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January 31, 2022

Arkansas Department of Environmental Quality
Air Division – Enforcement Branch
Attn: Compliance Inspector Supervisor
5301 Northshore Drive
North Little Rock, AR 72118-5317

SUBJECT: Semi-annual Title V Report (GP-7), NSPS Subpart WWW report, and SSM report[1]
Eco-Vista, LLC (Waste Management Eco-Vista Landfill)
Permit # 1884-AOP-R7/R8 AFIN # 72-00144

To Whom It May Concern:

This letter and the attached documentation represent the semi-annual Title V Report (GP-7), NSPS WWW report, and SSM report prepared on behalf of Waste Management Eco-Vista Landfill (EVLF) located in Springdale, Arkansas. The attached report covers the time period from January 11, 2021 through December 31, 2021.

EVLF became subject to the requirements of New Source Performance Standard (NSPS) Subpart WWW— Standards of Performance for Municipal Solid Waste Landfills on June 19, 2016. For this reason, WM is required to submit a semi-annual report that includes all of the information required in 40 CFR 60.757(f) as required in Plant-wide Condition No. 20 and indicated in General Provision 7 of the existing Title V Operating Permit. To comply with the permit requirements, the following information has been provided:

Title V GP-7 Report

The Title V GP-7 Report associated with EVLF has been included as **Attachment A** of this letter. The GP-7 report covers the reporting period of January 11, 2021 through December 31, 2021 for Title V Permit #1884-AOP-R7/R8.

[1] It is important to note that this facility became subject to the NSPS XXX Regulations on 5/23/19. For this reason, a separate annual report was submitted to address the NSPS XXX regulations. It is also important to note that we have prepared a separate report to account for the compliance associated with Title V Permit #1884-AOP-R6. Finally, we have submitted a separate report in accordance with the new NESHAP requirements, as well.

NSPS Reporting Requirements and Results

As required by 40 CFR 60.757(f), this report provides the information specified under the reporting requirements to include monthly wellfield parameter exceedances, quarterly surface scanning, and control device downtime. The results of the recordkeeping, monitoring, and operational data are presented in the following sections.

Gas Collection System Operations Monitoring – 40 CFR 60.757(f)(1)[2]

Under 40 CFR 60.757(f)(1) the value and length of time for exceedance of applicable parameters monitored under section 40 CFR 60.756 (a), (b), (c), and (d) must be reported in the semi-annual report. Paragraphs (b) and (d) do not apply to systems with open flares. Those parameters monitored and recorded under paragraph (a) include the well parameters (gauge pressure, nitrogen or oxygen concentration, and temperature), and paragraph (c) addresses the flare system parameters (continuous presence of flame and measurement and recording of flow at least every 15 minutes). The gauge pressure, oxygen concentration, and temperature were measured monthly.

The results of the monitoring are reported as follows:

Pressure

As required by 40 CFR 60.756(a)(1), wells shall be measured for gauge pressure in the gas collection header on a monthly basis. Action shall be initiated within five (5) days to correct any positive pressure existing at a wellhead and it shall be corrected within 15 calendar days, except in the case of the three (3) conditions specified under 40 CFR 60.753(b). If conditions cannot be corrected for negative pressure without excess air infiltration, the gas collection system shall either be expanded to correct the exceedances within 120 days of the initial measurement of positive pressure or addressed as indicated in Section 6 of the latest approved NSPS GCCS Design Plan.

Oxygen

As required by 40 CFR 60.756(a)(2), the wells shall be measured for nitrogen or oxygen concentration on a monthly basis. If oxygen is monitored, action is to be initiated within five (5) days to correct any reading greater than 5%. If correction of the exceedance cannot be achieved within 15 calendar days of the initial measurement, the gas collection system shall either be expanded to correct the exceedance within 120 days of the initial exceedance or addressed as indicated in Section 6 of the latest approved NSPS GCCS Design Plan.

[2] Please note that alternative monitoring parameters have been included in the latest approved NSPS Design Plan. These alternatives supersede the operational parameters as indicated in 40 CFR 60.752 (b)(2)(i)(B) and PC-16.

