC (1) | 20 |
| 9543554 | Zinc (Zn) | 2024/07/30 | 94 | 75 - 125 | 95 | 85 - 115 | <5.0 | ug | 4.8 (1) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID



Bureau Veritas Job #: C4L4698
Report Date: 2024/07/31

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: EW

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in cursive script that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C4L4698

2024/07/15 10:20

6710 Campbell Rd Mississauga, ON L5N 2L8

Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 1

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | |
|----------------------|--|---|--|----------------------|-------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 |
| Address: | 5768 Nauvoo Rd, Watford, ON NOM 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | EW/AXT/JRA |



NONT-2024-07-1431

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | |
|---|-----------------------|--------------------------------|---------------|-----------------------------|--|---|-------|---|---|--|--|--|--|--|--|--|--|--|--|--|---|-------------------------------------|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | | | | | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A? <input type="checkbox"/> n | | | | | | | | | | | | | | | | | | | | Regular Drinking Water? (Y/N) | | Metals Field Filtered? (Y/N) |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | | | | | | |
| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | | | | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS | |
| 1 | 24032805 | 8-Jun-24 | 1567 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 2 | 24032807 | 5-Jun-24 | 1650 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 3 | 24032808 | 8-Jun-24 | 1642 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 4 | 24032809 | 5-Jun-24 | 1669 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 5 | 24032810 | 8-Jun-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 6 | 24032812 | 5-Jun-24 | 1630 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 7 | 24032815 | 11-Jun-24 | 1610 | TSP | N | N | X | X | | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** | |
| 8 | 24032816 | 11-Jun-24 | 1645 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 9 | 24032817 | 11-Jun-24 | 1640 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 10 | 24032811 | 14-Jun-24 | 1614 | TSP | N | N | X | X | | | | | | | | | | | | 1 | | |
| 11 | 24032813 | 14-Jun-24 | 1571 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | | Date: | | Time: | | Laboratory Use Only | | | | | | | | | | | | | |
| JRA - | | | | | 2024/07/15 | | 1020 | | Temperature (°C) on Receipt: _____ Condition of Sample on Receipt: <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | | | | | | | | | | | |

White: Maxxam Yellow: Mail Pink: Client

C4L4698

2024/07/15 10:20



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 2

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: | |
|---|--|--|--|---------------------------|--|--|--|
| Company Name: Waste Management of Canada Corporation | | Company Name: RWDI AIR Inc. | | Quotation # | | <div style="border: 1px solid black; height: 100px; width: 100%;"></div> | |
| Contact Name: Lisa Mertick | | Contact Name: Brent Langille | | P.O. #: 13254248 | | | |
| Address: 5768 Nauvoo Rd, Watford, ON | | Address: 4510 Rhodes Drive, Suite 530 | | Project #: 2402553.02 | | | |
| NOM 2S0 | | Windsor, ON, N8W 5K5 | | Project Name: Twin Creeks | | | |
| Phone: 519-849-5810 Fax: 519-849-5811 | | Phone: 519-823-1311 x 2618 Fax: 519-823-1316 | | Location: Twin Creeks | | | |
| Email: lmertick@wm.com | | Email: Jeffery.Cleland@rwdi.com ; axt@rwdi.com | | Sampled By: | | CHAIN OF CUSTODY #: | |

| REGULATORY CRITERIA | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | | |
|--|--------------|---------------|-----------------------------|--|-------------------------|---|---|---|--|--|--|--|--|--|--|---|--|---|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> PWQO <input type="checkbox"/> Reg. 558 </div> <div> <input type="checkbox"/> Table 1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 </div> <div> <input type="checkbox"/> Sewer Use <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm Region: _____ </div> <div> <input checked="" type="checkbox"/> Other site specific specify _____ Report Criteria on C of A ? <input type="checkbox"/> n </div> </div> | | | | <div style="display: flex;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Regulated Drinking Water ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals Field Filtered ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TSP</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals (**Contact RWDI prior to metals analysis**)</div> <div style="flex-grow: 1; border: 1px solid black;"></div> </div> | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ <small>Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.</small> | | | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | # of Cont. | COMMENTS / TAT COMMENTS | | | | | | | | | | | | | | |
| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | | | | | | | | | | | | | | | | |
| 1 | 24032814 | 14-Jun-24 | 1568 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 2 | 24032819 | 17-Jun-24 | 1622 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 3 | 24032820 | 17-Jun-24 | 1576 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 4 | 24032821 | 17-Jun-24 | 1588 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 5 | 24032822 | 20-Jun-24 | 1598 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 6 | 24032823 | 20-Jun-24 | 1557 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 7 | 24032825 | 23-Jun-24 | 1600 | TSP | N | N | X | X | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 2405051 | 23-Jun-24 | 1580 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 9 | 2405052 | 23-Jun-24 | 1626 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 10 | 24050853 | 26-Jun-24 | 1611 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 11 | 24050854 | 26-Jun-24 | 1581 | TSP | N | N | X | X | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--|--------------------------------|--|-----------|-------|-----------------------------|--|
| | | | | 2024/7/15 | 1020 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/08/01
Report #: R8259515
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4L4692

Received: 2024/07/15, 10:20

Sample Matrix: Filter
Samples Received: 5

| Analyses | Date | | Date Analyzed | Laboratory Method | Analytical Method |
|--|----------|------------|---------------|-------------------|-------------------|
| | Quantity | Extracted | | | |
| Particulates on Hi-Vol Filters | 4 | N/A | 2024/07/18 | | |
| Particulates on Filter (Method IO-3.1) | 5 | 2024/07/17 | 2024/07/19 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 4 | N/A | 2024/07/16 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/08/01
Report #: R8259515
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4L4692

Received: 2024/07/15, 10:20

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2

Page 2 of 7

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | ZSK800 | ZSK801 | ZSK802 | ZSK803 | | | ZSK819 | | |
|--|-------|------------|------------|------------|------------|------|----------|----------|------|----------|
| Sampling Date | | 2024/06/26 | 2024/06/29 | 2024/06/29 | 2024/06/29 | | | | | |
| COC Number | | N/A | N/A | N/A | N/A | | | N/A | | |
| | UNITS | 24050855 | 24050856 | 24050857 | 24050858 | RDL | QC Batch | 24050880 | RDL | QC Batch |
| Particulate | ug/m3 | 23 | 22 | 22 | 19 | 3 | 9517737 | | | |
| Particulate Weight on Filter | ug | 35800 | 34800 | 34700 | 30600 | 5000 | 9524934 | <5000 | 5000 | 9524934 |
| Volume | m3 | 1533 | 1576 | 1579 | 1648 | N/A | ONSITE | | | |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/01

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in cursive script that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

2024/07/15 10:20

6740 Campbell Road Mississauga, ON L5N 2L8

Phone: 905-877-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 2

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | |
|----------------------|--|---|---|----------------------|-------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: | |



NONT-2024-07-1430


| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|--------------|---------------|-----------------------------|--------------------------------------|---|-------------------------|--|---------|--|--|--|-------|--|--|--|---|--|---|--|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> <p> <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary site specific <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> <input type="checkbox"/> Table 3 Region: _____ Report Criteria on C of A ? <input type="checkbox"/> n </p> | | | | | <p>Regulated Drinking Water ? (Y / N)</p> <p>Metals Field Filtered ? (Y / N)</p> <p>TSP</p> <p>Metals (**Contact RWDI prior to metals analysis**)</p> | | | | | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____</p> <p>Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.</p> | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | # of Cont. | COMMENTS / TAT COMMENTS | | | | | | | | | | | | | |
| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | |
| 1 | 24050855 | 26-Jun-24 | 1533 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 2 | 24050856 | 29-Jun-24 | 1576 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 3 | 24050857 | 29-Jun-24 | 1579 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 4 | 24050858 | 29-Jun-24 | 1648 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 5 | 24050859 | 2-Jul-24 | 1588 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 6 | 24050860 | 2-Jul-24 | 1573 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 7 | 24050861 | 2-Jul-24 | 1565 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 8 | 24050862 | 5-Jul-24 | 1580 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 9 | 24050863 | 5-Jul-24 | 1567 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 10 | 24050864 | 5-Jul-24 | 1628 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 11 | 24050865 | 8-Jul-24 | 1535 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| RELINQUISHED BY: (Signature/Print) | | | | RECEIVED BY: (Signature/Print) | | | | Date: | | | | Time: | | | | Laboratory Use Only | | | |
| | | | | | | | | 6/12/15 | | | | 12:00 | | | | Temperature (°C) on Receipt Condition of Sample on Receipt <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | |

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| | N0M 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Fax: | 519-849-5811 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: | | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|---|--|--|----------------------|------------------------------|--|--|--|--|--|--|--|---------------------------------|--|
| <p><i>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i></p> <div> <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> <input type="checkbox"/> Table 3 Region: _____ <div>Report Criteria on C of A ? <input type="checkbox"/></div> </div> | | Drinking Water ? (Y / N) | Filtered ? (Y / N) | contact RWDI prior to metals | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days</p> <p>DATE Required: _____</p> <p>TIME Required: _____</p> |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

[illegible]

| | | | | | |
|------------------------------------|---|----------|-------|-----------------------------|--|
| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
| |  | 10/17/15 | 10:10 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |
| | | | | | |
| | | | | | |



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/08/29
Report #: R8298260
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4L4692

Received: 2024/07/15, 10:20

Sample Matrix: Filter
Samples Received: 10

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/07/23 | 2024/07/31 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2024/07/29 | 2024/07/30 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 9 | N/A | 2024/07/18 | | |
| Particulates on Filter (Method IO-3.1) | 10 | 2024/07/17 | 2024/07/19 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 9 | N/A | 2024/07/16 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/08/29
Report #: R8298260
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4L4692

Received: 2024/07/15, 10:20

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | ZSK805 | ZSK807 | ZSK808 | ZSK810 | ZSK812 | ZSK813 | ZSK814 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/07/02 | 2024/07/02 | 2024/07/02 | 2024/07/05 | 2024/07/05 | 2024/07/05 | 2024/07/08 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24050859 | 24050860 | 24050861 | 24050862 | 24050863 | 24050864 | 24050865 | RDL | QC Batch |
| Particulate | ug/m3 | 17 | 18 | 45 | 52 | 53 | 29 | 46 | 3 | 9517737 |
| Particulate Weight on Filter | ug | 27000 | 27800 | 70000 | 82500 | 83300 | 47800 | 71000 | 5000 | 9524934 |
| Volume | m3 | 1588 | 1573 | 1565 | 1580 | 1567 | 1628 | 1535 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |

| Bureau Veritas ID | | ZSK816 | ZSK817 | | | ZSK819 | | |
|--|-------|------------|------------|------|----------|----------|------|----------|
| Sampling Date | | 2024/07/08 | 2024/07/08 | | | | | |
| COC Number | | N/A | N/A | | | N/A | | |
| | UNITS | 24050866 | 24050867 | RDL | QC Batch | 24050880 | RDL | QC Batch |
| Particulate | ug/m3 | 31 | 45 | 3 | 9517737 | | | |
| Particulate Weight on Filter | ug | 49000 | 67800 | 5000 | 9524934 | <5000 | 5000 | 9524934 |
| Volume | m3 | 1589 | 1498 | N/A | ONSITE | | | |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | |



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | ZSK810 | ZSK812 | ZSK816 | | |
|----------------------------------|-------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/07/05 | 2024/07/05 | 2024/07/08 | | |
| COC Number | | N/A | N/A | N/A | | |
| | UNITS | 24050862 | 24050863 | 24050866 | RDL | QC Batch |
| Metals | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | 6.0 | 9543554 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9543554 |
| Chromium (Cr) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9543554 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9543554 |
| Copper (Cu) | ug | 160 | 140 | 68.4 | 5.0 | 9543554 |
| Iron (Fe) | ug | 1140 | 1230 | 605 | 50 | 9543554 |
| Lead (Pb) | ug | 10.6 | 14.3 | 3.2 | 3.0 | 9543554 |
| Manganese (Mn) | ug | 32.3 | 34.1 | 16.5 | 1.0 | 9543554 |
| Nickel (Ni) | ug | <3.0 | <3.0 | <3.0 | 3.0 | 9543554 |
| Selenium (Se) | ug | <10 | <10 | <10 | 10 | 9543554 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9543554 |
| Zinc (Zn) | ug | 70.7 | 90.6 | 18.2 | 5.0 | 9543554 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | ZSK810 | | ZSK812 | | ZSK816 | | |
|----------------------------------|-------|------------|--------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/07/05 | | 2024/07/05 | | 2024/07/08 | | |
| COC Number | | N/A | | N/A | | N/A | | |
| | UNITS | 24050862 | RDL | 24050863 | RDL | 24050866 | RDL | QC Batch |
| Metals | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0038 | 0.0038 | <0.0038 | 0.0038 | <0.0038 | 0.0038 | 9531863 |
| Total Cadmium (Cd) | ug/m3 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | 9531863 |
| Total Chromium (Cr) | ug/m3 | <0.0032 | 0.0032 | <0.0032 | 0.0032 | <0.0031 | 0.0031 | 9531863 |
| Total Cobalt (Co) | ug/m3 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | 9531863 |
| Total Copper (Cu) | ug/m3 | 0.101 | 0.0032 | 0.0895 | 0.0032 | 0.0430 | 0.0031 | 9531863 |
| Total Iron (Fe) | ug/m3 | 0.719 | 0.032 | 0.785 | 0.032 | 0.381 | 0.031 | 9531863 |
| Total Lead (Pb) | ug/m3 | 0.0067 | 0.0019 | 0.0091 | 0.0019 | 0.0020 | 0.0019 | 9531863 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.017 | 0.017 | <0.017 | 0.017 | 9531863 |
| Total Nickel (Ni) | ug/m3 | <0.0019 | 0.0019 | <0.0019 | 0.0019 | <0.0019 | 0.0019 | 9531863 |
| Total Selenium (Se) | ug/m3 | <0.0063 | 0.0063 | <0.0064 | 0.0064 | <0.0063 | 0.0063 | 9531863 |
| Total Sulphur (S) | ug/m3 | 0.876 | 0.016 | 0.955 | 0.016 | 0.482 | 0.016 | 9531863 |
| Total Vanadium (V) | ug/m3 | <0.0032 | 0.0032 | <0.0032 | 0.0032 | <0.0031 | 0.0031 | 9531863 |
| Total Zinc (Zn) | ug/m3 | 0.0448 | 0.0032 | 0.0578 | 0.0032 | 0.0115 | 0.0031 | 9531863 |
| RDL = Reportable Detection Limit | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | |



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

GENERAL COMMENTS

Sample ZSK813 [24050864] : Filter torn.

Results relate only to the items tested.



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/29

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9543554 | Arsenic (As) | 2024/07/30 | 97 (1) | 75 - 125 | 95 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9543554 | Cadmium (Cd) | 2024/07/30 | 97 (1) | 75 - 125 | 97 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9543554 | Chromium (Cr) | 2024/07/30 | 89 (1) | 75 - 125 | 87 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9543554 | Cobalt (Co) | 2024/07/30 | 94 (1) | 75 - 125 | 95 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9543554 | Copper (Cu) | 2024/07/30 | 93 (1) | 75 - 125 | 94 | 85 - 115 | <5.0 | ug | 5.1 (3) | 20 |
| 9543554 | Iron (Fe) | 2024/07/30 | 92 (1) | 75 - 125 | 93 | 85 - 115 | <50 | ug | 0.52 (3) | 20 |
| 9543554 | Lead (Pb) | 2024/07/30 | 95 (1) | 75 - 125 | 96 | 85 - 115 | <3.0 | ug | 7.7 (3) | 20 |
| 9543554 | Manganese (Mn) | 2024/07/30 | 93 (1) | 75 - 125 | 95 | 85 - 115 | <1.0 | ug | 2.2 (3) | 20 |
| 9543554 | Nickel (Ni) | 2024/07/30 | 95 (1) | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9543554 | Selenium (Se) | 2024/07/30 | 101 (1) | 75 - 125 | 96 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9543554 | Vanadium (V) | 2024/07/30 | 89 (1) | 75 - 125 | 91 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9543554 | Zinc (Zn) | 2024/07/30 | 94 (1) | 75 - 125 | 95 | 85 - 115 | <5.0 | ug | 4.8 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [ZSK816-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ZSK816-01]



Bureau Veritas Job #: C4L4692
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in cursive script that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | |
|----------------------|--|---|--|----------------------|-------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks |
| Phone: | 519-849-5810 | Fax: | 519-849-5811 | Location: | Twin Creeks |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com | Sampled By: | |



NONT-2024-07-1430

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|---|--------------|--------------------------------|-----------------------------|--------------------------------------|--|-------------------------|--|---|--|--|--|--|--|--|--|--|---|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary site specific <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> <input type="checkbox"/> Table 3 Region: _____ Report Criteria on C of A ? <input type="checkbox"/> n | | | | | Regular Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | # of Cont. | COMMENTS / TAT COMMENTS | | | | | | | | | | | | |
| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | |
| 1 | 24050855 | 26-Jun-24 | 1533 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 2 | 24050856 | 29-Jun-24 | 1576 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 3 | 24050857 | 29-Jun-24 | 1579 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 4 | 24050858 | 29-Jun-24 | 1648 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 5 | 24050859 | 2-Jul-24 | 1588 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 6 | 24050860 | 2-Jul-24 | 1573 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 7 | 24050861 | 2-Jul-24 | 1565 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 8 | 24050862 | 5-Jul-24 | 1580 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 9 | 24050863 | 5-Jul-24 | 1567 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 10 | 24050864 | 5-Jul-24 | 1628 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 11 | 24050865 | 8-Jul-24 | 1535 | TSP | N | N | X | X | | | | | | | | | | 1 |
| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | | Time: | | Laboratory Use Only | | | | | | | | | | |
| | | | | 6/12/15 | | 10:00 | | Temperature (°C) on Receipt Condition of Sample on Receipt <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | | | | | | | | |

C4L4692

2024/07/15 10:20



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 2

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: | | | | | | | | | | | | | | | | | | | | | |
|---|--|--------------------------------------|--|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary site specific <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 3 Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | <table border="1"> <tr> <td>Regulated Drinking Water ? (Y / N)</td> <td>Metals Field Filtered ? (Y / N)</td> <td>TSP</td> <td>Metals (**Contact RWDI prior to metals analysis**)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #)</p> <p><input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days</p> <p>DATE Required: _____</p> <p>TIME Required: _____</p> <p>Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.</p> |
| Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | | | | | | | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|-------------------------|
| 1 | 24050866 | 8-Jul-24 | 1589 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 2 | 24050867 | 8-Jul-24 | 1498 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 3 | 24050880 | - | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Field Blank |
| 4 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |

*****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point*****

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| | | 2024/07/15 | 10:10 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/08/29
Report #: R8298208
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C405072

Received: 2024/08/09, 09:28

Sample Matrix: Filter
Samples Received: 19

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 4 | 2024/08/20 | 2024/08/26 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 4 | 2024/08/26 | 2024/08/26 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 18 | N/A | 2024/08/15 | | |
| Particulates on Filter (Method IO-3.1) | 19 | 2024/08/12 | 2024/08/15 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 18 | N/A | 2024/08/09 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/08/29
Report #: R8298208
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C405072

Received: 2024/08/09, 09:28

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4O5072
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZYN913 | ZYN914 | ZYN915 | ZYN916 | ZYN917 | ZYN918 | ZYN919 | | |
| Sampling Date | | 2024/07/11 | 2024/07/11 | 2024/07/11 | 2024/07/14 | 2024/07/14 | 2024/07/17 | 2024/07/17 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24050868 | 24050869 | 24050870 | 24050872 | 24050873 | 24050875 | 24050876 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------|
| Particulate | ug/m3 | 15 | 20 | 20 | 23 | 22 | 22 | 21 | 3 | 9567072 |
| Particulate Weight on Filter | ug | 24900 | 30700 | 32000 | 34500 | 33500 | 36100 | 33000 | 5000 | 9577615 |
| Volume | m3 | 1623 | 1573 | 1571 | 1524 | 1553 | 1628 | 1582 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZYN920 | ZYN921 | ZYN922 | ZYN923 | ZYN924 | ZYN925 | ZYN926 | | |
| Sampling Date | | 2024/07/20 | 2024/07/20 | 2024/07/20 | 2024/07/26 | 2024/07/26 | 2024/07/26 | 2024/07/23 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24050877 | 24050878 | 24050879 | 24050881 | 24050882 | 24050883 | 24050884 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|--------|-------|-------|-------|------|---------|
| Particulate | ug/m3 | 26 | 19 | 23 | 64 | 22 | 13 | 36 | 3 | 9567072 |
| Particulate Weight on Filter | ug | 39800 | 29300 | 37800 | 105000 | 35700 | 22200 | 56900 | 5000 | 9577615 |
| Volume | m3 | 1511 | 1582 | 1630 | 1639 | 1619 | 1672 | 1598 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZYN927 | | | ZYN928 | ZYN929 | ZYN930 | ZYN934 | | |
| Sampling Date | | 2024/07/23 | | | 2024/07/23 | 2024/07/29 | 2024/07/29 | 2024/07/29 | | |
| COC Number | | N/A | | | N/A | N/A | N/A | N/A | | |
| | UNITS | 24050885 | RDL | QC Batch | 24050886 | 24050887 | 24050888 | 24050892 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|------|---------|-------|-------|-------|-------|------|---------|
| Particulate | ug/m3 | | | | 40 | 26 | 19 | 28 | 3 | 9567072 |
| Particulate Weight on Filter | ug | 16800 | 5000 | 9577615 | 63000 | 41600 | 30100 | 44800 | 5000 | 9577615 |
| Volume | m3 | | | | 1578 | 1593 | 1601 | 1594 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



Bureau Veritas Job #: C405072
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | ZYN920 | ZYN921 | ZYN922 | ZYN923 | | |
|----------------------------------|-------|------------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/07/20 | 2024/07/20 | 2024/07/20 | 2024/07/26 | | |
| COC Number | | N/A | N/A | N/A | N/A | | |
| | UNITS | 24050877 | 24050878 | 24050879 | 24050881 | RDL | QC Batch |
| Metals | | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | <6.0 | 6.0 | 9598921 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9598921 |
| Chromium (Cr) | ug | <5.0 | <5.0 | <5.0 | <5.0 | 5.0 | 9598921 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9598921 |
| Copper (Cu) | ug | 51.6 | 174 | 102 | 106 | 5.0 | 9598921 |
| Iron (Fe) | ug | 479 | 301 | 452 | 1320 | 50 | 9598921 |
| Lead (Pb) | ug | <3.0 | <3.0 | 3.2 | 13.3 | 3.0 | 9598921 |
| Manganese (Mn) | ug | 15.5 | 8.9 | 13.0 | 38.0 | 1.0 | 9598921 |
| Nickel (Ni) | ug | <3.0 | <3.0 | 3.6 | <3.0 | 3.0 | 9598921 |
| Selenium (Se) | ug | <10 | <10 | <10 | <10 | 10 | 9598921 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | <5.0 | 5.0 | 9598921 |
| Zinc (Zn) | ug | 23.2 | 14.2 | 23.0 | 140 | 5.0 | 9598921 |
| RDL = Reportable Detection Limit | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | |



Bureau Veritas Job #: C405072
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | ZYN920 | | ZYN921 | | ZYN922 | | ZYN923 | | |
|----------------------------------|-------|------------|--------|------------|--------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/07/20 | | 2024/07/20 | | 2024/07/20 | | 2024/07/26 | | |
| COC Number | | N/A | | N/A | | N/A | | N/A | | |
| | UNITS | 24050877 | RDL | 24050878 | RDL | 24050879 | RDL | 24050881 | RDL | QC Batch |
| Metals | | | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0040 | 0.0040 | <0.0038 | 0.0038 | <0.0037 | 0.0037 | <0.0037 | 0.0037 | 9588449 |
| Total Cadmium (Cd) | ug/m3 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9588449 |
| Total Chromium (Cr) | ug/m3 | <0.0033 | 0.0033 | <0.0032 | 0.0032 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | 9588449 |
| Total Cobalt (Co) | ug/m3 | <0.0013 | 0.0013 | <0.0013 | 0.0013 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9588449 |
| Total Copper (Cu) | ug/m3 | 0.0342 | 0.0033 | 0.110 | 0.0032 | 0.0626 | 0.0031 | 0.0645 | 0.0031 | 9588449 |
| Total Iron (Fe) | ug/m3 | 0.317 | 0.033 | 0.190 | 0.032 | 0.277 | 0.031 | 0.803 | 0.031 | 9588449 |
| Total Lead (Pb) | ug/m3 | <0.0020 | 0.0020 | <0.0019 | 0.0019 | 0.0019 | 0.0018 | 0.0081 | 0.0018 | 9588449 |
| Total Lithium (Li) | ug/m3 | <0.018 | 0.018 | <0.017 | 0.017 | <0.017 | 0.017 | <0.016 | 0.016 | 9588449 |
| Total Nickel (Ni) | ug/m3 | <0.0020 | 0.0020 | <0.0019 | 0.0019 | 0.0022 | 0.0018 | <0.0018 | 0.0018 | 9588449 |
| Total Selenium (Se) | ug/m3 | <0.0066 | 0.0066 | <0.0063 | 0.0063 | <0.0061 | 0.0061 | <0.0061 | 0.0061 | 9588449 |
| Total Sulphur (S) | ug/m3 | 0.670 | 0.017 | 0.591 | 0.016 | 0.590 | 0.015 | 0.518 | 0.015 | 9588449 |
| Total Vanadium (V) | ug/m3 | <0.0033 | 0.0033 | <0.0032 | 0.0032 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | 9588449 |
| Total Zinc (Zn) | ug/m3 | 0.0154 | 0.0033 | 0.0090 | 0.0032 | 0.0141 | 0.0031 | 0.0853 | 0.0031 | 9588449 |
| RDL = Reportable Detection Limit | | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | | |



Bureau Veritas Job #: C4O5072
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C405072
Report Date: 2024/08/29

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9598921 | Arsenic (As) | 2024/08/26 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9598921 | Cadmium (Cd) | 2024/08/26 | 104 (1) | 75 - 125 | 104 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9598921 | Chromium (Cr) | 2024/08/26 | 97 (1) | 75 - 125 | 98 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9598921 | Cobalt (Co) | 2024/08/26 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9598921 | Copper (Cu) | 2024/08/26 | 102 (1) | 75 - 125 | 101 | 85 - 115 | <5.0 | ug | 3.0 (3) | 20 |
| 9598921 | Iron (Fe) | 2024/08/26 | 101 (1) | 75 - 125 | 102 | 85 - 115 | <50 | ug | 2.3 (3) | 20 |
| 9598921 | Lead (Pb) | 2024/08/26 | 99 (1) | 75 - 125 | 98 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9598921 | Manganese (Mn) | 2024/08/26 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <1.0 | ug | 1.5 (3) | 20 |
| 9598921 | Nickel (Ni) | 2024/08/26 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9598921 | Selenium (Se) | 2024/08/26 | 104 (1) | 75 - 125 | 107 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9598921 | Vanadium (V) | 2024/08/26 | 98 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9598921 | Zinc (Zn) | 2024/08/26 | 100 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 5.8 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [ZYN921-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ZYN921-01]



Bureau Veritas Job #: C4O5072
Report Date: 2024/08/29

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C405072

2024/08/09 09:28

Maxxam

6740 Campobello Road, Mississauga, ON L5N 2L8

Phone: 905-817-5770

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON NOM 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A? <input type="checkbox"/> n | | | | | Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A? <input type="checkbox"/> n | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | | | | | | | | | | |
| | | | | | # of Cont. COMMENTS / TAT COMMENTS | | | | | | | | | | | |
| 1 | | | | | 24050868 | | | | | | | | | | 1 | |
| 2 | | | | | 24050869 | | | | | | | | | | 1 | |
| 3 | | | | | 24050870 | | | | | | | | | | 1 | |
| 4 | | | | | 24050872 | | | | | | | | | | 1 | |
| 5 | | | | | 24050873 | | | | | | | | | | 1 | |
| 6 | | | | | 24050875 | | | | | | | | | | 1 | |
| 7 | | | | | 24050876 | | | | | | | | | | 1 | |
| 8 | | | | | 24050877 | | | | | | | | | | 1 | |
| 9 | | | | | 24050878 | | | | | | | | | | 1 | |
| 10 | | | | | 24050879 | | | | | | | | | | 1 | |
| 11 | | | | | 24050881 | | | | | | | | | | 1 | |



NONT-2024-08-1877

| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | | Laboratory Use Only | |
|------------------------------------|--|--------------------------------|--|------------|--|--|--|
| JRA - 8-Aug-24 | | MAX | | 2024/08/09 | | Temperature (°C) on Receipt | |
| | | | | | | Condition of Sample on Receipt | |
| | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF | |

only and intel

Write: Maxxam Yellow: Mail Pink: Client

C405072

2024/08/09 09:28



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | JRA | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axl@rwdi.com | | | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|--|---|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary site specific <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 3 Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A? <input type="checkbox"/> n | Regulated Drinking Water? (Y/N) Metals Field Filtered? (Y/N) TSP Metals (**Contact RWDI prior to metals analysis**) | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water? (Y/N) | Metals Field Filtered? (Y/N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|---------------------------------|------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24050882 | 26-Jul-24 | 1619 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 2 | 24050883 | 26-Jul-24 | 1672 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 3 | 24050884 | 23-Jul-24 | 1598 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 4 | 24050885 | 23-Jul-24 | Invalid | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 5 | 24050886 | 23-Jul-24 | 1578 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 6 | 24050887 | 29-Jul-24 | 1593 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 7 | 24050888 | 29-Jul-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24050889 | 1-Aug-24 | 1639 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 9 | 24050890 | 1-Aug-24 | 1632 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 10 | 24050891 | 1-Aug-24 | 1579 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 11 | 24050892 | 29-Jul-24 | 1594 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 8-Aug-24 | | 2024/08/09 | 0928 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

asky del mhl

White: Maxxam Yellow: Mail Pink: Client

2024/08/09 09:28



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD


Page 3 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | JRA | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com , axl@rwdi.com | | | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | |
|---|--|--|----------------------|------------------------------|--|--|--|--|--|--|--|---------------------------------|--|--|
| <p><i>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i></p> <div> <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> <input type="checkbox"/> Table 3 Region: _____ <div>Report Criteria on C of A ? <input type="checkbox"/> n</div> </div> | | Drinking Water ? (Y / N) | Filtered ? (Y / N) | contact RWDI prior to metals | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days</p> <p>DATE Required: _____</p> <p>TIME Required: _____</p> | |

**SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING
UNTIL DELIVERY TO MAXXAM**

[illegible]

| | | | | | |
|------------------------------------|---|-----------|-------|-----------------------------|--|
| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
| JRA - 8-Aug-27 |  | 6/24/2027 | 0928 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxcam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/30
Report #: R8341427
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C405072

Received: 2024/08/09, 09:28

Sample Matrix: Filter
Samples Received: 4

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2024/08/20 | 2024/08/26 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2024/08/26 | 2024/08/26 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 3 | N/A | 2024/08/15 | | |
| Particulates on Filter (Method IO-3.1) | 4 | 2024/08/12 | 2024/08/15 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/08/09 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/30
Report #: R8341427
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C405072

Received: 2024/08/09, 09:28

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4O5072
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | ZYN931 | ZYN932 | ZYN933 | | | ZYN935 | | |
|--|-------|------------|------------|------------|------|----------|------------|------|----------|
| Sampling Date | | 2024/08/01 | 2024/08/01 | 2024/08/01 | | | 2024/08/08 | | |
| COC Number | | N/A | N/A | N/A | | | N/A | | |
| | UNITS | 24050889 | 24050890 | 24050891 | RDL | QC Batch | 24051314 | RDL | QC Batch |
| Particulate | ug/m3 | 30 | 40 | 31 | 3 | 9567072 | | | |
| Particulate Weight on Filter | ug | 49300 | 65500 | 48200 | 5000 | 9577615 | <5000 | 5000 | 9577615 |
| Volume | m3 | 1639 | 1632 | 1579 | N/A | ONSITE | | | |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |



Bureau Veritas Job #: C4O5072
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | ZYN932 | ZYN933 | | |
|----------------------------------|-------|------------|------------|-----|----------|
| Sampling Date | | 2024/08/01 | 2024/08/01 | | |
| COC Number | | N/A | N/A | | |
| | UNITS | 24050890 | 24050891 | RDL | QC Batch |
| Metals | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | 6.0 | 9598921 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | 2.0 | 9598921 |
| Chromium (Cr) | ug | <5.0 | <5.0 | 5.0 | 9598921 |
| Cobalt (Co) | ug | <2.0 | <2.0 | 2.0 | 9598921 |
| Copper (Cu) | ug | 117 | 107 | 5.0 | 9598921 |
| Iron (Fe) | ug | 883 | 477 | 50 | 9598921 |
| Lead (Pb) | ug | 5.1 | 3.1 | 3.0 | 9598921 |
| Manganese (Mn) | ug | 24.6 | 14.6 | 1.0 | 9598921 |
| Nickel (Ni) | ug | <3.0 | <3.0 | 3.0 | 9598921 |
| Selenium (Se) | ug | <10 | <10 | 10 | 9598921 |
| Vanadium (V) | ug | <5.0 | <5.0 | 5.0 | 9598921 |
| Zinc (Zn) | ug | 45.1 | 29.3 | 5.0 | 9598921 |
| RDL = Reportable Detection Limit | | | | | |
| QC Batch = Quality Control Batch | | | | | |



Bureau Veritas Job #: C4O5072
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| | | | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ZYN932 | | ZYN933 | | |
| Sampling Date | | 2024/08/01 | | 2024/08/01 | | |
| COC Number | | N/A | | N/A | | |
| | UNITS | 24050890 | RDL | 24050891 | RDL | QC Batch |
| Metals | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0037 | 0.0037 | <0.0038 | 0.0038 | 9588449 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | 9588449 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | <0.0032 | 0.0032 | 9588449 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | 9588449 |
| Total Copper (Cu) | ug/m3 | 0.0718 | 0.0031 | 0.0677 | 0.0032 | 9588449 |
| Total Iron (Fe) | ug/m3 | 0.541 | 0.031 | 0.302 | 0.032 | 9588449 |
| Total Lead (Pb) | ug/m3 | 0.0031 | 0.0018 | 0.0020 | 0.0019 | 9588449 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.017 | 0.017 | 9588449 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | 0.0018 | <0.0019 | 0.0019 | 9588449 |
| Total Selenium (Se) | ug/m3 | <0.0061 | 0.0061 | <0.0063 | 0.0063 | 9588449 |
| Total Sulphur (S) | ug/m3 | 1.05 | 0.015 | 0.999 | 0.016 | 9588449 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | <0.0032 | 0.0032 | 9588449 |
| Total Zinc (Zn) | ug/m3 | 0.0277 | 0.0031 | 0.0185 | 0.0032 | 9588449 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4O5072
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4O5072
Report Date: 2024/09/30

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9598921 | Arsenic (As) | 2024/08/26 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9598921 | Cadmium (Cd) | 2024/08/26 | 104 (1) | 75 - 125 | 104 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9598921 | Chromium (Cr) | 2024/08/26 | 97 (1) | 75 - 125 | 98 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9598921 | Cobalt (Co) | 2024/08/26 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9598921 | Copper (Cu) | 2024/08/26 | 102 (1) | 75 - 125 | 101 | 85 - 115 | <5.0 | ug | 3.0 (3) | 20 |
| 9598921 | Iron (Fe) | 2024/08/26 | 101 (1) | 75 - 125 | 102 | 85 - 115 | <50 | ug | 2.3 (3) | 20 |
| 9598921 | Lead (Pb) | 2024/08/26 | 99 (1) | 75 - 125 | 98 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9598921 | Manganese (Mn) | 2024/08/26 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <1.0 | ug | 1.5 (3) | 20 |
| 9598921 | Nickel (Ni) | 2024/08/26 | 98 (1) | 75 - 125 | 99 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9598921 | Selenium (Se) | 2024/08/26 | 104 (1) | 75 - 125 | 107 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9598921 | Vanadium (V) | 2024/08/26 | 98 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9598921 | Zinc (Zn) | 2024/08/26 | 100 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 5.8 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [ZYN921-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ZYN921-01]



Bureau Veritas Job #: C405072
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in cursive script that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C405072

2024/08/09 09:28

Maxxam

6740 Campobello Road, Mississauga, ON L5N 2L8

Phone: 905-817-5770

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON NOM 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | | | | | | | | | | | | | | | |
| | | | | | # of Cont. COMMENTS / TAT COMMENTS | | | | | | | | | | | | | | | | |
| 1 | | | | | 24050868 11-Jul-24 1623 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 2 | | | | | 24050869 11-Jul-24 1573 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 3 | | | | | 24050870 11-Jul-24 1571 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 4 | | | | | 24050872 14-Jul-24 1524 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 5 | | | | | 24050873 14-Jul-24 1553 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 6 | | | | | 24050875 17-Jul-24 1628 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 7 | | | | | 24050876 17-Jul-24 1582 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 8 | | | | | 24050877 20-Jul-24 1511 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 9 | | | | | 24050878 20-Jul-24 1582 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 10 | | | | | 24050879 20-Jul-24 1630 TSP N N X X 1 | | | | | | | | | | | | | | | | |
| 11 | | | | | 24050881 26-Jul-24 1639 TSP N N X X 1 | | | | | | | | | | | | | | | | |



NONT-2024-08-1877

| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | | Laboratory Use Only | |
|------------------------------------|--|--------------------------------|--|------------|--|--|--|
| JRA - 8-Aug-24 | | MAX | | 2024/08/09 | | Temperature (°C) on Receipt | |
| | | | | | | Condition of Sample on Receipt | |
| | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF | |

only and intel

Write: Maxxam Yellow: Mail Pink: Client

2024/08/09 09:28

6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD


Page 2 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | CHAIN OF CUSTODY # : |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | |
|---|--|--|----------------------|------------------------------|--|--|--|--|--|--|--|---------------------------------|--|--|
| <p><i>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i></p> <div> <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other </div> <div> <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> </div> <div> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm <u>specify</u> </div> <div> <input type="checkbox"/> <input type="checkbox"/> Table 3 Region: _____ </div> <div> Report Criteria on C of A ? <input type="checkbox"/> n </div> | | Drinking Water ? (Y / N) | Filtered ? (Y / N) | contact RWDI prior to metals | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT:</p> <div> <input checked="" type="checkbox"/> 5 to 7 Working Days </div> <p>Rush TAT: Rush Confirmation # _____</p> <p>(call Lab for #)</p> <div> <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days </div> <p>DATE Required: _____</p> <p>TIME Required: _____</p> | |

**SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING
UNTIL DELIVERY TO MAXXAM**

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regul | Metal | TSP | Metal analysis | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|-------|-------|-----|----------------|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24050882 | 26-Jul-24 | 1619 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 2 | 24050883 | 26-Jul-24 | 1672 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 3 | 24050884 | 23-Jul-24 | 1598 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 4 | 24050885 | 23-Jul-24 | Invalid | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 5 | 24050886 | 23-Jul-24 | 1578 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 6 | 24050887 | 29-Jul-24 | 1593 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 7 | 24050888 | 29-Jul-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24050889 | 1-Aug-24 | 1639 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 9 | 24050890 | 1-Aug-24 | 1632 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 10 | 24050891 | 1-Aug-24 | 1579 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 11 | 24050892 | 29-Jul-24 | 1594 | TSP | N | N | X | X | | | | | | | | | | 1 | |

| | | | | | |
|------------------------------------|---|---------|-------|-----------------------------|--|
| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
| JRA - 8-Aug-21 |  | 8/11/21 | 5:28 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

city and school

White: Maxxam Yellow: Mail Pink: Client

2024/08/09 09:28



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD


Page 3 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | CHAIN OF CUSTODY # : |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | JRA | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com , axl@rwdi.com | | | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|---|--|--|----------------------|------------------------------|--|--|--|--|--|--|--|---|--|
| <p><i>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i></p> <div> <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other </div> <div> <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> </div> <div> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify </div> <div> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 3 Region: _____ </div> <div> Report Criteria on C of A ? <input type="checkbox"/> n </div> | | Drinking Water ? (Y / N) | Filtered ? (Y / N) | Contact RWDI prior to metals | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days | |
| Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | | | | | | | | | | | | | |

**SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING
UNTIL DELIVERY TO MAXXAM**

[illegible]

| | | | | | |
|------------------------------------|---|-----------|-------|-----------------------------|--|
| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
| JRA - 8-Aug-27 |  | 6/24/2027 | 0928 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxcam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/30
Report #: R8341440
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4T1004

Received: 2024/09/17, 11:00

Sample Matrix: Filter
Samples Received: 31

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 7 | 2024/09/25 | 2024/09/26 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 7 | 2024/09/26 | 2024/09/26 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 30 | N/A | 2024/09/23 | | |
| Particulates on Filter (Method IO-3.1) | 31 | 2024/09/18 | 2024/09/23 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 30 | N/A | 2024/09/17 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/09/30
Report #: R8341440
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4T1004

Received: 2024/09/17, 11:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4T1004
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ADDB76 | ADDB77 | ADDB78 | ADDB79 | ADDB80 | ADDB81 | ADDB82 | | |
| Sampling Date | | 2024/08/04 | 2024/08/04 | 2024/08/04 | 2024/08/07 | 2024/08/07 | 2024/08/07 | 2024/08/10 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24050894 | 24051300 | 24051301 | 24051302 | 24051303 | 24051304 | 24051305 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------|
| Particulate | ug/m3 | 34 | 28 | 28 | 19 | 10 | 32 | 16 | 3 | 9644886 |
| Particulate Weight on Filter | ug | 54800 | 45400 | 44500 | 30700 | 17200 | 51800 | 25600 | 5000 | 9655390 |
| Volume | m3 | 1617 | 1601 | 1596 | 1603 | 1752 | 1610 | 1617 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ADDB83 | ADDB84 | ADDB85 | ADDB86 | ADDB87 | ADDB88 | ADDB89 | | |
| Sampling Date | | 2024/08/10 | 2024/08/10 | 2024/08/13 | 2024/08/13 | 2024/08/16 | 2024/08/16 | 2024/08/13 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24051306 | 24051307 | 24051308 | 24051309 | 24051310 | 24051311 | 24051312 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|--------|------|---------|
| Particulate | ug/m3 | 20 | 16 | 21 | 27 | 29 | 25 | 63 | 3 | 9644886 |
| Particulate Weight on Filter | ug | 34500 | 25200 | 34000 | 42700 | 47600 | 40900 | 102000 | 5000 | 9655390 |
| Volume | m3 | 1722 | 1602 | 1627 | 1555 | 1616 | 1638 | 1609 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ADDB90 | ADDB91 | ADDB92 | ADDB93 | | | ADDB94 | | |
| Sampling Date | | 2024/08/16 | 2024/08/19 | 2024/08/19 | 2024/08/19 | | | 2024/08/21 | | |
| COC Number | | N/A | N/A | N/A | N/A | | | N/A | | |
| | UNITS | 24051313 | 24071762 | 24071763 | 24071764 | RDL | QC Batch | 24071774 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|------|---------|-------|------|---------|
| Particulate | ug/m3 | 44 | 20 | 17 | 28 | 3 | 9644886 | | | |
| Particulate Weight on Filter | ug | 72700 | 32400 | 28400 | 45200 | 5000 | 9655390 | <5000 | 5000 | 9655390 |
| Volume | m3 | 1640 | 1614 | 1678 | 1616 | N/A | ONSITE | | | |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



Bureau Veritas Job #: C4T1004
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ADDB95 | ADDB96 | ADDB97 | ADDB98 | ADDB99 | ADDC00 | ADDC01 | | |
| Sampling Date | | 2024/08/22 | 2024/08/22 | 2024/08/22 | 2024/08/25 | 2024/08/25 | 2024/08/25 | 2024/08/28 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071761 | 24071760 | 24051315 | 24071767 | 24071765 | 24071766 | 24071768 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|--------|-------|-------|-------|-------|-------|------|---------|
| Particulate | ug/m3 | 19 | 77 | 42 | 33 | 25 | 25 | 19 | 3 | 9644886 |
| Particulate Weight on Filter | ug | 30600 | 125000 | 66700 | 52000 | 39700 | 40500 | 29600 | 5000 | 9655390 |
| Volume | m3 | 1587 | 1609 | 1589 | 1591 | 1568 | 1594 | 1590 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ADDC02 | ADDC03 | ADDC04 | ADDC05 | ADDC06 | | |
| Sampling Date | | 2024/08/28 | 2024/08/28 | 2024/08/31 | 2024/08/31 | 2024/08/31 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071770 | 24071772 | 24071769 | 24071771 | 24071773 | RDL | QC Batch |

| | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|------|------|---------|
| Particulate | ug/m3 | 18 | 12 | 22 | 20 | 4 | 3 | 9644886 |
| Particulate Weight on Filter | ug | 28500 | 19100 | 34900 | 32400 | 6300 | 5000 | 9655390 |
| Volume | m3 | 1601 | 1568 | 1566 | 1598 | 1605 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



Bureau Veritas Job #: C4T1004
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | ADDB76 | ADDB78 | ADDB89 | ADDB90 | ADDB96 | ADDB97 | ADDC05 | | |
|-------------------|-------|------------|------------|------------|------------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/08/04 | 2024/08/04 | 2024/08/13 | 2024/08/16 | 2024/08/22 | 2024/08/22 | 2024/08/31 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24050894 | 24051301 | 24051312 | 24051313 | 24071760 | 24051315 | 24071771 | RDL | QC Batch |

| Metals | | | | | | | | | | |
|----------------|----|------|------|------|------|------|------|------|-----|---------|
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | <6.0 | <6.0 | <6.0 | <6.0 | 6.0 | 9663763 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9663763 |
| Chromium (Cr) | ug | <5.0 | <5.0 | 7.1 | 5.0 | <5.0 | <5.0 | <5.0 | 5.0 | 9663763 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9663763 |
| Copper (Cu) | ug | 171 | 53.2 | 108 | 105 | 145 | 43.7 | 69.2 | 5.0 | 9663763 |
| Iron (Fe) | ug | 485 | 215 | 1900 | 923 | 1190 | 785 | 233 | 50 | 9663763 |
| Lead (Pb) | ug | <3.0 | <3.0 | 16.7 | 8.1 | 4.3 | 4.2 | <3.0 | 3.0 | 9663763 |
| Manganese (Mn) | ug | 15.0 | 8.6 | 41.2 | 26.6 | 44.3 | 21.7 | 8.8 | 1.0 | 9663763 |
| Nickel (Ni) | ug | <3.0 | <3.0 | 4.0 | <3.0 | <3.0 | <3.0 | <3.0 | 3.0 | 9663763 |
| Selenium (Se) | ug | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 10 | 9663763 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5.0 | 9663763 |
| Zinc (Zn) | ug | 24.6 | 25.5 | 165 | 84.0 | 38.6 | 44.5 | 28.0 | 5.0 | 9663763 |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4T1004
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | ADDB76 | | ADDB78 | | ADDB89 | | ADDB90 | | |
|----------------------------------|-------|------------|--------|------------|--------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/08/04 | | 2024/08/04 | | 2024/08/13 | | 2024/08/16 | | |
| COC Number | | N/A | | N/A | | N/A | | N/A | | |
| | UNITS | 24050894 | RDL | 24051301 | RDL | 24051312 | RDL | 24051313 | RDL | QC Batch |
| Metals | | | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0037 | 0.0037 | <0.0038 | 0.0038 | <0.0037 | 0.0037 | <0.0037 | 0.0037 | 9662313 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9662313 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | 0.0044 | 0.0031 | 0.0031 | 0.0030 | 9662313 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9662313 |
| Total Copper (Cu) | ug/m3 | 0.106 | 0.0031 | 0.0333 | 0.0031 | 0.0673 | 0.0031 | 0.0638 | 0.0030 | 9662313 |
| Total Iron (Fe) | ug/m3 | 0.300 | 0.031 | 0.135 | 0.031 | 1.18 | 0.031 | 0.563 | 0.030 | 9662313 |
| Total Lead (Pb) | ug/m3 | <0.0019 | 0.0019 | <0.0019 | 0.0019 | 0.0104 | 0.0019 | 0.0049 | 0.0018 | 9662313 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.017 | 0.017 | <0.017 | 0.017 | <0.016 | 0.016 | 9662313 |
| Total Nickel (Ni) | ug/m3 | <0.0019 | 0.0019 | <0.0019 | 0.0019 | 0.0025 | 0.0019 | <0.0018 | 0.0018 | 9662313 |
| Total Selenium (Se) | ug/m3 | <0.0062 | 0.0062 | <0.0063 | 0.0063 | <0.0062 | 0.0062 | <0.0061 | 0.0061 | 9662313 |
| Total Sulphur (S) | ug/m3 | 0.532 | 0.015 | 0.559 | 0.016 | 0.510 | 0.016 | 0.862 | 0.015 | 9662313 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | <0.0030 | 0.0030 | 9662313 |
| Total Zinc (Zn) | ug/m3 | 0.0152 | 0.0031 | 0.0160 | 0.0031 | 0.103 | 0.0031 | 0.0512 | 0.0030 | 9662313 |
| RDL = Reportable Detection Limit | | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | | |

| Bureau Veritas ID | | ADDB96 | | ADDB97 | ADDC05 | | |
|----------------------------------|-------|------------|--------|------------|------------|--------|----------|
| Sampling Date | | 2024/08/22 | | 2024/08/22 | 2024/08/31 | | |
| COC Number | | N/A | | N/A | N/A | | |
| | UNITS | 24071760 | RDL | 24051315 | 24071771 | RDL | QC Batch |
| Metals | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0037 | 0.0037 | <0.0038 | <0.0038 | 0.0038 | 9662313 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | <0.0013 | 0.0013 | 9662313 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | <0.0031 | <0.0031 | 0.0031 | 9662313 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0013 | <0.0013 | 0.0013 | 9662313 |
| Total Copper (Cu) | ug/m3 | 0.0903 | 0.0031 | 0.0275 | 0.0433 | 0.0031 | 9662313 |
| Total Iron (Fe) | ug/m3 | 0.743 | 0.031 | 0.494 | 0.146 | 0.031 | 9662313 |
| Total Lead (Pb) | ug/m3 | 0.0027 | 0.0019 | 0.0026 | <0.0019 | 0.0019 | 9662313 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.017 | <0.017 | 0.017 | 9662313 |
| Total Nickel (Ni) | ug/m3 | <0.0019 | 0.0019 | <0.0019 | <0.0019 | 0.0019 | 9662313 |
| Total Selenium (Se) | ug/m3 | <0.0062 | 0.0062 | <0.0063 | <0.0063 | 0.0063 | 9662313 |
| Total Sulphur (S) | ug/m3 | 0.531 | 0.016 | 0.449 | 0.331 | 0.016 | 9662313 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | <0.0031 | <0.0031 | 0.0031 | 9662313 |
| Total Zinc (Zn) | ug/m3 | 0.0240 | 0.0031 | 0.0280 | 0.0175 | 0.0031 | 9662313 |
| RDL = Reportable Detection Limit | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | |



Bureau Veritas Job #: C4T1004
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

GENERAL COMMENTS

Sample ADDB79 [24051302] : Filter torn.

Sample ADDB91 [24071762] : Filter torn.

Results relate only to the items tested.



Bureau Veritas Job #: C4T1004
Report Date: 2024/09/30

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9663763 | Arsenic (As) | 2024/09/26 | 94 (1) | 75 - 125 | 97 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9663763 | Cadmium (Cd) | 2024/09/26 | 95 (1) | 75 - 125 | 97 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9663763 | Chromium (Cr) | 2024/09/26 | 91 (1) | 75 - 125 | 98 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9663763 | Cobalt (Co) | 2024/09/26 | 91 (1) | 75 - 125 | 96 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9663763 | Copper (Cu) | 2024/09/26 | 94 (1) | 75 - 125 | 96 | 85 - 115 | <5.0 | ug | 0.67 (3) | 20 |
| 9663763 | Iron (Fe) | 2024/09/26 | 91 (1) | 75 - 125 | 97 | 85 - 115 | <50 | ug | 1.6 (3) | 20 |
| 9663763 | Lead (Pb) | 2024/09/26 | 95 (1) | 75 - 125 | 96 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9663763 | Manganese (Mn) | 2024/09/26 | 95 (1) | 75 - 125 | 100 | 85 - 115 | <1.0 | ug | 3.2 (3) | 20 |
| 9663763 | Nickel (Ni) | 2024/09/26 | 92 (1) | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9663763 | Selenium (Se) | 2024/09/26 | 95 (1) | 75 - 125 | 99 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9663763 | Vanadium (V) | 2024/09/26 | 90 (1) | 75 - 125 | 97 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9663763 | Zinc (Zn) | 2024/09/26 | 94 (1) | 75 - 125 | 98 | 85 - 115 | <5.0 | ug | 9.6 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [ADDB78-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ADDB78-01]



Bureau Veritas Job #: C4T1004
Report Date: 2024/09/30

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C4T1004

2024/09/17 11:00



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 4

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|---|--|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | <p>Regulated Drinking Water ? (Y / N)</p> <p>Metals Field Filtered ? (Y / N)</p> <p>TSP</p> <p>Metals (**Contact RWDI prior to metals analysis**)</p> <p>QR Code: NONT-2024-09-3386</p> | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT:</p> <p><input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #)</p> <p><input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days</p> <p>DATE Required: _____</p> <p>TIME Required: _____</p> |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24050894 | 4-Aug-24 | 1617 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 2 | 24051300 | 4-Aug-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 3 | 24051301 | 4-Aug-24 | 1596 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 4 | 24051302 | 7-Aug-24 | 1603 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 5 | 24051303 | 7-Aug-24 | 1752 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 6 | 24051304 | 7-Aug-24 | 1610 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 7 | 24051305 | 10-Aug-24 | 1617 | TSP | N | N | X | X | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24051306 | 10-Aug-24 | 1722 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 9 | 24051307 | 10-Aug-24 | 1602 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 10 | 24051308 | 13-Aug-24 | 1627 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 11 | 24051309 | 13-Aug-24 | 1555 | TSP | N | N | X | X | | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 13-Sep-24/AM | Cindy Vong | 2024/09/17 | 10:50 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | Sue Ann Salwan | 2024/09/17 | 10:00 | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

CAT1004

2024/09/17 11:00



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 4

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|--|--|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input type="checkbox"/> PWQO Table 1 Sanitary <input type="checkbox"/> Table 2 Storm <input type="checkbox"/> Table 3 Region _____ <input type="checkbox"/> Reg. 558 <input checked="" type="checkbox"/> Other site specific specify _____ Report Criteria on C of A ? <input type="checkbox"/> n | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regul | Metal | TSP | Metal analysis | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|-------|-------|-----|----------------|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24051310 | 16-Aug-24 | 1616 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 2 | 24051311 | 16-Aug-24 | 1638 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 3 | 24051312 | 13-Aug-24 | 1609 | TSP | N | N | X | X | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 4 | 24051313 | 16-Aug-24 | 1640 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 5 | 24071762 | 19-Aug-24 | 1614 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 6 | 24071763 | 19-Aug-24 | 1678 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 7 | 24071764 | 19-Aug-24 | 1616 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 8 | 24071774 | 21-Aug-24 | - | TSP | N | N | X | X | | | | | | | | | | | 1 | Field Blank |
| 9 | 24071761 | 22-Aug-24 | 1587 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 10 | 24071760 | 22-Aug-24 | 1609 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 11 | 24051315 | 22-Aug-24 | 1589 | TSP | N | N | X | X | | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 13 Sep - 21 / A n | Cindy Vong | 2024/09/17 | 10:50 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | S. J. SUGAR SALVAGE | 2024/09/17 | 11:00 | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

C4T1004

2024/09/17 11:00



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 3 of 4

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | JRA | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | | | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> Table 2 <input type="checkbox"/> Region _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24071767 | 25-Aug-24 | 1591 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 2 | 24071765 | 25-Aug-24 | 1568 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 3 | 24071766 | 25-Aug-24 | 1594 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 4 | 24071768 | 28-Aug-24 | 1590 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 5 | 24071770 | 28-Aug-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 6 | 24071772 | 28-Aug-24 | 1568 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 7 | 24071769 | 31-Aug-24 | 1566 | TSP | N | N | X | X | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24071771 | 31-Aug-24 | 1598 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 9 | 24071773 | 31-Aug-24 | 1605 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 10 | 24071777 | 3-Sep-24 | 1599 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 11 | 24071778 | 3-Sep-24 | 1598 | TSP | N | N | X | X | | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 13-Sep-27/Am | Cindy Kong | 2024/09/17 | 10:50 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | SAR BUCAR SALVARE | 2024/09/17 | 11:00 | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

Write: Maxxam Yellow: Mdl Pink: Client

C4T1004

2024/09/17 11:00

6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 4 of 4

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | JRA | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | | | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--------------------------------------|--|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | <table border="1"> <thead> <tr> <th>Regulated Drinking Water ? (Y / N)</th> <th>Metals Field Filtered ? (Y / N)</th> <th>TSP</th> <th>Metals (**Contact RWDI prior to metals analysis**)</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #)</p> <p><input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days</p> <p>DATE Required: _____</p> <p>TIME Required: _____</p> <p>Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.</p> |
| Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|-------------------------|
| 1 | 24071780 | 3-Sep-24 | 1611 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 2 | 24071775 | 6-Sep-24 | | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 3 | 24071776 | 6-Sep-24 | | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 4 | 24071779 | 6-Sep-24 | | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 5 | 24071736 | 6-Sep-24 | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Field Blank |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 13-Sep-24/Am | Cindy Kong | 2024/09/17 | 10:50 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | SUGAR SALWAN | 2024/09/17 | 11:00 | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/10/24
Report #: R8374842
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4T1004

Received: 2024/09/17, 11:00

Sample Matrix: Filter
Samples Received: 7

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2024/09/25 | 2024/09/26 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2024/09/26 | 2024/09/26 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 6 | N/A | 2024/09/23 | | |
| Particulates on Filter (Method IO-3.1) | 7 | 2024/09/18 | 2024/09/23 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/09/17 | | |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/09/19 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/10/24
Report #: R8374842
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4T1004

Received: 2024/09/17, 11:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4T1004
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | ADDC07 | ADDC08 | ADDC09 | ADDC10 | ADDC11 | ADDC12 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/09/03 | 2024/09/03 | 2024/09/03 | 2024/09/06 | 2024/09/06 | 2024/09/06 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071777 | 24071778 | 24071780 | 24071775 | 24071776 | 24071779 | RDL | QC Batch |
| Particulate | ug/m3 | 16 | 16 | 89 | 18 | 19 | 26 | 3 | 9644886 |
| Particulate Weight on Filter | ug | 26200 | 25100 | 144000 | 30400 | 30600 | 43200 | 5000 | 9655390 |
| Volume | m3 | 1599 | 1598 | 1611 | 1655 | 1627 | 1667 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |

| Bureau Veritas ID | | ADDC13 | | |
|--|-------|------------|------|----------|
| Sampling Date | | 2024/09/06 | | |
| COC Number | | N/A | | |
| | UNITS | 24071736 | RDL | QC Batch |
| Particulate Weight on Filter | ug | <5000 | 5000 | 9655390 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4T1004
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

ELEMENTS BY ICP-AES (FILTER)

| | | | | | |
|----------------------------------|--------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ADDC09 | ADDC12 | | |
| Sampling Date | | 2024/09/03 | 2024/09/06 | | |
| COC Number | | N/A | N/A | | |
| | UNITS | 24071780 | 24071779 | RDL | QC Batch |
| Metals | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | 6.0 | 9663763 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | 2.0 | 9663763 |
| Chromium (Cr) | ug | <5.0 | <5.0 | 5.0 | 9663763 |
| Cobalt (Co) | ug | <2.0 | <2.0 | 2.0 | 9663763 |
| Copper (Cu) | ug | 179 | 71.4 | 5.0 | 9663763 |
| Iron (Fe) | ug | 2280 | 435 | 50 | 9663763 |
| Lead (Pb) | ug | 14.6 | 3.1 | 3.0 | 9663763 |
| Manganese (Mn) | ug | 55.8 | 16.2 | 1.0 | 9663763 |
| Nickel (Ni) | ug | 3.2 | <3.0 | 3.0 | 9663763 |
| Selenium (Se) | ug | <10 | <10 | 10 | 9663763 |
| Vanadium (V) | ug | <5.0 | <5.0 | 5.0 | 9663763 |
| Zinc (Zn) | ug | 168 | 29.2 | 5.0 | 9663763 |
| RDL = Reportable Detection Limit | | | | | |
| QC Batch = Quality Control Batch | | | | | |



Bureau Veritas Job #: C4T1004
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

CALCULATED ELEMENTS (FILTER)

| | | | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | ADDC09 | | ADDC12 | | |
| Sampling Date | | 2024/09/03 | | 2024/09/06 | | |
| COC Number | | N/A | | N/A | | |
| | UNITS | 24071780 | RDL | 24071779 | RDL | QC Batch |
| Metals | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0037 | 0.0037 | <0.0036 | 0.0036 | 9662313 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9662313 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | <0.0030 | 0.0030 | 9662313 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9662313 |
| Total Copper (Cu) | ug/m3 | 0.111 | 0.0031 | 0.0428 | 0.0030 | 9662313 |
| Total Iron (Fe) | ug/m3 | 1.42 | 0.031 | 0.261 | 0.030 | 9662313 |
| Total Lead (Pb) | ug/m3 | 0.0091 | 0.0019 | 0.0018 | 0.0018 | 9662313 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.016 | 0.016 | 9662313 |
| Total Nickel (Ni) | ug/m3 | 0.0020 | 0.0019 | <0.0018 | 0.0018 | 9662313 |
| Total Selenium (Se) | ug/m3 | <0.0062 | 0.0062 | <0.0060 | 0.0060 | 9662313 |
| Total Sulphur (S) | ug/m3 | 0.648 | 0.016 | 0.353 | 0.015 | 9662313 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | <0.0030 | 0.0030 | 9662313 |
| Total Zinc (Zn) | ug/m3 | 0.105 | 0.0031 | 0.0175 | 0.0030 | 9662313 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4T1004
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4T1004
Report Date: 2024/10/24

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9663763 | Arsenic (As) | 2024/09/26 | 94 (1) | 75 - 125 | 97 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9663763 | Cadmium (Cd) | 2024/09/26 | 95 (1) | 75 - 125 | 97 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9663763 | Chromium (Cr) | 2024/09/26 | 91 (1) | 75 - 125 | 98 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9663763 | Cobalt (Co) | 2024/09/26 | 91 (1) | 75 - 125 | 96 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9663763 | Copper (Cu) | 2024/09/26 | 94 (1) | 75 - 125 | 96 | 85 - 115 | <5.0 | ug | 0.67 (3) | 20 |
| 9663763 | Iron (Fe) | 2024/09/26 | 91 (1) | 75 - 125 | 97 | 85 - 115 | <50 | ug | 1.6 (3) | 20 |
| 9663763 | Lead (Pb) | 2024/09/26 | 95 (1) | 75 - 125 | 96 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9663763 | Manganese (Mn) | 2024/09/26 | 95 (1) | 75 - 125 | 100 | 85 - 115 | <1.0 | ug | 3.2 (3) | 20 |
| 9663763 | Nickel (Ni) | 2024/09/26 | 92 (1) | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9663763 | Selenium (Se) | 2024/09/26 | 95 (1) | 75 - 125 | 99 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9663763 | Vanadium (V) | 2024/09/26 | 90 (1) | 75 - 125 | 97 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9663763 | Zinc (Zn) | 2024/09/26 | 94 (1) | 75 - 125 | 98 | 85 - 115 | <5.0 | ug | 9.6 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Matrix Spike Parent ID [ADDB78-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [ADDB78-01]



Bureau Veritas Job #: C4T1004
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Julian Tong, Project Manager Assistant