Temperature

As required by 40 CFR 60.756(a)(3), wells shall be measured for temperature on a monthly basis. Each monitored wellhead should operate with a temperature less than 55 degrees Celsius (131°F). For any temperature readings equal to or greater than 131°F, action is to be initiated within five days to correct it. If correction of the exceedance cannot be achieved within 15 calendar days of the initial measurement, the gas collection system shall either be expanded to correct the exceedance within 120 days of the initial exceedance or addressed as indicated in Section 6 of the latest approved NSPS GCCS Design Plan.

As stated in 40 CFR 60.753(g), if monitoring demonstrates that the operational requirements regarding pressure, temperature and methane concentration in paragraphs (b), (c), or (d) of §60.753 are not met, corrective action shall be taken as specified in § 60.755(a)(3) through (5) or § 60.755(c) of this subpart. If corrective actions are taken as specified in § 60.755, the monitored exceedance is not a violation of the operational requirements in this section.

Monitoring for gauge pressure, oxygen concentration, and temperature are noted on the applicable table in **Attachment F.**

Control Device – 40 CFR 60.757(f)(2)

The control device for the active gas collection system at the site consists of two (2) open utility flares and treatment system. There is currently no by-pass line installed at the flare or treatment system. A power generation facility consisting of five (5) Caterpillar 3516 engines is also in place at this facility, but these engines are not considered to be control devices under 40 CFR Part 60, Subpart WWW because the collected LFG is routed to a treatment system that processes the collected gas for subsequent sale or use. Typically, when the candlestick flare is not operating the landfill gas (LFG) is directed to the existing treatment system for use at the power generation facility.

Control Device – 40 CFR 60.757(f)(3)

A description and duration of periods, from January 11, 2021 through December 31, 2021, when the control system was not operating for a period exceeding one hour and the length of time the control device was not operating has been included as **Attachment E.**

Collection System – 40 CFR 60.757(f)(4)

No collection system shutdowns in excess of five days were recorded during this reporting period.

Surface Emission Monitoring – 40 CFR 60.757(f)(5)

Surface emission monitoring (SEM) was performed at the landfill on a quarterly basis. A third-party consultant performed the quarterly surface monitoring during this period. Proper equipment was utilized and calibrated to monitor for potential methane emissions from the landfill as required by the regulations (40 CFR 60.753 (d)).

The 1st quarter 2021 SEM Report (conducted March 10-11, 2021) indicated that there were two (2) locations where surface methane emissions greater than 500 parts-per million were detected during the initial monitoring event. However, 10-Day Remonitoring (conducted on March 11, 2021), and 1-Month remonitoring (conducted on April 8, 2021) of the location indicated that there was no area of the landfill where surface emissions methane exceeded 500 parts-per-million.

The 2nd quarter 2021 SEM Report (conducted on May 12, 2021) indicated that there were four (4) locations where surface methane emissions greater than 500 parts-per million were detected during the initial monitoring event. However, 10-Day Remonitoring (conducted on May 12, 2021), and 1-Month remonitoring (conducted on June 9, 2021) of the location indicated that there was no area of the landfill where surface emissions methane exceeded 500 parts-per-million.

The 3rd quarter 2021 SEM Report (conducted August 4 and 5, 2021) indicated that there were three (3) locations where surface methane emissions greater than 500 parts-per million was detected during the initial monitoring event. However, 10-Day Remonitoring (conducted on August 4, 2021), and 1-Month remonitoring (conducted on September 2, 2021) of the locations indicated that there were no areas of the landfill where surface emissions methane exceeded 500 parts-per-million.

The 4th quarter 2021 SEM Report (conducted November 3, 2021) indicated that there were four (4) locations where surface methane emissions greater than 500 parts-per million were detected during the initial monitoring event. However, 10-Day Remonitoring (conducted on November 4, 2021), and 1-Month remonitoring (conducted on December 2, 2021) of the location indicated that there was no area of the landfill where surface emissions methane exceeded 500 parts-per-million.

The quarterly SEM reports are included in **Attachment D**.

System Expansion – 40 CFR 60.757(f)(6)

A GCCS Expansion occurred during this reporting period. The GCCS Expansion Site Plan is included as **Attachment I**.

Startup, Shutdown, and Malfunction Semi-Annual Reporting

Since EVLF is required to operate the existing GCCS in accordance with the requirements of NSPS, it is also subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills, being 40 CFR Part 63 Subparts A and AAAA. The NESHAP requires a facility to prepare and implement a start-up, shutdown and malfunction (SSM) Plan. The SSM Plan includes the procedures for operating and maintaining affected gas collection and control equipment as well as control device monitoring equipment during start-up shutdown and malfunction events. EVLF is an existing affected source per 40 CFR §63.1945(b).

In accordance with monitoring and recordkeeping requirements of the existing Title V permit, a semi-annual report must be submitted to the regulatory authority by February 1, 2022. This report contains information pertaining to the facility's compliance with the procedures in the SSM Plan during SSM events. This letter serves as the semi-annual SSM Report for the reporting period January 11, 2021 through December 31, 2021.

For this reporting period, 0 start-up, 0 shutdown, and 0 malfunction events occurred. The actions taken at the facility for SSM events during the reporting period were consistent with the procedures listed in the SSM Plan at the facility. No revision to the SSM plan occurred during this reporting period.

General Provision #7 requires a Responsible Official (RO) certify this report. The RO Certification is included as **Attachment B**. If you have any questions, or require additional information concerning this document, please call me at (501) 993-8966.

Sincerely,
Waste Management of Arkansas, Inc.
On Behalf of the Eco-Vista Landfill

Jodi Reynolds-Coffelt
Environmental Protection Manager
Waste Management of Arkansas, Inc.

cc: Eco-Vista POR

Enclosures:

- Attachment A – Title V GP-7 (Semi-Annual Report)
- Attachment B – GP-7 Certification Statement (Submitted Under Separate Cover)
- Attachment C – DAR Authorization (Submitted Under Separate Cover)
- Attachment D – Surface Emissions Monitoring Information
- Attachment E – Control Device Shutdown Log
- Attachment F – GCCS Exceedance Data
- Attachment G – Annual Waste-In-Place Volume
- Attachment H – 12-Month Rolling Total of CO
- Attachment I – GCCS Expansion Site Plan

Attachment A – Title V Semi-Annual Report

Eco-Vista, LLC (EVLF) Title V Air Operating Permit (AOP) General Provision # 7 requires semi-annual reporting to ADEQ Air Division pursuant to Regulation # 26, and 40 CFR 70.6(a)(3)(iii)(A). Specifically, semi-annual reports are due every six months and each report shall contain a full year of data. The reporting period for this report is January 11, 2021 through December 31, 2021. All instances of deviations from permit requirements must be clearly identified in such reports.

The following information details compliance with the Specific Conditions of the permit:

SC-01 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions #8 and #12. [Reg.19.501 et seq., 40 C.F.R. § 60 Subpart WWW, and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
01	Landfill Gas Surface Emissions (Fugitive)	VOC	4.6	20.0

SC-02 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions #8 and #12. [Reg.18.801, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Landfill Gas Surface Emissions (Fugitive)	Single HAP Total HAP	0.43 1.15	1.89 5.03

WM Eco-Vista Landfill, LLC SC-01 & SC-02 Permit Status:

In accordance with Plantwide Condition 7 (PC-7) the permittee has not exceeded the maximum design capacity (23,190,000 cubic yards) specified in Solid Waste Permit #0290-S1-R3 and weighs every incoming load of waste accepted at the facility. Also, in accordance with PC-8, the permittee maintains a lifetime in-place total, a 12-month rolling total, and each individual month's waste acceptance data onsite. These records will be retained for at least 5 years and will be available for review by ADEQ personnel upon request. The permittee demonstrates compliance with SC-01 and SC-02 based on compliance with PC-6 and PC-8.

Arkansas Air Operating Permit Semi-Annual Monitoring Report
In Accordance With General Provision 7 and
40 CFR 70.6(a)(3)(iii)(A)

Semi-Annual Title V Report
Permit # 1884-AOP-R7/R8 AFIN: #72-00144

SC-03 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #11, Plantwide Condition #10, and by burning only landfill gas as fuel at these sources. [Reg.19.501 *et seq.*, and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
02A	Parnel, 12-inch diameter, open candlestick Flare (2250 scfm) efficient) (installed 2009)	PM10	2.3	10.1
		SO_2	13.3	58.1
		VOC	0.2	0.6
02B	Parnel, 12-inch diameter, open candlestick Flare (2250 scfm) (98% efficient) (installed 2009)	CO	42.4	245.0*
		NO_x	9.3	40.7