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C4T1004

2024/09/17 11:00




6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 1 of 4

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|--|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> PWQO <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm Region: _____ | <input checked="" type="checkbox"/> Other site specific specify _____  NONT-2024-09-3386 | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |
| Report Criteria on C of A ? <input type="checkbox"/> n | | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|---|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24050894 | 4-Aug-24 | 1617 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 2 | 24051300 | 4-Aug-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 3 | 24051301 | 4-Aug-24 | 1596 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 4 | 24051302 | 7-Aug-24 | 1603 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 5 | 24051303 | 7-Aug-24 | 1752 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 6 | 24051304 | 7-Aug-24 | 1610 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 7 | 24051305 | 10-Aug-24 | 1617 | TSP | N | N | X | X | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24051306 | 10-Aug-24 | 1722 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 9 | 24051307 | 10-Aug-24 | 1602 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 10 | 24051308 | 13-Aug-24 | 1627 | TSP | N | N | X | X | | | | | | | | | | 1 | |
| 11 | 24051309 | 13-Aug-24 | 1555 | TSP | N | N | X | X | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 13-Sep-24/AM | Cindy Vong | 2024/09/17 | 10:50 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | Sue Ann Salwan | 2024/09/17 | 10:00 | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

C4T1004

2024/09/17 11:00



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 4

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|--|---|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input type="checkbox"/> PWQO Table 1 Sanitary <input type="checkbox"/> Table 2 Storm <input type="checkbox"/> Table 3 Region _____ <input type="checkbox"/> Reg. 558 <input checked="" type="checkbox"/> Other site specific specify _____ Report Criteria on C of A ? <input type="checkbox"/> n | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24051310 | 16-Aug-24 | 1616 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 2 | 24051311 | 16-Aug-24 | 1638 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 3 | 24051312 | 13-Aug-24 | 1609 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 4 | 24051313 | 16-Aug-24 | 1640 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 5 | 24071762 | 19-Aug-24 | 1614 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 6 | 24071763 | 19-Aug-24 | 1678 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 7 | 24071764 | 19-Aug-24 | 1616 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 8 | 24071774 | 21-Aug-24 | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Field Blank |
| 9 | 24071761 | 22-Aug-24 | 1587 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 10 | 24071760 | 22-Aug-24 | 1609 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 11 | 24051315 | 22-Aug-24 | 1589 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 13 Sep-21 / A n | Cindy Vong | 2024/09/17 | 10:50 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | S. J. SUGAR SALVAGE | 2024/09/17 | 11:00 | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

C4T1004

2024/09/17 11:00



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 3 of 4

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> Table 2 <input type="checkbox"/> Region _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24071767 | 25-Aug-24 | 1591 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 2 | 24071765 | 25-Aug-24 | 1568 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 3 | 24071766 | 25-Aug-24 | 1594 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 4 | 24071768 | 28-Aug-24 | 1590 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 5 | 24071770 | 28-Aug-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 6 | 24071772 | 28-Aug-24 | 1568 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 7 | 24071769 | 31-Aug-24 | 1566 | TSP | N | N | X | X | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24071771 | 31-Aug-24 | 1598 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 9 | 24071773 | 31-Aug-24 | 1605 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 10 | 24071777 | 3-Sep-24 | 1599 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 11 | 24071778 | 3-Sep-24 | 1598 | TSP | N | N | X | X | | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 13-Sep-27/Am | Cindy Kong | 2024/09/17 | 10:50 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | SAR SUGAR SALVAGE | 2024/09/17 | 11:00 | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

Write: Maxxam Yellow: Mdl Pink: Client

C4T1004

2024/09/17 11:00

6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 4 of 4

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Region: _____ <input type="checkbox"/> Table 3 <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|-------------------------|
| 1 | 24071780 | 3-Sep-24 | 1611 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 2 | 24071775 | 6-Sep-24 | | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 3 | 24071776 | 6-Sep-24 | | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 4 | 24071779 | 6-Sep-24 | | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 5 | 24071736 | 6-Sep-24 | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Field Blank |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |

| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--|--------------------------------|--|--------------------------|----------------|-----------------------------|--|
| JRA - 13-Sep-24/Am | | Cindy Kong SUGAR SALWAN | | 2024/09/17 2024/09/17 | 10:50 11:00 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/10/24
Report #: R8374869
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4V9676

Received: 2024/10/10, 11:21

Sample Matrix: Filter
Samples Received: 23

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 6 | 2024/10/17 | 2024/10/23 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 6 | 2024/10/21 | 2024/10/22 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 21 | N/A | 2024/10/16 | | |
| Particulates on Filter (Method IO-3.1) | 23 | 2024/10/11 | 2024/10/16 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 21 | N/A | 2024/10/10 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/10/24
Report #: R8374869
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4V9676

Received: 2024/10/10, 11:21

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4V9676
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | AFNK65 | AFNK66 | AFNK67 | AFNK68 | AFNK69 | AFNK70 | AFNK71 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/09/09 | 2024/09/09 | 2024/09/09 | 2024/09/12 | 2024/09/18 | 2024/09/12 | 2024/09/15 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071781 | 24071782 | 24071783 | 24071787 | 24071735 | 24071789 | 24071784 | RDL | QC Batch |
| Particulate | ug/m3 | 69 | 59 | 24 | 64 | 22 | 19 | 57 | 3 | 9695880 |
| Particulate Weight on Filter | ug | 112000 | 95500 | 38900 | 110000 | 36400 | 31300 (1) | 92300 | 5000 | 9703889 |
| Volume | m3 | 1618 | 1610 | 1620 | 1724 | 1625 | 1632 | 1612 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable (1) Filter torn. | | | | | | | | | | |

| Bureau Veritas ID | | AFNK72 | AFNK73 | AFNK74 | AFNK75 | AFNK76 | AFNK77 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/09/15 | 2024/09/15 | 2024/09/18 | 2024/09/18 | 2024/09/21 | 2024/09/21 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071785 | 24071786 | 24071730 | 24071731 | 24071732 | 24071733 | RDL | QC Batch |
| Particulate | ug/m3 | 21 | 29 | 103 | 303 | 49 | 36 | 3 | 9695880 |
| Particulate Weight on Filter | ug | 34600 | 47700 | 167000 | 491000 | 77600 | 59000 | 5000 | 9703889 |
| Volume | m3 | 1629 | 1657 | 1614 | 1622 | 1599 | 1633 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |

| Bureau Veritas ID | | AFNK78 | | | AFNK79 | AFNK80 | AFNK81 | AFNK82 | AFNK83 | | |
|--|-------|----------|------|----------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | | | | 2024/09/24 | 2024/09/24 | 2024/09/24 | 2024/09/27 | 2024/09/27 | | |
| COC Number | | N/A | | | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071750 | RDL | QC Batch | 24071739 | 24071740 | 24071742 | 24071737 | 24071738 | RDL | QC Batch |
| Particulate | ug/m3 | | | | 11 | 9 | 32 | 48 | 30 | 3 | 9695880 |
| Particulate Weight on Filter | ug | <5000 | 5000 | 9703889 | 18400 | 14300 (1) | 51800 | 77800 | 47500 | 5000 | 9703889 |
| Volume | m3 | | | | 1629 | 1627 | 1632 | 1614 | 1610 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable (1) Filter torn. | | | | | | | | | | | |



Bureau Veritas Job #: C4V9676
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | AFNK84 | AFNK85 | AFNK86 | | | AFNK87 | | |
|--|-------|------------|------------|------------|------|----------|----------|------|----------|
| Sampling Date | | 2024/09/27 | 2024/09/30 | 2024/09/30 | | | | | |
| COC Number | | N/A | N/A | N/A | | | N/A | | |
| | UNITS | 24071741 | 24071757 | 24071759 | RDL | QC Batch | 24071749 | RDL | QC Batch |
| | | | | | | | | | |
| Particulate | ug/m3 | 29 | 18 | 16 | 3 | 9695880 | | | |
| Particulate Weight on Filter | ug | 46500 | 28800 | 26600 | 5000 | 9703889 | <5000 | 5000 | 9703889 |
| Volume | m3 | 1611 | 1570 | 1620 | N/A | ONSITE | | | |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |



Bureau Veritas Job #: C4V9676
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | AFNK66 | AFNK74 | AFNK75 | AFNK76 | AFNK82 | AFNK83 | | |
|--|-------|------------|------------|------------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/09/09 | 2024/09/18 | 2024/09/18 | 2024/09/21 | 2024/09/27 | 2024/09/27 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071782 | 24071730 | 24071731 | 24071732 | 24071737 | 24071738 | RDL | QC Batch |
| Metals | | | | | | | | | |
| Arsenic (As) | ug | 6.8 | <6.0 | <6.0 | <6.0 | <6.0 | <6.0 | 6.0 | 9713131 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9713131 |
| Chromium (Cr) | ug | <5.0 | 8.3 | 8.8 | <5.0 | <5.0 | <5.0 | 5.0 | 9713131 |
| Cobalt (Co) | ug | <2.0 | <2.0 | 2.2 | <2.0 | <2.0 | <2.0 | 2.0 | 9713131 |
| Copper (Cu) | ug | 43.2 | 75.3 | 99.8 | 156 | 55.9 | 43.9 | 5.0 | 9713131 |
| Iron (Fe) | ug | 1380 | 3050 | 5150 | 792 | 904 | 287 | 50 | 9713131 |
| Lead (Pb) | ug | 10.1 | 22.9 | 9.7 | 4.1 | 4.2 | <3.0 | 3.0 | 9713131 |
| Manganese (Mn) | ug | 60.4 | 79.2 | 198 | 34.2 | 30.7 | 15.9 | 1.0 | 9713131 |
| Nickel (Ni) | ug | <3.0 | 5.0 | 8.1 | <3.0 | <3.0 | <3.0 | 3.0 | 9713131 |
| Selenium (Se) | ug | <10 | <10 | <10 | <10 | <10 | <10 | 10 | 9713131 |
| Vanadium (V) | ug | <5.0 | <5.0 | 12.6 | <5.0 | <5.0 | <5.0 | 5.0 | 9713131 |
| Zinc (Zn) | ug | 57.9 | 171 | 62.9 | 28.9 | 39.0 | 21.9 | 5.0 | 9713131 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | | | | | |



Bureau Veritas Job #: C4V9676
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | AFNK66 | | | AFNK74 | | | AFNK75 | | |
|----------------------------------|-------|------------|--------|----------|------------|--------|----------|------------|--------|----------|
| Sampling Date | | 2024/09/09 | | | 2024/09/18 | | | 2024/09/18 | | |
| COC Number | | N/A | | | N/A | | | N/A | | |
| | UNITS | 24071782 | RDL | QC Batch | 24071730 | RDL | QC Batch | 24071731 | RDL | QC Batch |
| Metals | | | | | | | | | | |
| Total Arsenic (As) | ug/m3 | 0.0042 | 0.0037 | 9708103 | <0.0037 | 0.0037 | 9708103 | <0.0037 | 0.0037 | 9708103 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | 9708103 | <0.0012 | 0.0012 | 9708103 | <0.0012 | 0.0012 | 9708103 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | 9708103 | 0.0051 | 0.0031 | 9708103 | 0.0054 | 0.0031 | 9708103 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | 9708103 | <0.0012 | 0.0012 | 9708103 | 0.0013 | 0.0012 | 9708103 |
| Total Copper (Cu) | ug/m3 | 0.0269 | 0.0031 | 9708103 | 0.0466 | 0.0031 | 9708103 | 0.0615 | 0.0031 | 9708103 |
| Total Iron (Fe) | ug/m3 | 0.854 | 0.031 | 9708103 | 1.89 | 0.031 | 9708103 | 3.17 | 0.031 | 9708103 |
| Total Lead (Pb) | ug/m3 | 0.0063 | 0.0019 | 9708103 | 0.0142 | 0.0019 | 9708103 | 0.0060 | 0.0019 | 9708103 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | 9708103 | <0.017 | 0.017 | 9708103 | <0.017 | 0.017 | 9708103 |
| Total Nickel (Ni) | ug/m3 | <0.0019 | 0.0019 | 9708103 | 0.0031 | 0.0019 | 9708103 | 0.0050 | 0.0019 | 9708103 |
| Total Selenium (Se) | ug/m3 | <0.0062 | 0.0062 | 9708103 | <0.0062 | 0.0062 | 9708103 | <0.0062 | 0.0062 | 9708103 |
| Total Sulphur (S) | ug/m3 | 0.616 | 0.016 | 9708103 | | | | 0.788 | 0.015 | 9708103 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | 9708103 | <0.0031 | 0.0031 | 9708103 | 0.0077 | 0.0031 | 9708103 |
| Total Zinc (Zn) | ug/m3 | 0.0360 | 0.0031 | 9708103 | 0.106 | 0.0031 | 9708103 | 0.0388 | 0.0031 | 9708103 |
| RDL = Reportable Detection Limit | | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | | |

| Bureau Veritas ID | | AFNK76 | | AFNK82 | | AFNK83 | | |
|----------------------------------|-------|------------|--------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/09/21 | | 2024/09/27 | | 2024/09/27 | | |
| COC Number | | N/A | | N/A | | N/A | | |
| | UNITS | 24071732 | RDL | 24071737 | RDL | 24071738 | RDL | QC Batch |
| Metals | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0038 | 0.0038 | <0.0037 | 0.0037 | <0.0037 | 0.0037 | 9708103 |
| Total Cadmium (Cd) | ug/m3 | <0.0013 | 0.0013 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9708103 |
| Total Chromium (Cr) | ug/m3 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | 9708103 |
| Total Cobalt (Co) | ug/m3 | <0.0013 | 0.0013 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9708103 |
| Total Copper (Cu) | ug/m3 | 0.0977 | 0.0031 | 0.0346 | 0.0031 | 0.0273 | 0.0031 | 9708103 |
| Total Iron (Fe) | ug/m3 | 0.495 | 0.031 | 0.560 | 0.031 | 0.178 | 0.031 | 9708103 |
| Total Lead (Pb) | ug/m3 | 0.0026 | 0.0019 | 0.0026 | 0.0019 | <0.0019 | 0.0019 | 9708103 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | <0.017 | 0.017 | <0.017 | 0.017 | 9708103 |
| Total Nickel (Ni) | ug/m3 | <0.0019 | 0.0019 | <0.0019 | 0.0019 | <0.0019 | 0.0019 | 9708103 |
| Total Selenium (Se) | ug/m3 | <0.0063 | 0.0063 | <0.0062 | 0.0062 | <0.0062 | 0.0062 | 9708103 |
| Total Sulphur (S) | ug/m3 | 0.479 | 0.016 | 0.488 | 0.015 | 0.411 | 0.016 | 9708103 |
| Total Vanadium (V) | ug/m3 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | <0.0031 | 0.0031 | 9708103 |
| Total Zinc (Zn) | ug/m3 | 0.0181 | 0.0031 | 0.0241 | 0.0031 | 0.0136 | 0.0031 | 9708103 |
| RDL = Reportable Detection Limit | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | |



Bureau Veritas Job #: C4V9676
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4V9676
Report Date: 2024/10/24

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9713131 | Arsenic (As) | 2024/10/22 | 101 (1) | 75 - 125 | 105 | 85 - 115 | <6.0 | ug | 2.7 (3) | 20 |
| 9713131 | Cadmium (Cd) | 2024/10/22 | 100 (1) | 75 - 125 | 105 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9713131 | Chromium (Cr) | 2024/10/22 | 99 (1) | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | 11 (3) | 20 |
| 9713131 | Cobalt (Co) | 2024/10/22 | 95 (1) | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9713131 | Copper (Cu) | 2024/10/22 | 99 (1) | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | 10 (3) | 20 |
| 9713131 | Iron (Fe) | 2024/10/22 | 107 (1) | 75 - 125 | 102 | 85 - 115 | <50 | ug | 12 (3) | 20 |
| 9713131 | Lead (Pb) | 2024/10/22 | 99 (1) | 75 - 125 | 103 | 85 - 115 | <3.0 | ug | 13 (3) | 20 |
| 9713131 | Manganese (Mn) | 2024/10/22 | 100 (1) | 75 - 125 | 105 | 85 - 115 | <1.0 | ug | 12 (3) | 20 |
| 9713131 | Nickel (Ni) | 2024/10/22 | 97 (1) | 75 - 125 | 104 | 85 - 115 | <3.0 | ug | 10 (3) | 20 |
| 9713131 | Selenium (Se) | 2024/10/22 | 101 (1) | 75 - 125 | 101 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9713131 | Vanadium (V) | 2024/10/22 | 95 (1) | 75 - 125 | 101 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9713131 | Zinc (Zn) | 2024/10/22 | 100 (1) | 75 - 125 | 103 | 85 - 115 | <5.0 | ug | 10 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [AFNK74-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [AFNK74-01]



Bureau Veritas Job #: C4V9676
Report Date: 2024/10/24

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in black ink that reads "Louise A. Harding".

Louise Harding, Scientific Specialist


Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| | N0M 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | JRA | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axt@rwdi.com | | | |

| REGULATORY CRITERIA | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | |
|---|--|--|----------------------|------------------------------|--|--|--|--|--|--|--|---------------------------------|--|--|
| <p><i>Note: for regulated drinking water samples - please use the Drinking Water Chain of Custody Form</i></p> <div> <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other </div> <div> <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <u>site specific</u> </div> <div> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify </div> <div> <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 3 Region: _____ </div> <div> Report Criteria on C of A ? <input type="checkbox"/> n </div> | | Drinking Water ? (Y / N) | Filtered ? (Y / N) | contact RWDI prior to metals | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days</p> <p>DATE Required: _____</p> <p>TIME Required: _____</p> | |


SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| ON THE DELIVERY TO MAXXAM | | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|---------------------------|-----------------------|--------------|---------------|-----------------------------|-------|--------|-----|-----------------|--|--|--|--|--|------------|-------------------------|
| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regul | Metals | TSP | Metals analysis | | | | | | | |
| 1 | 24071781 | 9-Sep-24 | 1618 | TSP | N | N | X | X | | | | | | | 1 |
| 2 | 24071782 | 9-Sep-24 | 1610 | TSP | N | N | X | X | | | | | | | 1 |
| 3 | 24071783 | 9-Sep-24 | 1620 | TSP | N | N | X | X | | | | | | | 1 |
| 4 | 24071787 | 12-Sep-24 | 1724 | TSP | N | N | X | X | | | | | | | 1 |
| 5 | 24071735 | 18-Sep-24 | 1625 | TSP | N | N | X | X | | | | | | | 1 |
| 6 | 24071789 | 12-Sep-24 | 1632 | TSP | N | N | X | X | | | | | | | 1 |
| 7 | 24071784 | 15-Sep-24 | 1612 | TSP | N | N | X | X | | | | | | | 1 |
| 8 | 24071785 | 15-Sep-24 | 1629 | TSP | N | N | X | X | | | | | | | 1 |
| 9 | 24071786 | 15-Sep-24 | 1657 | TSP | N | N | X | X | | | | | | | 1 |
| 10 | 24071730 | 18-Sep-24 | 1614 | TSP | N | N | X | X | | | | | | | 1 |
| 11 | 24071731 | 18-Sep-24 | 1622 | TSP | N | N | X | X | | | | | | | 1 |



NONT-2024-10-280

*****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point*****

| | | | | | |
|------------------------------------|---|------------|-------|-----------------------------|--|
| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
| JRA - 9-Oct-24 |  | 2024/10/09 | 11:21 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

C4V9676

2024/10/10 11:21

6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

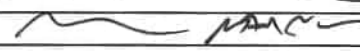
Page 2 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (If differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---------------------------------|--|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A? <input type="checkbox"/> n | <table border="1"> <thead> <tr> <th>Regulated Drinking Water? (Y/N)</th> <th>Metals Field Filtered? (Y/N)</th> <th>TSP</th> <th>Metals (**Contact RWDI prior to metals analysis**)</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>N</td><td>N</td><td>X</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> | Regulated Drinking Water? (Y/N) | Metals Field Filtered? (Y/N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | N | N | X | X | | | | | | | | | | | | | | | | | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #)</p> <p><input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days</p> <p>DATE Required: _____</p> <p>TIME Required: _____</p> <p>Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.</p> |
| Regulated Drinking Water? (Y/N) | Metals Field Filtered? (Y/N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water? (Y/N) | Metals Field Filtered? (Y/N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|---------------------------------|------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24071732 | 21-Sep-24 | 1599 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 2 | 24071733 | 21-Sep-24 | 1633 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 3 | 24071750 | - | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Blank |
| 4 | 24071739 | 24-Sep-24 | 1629 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 5 | 24071740 | 24-Sep-24 | 1627 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 6 | 24071742 | 24-Sep-24 | 1632 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 7 | 24071737 | 27-Sep-24 | 1614 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 8 | 24071738 | 27-Sep-24 | 1610 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 9 | 24071741 | 27-Sep-24 | 1611 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 10 | 24071757 | 30-Sep-24 | 1570 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |
| 11 | 24071759 | 30-Sep-24 | 1620 | TSP | N | N | X | X | | | | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|---|----------|-------|-----------------------------|--|
| JRA - 9-Oct-24 |  | 10/10/24 | 11:21 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

C4V9676

2024/10/10 11:21



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 3 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|--|---|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm <input type="checkbox"/> Table 3 Region: _____ <input type="checkbox"/> Reg. 558 | <input checked="" type="checkbox"/> Other site specific specify _____ Report Criteria on C of A ? <input type="checkbox"/> n | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|-------------------------|
| 1 | 24071749 | - | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Blank |
| 2 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |

*****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point*****

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|----------|-------|-----------------------------|--|
| JRA - 9-Oct-24 | | 10/10/24 | 11:21 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/12/17
Report #: R8449223
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4AL882

Received: 2024/11/26, 10:20

Sample Matrix: Filter
Samples Received: 25

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 6 | 2024/12/06 | 2024/12/16 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 6 | 2024/12/11 | 2024/12/13 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 24 | N/A | 2024/12/05 | | |
| Particulates on Filter (Method IO-3.1) | 25 | 2024/12/02 | 2024/12/05 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 21 | N/A | 2024/11/27 | | |
| Air Volume from HiVol Sampling | 3 | N/A | 2024/11/29 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2024/12/17
Report #: R8449223
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4AL882

Received: 2024/11/26, 10:20

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4AL882
Report Date: 2024/12/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | AJYU47 | AJYU48 | AJYU49 | AJYU51 | AJYU52 | AJYU53 | AJYU54 | | |
| Sampling Date | | 2024/10/03 | 2024/10/03 | 2024/10/03 | 2024/10/09 | 2024/10/09 | 2024/10/09 | 2024/10/15 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071746 | 24071747 | 24071748 | 24071743 | 24071744 | 24071745 | 24071754 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|--------|--------|--------|-------|-------|------|---------|
| Particulate | ug/m3 | 50 | 39 | 73 | 99 | 75 | 21 | 18 | 3 | 9791934 |
| Particulate Weight on Filter | ug | 82700 | 67200 | 119000 | 164000 | 125000 | 34800 | 28400 | 5000 | 9807900 |
| Volume | m3 | 1640 | 1719 | 1614 | 1665 | 1672 | 1658 | 1593 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | AJYU55 | AJYU56 | AJYU57 | AJYU58 | AJYU59 | AJYU60 | AJYU61 | | |
| Sampling Date | | 2024/10/15 | 2024/10/15 | 2024/10/21 | 2024/10/21 | 2024/10/21 | 2024/10/27 | 2024/10/27 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071755 | 24071756 | 24071751 | 24071752 | 24071753 | 24090439 | 24090440 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|--------|-------|-------|------|---------|
| Particulate | ug/m3 | 13 | 11 | 50 | 52 | 103 | 45 | 30 | 3 | 9791934 |
| Particulate Weight on Filter | ug | 21000 | 16900 | 81000 | 83100 | 162000 | 71300 | 47400 | 5000 | 9807900 |
| Volume | m3 | 1672 | 1601 | 1617 | 1605 | 1573 | 1584 | 1572 | N/A | ONSITE |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable

| | | | | | | | | | | |
|--------------------------|--------------|-----------------|-----------------|-----------------|-----------------|------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | AJYU62 | AJYU63 | AJYU64 | AJYU65 | | | AJYU66 | | |
| Sampling Date | | 2024/10/27 | 2024/11/02 | 2024/11/02 | 2024/11/02 | | | 2024/11/08 | | |
| COC Number | | N/A | N/A | N/A | N/A | | | N/A | | |
| | UNITS | 24090441 | 24090442 | 24090443 | 24090444 | RDL | QC Batch | 24090533 | RDL | QC Batch |

| | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|------|---------|-------|------|---------|
| Particulate | ug/m3 | 30 | 34 | 29 | 44 | 3 | 9791934 | | | |
| Particulate Weight on Filter | ug | 48200 | 55300 | 45700 | 71400 | 5000 | 9807900 | <5000 | 5000 | 9807900 |
| Volume | m3 | 1601 | 1606 | 1574 | 1629 | N/A | ONSITE | | | |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



Bureau Veritas Job #: C4AL882
Report Date: 2024/12/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| | | | | | | | | | | |
|--|--------------|-----------------|-----------------|-----------------|-----------------|---------------------|---------------------|---------------------|------------|-----------------|
| Bureau Veritas ID | | AJYU68 | AJYU69 | AJYU70 | | AKHR84 | AKHR85 | AKHR86 | | |
| Sampling Date | | 2024/11/08 | 2024/11/08 | 2024/11/08 | | 2024/11/14 16:25 | 2024/11/14 16:21 | 2024/11/14 16:12 | | |
| COC Number | | N/A | N/A | N/A | | N/A | N/A | N/A | | |
| | UNITS | 24090445 | 24090446 | 24090447 | QC Batch | 24090448 | 24090526 | 24090525 | RDL | QC Batch |
| | | | | | | | | | | |
| Particulate | ug/m3 | 100 | 134 | 24 | 9791934 | 16 | 26 | 26 | 3 | 9797651 |
| Particulate Weight on Filter | ug | 160000 | 215000 | 39700 | 9807900 | 25700 | 41500 | 41300 | 5000 | 9807900 |
| Volume | m3 | 1609 | 1601 | 1643 | ONSITE | 1625 | 1621 | 1612 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |



Bureau Veritas Job #: C4AL882
Report Date: 2024/12/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | AJYU51 | AJYU58 | AJYU59 | AJYU62 | AJYU68 | AJYU69 | | |
|----------------------------------|-------|------------|------------|------------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/10/09 | 2024/10/21 | 2024/10/21 | 2024/10/27 | 2024/11/08 | 2024/11/08 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24071743 | 24071752 | 24071753 | 24090441 | 24090445 | 24090446 | RDL | QC Batch |
| Metals | | | | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | <6.0 | <6.0 | <6.0 | 6.0 | 9819346 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9819346 |
| Chromium (Cr) | ug | 9.2 | <5.0 | 6.7 | <5.0 | <5.0 | 8.1 | 5.0 | 9819346 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 9819346 |
| Copper (Cu) | ug | 53.1 | 197 | 43.6 | 182 | 100 | 37.7 | 5.0 | 9819346 |
| Iron (Fe) | ug | 3110 | 1170 | 2640 | 654 | 2670 | 4650 | 50 | 9819346 |
| Lead (Pb) | ug | 15.1 | 8.9 | 14.5 | 4.6 | 5.6 | 21.7 | 3.0 | 9819346 |
| Manganese (Mn) | ug | 84.6 | 40.3 | 79.9 | 20.1 | 73.9 | 109 | 1.0 | 9819346 |
| Nickel (Ni) | ug | 4.9 | <3.0 | 4.5 | <3.0 | 3.8 | 7.1 | 3.0 | 9819346 |
| Selenium (Se) | ug | <10 | <10 | <10 | <10 | <10 | <10 | 10 | 9819346 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 6.0 | 5.0 | 9819346 |
| Zinc (Zn) | ug | 114 | 76.9 | 108 | 47.8 | 39.4 | 183 | 5.0 | 9819346 |
| RDL = Reportable Detection Limit | | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | | |



Bureau Veritas Job #: C4AL882
Report Date: 2024/12/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| | | | | | | | | | | | |
|--------------------------|--------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | AJYU51 | | AJYU58 | | AJYU59 | | AJYU62 | AJYU68 | | |
| Sampling Date | | 2024/10/09 | | 2024/10/21 | | 2024/10/21 | | 2024/10/27 | 2024/11/08 | | |
| COC Number | | N/A | | N/A | | N/A | | N/A | N/A | | |
| | UNITS | 24071743 | RDL | 24071752 | RDL | 24071753 | RDL | 24090441 | 24090445 | RDL | QC Batch |

Metals

| | | | | | | | | | | | |
|---------------------|-------|---------|--------|---------|--------|---------|--------|---------|---------|--------|---------|
| Total Arsenic (As) | ug/m3 | <0.0036 | 0.0036 | <0.0037 | 0.0037 | <0.0038 | 0.0038 | <0.0037 | <0.0037 | 0.0037 | 9812166 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | <0.0012 | <0.0012 | 0.0012 | 9812166 |
| Total Chromium (Cr) | ug/m3 | 0.0055 | 0.0030 | <0.0031 | 0.0031 | 0.0042 | 0.0032 | <0.0031 | <0.0031 | 0.0031 | 9812166 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | <0.0013 | 0.0013 | <0.0012 | <0.0012 | 0.0012 | 9812166 |
| Total Copper (Cu) | ug/m3 | 0.0319 | 0.0030 | 0.123 | 0.0031 | 0.0277 | 0.0032 | 0.113 | 0.0623 | 0.0031 | 9812166 |
| Total Iron (Fe) | ug/m3 | 1.87 | 0.030 | 0.726 | 0.031 | 1.68 | 0.032 | 0.408 | 1.66 | 0.031 | 9812166 |
| Total Lead (Pb) | ug/m3 | 0.0091 | 0.0018 | 0.0055 | 0.0019 | 0.0092 | 0.0019 | 0.0029 | 0.0035 | 0.0019 | 9812166 |
| Total Lithium (Li) | ug/m3 | <0.016 | 0.016 | <0.017 | 0.017 | <0.017 | 0.017 | <0.017 | <0.017 | 0.017 | 9812166 |
| Total Nickel (Ni) | ug/m3 | 0.0029 | 0.0018 | <0.0019 | 0.0019 | 0.0028 | 0.0019 | <0.0019 | 0.0023 | 0.0019 | 9812166 |
| Total Selenium (Se) | ug/m3 | <0.0060 | 0.0060 | <0.0062 | 0.0062 | <0.0064 | 0.0064 | <0.0062 | <0.0062 | 0.0062 | 9812166 |
| Total Sulphur (S) | ug/m3 | 0.723 | 0.015 | 0.569 | 0.016 | 0.923 | 0.016 | 0.404 | 0.583 | 0.016 | 9812166 |
| Total Vanadium (V) | ug/m3 | <0.0030 | 0.0030 | <0.0031 | 0.0031 | <0.0032 | 0.0032 | <0.0031 | <0.0031 | 0.0031 | 9812166 |
| Total Zinc (Zn) | ug/m3 | 0.0685 | 0.0030 | 0.0479 | 0.0031 | 0.0689 | 0.0032 | 0.0299 | 0.0245 | 0.0031 | 9812166 |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

| | | | | |
|--------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | AJYU69 | | |
| Sampling Date | | 2024/11/08 | | |
| COC Number | | N/A | | |
| | UNITS | 24090446 | RDL | QC Batch |

Metals

| | | | | |
|---------------------|-------|---------|--------|---------|
| Total Arsenic (As) | ug/m3 | <0.0037 | 0.0037 | 9812166 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | 9812166 |
| Total Chromium (Cr) | ug/m3 | 0.0051 | 0.0031 | 9812166 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | 9812166 |
| Total Copper (Cu) | ug/m3 | 0.0235 | 0.0031 | 9812166 |
| Total Iron (Fe) | ug/m3 | 2.91 | 0.031 | 9812166 |
| Total Lead (Pb) | ug/m3 | 0.0136 | 0.0019 | 9812166 |
| Total Lithium (Li) | ug/m3 | <0.017 | 0.017 | 9812166 |
| Total Nickel (Ni) | ug/m3 | 0.0044 | 0.0019 | 9812166 |
| Total Selenium (Se) | ug/m3 | <0.0062 | 0.0062 | 9812166 |
| Total Sulphur (S) | ug/m3 | 1.01 | 0.016 | 9812166 |
| Total Vanadium (V) | ug/m3 | 0.0037 | 0.0031 | 9812166 |
| Total Zinc (Zn) | ug/m3 | 0.114 | 0.0031 | 9812166 |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4AL882
Report Date: 2024/12/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4AL882
Report Date: 2024/12/17