*Facility-wide annual CO emission limit

SC-04 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #11, Plantwide Condition #10, and by burning only landfill gas as fuel at these sources. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
02A	Parnel, 12-inch diameter, open candlestick Flare (2250 scfm) (98% efficient) (installed 2009)	PM	2.3	10.1
		Single HAP Total	0.80	3.51
02B	Parnel, 12-inch diameter, open candlestick Flare (2250 scfm) (98% efficient) (installed 2009)	HAP	0.89	3.89

WM Eco-Vista Landfill, LLC SC-03 & SC-04 Permit Status:
The permittee has operated under the two possible scenarios. Also, as indicated in SC-03 and SC-04, the permittee did not exceed the SIP and/or NSPS/SIP Emission Limits for NOx, CO, or VOC. This was confirmed by the results of the performance test conducted on February 23, 2011. The permittee has demonstrated compliance with SC-03 and SC-04 by compliance with SC-11.

SC-05 Permit Condition:

- An initial visible emission test using EPA Method 22 was completed for the flare system. The Flares (SN-02A/B) shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. This initial visible emission test was performed on SN02A and SN02B on February 23, 2011. No additional Method 22 Test is required for SN02A and SN02B unless a new flare unit is installed or significant modifications are made to the flares. [Reg.19.303, Reg.19.304, 40 C.F.R. § 60.18(b) through (f), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-05 Permit Status:
A performance test on SN-02A & SN-02B and a Method 22 test was conducted on February 23, 2011. The Method 22 test results demonstrated compliance with SC-05. For this reason, no additional Method 22 Test is required for SN02A and SN02B unless a new flare unit is installed or significant modifications are made to the flares.

SC-06 Permit Condition:

- The permittee shall post and maintain clearly visible labels at flares SN-02A and SN-02B that identifies each flare as a distinct and separate emission source. [Reg.19.304 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-06 Permit Status:
Labels have been placed on flares SN-02A and SN-02B to clearly identify each flare as a distinct and separate emission source.

SC-07 Permit Condition:

- The permittee must operate each flare (SN-02A and 02B) pilot flame within the design limitations and manufacturer's specifications. The pilot flames may be lit by landfill gas, natural gas, or propane. [Reg.19.303 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-07 Permit Status:
The flare system is being operated within the design limitations and manufacturer's specifications. Moreover, the pilot flame has only been ignited using landfill gas, propane, or natural gas.

SC-08 Permit Condition:

- Each flare (SN-02A and 02B) must have a flame present at all times of operation or if no flame is present, the orifice of the unlit flare must be closed and the GCCS piping to the unlit flare shutdown to prevent passive venting of uncontrolled landfill gases. The presence of a flare pilot

light for each flare shall be monitored continuously using a thermocouple, an ultraviolet sensor or any other equivalent device to detect the presence of a flame. In the event of a flame failure, the permittee shall shut down the GCCS to prevent passive venting of landfill gas. [Reg.19.303, Reg.19.304, 40 C.F.R. §§ 60.18(b) through (f), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-08 Permit Status:

Either an ultraviolet sensor or a thermocouple monitors the presence of a flame. In the event of a flame failure, the gas extraction system is designed to automatically shut down to prevent passive venting of landfill gas through the flare unit.

SC-09 Permit Condition:

- Flares shall be used only with the net heating value of the landfill gas being combusted being 200 BTU/scf (7.45 MJ/scm) or greater for non-assisted flares (SN-02A and 02B). The net heating value of the gas being combusted shall be determined by the methods specified in 40 C.F.R. §60.18(f)(3). A copy of the calculations shall be kept on site and made available to Department personnel upon request. [Reg.19.303, Reg.19.304, 40 C.F.R.§ 60.18(c)(3)(ii), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-09 Permit Status:

The net heating value of the gas being combusted was calculated in accordance with the referenced specifications. A copy of the calculation is maintained on-site as part of the February 23, 2011 Flare performance test and is available for review by Department personnel upon request.