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9819346 | Arsenic (As) | 2024/12/13 | 103 (1) | 75 - 125 | 102 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9819346 | Cadmium (Cd) | 2024/12/13 | 104 (1) | 75 - 125 | 103 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9819346 | Chromium (Cr) | 2024/12/13 | 104 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9819346 | Cobalt (Co) | 2024/12/13 | 102 (1) | 75 - 125 | 103 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9819346 | Copper (Cu) | 2024/12/13 | 100 (1) | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 6.4 (3) | 20 |
| 9819346 | Iron (Fe) | 2024/12/13 | 101 (1) | 75 - 125 | 101 | 85 - 115 | <50 | ug | 4.5 (3) | 20 |
| 9819346 | Lead (Pb) | 2024/12/13 | 103 (1) | 75 - 125 | 103 | 85 - 115 | <3.0 | ug | 7.9 (3) | 20 |
| 9819346 | Manganese (Mn) | 2024/12/13 | 99 (1) | 75 - 125 | 101 | 85 - 115 | <1.0 | ug | 4.1 (3) | 20 |
| 9819346 | Nickel (Ni) | 2024/12/13 | 102 (1) | 75 - 125 | 103 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9819346 | Selenium (Se) | 2024/12/13 | 106 (1) | 75 - 125 | 105 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9819346 | Vanadium (V) | 2024/12/13 | 99 (1) | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9819346 | Zinc (Zn) | 2024/12/13 | 105 (1) | 75 - 125 | 106 | 85 - 115 | <5.0 | ug | 8.2 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [AJYU58-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [AJYU58-01]



Bureau Veritas Job #: C4AL882
Report Date: 2024/12/17

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Louise Harding, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C4AL882

2024/11/26 10:20

6740 Campobello Road, Mississauga, ON L5N 2L8

Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

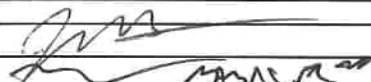
Page 1 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|--|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> PWQO <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm Region _____ <input checked="" type="checkbox"/> Other site specific specify _____ Report Criteria on C of A? <input type="checkbox"/> n | Regulated Drinking Water? (Y/N) Metals Field Filtered? (Y/N) TSP Metals (**Contact RWDI prior to metals analysis**) SPB NONT-2024-11-5076 | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water? (Y/N) | Metals Field Filtered? (Y/N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|---------------------------------|------------------------------|-----|--|------------|---|
| 1 | 24071746 | 3-Oct-24 | 1640 | TSP | N | N | X | X | 1 | |
| 2 | 24071747 | 3-Oct-24 | 1719 | TSP | N | N | X | X | 1 | |
| 3 | 24071748 | 3-Oct-24 | 1614 | TSP | N | N | X | X | 1 | |
| 4 | 24071743 | 9-Oct-24 | 1665 | TSP | N | N | X | X | 1 | |
| 5 | 24071744 | 9-Oct-24 | 1672 | TSP | N | N | X | X | 1 | |
| 6 | 24071745 | 9-Oct-24 | 1658 | TSP | N | N | X | X | 1 | |
| 7 | 24071754 | 15-Oct-24 | 1593 | TSP | N | N | X | X | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24071755 | 15-Oct-24 | 1672 | TSP | N | N | X | X | 1 | |
| 9 | 24071756 | 15-Oct-24 | 1601 | TSP | N | N | X | X | 1 | |
| 10 | 24071751 | 21-Oct-24 | 1617 | TSP | N | N | X | X | 1 | |
| 11 | 24071752 | 21-Oct-24 | 1605 | TSP | N | N | X | X | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|---|------------|-------|-----------------------------|--|
| JRA - 22-Nov-24 |  | 2024/11/26 | 10:20 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

C4AL882

2024/11/26 10:20

6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700 Fax: 905-817-5777 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

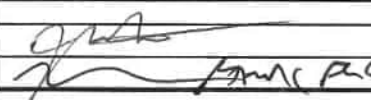
Page 2 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|---|---|---|
| <p>Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form</p> <p> <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary site specific <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 3 Region: _____ <input type="checkbox"/> Reg. 558 </p> <p>Report Criteria on C of A ? <input type="checkbox"/> n</p> | <p>Regulated Drinking Water ? (Y / N)</p> <p>Metals Field Filtered ? (Y / N)</p> <p>TSP</p> <p>Metals (**Contact RWDI prior to metals analysis**)</p> | <p>PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS</p> <p>Regular (Standard) TAT:</p> <p><input checked="" type="checkbox"/> 5 to 7 Working Days</p> <p>Rush TAT: Rush Confirmation # _____ (call Lab for #)</p> <p><input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days</p> <p>DATE Required: _____</p> <p>TIME Required: _____</p> <p>Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.</p> |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|------------|---|
| 1 | 24071753 | 21-Oct-24 | 1573 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 2 | 24090439 | 27-Oct-24 | 1584 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 3 | 24090440 | 27-Oct-24 | 1572 | TSP | N | N | X | X | | | | | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 4 | 24090441 | 27-Oct-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 5 | 24090442 | 2-Nov-24 | 1606 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 6 | 24090443 | 2-Nov-24 | 1574 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 7 | 24090444 | 2-Nov-24 | 1629 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 8 | 24090533 | 8-Nov-24 | - | TSP | N | N | X | X | | | | | | | | | | | 1 | Field Blank |
| 9 | 24090445 | 8-Nov-24 | 1609 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 10 | 24090446 | 8-Nov-24 | 1601 | TSP | N | N | X | X | | | | | | | | | | | 1 | |
| 11 | 24090447 | 8-Nov-24 | 1643 | TSP | N | N | X | X | | | | | | | | | | | 1 | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|---|------------|-------|-----------------------------|--|
| JRA - 22-Nov-24 |  | 2024/11/26 | 12:00 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

C4AL882

2024/11/26 10:20

6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 3 of 3

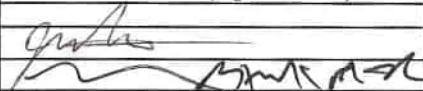
| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|---|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input type="checkbox"/> PWQO Table 1 Sanitary <input type="checkbox"/> Table 2 Storm <input type="checkbox"/> Table 3 Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | <input checked="" type="checkbox"/> Other site specific specify | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|---|--|--|--|--|--|--|--|--|--|--|--|------------|-------------------------|
| 1 | 24090448 | 14-Nov-24 | 1625 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 2 | 24090526 | 14-Nov-24 | 1621 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 3 | 24090525 | 14-Nov-24 | 1612 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |

*****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point*****

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|---|------------|-------|-----------------------------|--|
| JRA - 22-Nov-24 |  | 2024/11/26 | 10:20 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

C4AQ110

2024/11/29 10:58

6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 3 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|--|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | |
| <input type="checkbox"/> MISA <input type="checkbox"/> Reg. 153 <input type="checkbox"/> Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> site specific <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm <input type="checkbox"/> specify Region: _____ Report Criteria on C of A ? <input type="checkbox"/> n | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| | Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|----|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|------------|-----------------------------------|
| 1 | 24090448 | 14-Nov-24 | 1625 | TSP | N | N | X | X | | | | | | | | | | | | 1 | Please add samples to job C4AL882 |
| 2 | 24090526 | 14-Nov-24 | 1621 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 3 | 24090525 | 14-Nov-24 | 1612 | TSP | N | N | X | X | | | | | | | | | | | | 1 | |
| 4 | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |



NONT-2024-11-6184

*****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point*****

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|------------|-------|-----------------------------|--|
| JRA - 27-Nov-24 | | 2024/11/29 | 1558 | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2025/01/15
Report #: R8470705
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4BP387

Received: 2024/12/20, 10:45

Sample Matrix: Filter
Samples Received: 6

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2025/01/06 | 2025/01/07 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2025/01/07 | 2025/01/07 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 6 | N/A | 2025/01/03 | | |
| Particulates on Filter (Method IO-3.1) | 6 | 2025/01/03 | 2025/01/03 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 6 | N/A | 2024/12/20 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2025/01/15
Report #: R8470705
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4BP387

Received: 2024/12/20, 10:45

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/15

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | AMKO87 | AMKO88 | AMKO89 | AMKO90 | AMKO91 | AMKO92 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/11/26 | 2024/11/26 | 2024/11/26 | 2024/11/20 | 2024/11/20 | 2024/11/20 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24090527 | 24090528 | 24090529 | 24090530 | 24090531 | 24090532 | RDL | QC Batch |
| Particulate | ug/m3 | 14 | 14 | 9 | 11 | 24 | 10 | 3 | 9842051 |
| Particulate Weight on Filter | ug | 22500 | 22600 | 15100 | 17900 | 39600 | 16400 | 5000 | 9854116 |
| Volume | m3 | 1646 | 1644 | 1656 | 1584 | 1656 | 1611 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/15

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | AMKO91 | | |
| Sampling Date | | 2024/11/20 | | |
| COC Number | | N/A | | |
| | UNITS | 24090531 | RDL | QC Batch |
| Metals | | | | |
| Arsenic (As) | ug | <6.0 | 6.0 | 9855214 |
| Cadmium (Cd) | ug | <2.0 | 2.0 | 9855214 |
| Chromium (Cr) | ug | <5.0 | 5.0 | 9855214 |
| Cobalt (Co) | ug | <2.0 | 2.0 | 9855214 |
| Copper (Cu) | ug | 32.2 | 5.0 | 9855214 |
| Iron (Fe) | ug | 499 | 50 | 9855214 |
| Lead (Pb) | ug | 3.2 | 3.0 | 9855214 |
| Manganese (Mn) | ug | 14.4 | 1.0 | 9855214 |
| Nickel (Ni) | ug | <3.0 | 3.0 | 9855214 |
| Selenium (Se) | ug | <10 | 10 | 9855214 |
| Vanadium (V) | ug | <5.0 | 5.0 | 9855214 |
| Zinc (Zn) | ug | 31.6 | 5.0 | 9855214 |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/15

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | AMKO91 | | |
| Sampling Date | | 2024/11/20 | | |
| COC Number | | N/A | | |
| | UNITS | 24090531 | RDL | QC Batch |
| Metals | | | | |
| Total Arsenic (As) | ug/m3 | <0.0036 | 0.0036 | 9854806 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | 9854806 |
| Total Chromium (Cr) | ug/m3 | <0.0030 | 0.0030 | 9854806 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | 9854806 |
| Total Copper (Cu) | ug/m3 | 0.0194 | 0.0030 | 9854806 |
| Total Iron (Fe) | ug/m3 | 0.301 | 0.030 | 9854806 |
| Total Lead (Pb) | ug/m3 | 0.0019 | 0.0018 | 9854806 |
| Total Lithium (Li) | ug/m3 | <0.016 | 0.016 | 9854806 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | 0.0018 | 9854806 |
| Total Selenium (Se) | ug/m3 | <0.0060 | 0.0060 | 9854806 |
| Total Vanadium (V) | ug/m3 | <0.0030 | 0.0030 | 9854806 |
| Total Zinc (Zn) | ug/m3 | 0.0191 | 0.0030 | 9854806 |
| RDL = Reportable Detection Limit | | | | |
| QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/15

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/15

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9855214 | Arsenic (As) | 2025/01/07 | 48 (1,2) | 75 - 125 | 97 | 85 - 115 | <6.0 | ug | 0.62 (3) | 20 |
| 9855214 | Cadmium (Cd) | 2025/01/07 | 49 (1,2) | 75 - 125 | 96 | 85 - 115 | <2.0 | ug | 0.10 (3) | 20 |
| 9855214 | Chromium (Cr) | 2025/01/07 | 47 (1,2) | 75 - 125 | 95 | 85 - 115 | <5.0 | ug | 1.8 (3) | 20 |
| 9855214 | Cobalt (Co) | 2025/01/07 | 47 (1,2) | 75 - 125 | 96 | 85 - 115 | <2.0 | ug | 0.10 (3) | 20 |
| 9855214 | Copper (Cu) | 2025/01/07 | 44 (1,2) | 75 - 125 | 96 | 85 - 115 | <5.0 | ug | 0.73 (3) | 20 |
| 9855214 | Iron (Fe) | 2025/01/07 | 39 (1,2) | 75 - 125 | 97 | 85 - 115 | <50 | ug | 0 (3) | 20 |
| 9855214 | Lead (Pb) | 2025/01/07 | 48 (1,2) | 75 - 125 | 96 | 85 - 115 | <3.0 | ug | 0.21 (3) | 20 |
| 9855214 | Manganese (Mn) | 2025/01/07 | 45 (1,2) | 75 - 125 | 98 | 85 - 115 | <1.0 | ug | 0 (3) | 20 |
| 9855214 | Nickel (Ni) | 2025/01/07 | 46 (1,2) | 75 - 125 | 95 | 85 - 115 | <3.0 | ug | 0.10 (3) | 20 |
| 9855214 | Selenium (Se) | 2025/01/07 | 47 (1,2) | 75 - 125 | 100 | 85 - 115 | <10 | ug | 1.9 (3) | 20 |
| 9855214 | Vanadium (V) | 2025/01/07 | 46 (1,2) | 75 - 125 | 96 | 85 - 115 | <5.0 | ug | 0.52 (3) | 20 |
| 9855214 | Zinc (Zn) | 2025/01/07 | 47 (1,2) | 75 - 125 | 98 | 85 - 115 | <5.0 | ug | 0.71 (3) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Matrix Spike Parent ID [AMKO93-01]

(3) Duplicate Parent ID



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/15

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE


The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in cursive script that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | JRA | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com | | | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | | | | | | | | | | | | |
|--|----------|---------------------------------------|------|--------------|---|--------------|--|--|--|--|--|--|--|--|--|-----------------------------|--|-------------------------|---|---|--|--|--|--|--|--|---|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS | | | | | | | | | | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary site specific <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 3 Region: _____ <p style="text-align: right;">Report Criteria on C of A ? <input type="checkbox"/> n</p> | | | | | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Regulated Drinking Water ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Metals Field Filtered ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">TSP</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Metals (**Contact RWDI prior to metals analysis**)</div> </div> | | | | | | | | | | | | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | | | | | | | | | | | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | | | | | | | | | | |
| | | | | |  NONT-2024-12-4659 | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS | | | | | | | | | | |
| 1 | 24090527 | 26-Nov-24 | 1646 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 2 | 24090528 | 26-Nov-24 | 1644 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 3 | 24090529 | 26-Nov-24 | 1656 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 4 | 24090530 | 20-Nov-24 | 1584 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 5 | 24090531 | 20-Nov-24 | 1656 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 6 | 24090532 | 20-Nov-24 | 1611 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 7 | 24090534 | 2-Dec-24 | 1670 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24090535 | 2-Dec-24 | 1610 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 9 | 24090536 | 2-Dec-24 | 1710 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 10 | 24090537 | 8-Dec-24 | 1659 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| 11 | 24090538 | 8-Dec-24 | 1683 | TSP | | | | | | | | | | | | | N | N | X | X | | | | | | | 1 | |
| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | | Time: | | | | | | | | | | Laboratory Use Only | | | | | | | | | | | | |
| JRA - 18-Dec-24 | | [Signature] | | mm/dd/yyyy | | hh:mm | | | | | | | | | | Temperature (°C) on Receipt | Condition of Sample on Receipt | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | r/h | <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | | | | | | | | | |

C4BP387

2024/12/20 10:45



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | CHAIN OF CUSTODY # : |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | |
|--|--------------|--------------------------------|-----------------------------|--------------------------------------|--|-------|--|---|--|--|--|--|--|--|--|--|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | | | | | | | | | # of Cont. COMMENTS / TAT COMMENTS | | |
| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | |
| 1 24090539 | 8-Dec-24 | 1672 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 2 24090546 | 8-Dec-24 | - | TSP | N | N | X | X | | | | | | | | | | 1 |
| 3 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 4 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 5 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 6 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 7 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 8 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 9 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 10 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 11 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | | Time: | | Laboratory Use Only | | | | | | | | | |
| JRA - 18-Dec-24 | | SEE PAGE 1 | | | | | | Temperature (°C) on Receipt Condition of Sample on Receipt <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | | | | | | | |

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2025/01/27
Report #: R8476427
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4BP387

Received: 2024/12/20, 10:45

Sample Matrix: Filter
Samples Received: 7

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 2 | 2025/01/06 | 2025/01/07 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2025/01/07 | 2025/01/07 | CAM SOP-00408 | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 1 | 2025/01/08 | 2025/01/13 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 6 | N/A | 2025/01/03 | | |
| Particulates on Filter (Method IO-3.1) | 7 | 2025/01/03 | 2025/01/03 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 6 | N/A | 2024/12/20 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2025/01/27
Report #: R8476427
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4BP387

Received: 2024/12/20, 10:45

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | AMKO93 | AMKO94 | AMKO95 | AMKO96 | AMKO97 | AMKO98 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/12/02 | 2024/12/02 | 2024/12/02 | 2024/12/08 | 2024/12/08 | 2024/12/08 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24090534 | 24090535 | 24090536 | 24090537 | 24090538 | 24090539 | RDL | QC Batch |
| Particulate | ug/m3 | 21 | 27 | 18 | 20 | 20 | 20 | 3 | 9842051 |
| Particulate Weight on Filter | ug | 35900 | 42700 | 30400 | 32700 | 33500 | 33200 | 5000 | 9854116 |
| Volume | m3 | 1670 | 1610 | 1710 | 1659 | 1683 | 1672 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | |

| Bureau Veritas ID | | AMKO99 | | |
|--|-------|------------|------|----------|
| Sampling Date | | 2024/12/08 | | |
| COC Number | | N/A | | |
| | UNITS | 24090546 | RDL | QC Batch |
| Particulate Weight on Filter | ug | <5000 | 5000 | 9854116 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | |



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | AMKO93 | | AMKO94 | | |
|----------------------------------|-------|------------|----------|------------|-----|----------|
| Sampling Date | | 2024/12/02 | | 2024/12/02 | | |
| COC Number | | N/A | | N/A | | |
| | UNITS | 24090534 | QC Batch | 24090535 | RDL | QC Batch |
| Metals | | | | | | |
| Arsenic (As) | ug | <6.0 | 9855788 | <6.0 | 6.0 | 9855214 |
| Cadmium (Cd) | ug | <2.0 | 9855788 | <2.0 | 2.0 | 9855214 |
| Chromium (Cr) | ug | <5.0 | 9855788 | <5.0 | 5.0 | 9855214 |
| Cobalt (Co) | ug | <2.0 | 9855788 | <2.0 | 2.0 | 9855214 |
| Copper (Cu) | ug | 17.8 | 9855788 | 15.3 | 5.0 | 9855214 |
| Iron (Fe) | ug | 617 | 9855788 | 324 | 50 | 9855214 |
| Lead (Pb) | ug | <3.0 | 9855788 | <3.0 | 3.0 | 9855214 |
| Manganese (Mn) | ug | 17.0 | 9855788 | 9.0 | 1.0 | 9855214 |
| Nickel (Ni) | ug | <3.0 | 9855788 | <3.0 | 3.0 | 9855214 |
| Selenium (Se) | ug | <10 | 9855788 | <10 | 10 | 9855214 |
| Vanadium (V) | ug | <5.0 | 9855788 | <5.0 | 5.0 | 9855214 |
| Zinc (Zn) | ug | 27.7 | 9855788 | 9.8 | 5.0 | 9855214 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| | | | | | | | |
|----------------------------------|--------------|-----------------|------------|-----------------|-----------------|------------|-----------------|
| Bureau Veritas ID | | AMKO93 | | | AMKO94 | | |
| Sampling Date | | 2024/12/02 | | | 2024/12/02 | | |
| COC Number | | N/A | | | N/A | | |
| | UNITS | 24090534 | RDL | QC Batch | 24090535 | RDL | QC Batch |
| Metals | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0036 | 0.0036 | 9854806 | <0.0037 | 0.0037 | 9854806 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | 9854806 | <0.0012 | 0.0012 | 9854806 |
| Total Chromium (Cr) | ug/m3 | <0.0030 | 0.0030 | 9854806 | <0.0031 | 0.0031 | 9854806 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | 9854806 | <0.0012 | 0.0012 | 9854806 |
| Total Copper (Cu) | ug/m3 | 0.0106 | 0.0030 | 9854806 | 0.0095 | 0.0031 | 9854806 |
| Total Iron (Fe) | ug/m3 | 0.370 | 0.030 | 9854806 | 0.201 | 0.031 | 9854806 |
| Total Lead (Pb) | ug/m3 | <0.0018 | 0.0018 | 9854806 | <0.0019 | 0.0019 | 9854806 |
| Total Lithium (Li) | ug/m3 | <0.016 | 0.016 | 9854806 | <0.017 | 0.017 | 9854806 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | 0.0018 | 9854806 | <0.0019 | 0.0019 | 9854806 |
| Total Selenium (Se) | ug/m3 | <0.0060 | 0.0060 | 9854806 | <0.0062 | 0.0062 | 9854806 |
| Total Sulphur (S) | ug/m3 | 0.305 | 0.015 | 9854806 | | | |
| Total Vanadium (V) | ug/m3 | <0.0030 | 0.0030 | 9854806 | <0.0031 | 0.0031 | 9854806 |
| Total Zinc (Zn) | ug/m3 | 0.0166 | 0.0030 | 9854806 | 0.0061 | 0.0031 | 9854806 |
| RDL = Reportable Detection Limit | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | |



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/27

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9855214 | Arsenic (As) | 2025/01/07 | 48 (1,2) | 75 - 125 | 97 | 85 - 115 | <6.0 | ug | 0.62 (3) | 20 |
| 9855214 | Cadmium (Cd) | 2025/01/07 | 49 (1,2) | 75 - 125 | 96 | 85 - 115 | <2.0 | ug | 0.10 (3) | 20 |
| 9855214 | Chromium (Cr) | 2025/01/07 | 47 (1,2) | 75 - 125 | 95 | 85 - 115 | <5.0 | ug | 1.8 (3) | 20 |
| 9855214 | Cobalt (Co) | 2025/01/07 | 47 (1,2) | 75 - 125 | 96 | 85 - 115 | <2.0 | ug | 0.10 (3) | 20 |
| 9855214 | Copper (Cu) | 2025/01/07 | 44 (1,2) | 75 - 125 | 96 | 85 - 115 | <5.0 | ug | 0.73 (3) | 20 |
| 9855214 | Iron (Fe) | 2025/01/07 | 39 (1,2) | 75 - 125 | 97 | 85 - 115 | <50 | ug | 0 (3) | 20 |
| 9855214 | Lead (Pb) | 2025/01/07 | 48 (1,2) | 75 - 125 | 96 | 85 - 115 | <3.0 | ug | 0.21 (3) | 20 |
| 9855214 | Manganese (Mn) | 2025/01/07 | 45 (1,2) | 75 - 125 | 98 | 85 - 115 | <1.0 | ug | 0 (3) | 20 |
| 9855214 | Nickel (Ni) | 2025/01/07 | 46 (1,2) | 75 - 125 | 95 | 85 - 115 | <3.0 | ug | 0.10 (3) | 20 |
| 9855214 | Selenium (Se) | 2025/01/07 | 47 (1,2) | 75 - 125 | 100 | 85 - 115 | <10 | ug | 1.9 (3) | 20 |
| 9855214 | Vanadium (V) | 2025/01/07 | 46 (1,2) | 75 - 125 | 96 | 85 - 115 | <5.0 | ug | 0.52 (3) | 20 |
| 9855214 | Zinc (Zn) | 2025/01/07 | 47 (1,2) | 75 - 125 | 98 | 85 - 115 | <5.0 | ug | 0.71 (3) | 20 |
| 9855788 | Arsenic (As) | 2025/01/13 | 95 | 75 - 125 | 98 | 85 - 115 | <6.0 | ug | NC (3) | 20 |
| 9855788 | Cadmium (Cd) | 2025/01/13 | 96 | 75 - 125 | 98 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9855788 | Chromium (Cr) | 2025/01/13 | 90 | 75 - 125 | 95 | 85 - 115 | <5.0 | ug | NC (3) | 20 |
| 9855788 | Cobalt (Co) | 2025/01/13 | 94 | 75 - 125 | 98 | 85 - 115 | <2.0 | ug | NC (3) | 20 |
| 9855788 | Copper (Cu) | 2025/01/13 | 97 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 4.7 (3) | 20 |
| 9855788 | Iron (Fe) | 2025/01/13 | 92 | 75 - 125 | 96 | 85 - 115 | <50 | ug | 4.4 (3) | 20 |
| 9855788 | Lead (Pb) | 2025/01/13 | 95 | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9855788 | Manganese (Mn) | 2025/01/13 | 96 | 75 - 125 | 99 | 85 - 115 | <1.0 | ug | 0 (3) | 20 |
| 9855788 | Nickel (Ni) | 2025/01/13 | 93 | 75 - 125 | 97 | 85 - 115 | <3.0 | ug | NC (3) | 20 |
| 9855788 | Selenium (Se) | 2025/01/13 | 97 | 75 - 125 | 99 | 85 - 115 | <10 | ug | NC (3) | 20 |
| 9855788 | Vanadium (V) | 2025/01/13 | 92 | 75 - 125 | 97 | 85 - 115 | <5.0 | ug | NC (3) | 20 |



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/27

QUALITY ASSURANCE REPORT(CONT'D)

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|---|-----------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9855788 | Zinc (Zn) | 2025/01/13 | 97 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 5.5 (3) | 20 |
| <p>Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.</p> <p>Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.</p> <p>Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.</p> <p>Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.</p> <p>NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).</p> <p>(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.</p> <p>(2) Matrix Spike Parent ID [AMKO93-01]</p> <p>(3) Duplicate Parent ID</p> | | | | | | | | | | |



Bureau Veritas Job #: C4BP387
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE


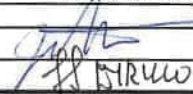
The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in cursive script that reads "Cristina Carriere".

Cristina Carriere, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|---|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | CHAIN OF CUSTODY # : |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Location: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com ; axt@rwdi.com | Sampled By: | JRA | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | | | | | | | | | |
|--|----------|---|------|--------------|---|--------------|--|------------------------------------|--|--|--|--|--|--|--|-------------------------|---|---|--|--|--|--|--|---|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | | | | | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS | | | | | | | | | | |
| <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary site specific <input type="checkbox"/> Reg. 558 <input type="checkbox"/> Table 2 <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 3 Region: _____ <p style="text-align: right;">Report Criteria on C of A ? <input type="checkbox"/> n</p> | | | | | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Regulated Drinking Water ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Metals Field Filtered ? (Y / N)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">TSP</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">Metals (**Contact RWDI prior to metals analysis**)</div> </div> | | | | | | | | | | Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days | | | | | | | | | | |
| | | | | | | | | | | | | | | | Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | | | | | | | | | | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | | | | | | | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | | | | | | | | | |
| | | | | |  NONT-2024-12-4659 | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS | | | | | | | | | |
| 1 | 24090527 | 26-Nov-24 | 1646 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 2 | 24090528 | 26-Nov-24 | 1644 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 3 | 24090529 | 26-Nov-24 | 1656 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 4 | 24090530 | 20-Nov-24 | 1584 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 5 | 24090531 | 20-Nov-24 | 1656 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 6 | 24090532 | 20-Nov-24 | 1611 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 7 | 24090534 | 2-Dec-24 | 1670 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | *****Send particulate results to RWDI prior to conducting metals analysis. RWDI will instruct which filter(s) to proceed with metal analysis at that point***** |
| 8 | 24090535 | 2-Dec-24 | 1610 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 9 | 24090536 | 2-Dec-24 | 1710 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 10 | 24090537 | 8-Dec-24 | 1659 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| 11 | 24090538 | 8-Dec-24 | 1683 | TSP | | | | | | | | | | | N | N | X | X | | | | | | 1 | |
| RELINQUISHED BY: (Signature/Print) | | RECEIVED BY: (Signature/Print) | | Date: | | Time: | | Laboratory Use Only | | | | | | | | | | | | | | | | | |
| JRA - 18-Dec-24 | |  | | mm/12/20 | | 10:45 | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | Temperature (°C) on Receipt r/h | | | | Condition of Sample on Receipt <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | | | | | | | | | | | |

C4BP387

2024/12/20 10:45



6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 3

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|----------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | CHAIN OF CUSTODY # : |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON N0M 2S0 | Address: | 4510 Rhodes Drive, Suite 530 Windsor, ON, N8W 5K5 | Project #: | 2402553.02 | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Project Name: | Twin Creeks | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axt@rwdi.com | Location: | Twin Creeks | |
| | Fax: 519-849-5811 | | Fax: 519-823-1316 | Sampled By: | JRA | |

| REGULATORY CRITERIA | | | | | ANALYSIS REQUESTED (Please be specific): | | | | | | | | | | TURNAROUND TIME (TAT) REQUIRED: | | |
|--|--------------|---------------|-----------------------------|--------------------------------------|--|-----|--|-------|--|-------|--|-----------------------------|--|--|--|--|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form <input type="checkbox"/> MISA Reg. 153 Sewer Use <input checked="" type="checkbox"/> Other site specific <input type="checkbox"/> PWQO <input type="checkbox"/> Table 1 <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm specify <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 Region: _____ <input type="checkbox"/> Reg. 558 Report Criteria on C of A ? <input type="checkbox"/> n | | | | | Regulated Drinking Water ? (Y / N) Metals Field Filtered ? (Y / N) TSP Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ | | |
| SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM | | | | | Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | | | | | | | | | # of Cont. COMMENTS / TAT COMMENTS | | |
| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | |
| 1 24090539 | 8-Dec-24 | 1672 | TSP | N | N | X | X | | | | | | | | | | 1 |
| 2 24090546 | 8-Dec-24 | - | TSP | N | N | X | X | | | | | | | | | | 1 |
| 3 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 4 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 5 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 6 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 7 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 8 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 9 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 10 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| 11 | | | TSP | N | N | X | X | | | | | | | | | | 1 |
| RELINQUISHED BY: (Signature/Print) | | | | RECEIVED BY: (Signature/Print) | | | | Date: | | Time: | | Laboratory Use Only | | | | | |
| JRA - 18-Dec-24 | | | | SEE PAGE 1 | | | | | | | | Temperature (°C) on Receipt | | Condition of Sample on Receipt | | | |
| | | | | | | | | | | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF | | | |

White: Maxxam Yellow: Mail Pink: Client



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2025/01/27
Report #: R8476429
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C502801

Received: 2025/01/10, 09:33

Sample Matrix: Filter
Samples Received: 8

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2025/01/17 | 2025/01/23 | | EPA 6010D m |
| Total Metals on Hi-Vol Filter (6010Cmod) | 3 | 2025/01/21 | 2025/01/22 | CAM SOP-00408 | EPA 6010D m |
| Particulates on Hi-Vol Filters | 8 | N/A | 2025/01/16 | | |
| Particulates on Filter (Method IO-3.1) | 8 | 2025/01/14 | 2025/01/16 | CAM SOP-00942 | Method IO-3.1 |
| Air Volume from HiVol Sampling | 8 | N/A | 2025/01/13 | | |

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your P.O. #: 13254248
Your Project #: 2402553.02
Site Location: TWIN CREEKS
Your C.O.C. #: N/A

Attention: Data reports

RWDI
650 Woodlawn Rd. W
Guelph, ON
Canada N1K1B8

Report Date: 2025/01/27
Report #: R8476429
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C502801

Received: 2025/01/10, 09:33

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant

Email: Julian.Tong@bureauveritas.com

Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C502801
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