SC-10 Permit Condition:

- Non-assisted flares (SN-02A and 02B) shall be designed for and operated with an exit velocity less than 60 ft/sec (18.3 m/sec). The maximum permitted velocity shall be calculated as specified in 40 C.F.R. § 60.18(f)(5). The actual exit velocity shall be determined as specified in 40 C.F.R. § 60.18(f)(4). A copy of the calculations shall be kept on site and made available to Department personnel upon request. [Reg.19.303, Reg.19.304, 40 C.F.R. § 60.18(f)(4-5), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-10 Permit Status:

The actual exit velocity was calculated in accordance with the referenced specifications. A copy of the calculation is a maintained on-site as part of the February 23, 2011 flare performance test and is available for review by Department personnel upon request.

SC-11 Permit Condition:

- The permittee shall maintain records to demonstrate compliance with Specific Condition #3 and #4. These records shall include the gas flow to the flares in standard cubic feet per minute (scfm). The gas flow to the flares shall be recorded once every 15 minutes. Electronic or paper hourly records shall be maintained of the number of engines operating and the flow rate to the flares. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain, shall be maintained on site and made available to Department personnel upon request. In the event that the gas flow meter(s) are inoperable due to extraordinary circumstances (i.e., lightning strike, flood, fire, etc.), the permittee may use daily records (instead of every 15 minutes) for a period not to exceed two weeks, unless otherwise approved by the ADEQ. The permittee must notify the ADEQ by the end of the next business day after an event has occurred and provide a description of the event, and the expected time to complete repair activities. [Reg.18.1004, Reg.19.705, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-11 Permit Status:

The permittee maintains operational gas flow limits on the flares in accordance with the permitted emissions listed in Specific Conditions 3 and 4. The permittee maintains records to demonstrate compliance. The gas flow to the flares and total gas flow to the number of operating engines is monitored and recorded every 15 minutes. These records are updated by the fifteenth day of the month following the month to which the records pertain and maintained on site and are available upon request.

SC-12 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions #14 and #15. [Reg.19.501 et seq. and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
03	Fugitive Emissions	PM_{10}	42.6	92.9

SC-13 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions #14 and #15. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
03	Fugitive Emissions	PM	160.7	350.8

SC-14 Permit Condition:

- The permittee shall not operate in a manner such that fugitive emissions from the storage piles, aggregate handling, and haul roads (SN-03) would cause a nuisance off-site or allow visible emissions from extending beyond the property boundary. Under normal conditions, off-site opacity less than or equal to 5% shall not be considered a nuisance. The permittee shall use water sprays, sweeping, or other techniques as necessary to control fugitive emissions that migrate off-site. [Reg.18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SC-15 Permit Condition:

- Dust suppression activities must be conducted in a manner and at a rate of application that will not cause runoff from the area being applied. Best Management Practices (40 C.F.R. § 122.44(k)) should be used around streams and waterbodies to prevent the dust suppression agent from entering Waters of the State. Except for potable water, no agent shall be applied within 100 feet of wetlands, lakes, ponds, springs, streams, or sinkholes. Failure to meet this condition may require the permittee to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Department's Water Division, in accordance with 40 C.F.R.122.1(b). [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-15 Permit Status:

The facility routinely uses water sprays, sweeping, or other techniques as necessary to control fugitive emissions that could potentially migrate off-site in compliance with SC-14. As specified in SC-15, EVLF employs BMP around streams and water bodies to prevent the dust suppression agent from entering waters of the state. Except for potable water, no agent is applied within 100 feet of wetlands, lakes, ponds, streams, springs, or sinkholes. The permittee demonstrates compliance with SC-12 and SC-13 based on compliance with SC-14 and SC-15.

SC-16 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #25, Plantwide Condition #10, and by burning only landfill gas as fuel at these sources. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
04	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #1 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO_2 VOC CO NO_x	0.5 1.0 1.3 6.9 3.7	1.9 4.1 5.3 245.0* 15.5
05	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #2 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO_2 VOC CO NO_x	0.5 1.0 1.3 6.9 3.7	1.9 4.1 5.3 245.0* 15.5
06	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #3 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO_2 VOC CO NO_x	0.5 1.0 1.3 6.9 3.7	1.9 4.1 5.3 245.0* 15.5
07	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #4 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO_2 VOC CO NO_x	0.5 1.0 1.3 6.9 3.7	1.9 4.1 5.3 245.0* 15.5
08	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #5 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO_2 VOC CO NO_x	0.5 1.0 1.3 6.9 3.7	1.9 4.1 5.3 245.0* 15.5

*Facility-wide annual CO emission limit

SC-17 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #25, Plantwide Condition #10, and by burning only landfill gas as fuel at these sources. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
04	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #1 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.5 0.32 0.34	1.9 1.42 1.47
05	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #2 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.5 0.32 0.34	1.9 1.42 1.47
06	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #3 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.5 0.32 0.34	1.9 1.42 1.47
07	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #4 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.5 0.32 0.34	1.9 1.42 1.47

08	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #5 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.5 0.32 0.34	1.9 1.42 1.47

WM Eco-Vista Landfill, LLC SC-16 & SC-17 Permit Status:

The permittee has operated under the two possible scenarios. Also, as indicated in SC-19 and SC-20, the permittee did not exceed the SIP and/or NSPS/SIP Emission Limits for NOx, CO, or VOC. This was confirmed by the results of the performance test conducted on March 19-20, 2020 and November 18, 2020. The permittee has demonstrated compliance with SC-16 and SC-17 by compliance with SC-19, SC-20, and SC-25.

SC-18 Permit Condition:

- Visible emissions from the engines (SN-04, 05, 06, 07 & 08) may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated by burning only landfill gas as fuel at these sources.

SN	Limit	Regulatory Citation
04, 05, 06, 07 & 08	5%	Reg.18.501 and Ark. Code Ann.

WM Eco-Vista Landfill, LLC SC-18 Permit Status:

A performance test on SN-02A & SN-02B and a Method 22 test was conducted on February 23, 2011. The Method 22 test results demonstrated compliance with SC-05. For this reason, no additional Method 22 Test is required for SN02A and SN02B unless a new flare unit is installed or significant modifications are made to the flares. It is also important to note that only treated LFG is used as a fuel for SN-04, SN-05, SN-06, SN-07, and SN-08; therefore, the permittee is operating in compliance with SC-018.

SC-19 Permit Condition:

- The permittee must comply with applicable emission limitations and standards used to permit hourly and annual rates for SN-04 through SN-08, specified for NO_X, CO and VOC emissions. The following table summarizes the not-to-exceed emission limits permitted for these sources. Compliance with these emission limits is deemed to be in compliance with the emission limits in Specific Condition #20. [Reg.19.501 *et seq.*, 40 C.F.R. § 52 Subpart E, 40 C.F.R. § 70.6 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	SIP Emission Limits (grams/bhp-hr)
04 through 08	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine (4SLB, turbocharged with after cooler)	NOX	1.50
		CO	2.70
		VOC	1.0

SC-20 Permit Condition:

- The permittee must comply with applicable NSPS Subpart JJJJ emission limitations and standards for SN-04 through SN-08 specified for NOX, CO and VOC emissions in the table below, based on an engine manufacture date after January 1, 2008 and/or after July 1, 2010. [Reg.19.304, 40 C.F.R. § 60.4230(a)(4)(ii), and Table 1 of 40 C.F.R. § 60 Subpart JJJJ]

SN	Description	Pollutant	NSPS Subpart JJJJ Emission Limits for Engine Manuf. Date after 01/01/2008 (grams/bhp-hr)	NSPS Subpart JJJJ Emission Limits for Engine Manuf. Date after 07/01/2010 (grams/bhp-hr)
04 through 08	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine (4SLB, turbocharged with after cooler)	NOX	3.0	2.0
		CO	5.0	5.0
		VOC	1.0	1.0

WM Eco-Vista Landfill, LLC SC-19 & SC-20 Permit Status:

EVLF's Beneficial Reuse Gas to Energy Facility became operational on November 22, 2010. An initial notification was submitted to the ADEQ in accordance with 40 CFR 60 Subpart JJJJ and SC-24 on January 21, 2011. All subsequent engine performance test notifications have been submitted to the ADEQ in accordance with 40 CFR 60 Subpart JJJJ, SC-24, and/or PWC-3, as well. In accordance with the requirements of SC-16 and SC-17, all engines subject to and operated in accordance with 40 CFR 60 Subpart JJJJ have satisfied the requirements of 40 CFR 63 Subpart ZZZZ. In accordance with SC-21, Performance testing every 8,760 hours, or 3 years per engine, whichever comes first, is required for Engine 2 (SN-05), Engine 4 (SN-07), and Engine 5 (SN-08).[3]The permittee, to the extent practicable,