RESULTS OF ANALYSES OF FILTER

| Bureau Veritas ID | | ANCH01 | ANCH02 | ANCH04 | ANCH05 | ANCH06 | ANCH07 | ANCH09 | | |
|--|-------|------------|------------|------------|------------|------------|------------|------------|------|----------|
| Sampling Date | | 2024/12/20 | 2024/12/20 | 2024/12/14 | 2024/12/14 | 2024/12/14 | 2024/12/26 | 2024/12/26 | | |
| COC Number | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | |
| | UNITS | 24090541 | 24090542 | 24090543 | 24090544 | 24090545 | 24090547 | 24090548 | RDL | QC Batch |
| Particulate | ug/m3 | 10 | 12 | 19 | 18 | 41 | 11 | 17 | 3 | 9858109 |
| Particulate Weight on Filter | ug | 16400 | 20400 | 31700 | 29900 | 70200 | 17400 | 27800 | 5000 | 9859273 |
| Volume | m3 | 1687 | 1654 | 1653 | 1678 | 1714 | 1647 | 1652 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | | | | | | | |

| Bureau Veritas ID | | ANCH10 | | |
|--|-------|------------|------|----------|
| Sampling Date | | 2024/12/26 | | |
| COC Number | | N/A | | |
| | UNITS | 24090500 | RDL | QC Batch |
| Particulate | ug/m3 | 27 | 3 | 9858109 |
| Particulate Weight on Filter | ug | 45300 | 5000 | 9859273 |
| Volume | m3 | 1684 | N/A | ONSITE |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable | | | | |



Bureau Veritas Job #: C502801
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

ELEMENTS BY ICP-AES (FILTER)

| Bureau Veritas ID | | ANCH04 | ANCH05 | ANCH06 | | |
|----------------------------------|-------|------------|------------|------------|-----|----------|
| Sampling Date | | 2024/12/14 | 2024/12/14 | 2024/12/14 | | |
| COC Number | | N/A | N/A | N/A | | |
| | UNITS | 24090543 | 24090544 | 24090545 | RDL | QC Batch |
| Metals | | | | | | |
| Arsenic (As) | ug | <6.0 | <6.0 | <6.0 | 6.0 | 9862156 |
| Cadmium (Cd) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9862156 |
| Chromium (Cr) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9862156 |
| Cobalt (Co) | ug | <2.0 | <2.0 | <2.0 | 2.0 | 9862156 |
| Copper (Cu) | ug | <5.0 | 20.7 | 18.3 | 5.0 | 9862156 |
| Iron (Fe) | ug | 72 | 87 | 292 | 50 | 9862156 |
| Lead (Pb) | ug | <3.0 | <3.0 | <3.0 | 3.0 | 9862156 |
| Manganese (Mn) | ug | 2.8 | 3.4 | 10.7 | 1.0 | 9862156 |
| Nickel (Ni) | ug | <3.0 | <3.0 | <3.0 | 3.0 | 9862156 |
| Selenium (Se) | ug | <10 | <10 | <10 | 10 | 9862156 |
| Vanadium (V) | ug | <5.0 | <5.0 | <5.0 | 5.0 | 9862156 |
| Zinc (Zn) | ug | 12.8 | 9.8 | 17.5 | 5.0 | 9862156 |
| RDL = Reportable Detection Limit | | | | | | |
| QC Batch = Quality Control Batch | | | | | | |



Bureau Veritas Job #: C502801
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

CALCULATED ELEMENTS (FILTER)

| Bureau Veritas ID | | ANCH04 | | ANCH05 | | ANCH06 | | |
|----------------------------------|-------|------------|--------|------------|--------|------------|--------|----------|
| Sampling Date | | 2024/12/14 | | 2024/12/14 | | 2024/12/14 | | |
| COC Number | | N/A | | N/A | | N/A | | |
| | UNITS | 24090543 | RDL | 24090544 | RDL | 24090545 | RDL | QC Batch |
| Metals | | | | | | | | |
| Total Arsenic (As) | ug/m3 | <0.0036 | 0.0036 | <0.0036 | 0.0036 | <0.0035 | 0.0035 | 9860966 |
| Total Cadmium (Cd) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9860966 |
| Total Chromium (Cr) | ug/m3 | <0.0030 | 0.0030 | <0.0030 | 0.0030 | <0.0029 | 0.0029 | 9860966 |
| Total Cobalt (Co) | ug/m3 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | <0.0012 | 0.0012 | 9860966 |
| Total Copper (Cu) | ug/m3 | <0.0030 | 0.0030 | 0.0123 | 0.0030 | 0.0107 | 0.0029 | 9860966 |
| Total Iron (Fe) | ug/m3 | 0.044 | 0.030 | 0.052 | 0.030 | 0.170 | 0.029 | 9860966 |
| Total Lead (Pb) | ug/m3 | <0.0018 | 0.0018 | <0.0018 | 0.0018 | <0.0018 | 0.0018 | 9860966 |
| Total Lithium (Li) | ug/m3 | <0.016 | 0.016 | <0.016 | 0.016 | <0.016 | 0.016 | 9860966 |
| Total Nickel (Ni) | ug/m3 | <0.0018 | 0.0018 | <0.0018 | 0.0018 | <0.0018 | 0.0018 | 9860966 |
| Total Selenium (Se) | ug/m3 | <0.0061 | 0.0061 | <0.0060 | 0.0060 | <0.0058 | 0.0058 | 9860966 |
| Total Sulphur (S) | ug/m3 | 0.101 | 0.015 | 0.116 | 0.015 | 0.174 | 0.015 | 9860966 |
| Total Vanadium (V) | ug/m3 | <0.0030 | 0.0030 | <0.0030 | 0.0030 | <0.0029 | 0.0029 | 9860966 |
| Total Zinc (Zn) | ug/m3 | 0.0077 | 0.0030 | 0.0058 | 0.0030 | 0.0102 | 0.0029 | 9860966 |
| RDL = Reportable Detection Limit | | | | | | | | |
| QC Batch = Quality Control Batch | | | | | | | | |



Bureau Veritas Job #: C502801
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

GENERAL COMMENTS

Results relate only to the items tested.



Bureau Veritas Job #: C502801
Report Date: 2025/01/27

QUALITY ASSURANCE REPORT

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|----------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 9862156 | Arsenic (As) | 2025/01/22 | 97 | 75 - 125 | 98 | 85 - 115 | <6.0 | ug | NC (1) | 20 |
| 9862156 | Cadmium (Cd) | 2025/01/22 | 100 | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9862156 | Chromium (Cr) | 2025/01/22 | 94 | 75 - 125 | 97 | 85 - 115 | <5.0 | ug | NC (1) | 20 |
| 9862156 | Cobalt (Co) | 2025/01/22 | 98 | 75 - 125 | 102 | 85 - 115 | <2.0 | ug | NC (1) | 20 |
| 9862156 | Copper (Cu) | 2025/01/22 | 102 | 75 - 125 | 102 | 85 - 115 | <5.0 | ug | 11 (1) | 20 |
| 9862156 | Iron (Fe) | 2025/01/22 | 104 | 75 - 125 | 100 | 85 - 115 | <50 | ug | 1.3 (1) | 20 |
| 9862156 | Lead (Pb) | 2025/01/22 | 97 | 75 - 125 | 99 | 85 - 115 | <3.0 | ug | 6.4 (1) | 20 |
| 9862156 | Manganese (Mn) | 2025/01/22 | 100 | 75 - 125 | 102 | 85 - 115 | <1.0 | ug | 1.3 (1) | 20 |
| 9862156 | Nickel (Ni) | 2025/01/22 | 96 | 75 - 125 | 100 | 85 - 115 | <3.0 | ug | NC (1) | 20 |
| 9862156 | Selenium (Se) | 2025/01/22 | 99 | 75 - 125 | 103 | 85 - 115 | <10 | ug | NC (1) | 20 |
| 9862156 | Vanadium (V) | 2025/01/22 | 95 | 75 - 125 | 99 | 85 - 115 | <5.0 | ug | NC (1) | 20 |
| 9862156 | Zinc (Zn) | 2025/01/22 | 97 | 75 - 125 | 100 | 85 - 115 | <5.0 | ug | 10 (1) | 20 |

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Duplicate Parent ID



Bureau Veritas Job #: C502801
Report Date: 2025/01/27

RWDI
Client Project #: 2402553.02
Site Location: TWIN CREEKS
Your P.O. #: 13254248
Sampler Initials: JRA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

Louise A Harding

Louise Harding, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C502801

2025/01/10 09:33

6740 Campobello Road Mississauga, ON L5N 2L8

Phone: 905-817-5700

Fax: 905-817-5777

Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page 2 of 2

| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | MAXXAM JOB NUMBER: |
|----------------------|--|---|--|----------------------|-------------|---------------------|
| Company Name: | Waste Management of Canada Corporation | Company Name: | RWDI AIR Inc. | Quotation # | | |
| Contact Name: | Lisa Mertick | Contact Name: | Brent Langille | P.O. #: | 13254248 | |
| Address: | 5768 Nauvoo Rd, Watford, ON | Address: | 4510 Rhodes Drive, Suite 530 | Project #: | 2402553.02 | CHAIN OF CUSTODY #: |
| | NOM 2S0 | | Windsor, ON, N8W 5K5 | Project Name: | Twin Creeks | |
| Phone: | 519-849-5810 | Phone: | 519-823-1311 x 2618 | Location: | Twin Creeks | |
| Fax: | 519-849-5811 | Fax: | 519-823-1316 | Sampled By: | JRA | |
| Email: | lmertick@wm.com | Email: | Jeffery.Cleland@rwdi.com; axl@rwdi.com | | | |

| REGULATORY CRITERIA | ANALYSIS REQUESTED (Please be specific): | TURNAROUND TIME (TAT) REQUIRED: |
|--|---|---|
| Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | |
| <input type="checkbox"/> MISA Reg. 153 <input type="checkbox"/> PWQO <input type="checkbox"/> Reg. 558 | <input checked="" type="checkbox"/> Other site specific specify _____ Report Criteria on C of A ? <input checked="" type="checkbox"/> n | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: <input checked="" type="checkbox"/> 5 to 7 Working Days Rush TAT: Rush Confirmation # _____ (call Lab for #) <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days DATE Required: _____ TIME Required: _____ |
| Please note that TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | | |

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

| Sample Identification | Date Sampled | Sample Volume | Matrix (GW, SW, Soil, etc.) | Regulated Drinking Water ? (Y / N) | Metals Field Filtered ? (Y / N) | TSP | Metals (**Contact RWDI prior to metals analysis**) | | | | | | | | | | | | | | # of Cont. | COMMENTS / TAT COMMENTS |
|-----------------------|--------------|---------------|-----------------------------|--------------------------------------|-----------------------------------|-----|--|---|--|--|--|--|--|--|--|--|--|--|--|--|------------|-------------------------|
| 1 | 24090510 | 6-Jan-25 | - | TSP | N | N | X | X | | | | | | | | | | | | | 1 | Field Blank |
| 2 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |

| RELINQUISHED BY: (Signature/Print) | RECEIVED BY: (Signature/Print) | Date: | Time: | Laboratory Use Only | |
|------------------------------------|--------------------------------|-------|-------|-----------------------------|--|
| JRA 08-Jan-25 | SEE PAGE 1 | | | Temperature (°C) on Receipt | Condition of Sample on Receipt |
| | | | | | <input type="checkbox"/> OK <input type="checkbox"/> SIF |

White: Maxxam Yellow: Mail Pink: Client

A large decorative graphic on the left side of the page, featuring a blue triangle at the top left and a large, light gray curved shape that dominates the lower half of the page.

APPENDIX H

RWDI AIR
Ambient TSP Monitoring Field Data Sheet

| Sample I.D. | Installation Date | Sample Date | Removal Date | Filter No. | Initial Readings | | | Final Readings | | |
|-------------|-------------------|-------------|--------------|------------|------------------|---------|-------------------------------|----------------|---------|-------------------------------|
| | | | | | Time of Day | Timer | Delta P (in H ₂ O) | Time of Day | Timer | Delta P (in H ₂ O) |
| WMI-1 | 28-Dec-23 | 7-Jan-24 | 8-Jan-24 | 23110954 | 9:10 AM | 6987.07 | 3.8 | 12:50 PM | 7011.07 | 4 |
| WMI-1 | 8-Jan-24 | 19-Jan-24 | 29-Jan-24 | 23110971 | 12:50 PM | 7011.09 | 3.8 | 2:35 PM | 7035.09 | 4 |
| WMI-1 | 30-Jan-24 | 31-Jan-24 | 1-Feb-24 | 23110977 | 3:00 PM | 7035.11 | 3.8 | 1:30 PM | 7059.11 | 3.5 |
| WMI-1 | 1-Feb-24 | 12-Feb-24 | 21-Feb-24 | 23110963 | 2:00 PM | 7059.43 | 3.8 | 11:15 AM | 7083.43 | 3.9 |
| WMI-1 | 21-Feb-24 | 24-Feb-24 | 5-Mar-24 | 23122700 | 11:15 AM | 7083.44 | 3.8 | 10:55 AM | 7107.44 | 3.8 |
| WMI-1 | 5-Mar-24 | 7-Mar-24 | 15-Mar-24 | 23122707 | 10:55 AM | 7107.46 | 3.8 | 2:57 PM | 7131.46 | 3.9 |
| WMI-1 | 15-Mar-24 | 19-Mar-24 | 28-Mar-24 | 23122712 | 2:57 PM | 7131.47 | 3.8 | 11:45 AM | 7155.47 | 3.4 |
| WMI-1 | 28-Mar-24 | 31-Mar-24 | 8-Apr-24 | 24012940 | 11:45 AM | 7155.48 | 3.8 | 11:27 AM | 7179.48 | 3.9 |
| WMI-1 | 8-Apr-24 | 12-Apr-24 | 19-Apr-24 | 24012948 | 1:00 PM | 7180.05 | 3.9 | 1:00 PM | 7204.05 | 3.8 |
| WMI-1 | 19-Apr-24 | 24-Apr-24 | 25-Apr-24 | 24012925 | 1:00 PM | 7204.06 | 3.9 | 9:20 AM | 7228.06 | 3.9 |
| WMI-1 | 25-Apr-24 | 6-May-24 | 8-May-24 | 24012930 | 9:20 AM | 7228.07 | 3.9 | 9:41 AM | 7252.07 | 3.7 |
| WMI-1 | 8-May-24 | 18-May-24 | 29-May-24 | 24012934 | 9:41 AM | 7252.11 | 3.9 | 9:02 AM | 7276.14 | 3.9 |
| WMI-1 | 29-May-24 | 30-May-24 | 3-Jun-24 | 24022397 | 9:02 AM | 7276.14 | 3.9 | 2:00 PM | 7300.13 | 3.6 |
| WMI-1 | 3-Jun-24 | 5-Jun-24 | 10-Jun-24 | 24032812 | 2:00 PM | 7300.14 | 3.9 | 11:15 AM | 7324.14 | 4.2 |
| WMI-1 | 10-Jun-24 | 11-Jun-24 | 13-Jun-24 | 24032815 | 11:15 AM | 7324.15 | 3.9 | 2:35 PM | 7348.15 | 4.1 |
| WMI-1 | 13-Jun-24 | 17-Jun-24 | 18-Jun-24 | 24032821 | 2:35 PM | 7348.16 | 3.9 | 9:35 AM | 7372.16 | 4.1 |
| WMI-1 | 18-Jun-24 | 23-Jun-24 | 24-Jun-24 | 24050851 | 9:35 AM | 7372.17 | 3.9 | 3:50 PM | 7396.17 | 4 |
| WMI-1 | 24-Jun-24 | 29-Jun-24 | 3-Jul-24 | 24050857 | 3:50 PM | 7396.18 | 3.9 | 2:00 PM | 7420.18 | 4 |
| WMI-1 | 3-Jul-24 | 5-Jul-24 | 9-Jul-24 | 24050862 | 2:00 PM | 7420.19 | 3.9 | 10:00 AM | 7444.19 | 4 |
| WMI-1 | 9-Jul-24 | 11-Jul-24 | 15-Jul-24 | 24050870 | 10:00 AM | 7444.2 | 3.9 | 3:10 PM | 7468.2 | 3.9 |
| WMI-1 | 15-Jul-24 | 17-Jul-24 | 22-Jul-24 | 24050876 | 3:10 PM | 7468.21 | 3.9 | 3:00 PM | 7492.21 | 4 |
| WMI-1 | 22-Jul-24 | 23-Jul-24 | 25-Jul-24 | 24050886 | 3:00 PM | 7492.22 | 3.9 | 1:10 PM | 7516.22 | 3.9 |
| WMI-1 | 25-Jul-24 | 29-Jul-24 | 30-Jul-24 | 24050892 | 1:10 PM | 7516.45 | 3.7 | 1:15 PM | 7540.45 | 3.7 |
| WMI-1 | 30-Jul-24 | 4-Aug-24 | 6-Aug-24 | 24051300 | 1:15 PM | 7540.48 | 3.7 | 11:10 AM | 7564.48 | 3.8 |
| WMI-1 | 6-Aug-24 | 10-Aug-24 | 12-Aug-24 | 24051305 | 11:10 AM | 7564.49 | 3.7 | 1:00 PM | 7588.49 | 3.8 |
| WMI-1 | 12-Aug-24 | 16-Aug-24 | 20-Aug-24 | 24051313 | 1:00 PM | 7588.5 | 3.7 | 4:45 PM | 7612.5 | 4 |
| WMI-1 | 20-Aug-24 | 22-Aug-24 | 26-Aug-24 | 24071761 | 4:45 PM | 7612.52 | 3.7 | 12:30 PM | 7636.52 | 3.6 |
| WMI-1 | 26-Aug-24 | 28-Aug-24 | 30-Aug-24 | 24071770 | 12:30 PM | 7636.53 | 3.7 | 11:15 AM | 7660.51 | 3.8 |
| WMI-1 | 30-Aug-24 | 3-Sep-24 | 4-Sep-24 | 24071780 | 11:15 AM | 7660.52 | 3.7 | 12:05 PM | 7684.52 | 3.8 |
| WMI-1 | 4-Sep-24 | 9-Sep-24 | 11-Sep-24 | 24071783 | 12:05 PM | 7684.53 | 3.7 | 10:00 AM | 7708.57 | 3.8 |
| WMI-1 | 11-Sep-24 | 15-Sep-24 | 17-Sep-24 | 24071786 | 10:00 AM | 7708.6 | 3.9 | 12:15 PM | 7732.6 | 4 |
| WMI-1 | 17-Sep-24 | 21-Sep-24 | 23-Sep-24 | 24071733 | 12:15 PM | 7732.62 | 3.9 | 11:45 AM | 7756.62 | 3.8 |
| WMI-1 | 23-Sep-24 | 27-Sep-24 | 1-Oct-24 | 24071737 | 11:45 AM | 7756.63 | 3.7 | 12:30 PM | 7780.63 | 3.8 |
| WMI-1 | 1-Oct-24 | 3-Oct-24 | 10-Oct-24 | 24071747 | 12:30 PM | 7780.65 | 3.9 | 11:00 AM | 7804.65 | 4.4 |
| WMI-1 | 10-Oct-24 | 15-Oct-24 | 22-Oct-24 | 24071755 | 12:00 PM | 7804.67 | 3.9 | 12:30 PM | 7828.67 | 4 |
| WMI-1 | 22-Oct-24 | 27-Oct-24 | 4-Nov-24 | 24090441 | 1:15 PM | 7829.01 | 3.9 | 1:30 PM | 7853.01 | 3.8 |
| WMI-1 | 4-Nov-24 | 8-Nov-24 | 19-Nov-24 | 24090447 | 1:30 PM | 7853.03 | 3.9 | 4:30 PM | 7877.03 | 4 |
| WMI-1 | 19-Nov-24 | 20-Nov-24 | 29-Nov-24 | 24090531 | 4:30 PM | 7877.03 | 3.9 | 3:05 PM | 7901.03 | 3.9 |
| WMI-1 | 29-Nov-24 | 2-Dec-24 | 13-Dec-24 | 24090536 | 3:05 PM | 7901.03 | 3.9 | 12:25 PM | 7925.03 | 4 |
| WMI-1 | 13-Dec-24 | 14-Dec-24 | 23-Dec-24 | 24090545 | 12:25 PM | 7925.04 | 3.9 | 4:00 PM | 7949.04 | 4 |
| WMI-1 | 23-Dec-24 | 26-Dec-24 | 6-Jan-25 | 24090500 | 4:00 PM | 7949.05 | 3.9 | 2:40 PM | 7973.05 | 4 |

Comments: Calibration on Feb 1/24. New setpoint = 3.8 "H2O
 Calibration on Apr 8/24. New setpoint = 3.9 "H2O
 Calibration on Jul 25/24. New setpoint = 3.7 "H2O
 Calibration on Oct 22/24. New setpoint = 3.9 "H2O

RWDI AIR
Ambient TSP Monitoring Field Data Sheet

| Sample I.D. | Installation Date | Sample Date | Removal Date | Filter No. | Initial Readings | | | Final Readings | | |
|-------------|-------------------|-------------|--------------|------------|------------------|---------|-------------------------------|----------------|---------|-------------------------------|
| | | | | | Time of Day | Timer | Delta P (in H ₂ O) | Time of Day | Timer | Delta P (in H ₂ O) |
| WMI-2 | 28-Dec-23 | 7-Jan-24 | 8-Jan-24 | 23110955 | 9:50 AM | 6495.10 | 3.2 | 1:35 PM | 6519.10 | 3.7 |
| WMI-2 | 8-Jan-24 | 19-Jan-24 | 29-Jan-24 | 23110969 | 1:35 PM | 6519.16 | 3.2 | 1:05 PM | 6543.16 | 3.3 |
| WMI-2 | 30-Jan-24 | 31-Jan-24 | 1-Feb-24 | 23110959 | 1:20 PM | 6543.79 | 3.2 | 3:15 PM | 6567.79 | 3.3 |
| WMI-2 | 1-Feb-24 | 12-Feb-24 | 21-Feb-24 | 23110965 | 3:15 PM | 6567.81 | 3.2 | 1:35 PM | 6591.81 | 3.3 |
| WMI-2 | 21-Feb-24 | 24-Feb-24 | 5-Mar-24 | 23120599 | 1:35 PM | 6591.82 | 3.2 | 10:40 AM | 6615.82 | 3.3 |
| WMI-2 | 5-Mar-24 | 7-Mar-24 | 15-Mar-24 | 23122709 | 10:40 AM | 6615.83 | 3.2 | 12:40 PM | 6639.83 | 3.3 |
| WMI-2 | 15-Mar-24 | 19-Mar-24 | 28-Mar-24 | 23122713 | 12:40 PM | 6639.84 | 3.2 | 12:10 PM | 6663.84 | 3.2 |
| WMI-2 | 28-Mar-24 | 31-Mar-24 | 8-Apr-24 | 24012941 | 12:10 PM | 6663.84 | 3.2 | 3:20 PM | 6687.84 | 3.4 |
| WMI-2 | 8-Apr-24 | 12-Apr-24 | 19-Apr-24 | 24012946 | 4:00 PM | 6688.05 | 3.4 | 1:50 PM | 6712.05 | 3.3 |
| WMI-2 | 19-Apr-24 | 24-Apr-24 | 25-Apr-24 | 24012923 | 1:50 PM | 6712.06 | 3.4 | 9:50 AM | 6736.06 | 3.6 |
| WMI-2 | 25-Apr-24 | 6-May-24 | 8-May-24 | 24012929 | 9:50 AM | 6736.08 | 3.4 | 10:30 AM | 6760.10 | 3.3 |
| WMI-2 | 8-May-24 | 18-May-24 | 29-May-24 | 24012935 | 10:30 AM | 6760.12 | 3.4 | 9:48 AM | 6784.12 | 3.4 |
| WMI-2 | 29-May-24 | 30-May-24 | 3-Jun-24 | 24022399 | 9:54 AM | 6784.16 | 3.4 | 12:55 PM | 6808.16 | 3.2 |
| WMI-2 | 3-Jun-24 | 5-Jun-24 | 10-Jun-24 | 24032807 | 12:55 PM | 6808.18 | 3.4 | 10:00 AM | 6832.18 | 3.8 |
| WMI-2 | 10-Jun-24 | 11-Jun-24 | 13-Jun-24 | 24032817 | 10:00 AM | 6832.19 | 3.4 | 10:00 AM | 6856.19 | 3.6 |
| WMI-2 | 13-Jun-24 | 17-Jun-24 | 18-Jun-24 | 24032820 | 2:45 PM | 6856.19 | 3.4 | 10:05 AM | 6880.19 | 3.4 |
| WMI-2 | 18-Jun-24 | 23-Jun-24 | 24-Jun-24 | 24032825 | 10:05 AM | 6880.2 | 3.4 | 3:30 PM | 6904.20 | 3.6 |
| WMI-2 | 24-Jun-24 | 29-Jun-24 | 3-Jul-24 | 24050856 | 3:30 PM | 6904.21 | 3.4 | 1:45 PM | 6928.21 | 3.4 |
| WMI-2 | 3-Jul-24 | 5-Jul-24 | 9-Jul-24 | 24050863 | 1:45 PM | 6928.22 | 3.4 | 9:40 AM | 6952.22 | 3.3 |
| WMI-2 | 9-Jul-24 | 11-Jul-24 | 15-Jul-24 | 24050869 | 9:40 AM | 6952.23 | 3.4 | 2:50 PM | 6976.23 | 3.3 |
| WMI-2 | 15-Jul-24 | 17-Jul-24 | 22-Jul-24 | 24050875 | 2:50 PM | 6976.25 | 3.4 | 1:50 PM | 7000.25 | 3.8 |
| WMI-2 | 22-Jul-24 | 23-Jul-24 | 24-Jul-24 | 24050884 | 1:50 PM | 7000.26 | 3.4 | 3:30 PM | 7024.26 | 3.5 |
| WMI-2 | 25-Jul-24 | 29-Jul-24 | 30-Jul-24 | 24050887 | 11:00 AM | 7024.97 | 3.7 | 1:05 PM | 7048.97 | 3.7 |
| WMI-2 | 30-Jul-24 | 4-Aug-24 | 6-Aug-24 | 24050894 | 1:05 PM | 7048.99 | 3.7 | 10:45 AM | 7072.99 | 4 |
| WMI-2 | 6-Aug-24 | 10-Aug-24 | 12-Aug-24 | 24051306 | 10:45 AM | 7073.04 | 3.7 | 1:20 PM | 7097.04 | 4.8 |
| WMI-2 | 12-Aug-24 | 16-Aug-24 | 20-Aug-24 | 24051310 | 1:20 PM | 7097.07 | 3.7 | 5:20 PM | 7121.07 | 3.8 |
| WMI-2 | 20-Aug-24 | 22-Aug-24 | 26-Aug-24 | 24071760 | 5:20 PM | 7121.08 | 3.7 | 12:00 PM | 7145.08 | 3.7 |
| WMI-2 | 26-Aug-24 | 28-Aug-24 | 30-Aug-24 | 24071772 | 12:00 PM | 7145.09 | 3.7 | 11:00 AM | 7169.09 | 3.7 |
| WMI-2 | 30-Aug-24 | 3-Sep-24 | 4-Sep-24 | 24071778 | 11:00 AM | 7169.1 | 3.7 | 11:20 AM | 7193.10 | 3.7 |
| WMI-2 | 4-Sep-24 | 9-Sep-24 | 11-Sep-24 | 24071781 | 11:20 AM | 7193.11 | 3.7 | 10:40 AM | 7217.14 | 3.8 |
| WMI-2 | 11-Sep-24 | 15-Sep-24 | 17-Sep-24 | 24071784 | 10:45 AM | 7217.14 | 3.7 | 11:50 AM | 7241.14 | 3.8 |
| WMI-2 | 17-Sep-24 | 21-Sep-24 | 23-Sep-24 | 24071732 | 11:50 AM | 7241.18 | 3.7 | 11:30 AM | 7265.18 | 3.7 |
| WMI-2 | 23-Sep-24 | 27-Sep-24 | 1-Oct-24 | 24071741 | 11:30 AM | 7265.18 | 3.7 | 12:20 PM | 7289.18 | 3.8 |
| WMI-2 | 1-Oct-24 | 3-Oct-24 | 10-Oct-24 | 24071748 | 12:20 PM | 7289.19 | 3.7 | 12:33 PM | 7313.19 | 3.7 |
| WMI-2 | 10-Oct-24 | 15-Oct-24 | 22-Oct-24 | 24071754 | 12:54 PM | 7313.31 | 3.7 | 1:35 PM | 7337.31 | 3.7 |
| WMI-2 | 22-Oct-24 | 27-Oct-24 | 4-Nov-24 | 24090439 | 1:35 PM | 7337.32 | 3.7 | 2:10 PM | 7361.32 | 3.7 |
| WMI-2 | 4-Nov-24 | 8-Nov-24 | 19-Nov-24 | 24090445 | 2:10 PM | 7361.33 | 3.7 | 2:25 PM | 7385.33 | 3.8 |
| WMI-2 | 19-Nov-24 | 20-Nov-24 | 29-Nov-24 | 24090530 | 2:25 PM | 7385.34 | 3.7 | 2:00 PM | 7409.34 | 3.8 |
| WMI-2 | 29-Nov-24 | 2-Dec-24 | 13-Dec-24 | 24090535 | 2:00 PM | 7409.34 | 3.7 | 1:05 PM | 7433.34 | 3.7 |
| WMI-2 | 13-Dec-24 | 14-Dec-24 | 23-Dec-24 | 24090544 | 1:05 PM | 7433.35 | 3.7 | 4:50 PM | 7457.34 | 3.8 |
| WMI-2 | 23-Dec-24 | 26-Dec-24 | 6-Jan-25 | 24090548 | 4:50 PM | 7457.35 | 3.7 | 2:20 PM | 7481.35 | 3.8 |

Comments: Calibration on Jan 30/24. New setpoint = 3.2 "H2O
 Calibration on April 8/24. New setpoint = 3.4" H2O
 Calibration on Jul 25/24. New setpoint = 3.7" H2O
 Calibration on Oct 10/24. New setpoint = 3.7 "H2O