[3] It is important to note that Engine 1 (SN-04) and Engine 3 (SN-06) are exempt from 40 CFR 60 Subpart JJJJ requirements; therefore, they are only subject to the initial performance test requirements of 40 CFR 63 Subpart ZZZZ.

maintains and operates each engine and control device in a manner consistent with good air pollution control practice for minimizing emissions. A copy of the maintenance plan and maintenance records are filed onsite. The following table shows the date that the performance testing was conducted and the report submittal dates:

ENGINE PERFORMANCE TEST DATES	ENGINE PERFORMANCE TEST REPORT SUBMITTAL DATES
SN-05 (3/22-25/2011) SN-04, SN-06, SN-07, and SN-08 (5/9-11/2011)	SN-05 (4/25/2011) SN-04, SN-06, SN-07, and SN-08 (5/26/2011)
SN-04 through SN-08 (5/15-16/2012)	SN-04 through SN-08 (6/7/2012)
SN-04 through SN-08 (4/15-16/2013)	SN-04 through SN-08 (6/11/2013)
SN-04 through SN-08 (4/14-15/2014)	SN-04 through SN-08 (6/6/2014)
SN-04 through SN-08 (4/9-10/2015)	SN-04 through SN-08 (6/8/2015)
SN-04 through SN-08 (4/13-14/2016)	SN-04 through SN-08 (6/13/2016)
SN-05 through SN-08 (5/9-10/2017)	SN-05 through SN-08 (7/17/2017)
SN-05 through SN-08 (5/9-10/2018)	SN-05 through SN-08 (7/9/2018)
SN-05, SN-07, and SN-08 (4/29-30/19)	SN-05, SN-07, and SN-08 (6/27/19)
SN-04 (10/3/2019)	SN-04 (10/29/19)
SN-05, SN-07, and SN-08 (3/19-20/2020)	SN-05, SN-07, and SN-08 (5/19/2020)
SN-08 (11/18/2020)	SN-08 (1/11/2021)
SN-05, SN-07, and SN-08 (3/19/2021)	SN-05, SN-07, and SN-08 (5/18/2021)

Based on the information provided above and the results of the most recent engine performance tests, this facility has satisfied the compliance requirements SC-19 & SC-20. A copy of the engine performance test report is available onsite for review by ADEQ personnel upon request.

SC-21 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #25, Plantwide Condition #10, and by burning only pipeline-quality natural gas as fuel at these sources. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
04	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #1 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO2 VOC CO NO_X	0.1 0.1 2.0 5.7 5.1	0.4 0.1 8.8 245.0* 22.2
05	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #2 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO2 VOC CO NO_X	0.1 0.1 2.0 5.7 5.1	0.4 0.1 8.8 245.0* 22.2
06	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #3 (4slB, turbocharged with after cooler, 313 scfm)	PM10 SO_2 VOC CO NO_x	0.1 0.1 2.0 5.7 5.1	0.4 0.1 8.8 245.0* 22.2
07	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #4 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO2 VO C CO	0.1 0.1 2.0 5.7 5.1	0.4 0.1 8.8 245.0* 22.2
08	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #5 (4SLB, turbocharged with after cooler, 313 scfm)	PM_{10} SO2 VO C CO	0.1 0.1 2.0 5.7 5.1	0.4 0.1 8.8 245.0* 22.2

*Facility-wide annual CO emission limit

SC-22 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #25, Plantwide Condition #10, and by burning only pipeline-quality natural gas as fuel at these sources. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
04	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #1 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.1 0.43 0.59	0.4 1.88 2.56
05	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #2 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.1 0.43 0.59	0.4 1.88 2.56
06	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #3 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.1 0.43 0.59	0.4 1.88 2.56
07	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #4 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.1 0.43 0.59	0.4 1.88 2.56
08	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine #5 (4SLB, turbocharged with after cooler, 313 scfm)	PM Single HAP Total HAP	0.1 0.43 0.59	0.4 1.88 2.56

WM Eco-Vista Landfill, LLC SC-21 & SC-22 Permit Status:
Currently, the permittee does not burn only landfill gas as fuel.

SC-23 Permit Condition:

- Visible emissions from the engines (SN-04, 05, 06, 07 & 08) may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated by burning only pipeline-quality natural gas as fuel at these sources.