RWDI AIR
Ambient TSP Monitoring Field Data Sheet

| Sample I.D. | Installation Date | Sample Date | Removal Date | Filter No. | Initial Readings | | | Final Readings | | |
|-------------|-------------------|-------------|--------------|------------|------------------|----------|-------------------------------|----------------|----------|-------------------------------|
| | | | | | Time of Day | Timer | Delta P (in H ₂ O) | Time of Day | Timer | Delta P (in H ₂ O) |
| WMI-3 | 21-Dec-23 | 1-Jan-24 | 8-Jan-24 | 23110157 | 11:50 AM | 9439.06 | 3.9 | 1:30 PM | 9463.06 | 4.0 |
| WMI-3 | 8-Jan-24 | 13-Jan-24 | 15-Jan-24 | 23110958 | 1:30 PM | 9463.08 | 3.9 | 2:10 PM | 9487.08 | 3.9 |
| WMI-3 | 15-Jan-24 | 25-Jan-24 | 29-Jan-24 | 23110974 | 2:10 PM | 9487.09 | 3.9 | 1:00 PM | 9511.09 | 3.9 |
| WMI-3 | 31-Jan-24 | 6-Feb-24 | 7-Feb-24 | 23110962 | 12:25 PM | 9511.54 | 3.7 | 12:40 PM | 9535.54 | 3.5 |
| WMI-3 | 7-Feb-24 | 18-Feb-24 | 21-Feb-24 | 23110967 | 12:40 PM | 9535.58 | 3.7 | 1:40 PM | 9559.58 | 3.7 |
| WMI-3 | 21-Feb-24 | 1-Mar-24 | 5-Mar-24 | 23122701 | 1:40 PM | 9559.59 | 3.7 | 10:35 AM | 9583.59 | 3.8 |
| WMI-3 | 5-Mar-24 | 13-Mar-24 | 15-Mar-24 | 23122706 | 10:35 AM | 9583.60 | 3.7 | 12:35 PM | 9607.60 | 3.9 |
| WMI-3 | 15-Mar-24 | 25-Mar-24 | 28-Mar-24 | 23122710 | 12:35 PM | 9607.61 | 3.7 | 12:00 PM | 9631.61 | 3.7 |
| WMI-3 | 28-Mar-24 | 6-Apr-24 | 8-Apr-24 | 24012942 | 12:00 PM | 9631.62 | 3.7 | 3:00 PM | 9655.62 | 3.7 |
| WMI-3 | 8-Apr-24 | 18-Apr-24 | 19-Apr-24 | 24012951 | 3:30 PM | 9655.86 | 4 | 1:45 PM | 9679.86 | 4.5 |
| WMI-3 | 19-Apr-24 | 30-Apr-24 | 8-May-24 | 24012924 | 1:45 PM | 9679.88 | 4 | 10:21 AM | 9703.83 | 3.7 |
| WMI-3 | 8-May-24 | 12-May-24 | 14-May-24 | 24022396 | 10:21 AM | 9703.87 | 4 | 11:33 AM | 9727.82 | 4.3 |
| WMI-3 | 14-May-24 | 24-May-24 | 29-May-24 | 24032800 | 11:33 AM | 9727.85 | 4 | 9:59 AM | 9751.84 | 4.3 |
| WMI-3 | 29-May-24 | 2-Jun-24 | 3-Jun-24 | 24032803 | 10:08 AM | 9751.92 | 4 | 12:50 PM | 9775.92 | 2.8 |
| WMI-3 | 3-Jun-24 | 8-Jun-24 | 10-Jun-24 | 24032808 | 12:50 PM | 9775.94 | 4 | 9:55 AM | 9799.94 | 4.4 |
| WMI-3 | 10-Jun-24 | 14-Jun-24 | 18-Jun-24 | 24032814 | 9:55 AM | 9799.95 | 4 | 10:00 AM | 9823.95 | 3.9 |
| WMI-3 | 18-Jun-24 | 20-Jun-24 | 24-Jun-24 | 24032824 | 10:00 AM | 9823.98 | 4 | 3:20 PM | 9825.99 | 3.9 |
| WMI-3 | 24-Jun-24 | 26-Jun-24 | 27-Jun-24 | 24050854 | 3:20 PM | 9487.60 | 4 | 4:05 PM | 9511.60 | 4 |
| WMI-3 | 27-Jun-24 | 2-Jul-24 | 3-Jul-24 | 24050859 | 3:05 PM | 9511.61 | 4 | 1:40 PM | 9535.61 | 4.1 |
| WMI-3 | 3-Jul-24 | 8-Jul-24 | 9-Jul-24 | 24050865 | 1:40 PM | 9535.62 | 4 | 9:35 AM | 9559.62 | 3.7 |
| WMI-3 | 9-Jul-24 | 14-Jul-24 | 15-Jul-24 | 24050873 | 9:35 AM | 9559.65 | 4 | 2:45PM | 9583.65 | 3.8 |
| WMI-3 | 15-Jul-24 | 20-Jul-24 | 22-Jul-24 | 24050879 | 2:45PM | 9583.68 | 4 | 1:55 PM | 9607.68 | 4.5 |
| WMI-3 | 22-Jul-24 | 26-Jul-24 | 30-Jul-24 | 24050882 | 1:55 PM | 9608.01 | 3.8 | 12:55 PM | 9632.01 | 4.1 |
| WMI-3 | 30-Jul-24 | 1-Aug-24 | 6-Aug-24 | 24050890 | 12:55 PM | 9632.06 | 3.8 | 10:50 AM | 9656.06 | 4.1 |
| WMI-3 | 6-Aug-24 | 7-Aug-24 | 12-Aug-24 | 24051302 | 10:50 AM | 9656.12 | 3.8 | 1:25 PM | 9680.12 | 3.8 |
| WMI-3 | 12-Aug-24 | 13-Aug-24 | 15-Aug-24 | 24051309 | 1:25 PM | 9680.14 | 3.8 | 2:55 PM | 9704.14 | 3.5 |
| WMI-3 | 15-Aug-24 | 19-Aug-24 | 20-Aug-24 | 24071763 | 2:55 PM | 9704.17 | 3.8 | 5:30 PM | 9728.17 | 4.5 |
| WMI-3 | 20-Aug-24 | 25-Aug-24 | 26-Aug-24 | 24071765 | 5:30 PM | 9728.20 | 3.8 | 12:10 PM | 9752.20 | 3.7 |
| WMI-3 | 26-Aug-24 | 31-Aug-24 | 4-Sep-24 | 24071773 | 12:10 PM | 9752.22 | 3.8 | 11:15 AM | 9776.22 | 3.9 |
| WMI-3 | 4-Sep-24 | 6-Sep-24 | 11-Sep-24 | 24071779 | 11:15 AM | 9776.23 | 3.8 | 10:50 AM | 9800.23 | 3.9 |
| WMI-3 | 11-Sep-24 | 12-Sep-24 | 17-Sep-24 | 24071788 | 10:50 AM | - | 3.8 | 11:55 AM | - | 4.4 |
| WMI-3 | 17-Sep-24 | 18-Sep-24 | 23-Sep-24 | 24071731 | 11:55 AM | 9800.31 | 3.8 | 11:35 AM | 9824.31 | 4 |
| WMI-3 | 23-Sep-24 | 24-Sep-24 | 25-Sep-24 | 24071740 | 11:35 AM | 9824.32 | 3.8 | 2:55 PM | 9848.32 | 4.1 |
| WMI-3 | 25-Sep-24 | 30-Sep-24 | 1-Oct-24 | 24071757 | 2:55 PM | 9848.34 | 3.8 | 12:15 PM | 9872.34 | 3.6 |
| WMI-3 | 1-Oct-24 | 9-Oct-24 | 10-Oct-24 | 24071744 | 12:15 PM | 9872.35 | 3.8 | 12:00 PM | 9896.35 | 4.3 |
| WMI-3 | 10-Oct-24 | 21-Oct-24 | 22-Oct-24 | 24071753 | 12:27 PM | 9896.54 | 3.6 | 1:40 PM | 9920.54 | 3.4 |
| WMI-3 | 22-Oct-24 | 2-Nov-24 | 4-Nov-24 | 24090444 | 1:40 PM | 9920.56 | 3.6 | 2:15 PM | 9944.56 | 4 |
| WMI-3 | 4-Nov-24 | 14-Nov-24 | 19-Nov-24 | 24090526 | 2:15 PM | 9944.57 | 3.6 | 2:30 PM | 9968.57 | 3.8 |
| WMI-3 | 19-Nov-24 | 26-Nov-24 | 29-Nov-24 | 24090528 | 2:30 PM | 9968.58 | 3.6 | 2:05 PM | 9992.58 | 3.8 |
| WMI-3 | 29-Nov-24 | 8-Dec-24 | 13-Dec-24 | 24090537 | 2:05 PM | 9992.58 | 3.6 | 1:10 PM | 10016.58 | 3.8 |
| WMI-3 | 13-Dec-24 | 20-Dec-24 | 23-Dec-24 | 24090542 | 1:10 PM | 10016.59 | 3.6 | 4:40 PM | 10040.59 | 3.7 |
| WMI-3 | 23-Dec-24 | 1-Jan-25 | 6-Jan-25 | 24090502 | 4:40 PM | 10040.59 | 3.6 | 2:15 PM | 10064.59 | 3.8 |

Comments: Calibration on Jan 31/24. New setpoint = 3.7 "H2O
 Calibration on Apr 8/24. New setpoint = 4.01 "H2O
 Calibration on Jul 25/24. New setpoint = 3.8" H2O
 Calibration on Oct 10/24. New setpoint = 3.6 "H2O

RWDI AIR
Ambient TSP Monitoring Field Data Sheet

| Sample I.D. | Installation Date | Sample Date | Removal Date | Filter No. | Initial Readings | | | Final Readings | | |
|-------------|-------------------|-------------|--------------|------------|------------------|---------|-------------------------------|----------------|---------|-------------------------------|
| | | | | | Time of Day | Timer | Delta P (in H ₂ O) | Time of Day | Timer | Delta P (in H ₂ O) |
| WMI-4 | 28-Dec-23 | 7-Jan-24 | 8-Jan-24 | 23110953 | 9:35 AM | 8500.53 | 3.8 | 1:15 PM | 8524.53 | 4.0 |
| WMI-4 | 8-Jan-24 | 19-Jan-24 | 29-Jan-24 | 23110970 | 1:15 PM | 8524.56 | 3.8 | 1:25 PM | 8548.56 | 3.9 |
| WMI-4 | 30-Jan-24 | 31-Jan-24 | 1-Feb-24 | 23110978 | 1:05 PM | 8549.23 | 3.9 | 2:20 PM | 8573.23 | 3.9 |
| WMI-4 | 1-Feb-24 | 12-Feb-24 | 21-Feb-24 | 23110964 | 3:00 PM | 8573.49 | 3.8 | 1:00 PM | 8590.59 | 2.5 |
| WMI-4 | 21-Feb-24 | 24-Feb-24 | 5-Mar-24 | 23120598 | 1:00 PM | 8590.63 | 3.8 | 10:15 AM | 8614.63 | 4.2 |
| WMI-4 | 5-Mar-24 | 7-Mar-24 | 15-Mar-24 | 23122708 | 10:15 AM | 8614.68 | 3.8 | 2:00 PM | 8638.68 | 3.7 |
| WMI-4 | 15-Mar-24 | 19-Mar-24 | 28-Mar-24 | 23122714 | 2:00 PM | 8638.69 | 3.8 | 12:05 PM | 8662.68 | 3.8 |
| WMI-4 | 28-Mar-24 | 31-Mar-24 | 8-Apr-24 | 24012939 | 12:05 PM | 8662.69 | 3.8 | 1:17 PM | 8686.69 | 3.9 |
| WMI-4 | 8-Apr-24 | 12-Apr-24 | 19-Apr-24 | 24012947 | 2:10 PM | 8687.11 | 3.9 | 1:35 PM | 8711.11 | 3.9 |
| WMI-4 | 19-Apr-24 | 24-Apr-24 | 25-Apr-24 | 24012928 | 1:30PM | 8711.12 | 3.8 | 9:00 AM | 8735.13 | 4 |
| WMI-4 | 25-Apr-24 | 6-May-24 | 8-May-24 | 24012926 | 9:00 AM | 8735.12 | 3.8 | 9:07 AM | 8759.15 | 3.9 |
| WMI-4 | 8-May-24 | 18-May-24 | 29-May-24 | 24012933 | 9:07 AM | 8759.16 | 3.9 | 10:29 AM | 8783.16 | 3.8 |
| WMI-4 | 29-May-24 | 30-May-24 | 3-Jun-24 | 24022398 | 10:35 AM | 8783.18 | 3.9 | 12:20 PM | 8807.18 | 3.7 |
| WMI-4 | 3-Jun-24 | 5-Jun-24 | 10-Jun-24 | 24032809 | 12:20 PM | 8807.20 | 3.9 | 10:15 AM | 8831.2 | 4.1 |
| WMI-4 | 10-Jun-24 | 11-Jun-24 | 13-Jun-24 | 24032816 | 10:15 AM | 8831.21 | 3.9 | 2:25 PM | 8855.21 | 4 |
| WMI-4 | 13-Jun-24 | 17-Jun-24 | 18-Jun-24 | 24032819 | 2:25 PM | 8855.21 | 3.9 | 10:30 AM | 8879.21 | 4 |
| WMI-4 | 18-Jun-24 | 23-Jun-24 | 24-Jun-24 | 24050852 | 10:30 AM | 8879.22 | 3.9 | 2:15 PM | 8903.22 | 4 |
| WMI-4 | 24-Jun-24 | 29-Jun-24 | 3-Jul-24 | 24050858 | 2:15 PM | 8903.23 | 3.9 | 1:20 PM | 8927.23 | 4.2 |
| WMI-4 | 3-Jul-24 | 5-Jul-24 | 9-Jul-24 | 24050864 | 1:20 PM | 8927.24 | 3.9 | 9:20 AM | 8951.24 | 4 |
| WMI-4 | 9-Jul-24 | 11-Jul-24 | 15-Jul-24 | 24050868 | 9:20 AM | 8951.25 | 3.9 | 2:15 PM | 8975.25 | 3.9 |
| WMI-4 | 15-Jul-24 | 17-Jul-24 | 22-Jul-24 | 24050874 | 2:15 PM | 8975.26 | 3.9 | - | 8975.26 | - |
| WMI-4 | 22-Jul-24 | 23-Jul-24 | 25-Jul-24 | 24050885 | 1:35 PM | 8975.27 | 3.9 | 12:30 PM | 8989.5 | 3.9 |
| WMI-4 | 25-Jul-24 | 29-Jul-24 | 30-Jul-24 | 24050888 | 12:30 PM | 8990.07 | 3.9 | 12:15 PM | 9014.07 | 4 |
| WMI-4 | 30-Jul-24 | 4-Aug-24 | 6-Aug-24 | 24051301 | 12:15 PM | 9014.08 | 3.9 | 10:15 AM | 9038.08 | 3.9 |
| WMI-4 | 6-Aug-24 | 10-Aug-24 | 12-Aug-24 | 24051307 | 10:15 AM | 9038.12 | 3.9 | 1:50 PM | 9062.12 | 3.9 |
| WMI-4 | 12-Aug-24 | 16-Aug-24 | 20-Aug-24 | 24051311 | 1:50 PM | 9062.14 | 3.9 | 5:00 PM | 9086.13 | 4.2 |
| WMI-4 | 20-Aug-24 | 22-Aug-24 | 26-Aug-24 | 24051315 | 5:00 PM | 9086.15 | 3.9 | 11:45 AM | 9110.15 | 3.8 |
| WMI-4 | 26-Aug-24 | 28-Aug-24 | 30-Aug-24 | 24071768 | 11:45 AM | 9110.18 | 3.9 | 10:35 AM | 9134.18 | 3.9 |
| WMI-4 | 30-Aug-24 | 3-Sep-24 | 4-Sep-24 | 24071777 | 10:35 AM | 9134.20 | 3.9 | 11:00 AM | 9158.2 | 3.9 |
| WMI-4 | 4-Sep-24 | 9-Sep-24 | 11-Sep-24 | 24071782 | 11:00 AM | 9158.21 | 3.9 | 9:30 AM | 9182.24 | 3.9 |
| WMI-4 | 11-Sep-24 | 15-Sep-24 | 17-Sep-24 | 24071785 | 9:30 AM | 9182.24 | 3.9 | 11:15 AM | 9206.26 | 4.1 |
| WMI-4 | 17-Sep-24 | 21-Sep-24 | 23-Sep-24 | 24071734 | 11:15 AM | 9206.29 | 3.9 | 11:10 AM | 9212.32 | 3.9 |
| WMI-4 | 23-Sep-24 | 27-Sep-24 | 1-Oct-24 | 24071738 | 11:10 AM | 9212.35 | 3.9 | 11:55 AM | 9236.35 | 4 |
| WMI-4 | 1-Oct-24 | 3-Oct-24 | 10-Oct-24 | 24071746 | 11:55 AM | 9236.37 | 3.9 | 9:30 AM | 9260.37 | 3.9 |
| WMI-4 | 10-Oct-24 | 15-Oct-24 | 22-Oct-24 | 24071756 | 10:11 AM | 9260.63 | 3.8 | 1:20 PM | 9284.63 | 3.8 |
| WMI-4 | 22-Oct-24 | 27-Oct-24 | 4-Nov-24 | 24090440 | 1:20 PM | 9284.64 | 3.8 | 2:30 PM | 9308.64 | 3.8 |
| WMI-4 | 4-Nov-24 | 8-Nov-24 | 19-Nov-24 | 24090446 | 2:30 PM | 9308.64 | 3.8 | 11:40 AM | 9332.64 | 3.9 |
| WMI-4 | 19-Nov-24 | 20-Nov-24 | 29-Nov-24 | 24090532 | 11:45 AM | 9332.65 | 3.8 | 1:00 PM | 9356.65 | 3.8 |
| WMI-4 | 29-Nov-24 | 2-Dec-24 | 13-Dec-24 | 24090534 | 1:00 PM | 9356.65 | 3.8 | 1:45 PM | 9380.65 | 4 |
| WMI-4 | 13-Dec-24 | 14-Dec-24 | 23-Dec-24 | 24090543 | 1:45 PM | 9380.65 | 3.8 | 4:20 PM | 9404.65 | 3.8 |
| WMI-4 | 23-Dec-24 | 26-Dec-24 | 6-Jan-25 | 24090547 | 4:20 PM | 9404.66 | 3.8 | 1:55 PM | 9428.66 | 4 |

Comments: Calibration on Jan 30/24. New setpoint = 3.9 "H2O
 Calibration on Feb 1/24. New setpoint = 3.8 "H2O
 Calibration on Apr 8/24. New setpoint = 3.9"H2O
 Calibration on Oct 10/24. New setpoint = 3.8 "H2O

RWDI AIR
Ambient TSP Monitoring Field Data Sheet

| Sample I.D. | Installation Date | Sample Date | Removal Date | Filter No. | Initial Readings | | | Final Readings | | |
|-------------|-------------------|-------------|--------------|------------|------------------|---------|-------------------------------|----------------|---------|-------------------------------|
| | | | | | Time of Day | Timer | Delta P (in H ₂ O) | Time of Day | Timer | Delta P (in H ₂ O) |
| WMI-5 | 21-Dec-23 | 1-Jan-24 | 8-Jan-24 | 23110156 | 10:30 AM | 8634.39 | 3.5 | 12:55 PM | 8658.39 | 3.6 |
| WMI-5 | 8-Jan-24 | 13-Jan-24 | 15-Jan-24 | 23110956 | 12:55 PM | 8658.40 | 3.5 | 1:50 PM | 8682.40 | 3.8 |
| WMI-5 | 15-Jan-24 | 25-Jan-24 | 29-Jan-24 | 23110973 | 1:50 PM | 8682.41 | 3.5 | 2:30 PM | 8706.41 | 3.6 |
| WMI-5 | 31-Jan-24 | 6-Feb-24 | 7-Feb-24 | 23110961 | 2:40 PM | 8706.9 | 3.6 | 1:00 PM | 8730.9 | 3.6 |
| WMI-5 | 7-Feb-24 | 18-Feb-24 | 21-Feb-24 | 23120596 | 1:00 PM | 8730.91 | 3.6 | 11:20 AM | 8754.91 | 4.0 |
| WMI-5 | 21-Feb-24 | 1-Mar-24 | 5-Mar-24 | 23122702 | 11:20 AM | 8754.94 | 3.6 | 11:00 AM | 8778.89 | 3.7 |
| WMI-5 | 5-Mar-24 | 13-Mar-24 | 15-Mar-24 | 23122705 | 11:00 AM | 8778.90 | 3.6 | 3:02 PM | 8802.9 | 3.6 |
| WMI-5 | 15-Mar-24 | 25-Mar-24 | 28-Mar-24 | 23122711 | 3:02 PM | 8802.91 | 3.6 | 11:40 AM | 8826.9 | 3.4 |
| WMI-5 | 29-Mar-24 | 6-Apr-24 | 8-Apr-24 | 24012943 | 11:40 AM | 8826.95 | 3.6 | 11:35 AM | 8850.95 | 3.7 |
| WMI-5 | 8-Apr-24 | 18-Apr-24 | 19-Apr-24 | 24012949 | 12:05 PM | 8851.38 | 3.7 | 1:05 PM | 8875.38 | 4.2 |
| WMI-5 | 19-Apr-24 | 30-Apr-24 | 8-May-24 | 24012927 | 1:05 PM | 8875.4 | 3.7 | 9:51 AM | 8899.4 | 4.5 |
| WMI-5 | 8-May-24 | 12-May-24 | 14-May-24 | 24012932 | 9:51 AM | 8899.4 | 3.7 | 11:50 AM | 8923.51 | 3.9 |
| WMI-5 | 14-May-24 | 24-May-24 | 29-May-24 | 24032801 | 11:50 AM | 8923.54 | 3.7 | 9:22 AM | 8947.54 | 4.2 |
| WMI-5 | 29-May-24 | 2-Jun-24 | 3-Jun-24 | 24032804 | 9:22 AM | 8947.54 | 3.7 | 2:05 PM | 8971.66 | 2.4 |
| WMI-5 | 3-Jun-24 | 8-Jun-24 | 10-Jun-24 | 24032810 | 2:05 PM | 8971.71 | 3.7 | 11:20 AM | 8995.71 | 4.2 |
| WMI-5 | 10-Jun-24 | 14-Jun-24 | 18-Jun-24 | 24032813 | 11:20 AM | 8995.72 | 3.7 | 9:40 AM | 9019.72 | 4.0 |
| WMI-5 | 18-Jun-24 | 20-Jun-24 | 24-Jun-24 | 24032823 | 9:40 AM | 9019.75 | 3.7 | 3:55 PM | 9043.75 | 4.0 |
| WMI-5 | 24-Jun-24 | 26-Jun-24 | 27-Jun-24 | 2405855 | 3:55 PM | 9043.76 | 3.7 | 4:20 PM | 9067.76 | 3.7 |
| WMI-5 | 27-Jun-24 | 2-Jul-24 | 3-Jul-24 | 24050861 | 4:20 PM | 9067.77 | 3.7 | 2:10 PM | 9091.77 | 4.0 |
| WMI-5 | 3-Jul-24 | 8-Jul-24 | 9-Jul-24 | 24050867 | 2:10 PM | 9091.8 | 3.7 | 10:10 AM | 9115.8 | 3.5 |
| WMI-5 | 9-Jul-24 | 14-Jul-24 | 15-Jul-24 | 24050872 | 10:10 AM | 9115.86 | 3.7 | 3:15 PM | 9139.86 | 3.7 |
| WMI-5 | 15-Jul-24 | 20-Jul-24 | 22-Jul-24 | 24050877 | 3:20 PM | 9139.87 | 3.7 | 3:05 PM | 9163.87 | 3.6 |
| WMI-5 | 22-Jul-24 | 26-Jul-24 | 30-Jul-24 | 24050881 | 3:05 PM | 9164.27 | 3.6 | 1:25 PM | 9188.27 | 3.9 |
| WMI-5 | 30-Jul-24 | 1-Aug-24 | 6-Aug-24 | 24050889 | 1:25 PM | 9188.3 | 3.7 | 11:10 AM | 9212.3 | 4.1 |
| WMI-5 | 6-Aug-24 | 7-Aug-24 | 12-Aug-24 | 24051304 | 11:10 AM | 9212.35 | 3.7 | 1:10 PM | 9236.35 | 3.8 |
| WMI-5 | 12-Aug-24 | 13-Aug-24 | 15-Aug-24 | 24051312 | 1:10 PM | 9236.36 | 3.7 | 2:27 PM | 9260.36 | 3.9 |
| WMI-5 | 15-Aug-24 | 19-Aug-24 | 20-Aug-24 | 24071764 | 2:27 PM | 9260.39 | 3.7 | 4:55 PM | 9284.39 | 3.9 |
| WMI-5 | 20-Aug-24 | 25-Aug-24 | 26-Aug-24 | 24071766 | 4:55 PM | 9284.4 | 3.7 | 12:35 PM | 9308.4 | 3.7 |
| WMI-5 | 26-Aug-24 | 31-Aug-24 | 4-Sep-24 | 24071769 | 12:35 PM | 9308.42 | 3.7 | 12:10 PM | 9332.41 | 3.5 |
| WMI-5 | 4-Sep-24 | 6-Sep-24 | 11-Sep-24 | 24071775 | 12:10 PM | 9332.43 | 3.7 | 10:15 AM | 9356.47 | 4.6 |
| WMI-5 | 11-Sep-24 | 12-Sep-24 | 17-Sep-24 | 24071787 | 10:15 AM | 9356.5 | 3.8 | 12:24 PM | 9380.51 | 4.8 |
| WMI-5 | 17-Sep-24 | 18-Sep-24 | 23-Sep-24 | 24071730 | 12:28 PM | 9380.54 | 3.8 | 12:05 PM | 9404.54 | 3.8 |
| WMI-5 | 23-Sep-24 | 24-Sep-24 | 25-Sep-24 | 24071742 | 12:05 PM | 9404.58 | 3.8 | 3:10 PM | 9428.57 | 4.0 |
| WMI-5 | 25-Sep-24 | 30-Sep-24 | 1-Oct-24 | 24071758 | 3:10 PM | 9428.59 | 3.8 | 12:35 PM | 9476.59 | 4.0 |
| WMI-5 | 1-Oct-24 | 9-Oct-24 | 10-Oct-24 | 24071745 | 12:35 PM | 9476.6 | 3.8 | 11:10 AM | 9500.6 | 4.0 |
| WMI-5 | 10-Oct-24 | 21-Oct-24 | 22-Oct-24 | 24071752 | 11:50 AM | 9500.91 | 3.4 | 12:50 PM | 9524.91 | 3.5 |
| WMI-5 | 22-Oct-24 | 2-Nov-24 | 4-Nov-24 | 24090443 | 12:50 PM | 9524.92 | 3.4 | 1:35 PM | 9548.92 | 3.3 |
| WMI-5 | 4-Nov-24 | 14-Nov-24 | 19-Nov-24 | 24090525 | 1:35 PM | 9548.92 | 3.4 | 4:40 PM | 9572.92 | 3.5 |
| WMI-5 | 19-Nov-24 | 26-Nov-24 | 29-Nov-24 | 24090527 | 4:40 PM | 9572.92 | 3.4 | 3:00 PM | 9596.92 | 3.6 |
| WMI-5 | 29-Nov-24 | 8-Dec-24 | 13-Dec-24 | 24090538 | 3:00 PM | 9596.94 | 3.4 | 12:30 PM | 9620.94 | 3.6 |
| WMI-5 | 13-Dec-24 | 20-Dec-24 | 23-Dec-24 | 24090540 | 12:30 PM | 9620.94 | 3.4 | 4:10 PM | 9620.94 | 3.8 |
| WMI-5 | 23-Dec-24 | 1-Jan-25 | 6-Jan-25 | 24090503 | 4:10 PM | 9620.95 | 3.4 | 2:50 PM | 9644.95 | 3.6 |

Comments: Calibration on Jan 31/24. New setpoint = 3.6 "H2O
 Calibration on Apr 8/24. New setpoint= 3.7 "H2O
 Calibration on Jul 25/24. New setpoint = 3.6 "H2O
 Calibration on Oct 10/24. New setpoint = 3.4 "H2O

RWDI AIR
Ambient TSP Monitoring Field Data Sheet

| Sample I.D. | Installation Date | Sample Date | Removal Date | Filter No. | Initial Readings | | | Final Readings | | |
|-------------|-------------------|-------------|--------------|------------|------------------|---------|-------------------------------|----------------|---------|-------------------------------|
| | | | | | Time of Day | Timer | Delta P (in H ₂ O) | Time of Day | Timer | Delta P (in H ₂ O) |
| WMI-6 | 21-Dec-23 | 1-Jan-24 | 8-Jan-24 | 23110949 | 11:00 AM | 5934.24 | 3.8 | 1:10 PM | 5958.24 | 3.8 |
| WMI-6 | 8-Jan-24 | 13-Jan-24 | 15-Jan-24 | 23110957 | 1:10 PM | 5958.25 | 3.8 | 2:00 PM | 5982.25 | 3.8 |
| WMI-6 | 15-Jan-24 | 25-Jan-24 | 29-Jan-24 | 23110972 | 2:00 PM | 5982.26 | 3.8 | 1:30 PM | 6006.26 | 3.9 |
| WMI-6 | 31-Jan-24 | 6-Feb-24 | 7-Feb-24 | 23110960 | 1:40 PM | 6006.59 | 3.5 | 1:20 PM | 6030.59 | 3.4 |
| WMI-6 | 7-Feb-24 | 18-Feb-24 | 21-Feb-24 | 23110966 | 1:20 PM | 6030.62 | 3.5 | 1:10 PM | 6054.62 | 3.8 |
| WMI-6 | 21-Feb-24 | 1-Mar-24 | 5-Mar-24 | 23122703 | 1:10 PM | 6054.66 | 3.5 | 10:20 AM | 6060.99 | 3.7 |
| WMI-6 | 5-Mar-24 | 13-Mar-24 | 15-Mar-24 | 23122704 | 10:20 AM | 6060.97 | 3.5 | 2:10 PM | 6084.97 | 3.6 |
| WMI-6 | 15-Mar-24 | 25-Mar-24 | 28-Mar-24 | 24012937 | 2:10 PM | 6084.98 | 3.5 | 12:10 PM | 6108.98 | 3.5 |
| WMI-6 | 29-May-24 | 6-Apr-24 | 8-Apr-24 | 24012944 | 12:10 PM | 6108.99 | 3.5 | 1:15 PM | 6132.99 | 3.7 |
| WMI-6 | 8-Apr-24 | 18-Apr-24 | 19-Apr-24 | 24012950 | 2:35 PM | 6133.4 | 3.8 | 1:30 PM | 6157.40 | 3.9 |
| WMI-6 | 25-Apr-24 | 30-Apr-24 | 8-May-24 | 24012931 | 1:30 PM | 6157.41 | 3.8 | 9:14 AM | 6181.40 | 3.8 |
| WMI-6 | 8-May-24 | 12-May-24 | 14-May-24 | 24012936 | 9:14 AM | 6181.42 | 3.8 | 12:15 PM | 6205.42 | 4.3 |
| WMI-6 | 14-May-24 | 24-May-24 | 29-May-24 | 24032802 | 12:15 PM | 6205.45 | 3.8 | 10:37 AM | 6229.45 | 4.5 |
| WMI-6 | 29-May-24 | 2-Jun-24 | - | - | - | - | - | - | - | - |
| WMI-6 | 3-Jun-24 | 8-Jun-24 | 10-Jun-24 | 24032805 | 12:15 PM | 6229.58 | 3.8 | 10:20 AM | 6253.58 | 3.5 |
| WMI-6 | 10-Jun-24 | 14-Jun-24 | 18-Jun-24 | 24032811 | 10:20 AM | 6253.59 | 3.8 | 10:35 AM | 6277.59 | 4 |
| WMI-6 | 18-Jun-24 | 20-Jun-24 | 24-Jun-24 | 24032822 | 10:35 AM | 6277.61 | 3.8 | 2:25 PM | 6301.61 | 4 |
| WMI-6 | 24-Jun-24 | 26-Jun-24 | 27-Jun-24 | 24050853 | 2:25 PM | 6301.62 | 3.8 | 3:50 PM | 6325.62 | 4 |
| WMI-6 | 27-Jun-24 | 2-Jul-24 | 3-Jul-24 | 24050860 | 3:50 PM | 6325.65 | 3.8 | 1:15 PM | 6349.65 | 3.7 |
| WMI-6 | 3-Jul-24 | 8-Jul-24 | 9-Jul-24 | 24050866 | 1:15 PM | 6349.66 | 3.8 | 9:25 AM | 6373.66 | 3.9 |
| WMI-6 | 9-Jul-24 | 14-Jul-24 | 15-Jul-24 | 24050871 | 9:25 AM | 6373.67 | 3.8 | 2:20 PM | 6373.67 | 3.8 |
| WMI-6 | 15-Jul-24 | 20-Jul-24 | 22-Jul-24 | 24050878 | 2:20 PM | 6373.68 | 3.8 | 1:40 PM | 6397.68 | 3.8 |
| WMI-6 | 22-Jul-24 | 26-Jul-24 | 30-Jul-24 | 24050883 | 1:40 PM | 6397.69 | 3.8 | 12:05 PM | 6422.59 | 4 |
| WMI-6 | 30-Jul-24 | 1-Aug-24 | 6-Aug-24 | 24050891 | 12:05 PM | 6422.61 | 3.8 | 10:25 AM | 6446.61 | 3.6 |
| WMI-6 | 6-Aug-24 | 7-Aug-24 | 12-Aug-24 | 24051303 | 10:25 AM | 6440.65 | 3.8 | 1:40 PM | 6466.82 | 3.8 |
| WMI-6 | 12-Aug-24 | 13-Aug-24 | 15-Aug-24 | 24051308 | 1:40 PM | 6466.83 | 3.8 | 2:40 PM | 6490.83 | 4.1 |
| WMI-6 | 15-Aug-24 | 19-Aug-24 | 20-Aug-24 | 24071762 | 2:40 PM | 6490.86 | 3.8 | 5:05 PM | 6514.86 | 3.9 |
| WMI-6 | 20-Aug-24 | 25-Aug-24 | 26-Aug-24 | 24071767 | 5:05 PM | 6514.87 | 3.8 | 11:40 AM | 6538.87 | 3.7 |
| WMI-6 | 26-Aug-24 | 31-Aug-24 | 4-Sep-24 | 24071771 | 11:40 AM | 6538.89 | 3.8 | 11:10 AM | 6562.89 | 3.8 |
| WMI-6 | 4-Sep-24 | 6-Sep-24 | 11-Sep-24 | 24071776 | 11:10 AM | 6562.9 | 3.8 | 9:35 AM | 6586.95 | 3.9 |
| WMI-6 | 11-Sep-24 | 12-Sep-24 | 17-Sep-24 | 24071789 | 9:35 AM | 6586.96 | 3.9 | 11:30 AM | 6610.96 | 3.9 |
| WMI-6 | 17-Sep-24 | 18-Sep-24 | 23-Sep-24 | 24071735 | 11:30 AM | 6610.97 | 3.9 | 11:15 AM | 6634.97 | 3.9 |
| WMI-6 | 23-Sep-24 | 24-Sep-24 | 25-Sep-24 | 24071739 | 11:15 AM | 6634.98 | 3.9 | 2:40 PM | 6658.97 | 4 |
| WMI-6 | 25-Sep-24 | 30-Sep-24 | 1-Oct-24 | 24071759 | 2:40 PM | 6658.98 | 3.9 | 12:00 PM | 6682.98 | 3.9 |
| WMI-6 | 1-Oct-24 | 9-Oct-24 | 10-Oct-24 | 24071743 | 12:00 PM | 6682.99 | 3.9 | 10:20 AM | 6706.99 | 4.1 |
| WMI-6 | 10-Oct-24 | 21-Oct-24 | 22-Oct-24 | 24071751 | 10:43 AM | 6707.26 | 3.8 | 1:25 PM | 6731.26 | 4 |
| WMI-6 | 22-Oct-24 | 2-Nov-24 | 4-Nov-24 | 24090442 | 1:25 PM | 6731.27 | 3.8 | 2:25 PM | 6755.27 | 4 |
| WMI-6 | 4-Nov-24 | 14-Nov-24 | 19-Nov-24 | 24090448 | 2:25 PM | 6755.28 | 3.8 | 11:50 AM | 6779.28 | 3.9 |
| WMI-6 | 19-Nov-24 | 26-Nov-24 | 29-Nov-24 | 24090529 | 11:50 AM | 6779.29 | 3.8 | 1:10 PM | 6803.29 | 4.1 |
| WMI-6 | 29-Nov-24 | 8-Dec-24 | 13-Dec-24 | 24090539 | 1:10 PM | 6803.29 | 3.8 | 1:50 PM | 6827.29 | 3.9 |
| WMI-6 | 13-Dec-24 | 20-Dec-24 | 23-Dec-24 | 24090541 | 1:50 PM | 6827.3 | 3.8 | 4:25 PM | 6851.30 | 4 |
| WMI-6 | 23-Dec-24 | 1-Jan-25 | 6-Jan-25 | 24090501 | 4:25 PM | 6851.31 | 3.8 | 2:00 PM | 6875.31 | 4 |

Comments: Calibration on Jan 31/24. New setpoint = 3.5 "H2O
 Calibration on Apr 8/24. New setpoint = 3.8 "H2O
 Calibration on Jul 24/24. New setpoint = 3.8 "H2O
 Calibration on Oct 10/24. New setpoint = 3.8 "H2O

A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

APPENDIX I

The graphic for Appendix I1 features a large, light gray circle that occupies the right two-thirds of the page. A blue curved shape, resembling a quarter-circle, is positioned in the top-left corner, partially overlapping the gray circle. The text 'APPENDIX I1' is centered within the gray area.

APPENDIX I1

General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) May 14, 2024 | Date Exceedence Determined April 30, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|---|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | County/District County of Lambton | Postal Code N0M 2S0 | |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|---|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, was the ESDM Report prepared to fulfill (select all that apply): | |
| <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> | |
| <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities | |
| <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director | |
| <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report | |
| <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence | |
| <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard | |
| <input type="checkbox"/> Other (please specify): _____ | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility |
| <input type="checkbox"/> Child Care Facility | <input type="checkbox"/> Educational Facility |
| <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): _____ | <input type="checkbox"/> Other Location (explain): _____ |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|---|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 25/03/24 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? | | |
| <input checked="" type="checkbox"/> Yes | If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | |
| <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): | | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility | <input type="checkbox"/> Child Care Facility |
| <input type="checkbox"/> Educational Facility | <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): _____ | <input checked="" type="checkbox"/> Other Location (explain): Property Line of Facility | |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.


| | | | |
|--|----------------|---|---|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) _____ | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| Postal Code N0M 2S0 | | | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | E-mail Address amclahl@wm.com |
| Signature  | | Date (dd/mm/yyyy) 14/05/2024 | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | |
|--------------------------------|-----------------------|------------------------------|--|--|-----------------------------|---|-----------------|-------------------------|--|
| Western | | | 25/03/24 | N/A | 24-Hours | Site Property Line | | | |
| Contaminant ^(a) | | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit |
| 1 | TSP (Western Sampler) | N/A | Hi-Vol | 122 | 24 | 120 | Visibility | AAQC | 102% |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On April 30, 2024, we received the TSP results from Bureau Veritas regarding the particulate weights from the March 25, 2024 sampling event. On April 30, 2024, the results were entered and assessed, and it was found that there was one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

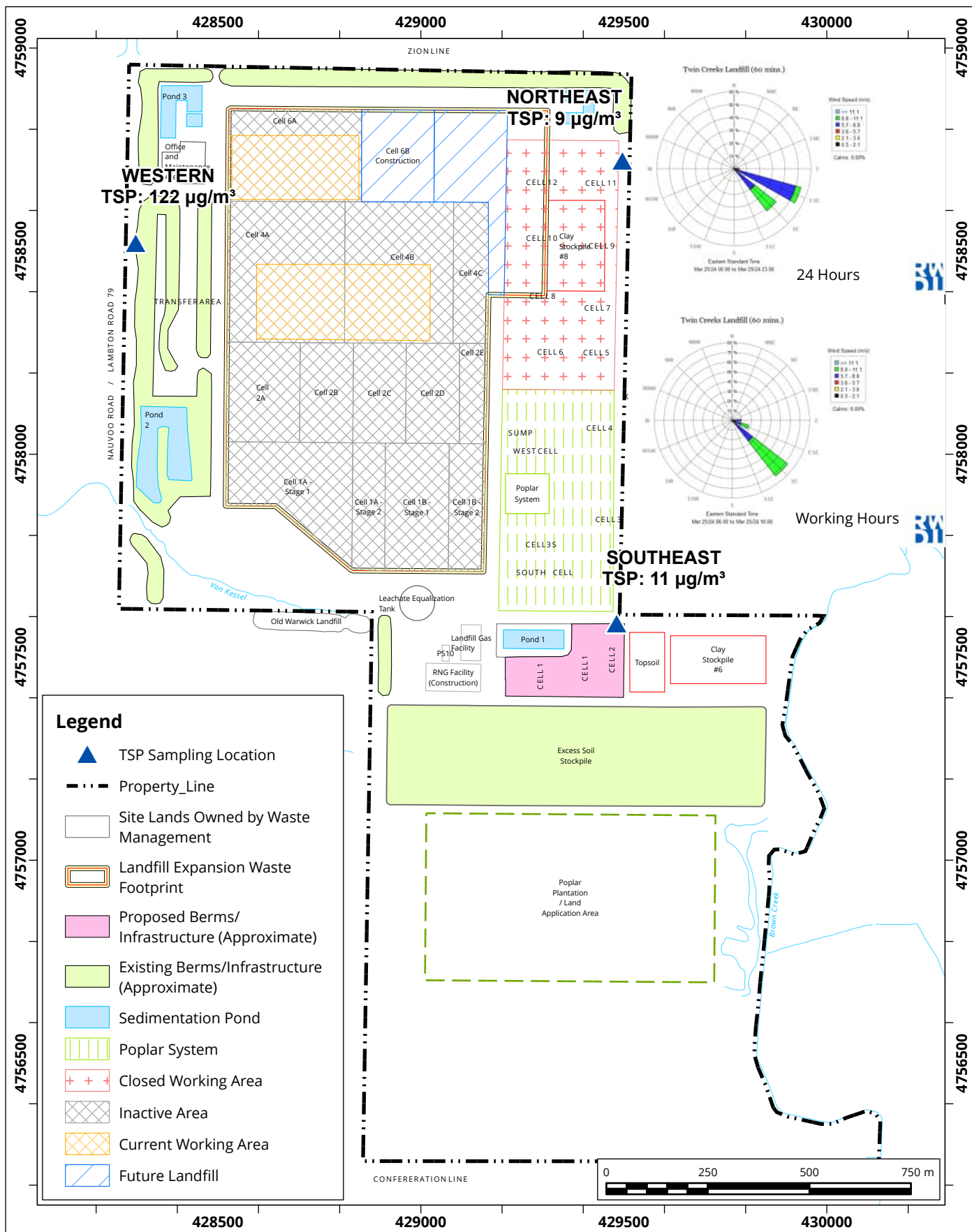
March 25, 2024

On Monday March 25, 2024, there was an exceedance of the TSP 24-hour AAQC at the Western sampler. Attached is Figure 1, which presents wind roses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the March 25 sampling date.

1. The measured TSP concentration at the Northeast sampler was 9 ug/m^3 , the Western sampler was 122 ug/m^3 and Southeast sampler (site background) was 11 ug/m^3 . During the 24-hour period, the wind was predominantly from the SSE, SE and SSW; wind speeds ranged from 20 to 34 km/h and wind gusts reached a maximum of 48 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the ESE to S. During this timeframe, the Western sampler location was in close proximity to site construction activities associated with interim capping that was occurring on the Western portion of Cell 4A (sideslope and on the top).
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Western TSP sampler location, predominantly originated from on-site construction activities related to interim capping, with minimal contributions from off-site activities/sources as measured at the site background location (Northeast and Southeast samplers at 9 ug/m^3 and 11 ug/m^3 respectively for TSP).



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: March 25, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|-------------|
| Drawn by: AXT | Figure: 1 |
| Approx. Scale: | 1:13,000 |
| Date Revised: | May 7, 2024 |



The background features a large, light gray circular shape on the right side, partially overlapping a blue triangular shape on the left. A thin white curved line separates the two shapes.

APPENDIX I2

General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) August 14, 2024 | Date Exceedence Determined August 2, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|------|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | | County/District County of Lambton | Postal Code N0M 2S0 |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|-----|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, was the ESDM Report prepared to fulfill (select all that apply): | |
| <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> | |
| <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities | |
| <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director | |
| <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report | |
| <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence | |
| <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard | |
| <input type="checkbox"/> Other (please specify): | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility |
| <input type="checkbox"/> Child Care Facility | <input type="checkbox"/> Educational Facility |
| <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input type="checkbox"/> Other Location (explain): |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|---|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 05/06/24 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? | | |
| <input checked="" type="checkbox"/> Yes | If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | |
| <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): | | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility | <input type="checkbox"/> Child Care Facility |
| <input type="checkbox"/> Educational Facility | <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input checked="" type="checkbox"/> Other Location (explain): | Property Line of Facility |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.


| | | | |
|---|----------------|---|--------------------------|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| Postal Code N0M 2S0 | | | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | |
| E-mail Address amclachl@wm.com | | | |
| Signature  | | Date (dd/mm/yyyy) 14/08/2024 | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|--------------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Northeast Sampler | | 05/06/2024 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Northeast Sampler) | N/A | Hi-Vol | 125 | 24 | 12 | Visibility | AAQC | 104% | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On August 1, 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the June 5, 2024 sampling event. On August 2, 2024, the results were entered and assessed, and it was found that there was one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

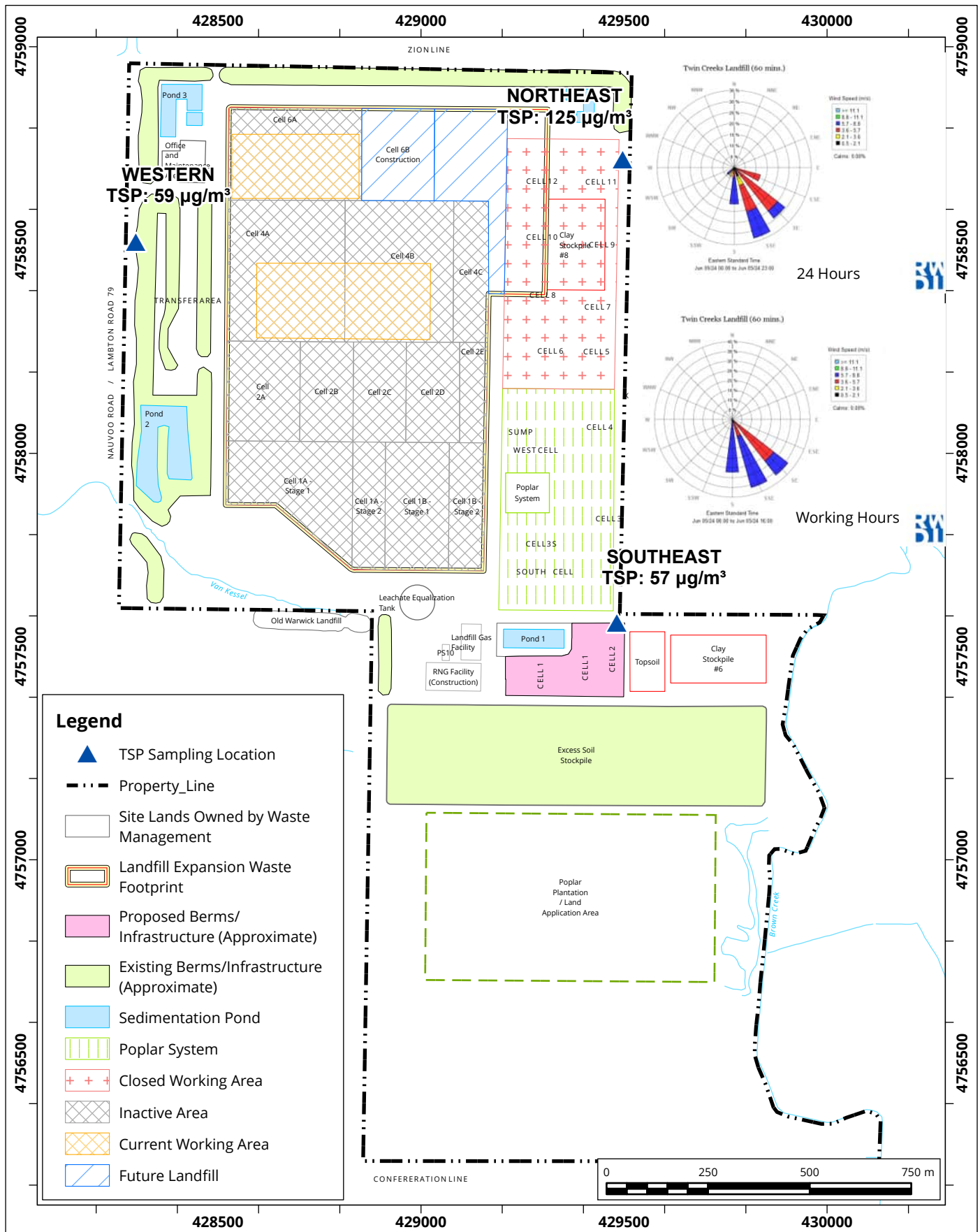
June 5, 2024

On Wednesday June 5, 2024, there was an exceedance of the TSP 24-hour AAQC at the Northeastern sampler. Attached is Figure 1, which presents wind roses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the June 5 sampling date.

1. The measured TSP concentration at the Northeast sampler was 125 ug/m^3 , the Western sampler was 59 ug/m^3 and Southeast sampler (site background) was 57 ug/m^3 . During the 24-hour period, the wind was predominantly from the ESE to S; wind speeds ranged from 6 to 26 km/h and wind gusts reached a maximum of 52 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the SE to S. During this timeframe, the Northeast sampler location was in close proximity to stone stockpiling east of Pond 4.
3. Sweeping and watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Northeast TSP sampler location, predominantly originated from on-site construction activities related to stone stockpiling, with contributions from off-site activities/sources as measured at the site background location (Southeast sampler at 57 ug/m^3 respectively for TSP).



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: June 5, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------|--------------|
| Drawn by: AXT | Figure: 1 |
| Approx. Scale: | 1:13,000 |
| Date Revised: | Jul 22, 2024 |



The graphic for Appendix 13 features a large, light gray circular shape on the right side of the page. On the left, a blue triangular shape is partially visible, with a white curved line separating it from the gray circle. The text 'APPENDIX 13' is centered in the white space between the blue triangle and the gray circle.

APPENDIX 13

General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) August 14, 2024 | Date Exceedence Determined August 2, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|---|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | County/District County of Lambton | Postal Code N0M 2S0 | |
| Geo Reference | | | |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|-----|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | |
| * Note: The ESDM must be submitted within three months of the discharge | | | |

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, was the ESDM Report prepared to fulfill (select all that apply): | |
| <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> | |
| <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities | |
| <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director | |
| <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report | |
| <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence | |
| <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard | |
| <input type="checkbox"/> Other (please specify): | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility |
| <input type="checkbox"/> Child Care Facility | <input type="checkbox"/> Educational Facility |
| <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input type="checkbox"/> Other Location (explain): |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|---|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 11/06/24 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? | | |
| <input checked="" type="checkbox"/> Yes | If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | |
| <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): | | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility | <input type="checkbox"/> Child Care Facility |
| <input type="checkbox"/> Educational Facility | <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input checked="" type="checkbox"/> Other Location (explain): | Property Line of Facility |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.


| | | | |
|---|----------------|---|--------------------------|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| Postal Code N0M 2S0 | | | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | |
| E-mail Address amclachl@wm.com | | | |
| Signature  | | Date (dd/mm/yyyy) 14/08/2024 | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|---|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Northeast, Southeast and Western Samplers | | 11/06/2024 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Northeast Sampler) | N/A | Hi-Vol | 440 | 24 | 120 | Visibility | AAQC | 367% | |
| 2 TSP (Southeast Sampler) | N/A | Hi-Vol | 284 | 24 | 120 | Visibility | AAQC | 237% | |
| 3 TSP (Western Sampler) | N/A | Hi-Vol | 161 | 24 | 120 | Visibility | AAQC | 134% | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On August 1, 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the June 11, 2024 sampling event. On August 2, 2024, the results were entered and assessed, and it was found that there were three (3) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

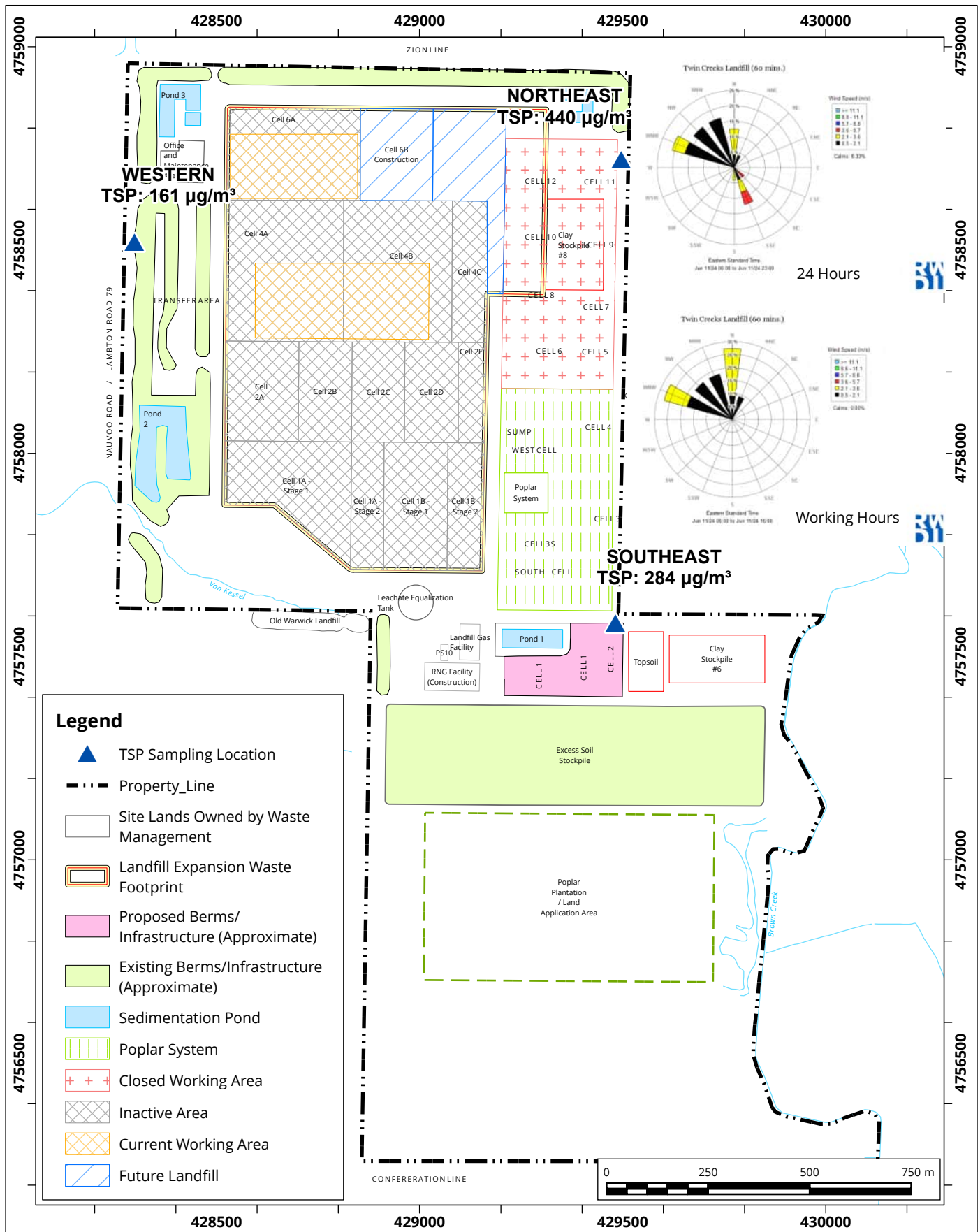
June 11, 2024

On Tuesday June 11, 2024, there was an exceedance of the TSP 24-hour AAQC at the Southeastern, Northeastern and Western samplers. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the June 11 sampling date.

1. The measured TSP concentration at the Southeast sampler was 284 ug/m^3 , the Northeast sampler was 440 ug/m^3 and Western sampler was 161 ug/m^3 . During the 24-hour period, the wind was predominantly from the SSE and WNW to N; wind speeds ranged from 1 to 14 km/h and wind gusts reached a maximum of 19 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the WNW to N. During this timeframe, the Northeast sampler location was in close proximity to stone stockpiling east of Pond 4. The southeast sampler was downwind and influenced by the stockpiling activities and associated road traffic.
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at all sampling locations, predominantly originated from on-site construction activities related stone stockpiling, with contributions from off-site activities/sources as measured at the site background location (Western sampler at 161 ug/m^3).



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: June 11, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------------------|-----------|
| Drawn by: AXT | Figure: 1 |
| Approx. Scale: 1:13,000 | |
| Date Revised: Jul 23, 2024 | |



The graphic for Appendix I4 features a large, light gray circular shape on the right side of the page. On the left, a blue triangular shape is partially visible, with a white curved line separating it from the gray circle. The text 'APPENDIX I4' is centered in the white space between the blue triangle and the gray circle.

APPENDIX I4

General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) August 14, 2024 | Date Exceedence Determined August 2, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|---|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | County/District County of Lambton | Postal Code N0M 2S0 | |
| Geo Reference | | | |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|-----|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | |
| * Note: The ESDM must be submitted within three months of the discharge | | | |

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, was the ESDM Report prepared to fulfill (select all that apply): | |
| <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> | |
| <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities | |
| <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director | |
| <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report | |
| <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence | |
| <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard | |
| <input type="checkbox"/> Other (please specify): | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) | |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility |
| <input type="checkbox"/> Child Care Facility | <input type="checkbox"/> Educational Facility |
| <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input type="checkbox"/> Other Location (explain): |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|---|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 14/06/24 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? | | |
| <input checked="" type="checkbox"/> Yes | If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | |
| <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): | | |
| <input type="checkbox"/> Health Care | <input type="checkbox"/> Seniors Residence / Long Term Care Facility | <input type="checkbox"/> Child Care Facility |
| <input type="checkbox"/> Educational Facility | <input type="checkbox"/> Dwelling | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Location Specified by The Director (explain): | <input checked="" type="checkbox"/> Other Location (explain): | Property Line of Facility |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.


| | | | |
|---|----------------|---|--|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | Unit Identifier (i.e. suite or apartment number) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| Postal Code N0M 2S0 | | | |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | E-mail Address amclachl@wm.com |
| Signature  | | Date (dd/mm/yyyy) 14/08/2024 | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|--------------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Northeast Sampler | | 14/06/2024 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Northeast Sampler) | N/A | Hi-Vol | 192 | 24 | 120 | Visibility | AAQC | 160% | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* For additional measurement locations / sampling times, please included additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On August 1 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the June 14, 2024 sampling event. On August 2 2024, the results were entered and assessed, and it was found that there were one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

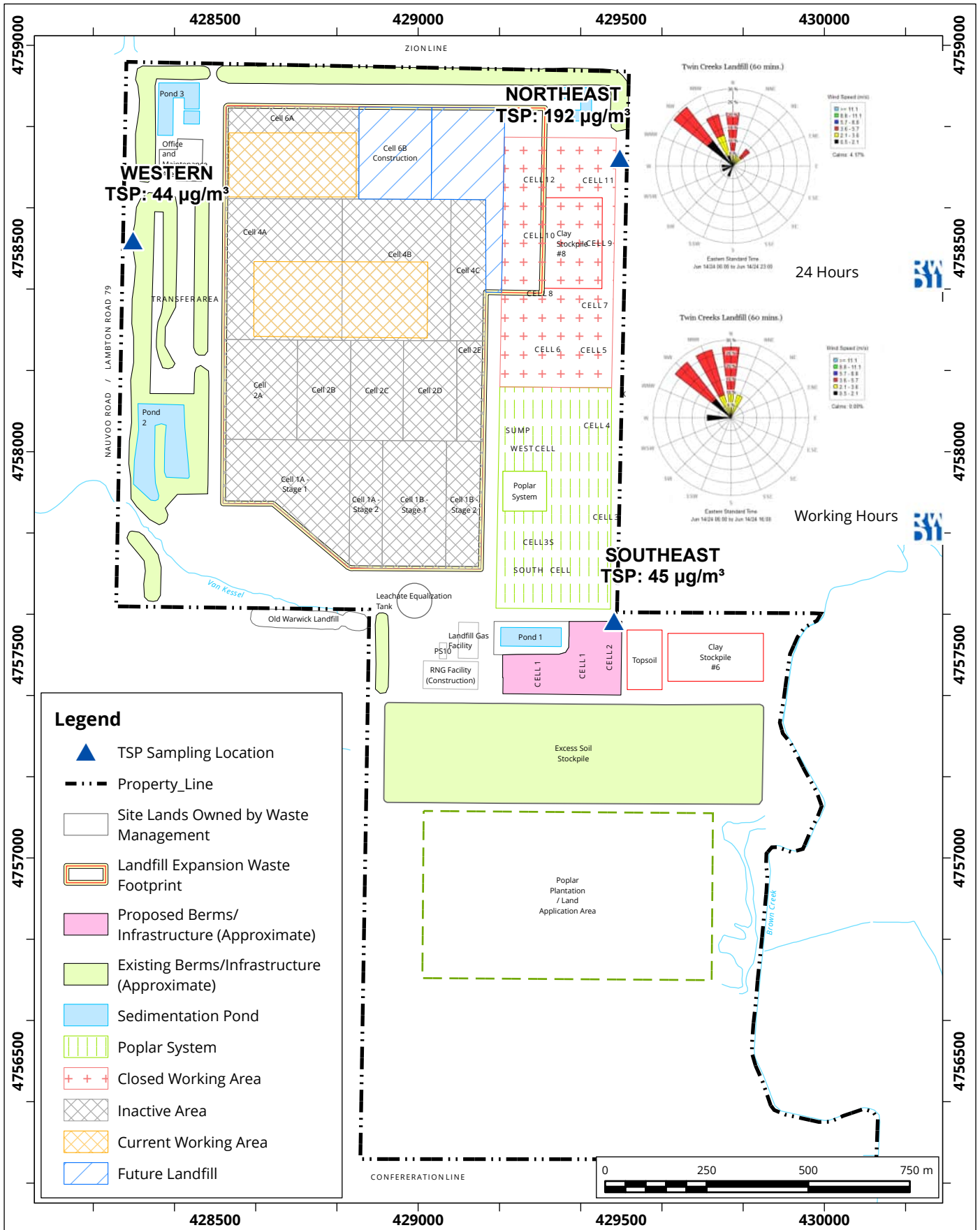
June 14, 2024

On Friday June 14, 2024, there was an exceedance of the TSP 24-hour AAQC at the Northeastern sampler. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the June 14 sampling date.

1. The measured TSP concentration at the Northeast sampler was 192 ug/m^3 , the Southeast sampler was 45 ug/m^3 and Western sampler (site background) was 44 ug/m^3 . During the 24-hour period, the wind was predominantly from the NW to N; wind speeds ranged from 2 to 24 km/h and wind gusts reached a maximum of 37 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the NW to N. During this timeframe, the Northeast sampler location was in close proximity to site construction activities associated with stone stockpiling at the stone stockpile east of Pond 4.
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Northeast TSP sampler location, predominantly originated from on-site construction activities related to stone stockpiling, with contributions from off-site activities/sources as measured at the site background location (Southeast and Western samplers at 45 ug/m^3 and 44 ug/m^3 respectively for TSP).



The graphic for Appendix I5 features a large, light gray circular shape on the right side of the page. On the left, a blue triangular shape is partially visible, with a white curved line separating it from the gray circle. The text 'APPENDIX I5' is centered in the white space between the blue triangle and the gray circle.

APPENDIX I5

General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) | Date Exceedence Determined September 18, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|------|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | | County/District County of Lambton | Postal Code N0M 2S0 |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|---|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, was the ESDM Report prepared to fulfill (select all that apply): <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard <input type="checkbox"/> Other (please specify): _____ | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input type="checkbox"/> Other Location (explain): _____ | |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|--|--|
| Type of Monitor / Measurement Type HI-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 18/09/2024 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input checked="" type="checkbox"/> Other Location (explain): Property Line of Facility | | |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.

| | | | | |
|--|----------------|---|--------------------------|--|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | | Unit Identifier (i.e. suite or apartment number) |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) _____ | | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada | Postal Code N0M 2S0 |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | | E-mail Address amclachl@wm.com |
| Signature | | | Date (dd/mm/yyyy) | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | | Time | Sampling Period | | Land Use at Monitor | | |
|--------------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Northeast Sampler | | 18/09/24 | | N/A | 24-Hour | | Site Property Line | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Northeast Sampler) | N/A | Hi-Vol | 303 | 24 | 120 | Visibility | AAQC | 253% | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

* **For additional measurement locations / sampling times, please included additional tables**

** **If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column**

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Marcelina, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On October 24, 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the September 18, 2024 sampling event. On October 24, 2024, the results were entered and assessed, and it was found that there were one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

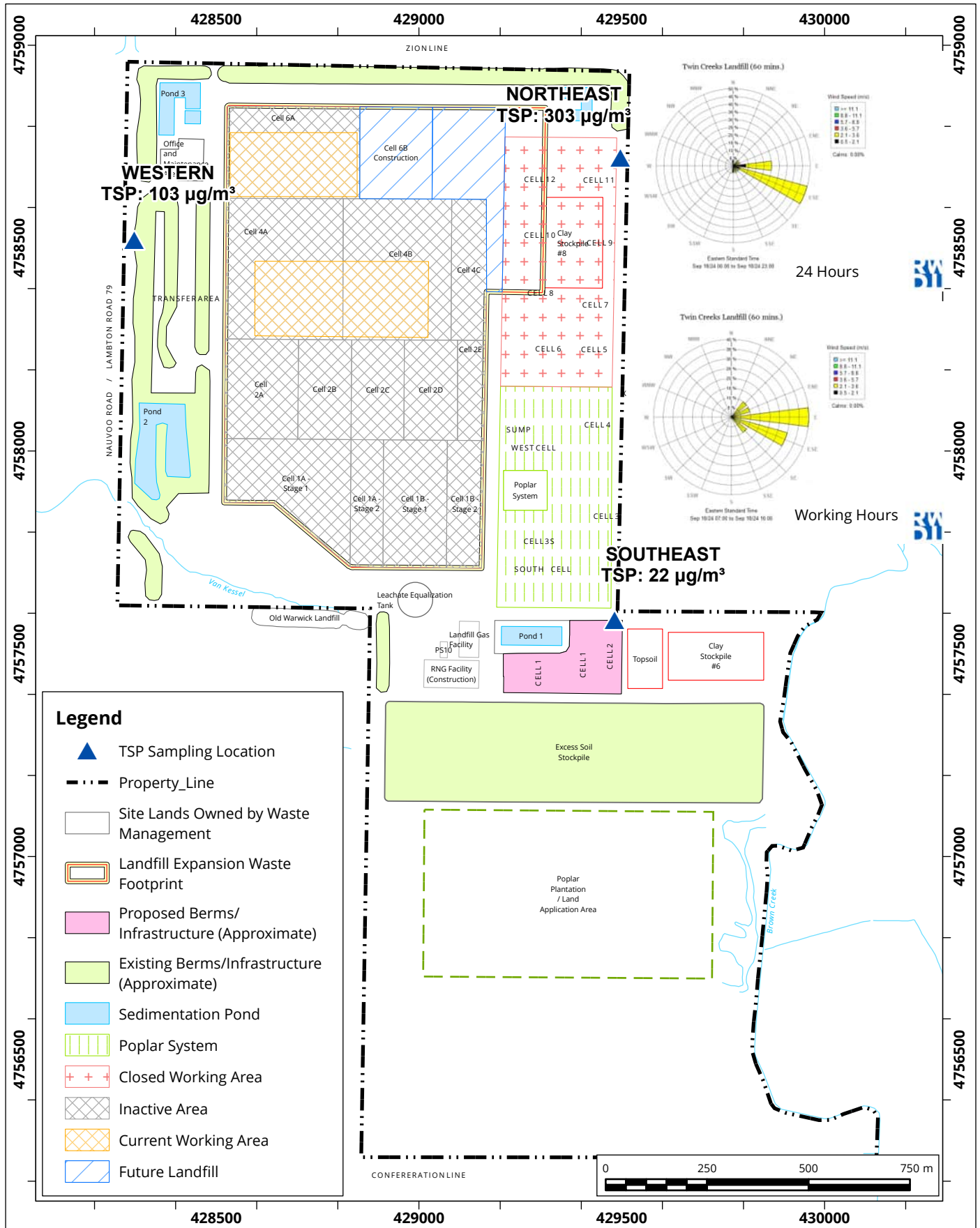
September 18, 2024

On Wednesday September 18, 2024, there was an exceedance of the TSP 24-hour AAQC at the Northeastern sampler. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during the September 18 sampling date.

1. The measured TSP concentration at the Northeast sampler was 303 ug/m^3 , the Southeast sampler (site background) was 22 ug/m^3 and Western sampler was 103 ug/m^3 . During the 24-hour period, the wind was predominantly from the E to ESE; wind speeds ranged from 2 to 13 km/h and wind gusts reached a maximum of 23 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the E to ESE. During this timeframe, the Northeast sampler location was in close proximity to site construction activities associated with stone stockpiling at the stone stockpile east of Pond 4.
3. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
4. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Northeast TSP sampler location, predominantly originated from on-site construction activities related to stone stockpiling, with contributions from off-site activities/sources as measured at the site background locations (Southeast and Western samplers at 22 ug/m^3 and 103 ug/m^3 respectively for TSP).



The background features a large, light gray circular shape on the right side, partially overlapping a solid blue triangular shape on the left. The text 'APPENDIX I6' is centered within the gray area.

APPENDIX I6

General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|--|
| Date Form Submitted (Faxed) | Date Exceedence Determined December 18, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|---|------|--|--|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | | Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.) Waste Disposal Site | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | Unit Identifier (i.e. suite or apartment number) |
| Survey Address (used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory) | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information (includes any additional information to clarify applicants' physical location) | | | |
| Municipality/Unorganized Township Watford | | County/District County of Lambton | Postal Code N0M 2S0 |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – attach a separate list if more space is required | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | | | |
|--|---|--|---|
| Section 28 Notifications | | | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | | | |
| <input type="checkbox"/> | Yes | Type of Previously Approved Abatement Plan | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| <input checked="" type="checkbox"/> | No | If No, please provide the following: Dust Management Plan (BMPP) | December 16, 2023 (ECA) |
| Section 30 (3) Notifications for URT exceedence | | | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | | | |
| <input type="checkbox"/> | Yes | | |
| <input type="checkbox"/> | No If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ | | |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|--|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, was the ESDM Report prepared to fulfill (select all that apply): <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard <input type="checkbox"/> Other (please specify): _____ | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Have you modelled for additional receptor locations other than the maximum POI? (please include figure showing maximum POI location) <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input type="checkbox"/> Other Location (explain): _____ | |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|--|--|--|
| Type of Monitor / Measurement Type Hi-Vol Monitor | Date of Exceedence (dd/mm/yyyy) 08/11/2024 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe the approval: Air Quality Monitoring (approved ECA #A032203 December 16, 2023) | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (select all that apply): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input checked="" type="checkbox"/> Other Location (explain): Property Line of Facility | | |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.

| | | | | |
|--|----------------|---|--------------------------|--|
| Name of Signing Authority (please print) Angela McLachlan | | Title Environmental Compliance Manager | | |
| Civic Address (address that has civic numbering and street information includes street number, name, type and direction) 5768 Nauvoo Rd | | | | Unit Identifier (i.e. suite or apartment number) |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) _____ | | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada | Postal Code N0M 2S0 |
| Telephone Number (including area code & extension) 519-849-5810 | | Fax Number (including area code) 519-849-6816 | | E-mail Address amclachl@wm.com |
| Signature | | | Date (dd/mm/yyyy) | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| Location of Monitor (Describe) | | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor | | | | |
|--------------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|--|
| Southeast Sampler | | 08/11/24 | N/A | 24-Hour | Site Property Line | | | | |
| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit | |
| 1 TSP (Southeast Sampler) | N/A | Hi-Vol | 135 | 24 | 120 | Visibility | AAQC | 112% | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

*** For additional measurement locations / sampling times, please included additional tables**

**** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column**

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Marcelina, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

On December 17, 2024, we received the final TSP results from Bureau Veritas regarding the particulate weights from the November 8, 2024 sampling event. On December 17, 2024, the results were entered and assessed, and it was found that there were one (1) measured TSP concentration in excess of the 24-hour AAQC. Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

November 8, 2024

On Friday November 8, 2024, there was an exceedance of the TSP 24-hour AAQC at the Southeast sampler. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating time for the site. Figure 1 also displays the measured TSP concentrations of all samplers during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the TSP concentrations as well as the onsite conditions during November 8 sampling date.

1. The measured TSP concentration at the Northeast sampler was 99 ug/m³, the Southeast sampler was 135 ug/m³ and Western sampler (site background) was 24 ug/m³.
2. During the 24-hour period, the wind was predominantly from the SW to WSW and WNW to NW; wind speeds ranged from 3 to 26 km/h and wind gusts reached a maximum of 39 km/h.
3. During the operational hours of the facility (7am to 5pm EDT) the wind was predominantly coming from the WNW to NW. During this timeframe, the Southeast sampler location was downwind to site capping construction activities.
4. Sweeping/watering activities for dust control purposes for the landfilling operations occurred on this date.
5. The site was operating normally for landfilling activities.

In summary, the aforementioned TSP exceedance that was measured on-site at the Southeast TSP sampler location, predominantly originated from on-site construction activities related to landfill capping with contributions from off-site activities/sources as measured at the site background locations (Northeast and Western samplers at 99 ug/m³ and 24 ug/m³ respectively for TSP).

A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

APPENDIX J

A decorative graphic on the left side of the page, featuring a blue triangle at the top left and a large, light gray curved shape that sweeps across the page.

APPENDIX J1

General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and O. Reg. 419/05 and will be used to collect information relating to a measured or modelled air related exceedence as required by s.25(9), s.28(1) and s.30(3) of O. Reg. 419/05. The Ministry of the Environment (MOE) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local MOE District Office. A list of these District Offices (including fax numbers) is available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/org/op.htm#Reg/Dist>. A copy of this form may be acquired through the MOE public web site (www.ene.gov.on.ca) or by contacting any MOE office.
2. For notification under s.25(9) or 28(1), the completed notification form should be faxed, as soon as practicable, to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area in which the facility is located.
3. For notification under s. 30, the completed notification form should be immediately faxed to the local Ministry of Environment (MOE) District Office which has jurisdiction over the area which the facility is located. If the exceedence is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).
4. Information contained in this notification form may not be considered confidential and may be made available to the public upon request. Information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the MOE of a measured or modeled air related exceedence as required under O. Reg. 419/05. Failure to notify the MOE as required by regulation constitutes an offence under the O. Reg. 419/05 and the EPA.

The generic term "limits" in the context of this form means any numerical Point of Impingement Concentration limit set by the MOE including standards in O. Reg. 419/05 and guidelines provided by the MOE (Ministry POI Limits). For a comprehensive list of MOE POI Limits please refer to the publication titled "Summary of O. Reg. 419/05 Standards, Point of Impingement Guidelines, and Ambient Air Quality Criteria (AAQC's)" available on the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/2424e01.htm>. Note that contaminants that have guidelines limits or recommended levels for chemicals with no standard or guideline may be considered "contaminants not listed in any of Schedules 1, 2 and 3 and discharges of the contaminant may cause an adverse effect" as this language appears in O. Reg. 419/05.

This form may be used for notification of exceedences of more than one contaminant; Table 1 (or equivalent) should be completed for each contaminant. If this notification is made pursuant to s. 30 in combination with ss. 25(9) or 28(1) then this form must be submitted immediately in accordance with s.30.

Regulatory Authority

28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,
 - (a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,
 - (i) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20, or
 - (ii) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect;
 - (b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (c) the contaminant is not listed in any of Schedules 1, 2 and 3 and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect.
25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,
 - (a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 18, 19 or 20; or
 - (b) the contaminant is not listed in any of Schedules 1, 2 and 3 and the use of the model indicates that discharges of the contaminant may cause an adverse effect.
30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in the concentration of the contaminant exceeding the half hour upper risk threshold or other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement.
 - (2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,
 - (a) an approved dispersion model or other dispersion model; or
 - (b) a dispersion model that is not used in accordance with this Regulation.
 - (3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing.

1. Ministry of the Environment District Office Information

| | |
|--|---|
| Date Form Submitted (Faxed) | Date Exceedence Determined October 10, 2024 |
| District Office Sarnia District Office | Fax Number (519) 336-4280 |
| Supporting information attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| If yes, number of pages: 1 | |

2. Site Information

| | | | |
|--|------|--|---|
| Name of Person Making the Notification Angela McLachlan | | Business Name Waste Management of Canada Corporation | |
| North American Industry Classification System (NAICS) Code 562210 | | Business Activity Description <i>(a description of the business endeavour, this may include products sold, services provided, equipment used, etc.)</i> | |
| Site Name Twin Creeks Environmental Centre | | MOE District Office Sarnia District Office | |
| Address Information: | | | |
| Site Address - Street information <i>(address that has civic numbering and street information includes street number, name, type and direction)</i> 5768 Nauvoo Rd | | | Unit Identifier <i>(i.e. suite or apartment number)</i> |
| Survey Address <i>(used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory)</i> | | | |
| Lot and Conc.: used to indicate location within a subdivided township and consists of a lot number and a concession number Lot _____ Conc. _____ | | Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan Part _____ Reference Plan _____ | |
| Non Address Information <i>(includes any additional information to clarify applicants' physical location)</i> | | | |
| Municipality/Unorganized Township Watford | | County/District County of Lambton | Postal Code N0M 2S0 |
| Map Datum | Zone | Accuracy Estimate | Geo Referencing Method |
| UTM Easting | | UTM Northing | |
| Certificate of Approval Number (s) – <i>attach a separate list if more space is required</i> | | | |
| 6318-CX4NFX | | A032203 | 8117-CUSNXX |

3. Type of Notification: Limit Exceedence – Table 1 or Table 2 should be completed and submitted with this notification of exceedence.

| | |
|--|---|
| <input checked="" type="checkbox"/> | This is a notification under Section 28(1) – Notice to Provincial Officer as a result of modelling or measurements relating to an exceedence of: (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input checked="" type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| <input type="checkbox"/> | This is a notification under Section 25 (9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (select all that apply) |
| <input type="checkbox"/> | Schedule 1 |
| <input type="checkbox"/> | Schedule 2 |
| <input type="checkbox"/> | Schedule 3 |
| <input type="checkbox"/> | POI Guideline |
| <input type="checkbox"/> | Ambient Air Quality Criteria |
| <input type="checkbox"/> | Other Limit (explain): _____ |
| Date that Refinement is anticipated to be complete (dd/mm/yyyy): _____ | |
| <input type="checkbox"/> | This is a notification under Section 30 (3) – Notice to the Director as a result of an exceedence of Upper Risk Thresholds (Schedule 6) |
| <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | No |

4. Follow-Up Action

| | |
|--|--|
| Section 28 Notifications | |
| Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29? | |
| <input type="checkbox"/> Yes | Type of Previously Approved Abatement Plan |
| <input type="checkbox"/> No | Date Approved under s.29 of O. Reg. 419/05 (dd/mm/yyyy) |
| If No, please provide the following: | |
| Section 30 (3) Notifications for URT exceedence | |
| Has an Emission Summary and Dispersion Modelling (ESDM) Report been prepared in accordance with s.30(4) and submitted to the Ministry? | |
| <input type="checkbox"/> Yes | |
| <input type="checkbox"/> No | If No, what is the anticipated submission date for the ESDM* (dd/mm/yyyy)? _____ |

* Note: The ESDM must be submitted within three months of the discharge

5. Model Based Assessment – please complete this section if notifying of a modelled exceedence (complete Table 1)

| | |
|---|--|
| Was an ESDM Report prepared in accordance with s.26 O. Reg. 419/05? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, was the ESDM Report prepared to fulfill (<i>select all that apply</i>): <input type="checkbox"/> s.22 of O. Reg. 419/05 - Application for Certificate of Approval under section 9 of the <i>Environmental Protection Act</i> <input type="checkbox"/> s.23 of O. Reg. 419/05 - Requirement for Schedule 4 or 5 sector facilities <input type="checkbox"/> s.24 of O. Reg. 419/05 - Notice issued by Director <input type="checkbox"/> s.25 of O. Reg. 419/05 - Requirement for updating ESDM Report <input type="checkbox"/> s.30(4) of O. Reg. 419/05 – Required as result of URT exceedence <input type="checkbox"/> s.32(13) of O. Reg. 419/05 – Required as part of a Request for Alternative Standard <input type="checkbox"/> Other (please specify): _____ | |
| Was the approved dispersion model refined as required by s.12 O. Reg. 419/05 (i.e. operating conditions, emission rates)? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Have you modelled for additional receptor locations other than the maximum POI? (<i>please include figure showing maximum POI location</i>) <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (<i>select all that apply – please include figure showing additional modelled locations</i>): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input type="checkbox"/> Other Location (explain): _____ | |

6. Measurement Based Assessment – please complete this section if notifying of a measured exceedence (Complete Table 2 or equivalent)

| | | |
|---|--|--|
| Type of Monitor / Measurement Type Evacuated Canister | Date of Exceedence (dd/mm/yyyy) 10/10/2024 | Duration of Exceedence 24-Hour |
| Is the monitoring approved by the Ministry of the Environment? <input type="checkbox"/> Yes If yes, please describe the approval: _____ <input type="checkbox"/> No | | |
| Monitoring Reference Number: (if available) | | |
| Specify the location (i.e., land use) at which the exceedence did occur (<i>select all that apply</i>): <input type="checkbox"/> Health Care <input type="checkbox"/> Seniors Residence / Long Term Care Facility <input type="checkbox"/> Child Care Facility <input type="checkbox"/> Educational Facility <input type="checkbox"/> Dwelling <input type="checkbox"/> Unknown <input type="checkbox"/> Location Specified by The Director (explain): _____ <input type="checkbox"/> Other Location (explain): _____ | | |

7. Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184(2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedence under O.Reg 419/05 to the Ministry of the Environment
- I have used the most recent notification form (as obtained from the Ministry of the Environment Internet site at <http://www.ene.gov.on.ca/envision/gp/index.htm#PartAir> or from my local Ministry District Office and I have included all necessary information required by O. Reg. 419/05 and identified on this form.

| | | | |
|--|----------------|--|--|
| Name of Signing Authority (<i>please print</i>) Angela McLachlan | | Title Environmental Compliance Manager | |
| Civic Address (<i>address that has civic numbering and street information includes street number, name, type and direction</i>) 5768 Nauvoo Rd | | Unit Identifier (<i>i.e. suite or apartment number</i>) | |
| Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3) _____ | | | |
| Municipality Watford | Postal Station | Province/State ON | Country Canada |
| | | Postal Code N0M 2S0 | |
| Telephone Number (<i>including area code & extension</i>) 519-849-5810 | | Fax Number (<i>including area code</i>) 519-849-6816 | E-mail Address amclachl@wm.com |
| Signature | | Date (dd/mm/yyyy) | |

Table 1 - Information About Modelled Air Limit Exceedence – Contaminant Information

| | |
|--|---|
| Location of Maximum POI Concentration (e.g. UTM, street address, etc.) | Land Use at Maximum Point of Impingement (if known) |
|--|---|

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Air Dispersion Model Used) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC or POI Limit (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC or POI Limit |
|----------------------------|------------------------------|---|---|-----------------------------|--|-----------------|-------------------------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Table 2 - Information About Measured Air Limit Exceedence – Contaminant Information

| | | | | |
|---|-------------------|-------|-----------------|---------------------|
| Location of Monitor (Describe) | Date (dd/mm/yyyy) | Time | Sampling Period | Land Use at Monitor |
| North West and Southeast of active landfill | 10/10/2024 | 01:00 | 24-Hr | Landfill |

| Contaminant ^(a) | CAS ^(b) Number | Type of Assessment (Measurement Method) | Maximum POI ^(c) Concentration (µg/m ³) | Averaging Period (hours) | Current MOE AAQC POI Limi (µg/m ³) | Limiting Effect | Schedule (1, 2 or 3) | Percentage of MOE AAQC POI Limit |
|----------------------------|------------------------------|--|---|-----------------------------|--|-----------------|-------------------------|--|
| 1 Chloroform | 67-66-3 | Evacuated Canister | 1.27 | 24 | 1 | Health | AAQC | 127% |
| 2 Chloroform | 67-66-3 | Evacuated Canister | 1.17 | 24 | 1 | Health | AAQC | 117% |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |

*** For additional measurement locations / sampling times, please included additional tables**

**** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column**

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

Amanda and Sean, on behalf of Waste Management of Canada Corporation, RWDI AIR Inc. submits the following information.

RWDI AIR Inc. (RWDI) received the final VOC results from Bureau Veritas regarding the VOC concentrations from the October 10 to 11, 2024 sampling period. On review of the results, there were (2) measured Chloroform concentration in excess of the 24-hour AAQC (1 ug/m^3). Attached are the Exceedance Forms (PIBS 5354e) for your reference. Below is a summary of the events.

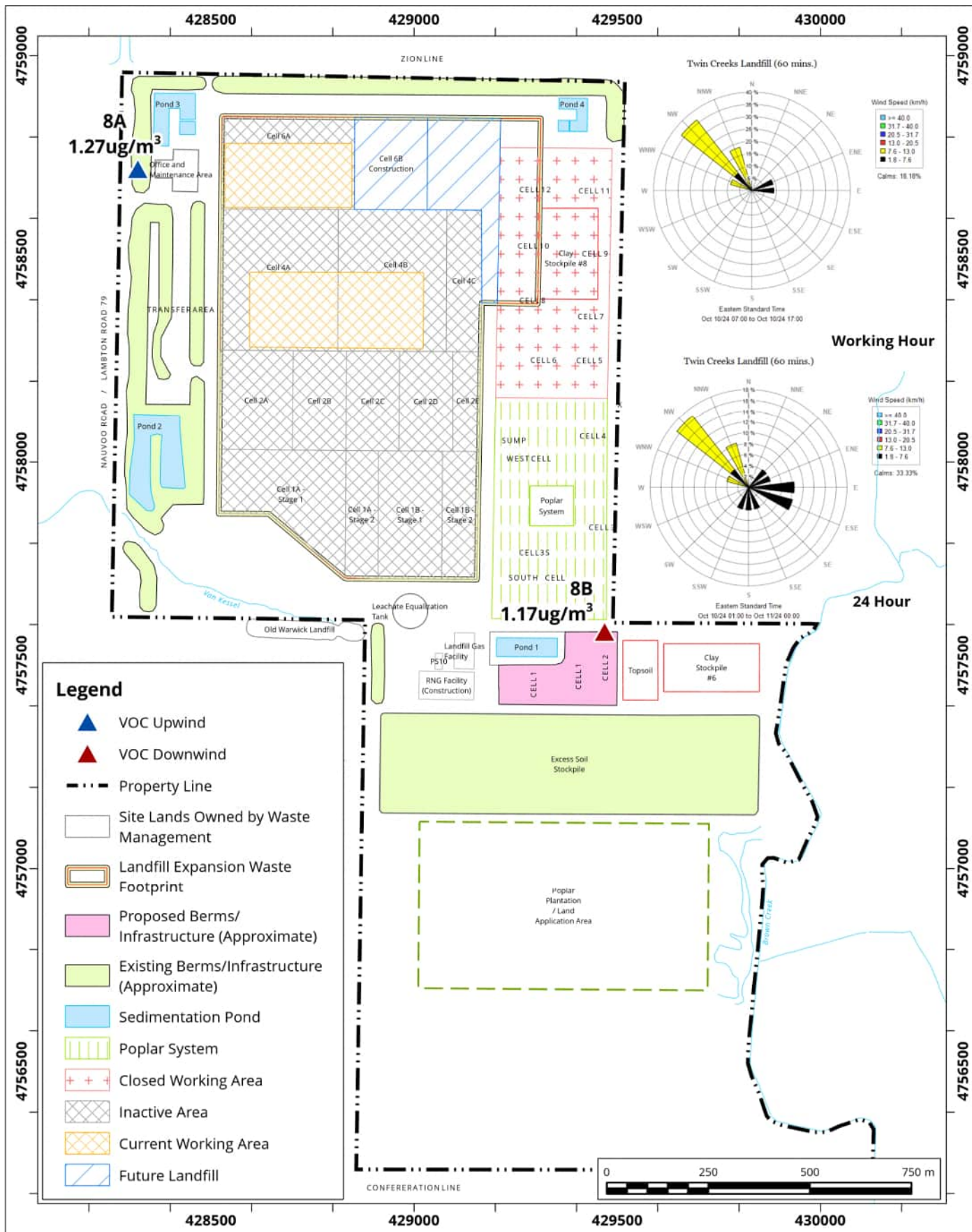
October 10, 2024

Canisters ran from Thursday October 11, 2024 to Friday October 12, 2024, where there were two (2) exceedances of the Chloroform 24-hour AAQC at the location of 8A and 8B canisters. Attached is Figure 1, which present windroses for the wind conditions during each: 1) the 24-hour sampling date; and 2) the operating times for the site. Figure 1 also displays the measured Chloroform concentrations of both canisters during the 24-hour sampling event respectively, and the site plan with a legend depicting active and closed working areas of the landfill.

The following section summarizes the Chloroform concentrations as well as the onsite conditions during the October 10 to 11 sampling period.

1. The measured Chloroform concentration at canister 8A was 1.27 ug/m^3 , while canister 8B measured 1.17 ug/m^3 . During the 24-hour sampling period, the wind was predominantly from the NW to NNW and E to ESE; wind speeds ranged from 0 to 11 km/h and wind gusts reached a maximum of 22 km/h.
2. During the operational hours of the facility (7am to 5pm EDT) on October 10, 2024, the winds were predominantly coming from the NW and NNW. In this time frame, canister 8A was upwind and canister 8B was downwind and in moderate proximity to site activities.
3. The site was operating normally for landfilling activities.

In summary, the aforementioned Chloroform exceedances that were measured on-site at the upwind canister 8A were marginally greater than the downwind canister 8B. Therefore, these exceedances are related to offsite activities and unrelated to onsite landfilling activities.



Site Plan Showing Sampling Locations and Wind Rose Sampling Period: October 10-11, 2024

Map Projection: NAD 1983 UTM Zone 17N
Twin Creeks Environmental Centre - Watford, Ontario



Project #: 2402553

| | |
|----------------------------|-----------|
| Drawn by: PIP | Figure: 8 |
| Approx. Scale: 1:13,000 | |
| Date Revised: Oct 21, 2024 | |



A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

APPENDIX K

WM Twin Creeks Environmental Centre - Summary of Complaints - 2024-ECA A032203

| Log | Name | Date | Time | Relationship | Type | Where | Wind Direction | Corrective Action | Response |
|-----|---------------------|------------|------------|--------------|------------------------|---------------------|----------------|--|---|
| 1 | Jody Jasek | 2/3/2024 | 6:33 p.m. | Resident | Odour | Residence | N | Investigation with Ops, Gas, Residents in area did not detect | Left message |
| 2a | Therese Copeland | 4/10/2024 | 8:10 p.m. | Resident | Odour | Residence | ENE | Investigation with Gas, A power interruption caused a shutdown of the gas collection system, following restart the system returned to normal operations. | Left message |
| 2b | Kevin McNeil | 4/10/2024 | 10:03 p.m. | Resident | Odour | Transient/Residence | ENE | Investigation with Gas, A power interruption caused a shutdown of the gas collection system, following restart the system returned to normal operations. | Add info requested on power availability, could smell same odour last night |
| 3 | Kevin McNeil | 4/16/2024 | 2:39 p.m. | Resident | Odour | Workplace | NE | Investigation, agricultural odours, light methane odour at front gate, report as timely as possible | No response at this time |
| 4 | Kevin McNeil | 4/30/2024 | 9:39 p.m. | Resident | Odour | Residence | NE | Investigation-nothing abnormal noted | No response at this time |
| 5 | Kevin McNeil | 5/6/2024 | 8:02 a.m. | Resident | Odour | Residence/Workplace | NE | Investigation-Ops Mgr detected at 6:15 a.m. odour to Home Hardware, went to addresses at 8:27 a.m. no odour detected | No response at this time |
| 6 | Martina Jackson | 5/24/2024 | 8:05 a.m. | Resident | Odour | In Town | N | Investigation-Ops Mgr, Gas Tech went out did not detect in Town, could smell waste by South Slope on site and did note agricultural odours in the morning | No response at this time |
| 7 | Kevin McNeil | 5/30/2024 | 9:08 p.m. | Resident | Odour | Residence | NW | Flare had gone down earlier in day, back up by afternoon | No response at this time |
| 8 | Martina Jackson | 7/25/2024 | 8:15 a.m. | Resident | Odour | Residence | NE | Investigation-Gas System went offline at 8:10 a.m. back up within 30 mins. | No response at this time |
| 9 | Therese Copeland | 7/26/2024 | 8:17 a.m | Resident | Odour | Residence | NNE | Investigation: Mix of agricultural and some garbage odours detected on Sunset | No response at this time |
| 10 | Mark Van Lieshout | 8/7/2024 | 7:59 a.m. | Resident | Odour | Residence | NNE | Investigation:compounding odours of Agricultural and Landfill. Typically after a long weekend waste that has been accumulated in the Transfer Stations is shipped and this waste is known to be odourous due to the length of time sitting | No response at this time |
| 11 | Bill & Linda Nugent | 9/14/2024 | 8:21 p.m. | Resident | Odour (Transient) | Hwy. 402 | ESE | Wind direction does not align with complaint | Believes it was Landfill |
| 12 | Crystal Worsfold | 9/16/2024 | 11:21 a.m. | Resident | Odour (Transient) | Walking up Town | SSE | Wind direction does not align with complaint | Agreed on Wind Direction, apologies |
| 13 | Bill & Linda Nugent | 9/26/2024 | 7:36 a.m. | Resident | Odour | Residence | NE | Ops Mgr went to location faint garbage as well as agricult. | Phone not working? |
| 14 | Chris Van Loon | 9/26/2024 | 9:26 p.m. | Resident | Odour (Transient) | Multiple locations | Various | Investigation, agricultural odours in area | No response at this time |
| 15 | Lily Braet | 11/25/2024 | 10:25 p.m. | Resident | Undulation from Flares | Residence | S | Investigation gas line installations connections create excess oxygen in the system. | Would like to speak to John as well (this did occur) |

A large decorative graphic on the left side of the page, featuring a blue square in the top-left corner and a large, light gray curved shape that sweeps across the page from the bottom-left towards the top-right.

APPENDIX L

Meteorological Station Calibration Data Sheet

Page 1 of 2

Client: WM

Date:

18-Dec-24

Station ID: Twin Creeks Met

Time:

10:40

to

12:25

Technicians: A Tokarewicz & J Artibello

Installed Equipment

| Parameter | Model |
|---------------------------|-----------------------------|
| Data Logger | CR300 |
| Modem | Bullet LTE |
| Wind Velocity & Direction | RM Young 05103 S/N 79637 |
| T/RH (as found) | Vaisala HMP155 S/N V2950179 |
| T/RH (as left) | Vaisala HMP155 S/N V2950179 |
| Precipitation | Rimco RIM8020 S/N 104130 |
| | |
| | |

Windhead Check

Calibrator: RM Young Model 18802 - S/N 4864

| Wind Direction (deg from) | | Wind Speed (m/s) | |
|---------------------------|-------------|------------------|-------------|
| Direction Setpoint | DAS Reading | Speed Setpoint | DAS Reading |
| 0 | 0.5 | 0.98m/s(200rpm) | 0.98 |
| 45 | 43.3 | 2.45m/s(500rpm) | 2.45 |
| 90 | 89.4 | 3.92m/s(800rpm) | 3.92 |
| 135 | 133.1 | 5.39m/s(1100rpm) | 5.39 |
| 180 | 176.5 | 6.86m/s(1400rpm) | 6.86 |
| 225 | 224.1 | 9.31m/s(1900rpm) | 9.31 |
| 270 | 267.5 | | |
| 315 | 312.2 | | |

Criteria Met: Yes

Comments: Meets criteria, recommend potentiometer replacement

Temperature Check

Standard Thermometer: Weather Network

As Found

Reference Temperature: 1.0 DAS Temperature: 0.9

As Left

Reference Temperature: 1.0 DAS Temperature: 1.3

Criteria Met: Yes

Comments:

Relative Humidity Check

Standard Humidity Instrument: Weather Network

As Found

Reference Humidity: 89.0 DAS Humidity: 92.4

As Left

Reference Humidity: 89.0 DAS Humidity: 90.5

Criteria Met: Yes

Comments: _____

Precipitation Check

Graduated Cylinder Volume: 250 mL

Instrument Level: Yes
 Debris in inlet basin: No

| | | |
|-------------------------|---------------|------------------|
| Volume of water poured | <u>325 mL</u> | |
| Number of tips | <u>47</u> | 50 tips expected |
| Multiplier from Program | <u>0.2</u> | |

Criteria Met: Yes

Comments: _____