SN	Limit	Regulatory Citation
04, 05, 06, 07 & 08	5%	Reg.18.501 and Ark. Code Ann.

WM Eco-Vista Landfill, LLC SC-23 Permit Status:
Currently, the permittee does not burn only landfill gas as fuel.

SC-24 Permit Condition:

- The permittee must comply with applicable NSPS Subpart JJJJ emission limitations and standards for SN-04 through SN-08 specified for NOX, CO and VOC emissions in the table below, based on an engine manufacture date after January 1, 2008 and/or after July 1, 2010. [Reg.19.304, 40 C.F.R. § 60.4230(a)(4)(ii), and Table 1 of 40 C.F.R. § 60 Subpart JJJJ]

SN	Description	Pollutant	NSPS Subpart JJJJ Emission Limits for Engine Manuf. Date after 01/01/2008 (grams/bhp-hr)	NSPS Subpart JJJJ Emission Limits for Engine Manuf. Date after 07/01/2010 (grams/bhp-hr)
04 through 08	Caterpillar G3516 LE, 1,148 bhp, LF gas-fired, stationary IC Engine (4SLB, turbocharged with after cooler)	NOX	2.0	1.0
		CO	4.0	2.0
		VOC	1.0	0.7

WM Eco-Vista Landfill, SC-24 Permit Status:
Currently, the permittee does not burn only landfill gas as fuel.

SC-25 Permit Condition:

- The permittee shall maintain records to demonstrate compliance with Specific Conditions #16, #17, #21, and #22. These records shall include the number of engines operating, the type of gas being used as fuel, and the gas flow to the engines in standard cubic feet per minute

(scfm). The gas flow to the engines shall be recorded once every 15 minutes. Electronic or paper hourly records shall be maintained of the number of engines operating and the flow rate to the flares. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain, shall be maintained on site and made available to Department personnel upon request. In the event that the gas flow meter(s) are inoperable due to extraordinary circumstances (i.e., lightning strike, flood, fire, etc.), the permittee may use daily records (instead of every 15 minutes) for a period not to exceed two weeks, unless otherwise approved by the ADEQ. The permittee must notify the ADEQ by the end of the next business day after an event has occurred and provide a description of the event, and the expected time to complete repair activities. [Reg.18.1004, Reg.19.705, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-25 Permit Status:

The permittee maintains operational gas flow limits on the flares in accordance with the permitted emissions listed in Specific Conditions 3 and 4. The permittee maintains records to demonstrate compliance with Specific Condition 16 and 17. The gas flow to the flares and total gas flow to the number of operating engines is monitored and recorded every 15 minutes. These records are updated by the fifteenth day of the month following the month to which the records pertain and maintained on site and are available upon request.

SC-26 Permit Condition:

- The permittee shall maintain records of which dates the facility switches between the LFG-To-Energy Operating Scenario and the Renewable Natural Gas Project Operating Scenario for the operation of SN-04 through SN-08. The permittee shall update these records as needed. These records shall be maintained on-site and made available to Department personnel upon request.

WM Eco-Vista Landfill, LLC SC-26 Permit Status:

Currently, the permittee does not burn only landfill gas as fuel so SC-26 not applicable.

SC-27 Permit Condition:

- Each engine, SN-04 through SN-08, must be equipped with a non-resettable hour meter. The facility must keep records of the hours of operation of the engines recorded through the non-resettable hour meter, maintain a copy on-site, and make available to Department personnel upon request. [Reg.19.705 and 40 C.F.R. § 52]

WM Eco-Vista Landfill, LLC SC-27 Permit Status:

EVLF's Beneficial Reuse Gas to Energy Facility became operational in November 2010. Records to comply with SC-27 are maintained on-site and are available for department personnel to review upon request. Each engine has a non-resettable hour meter.

SC-28 Permit Condition:

- The permittee may replace any currently permitted engine on a temporary or permanent basis with a replacement engine, defined as an engine that is of the same make, model and design capacity of the engine being replaced. The engine will have the same or lower permitted emission rates on a pound per hour and ton per year basis, have the same or lower horsepower, and will not violate any regulations promulgated by the EPA. The permittee shall notify ADEQ of the replacement within 30 days of startup and the notice will provide the startup date and a statement indicating the engine's status under 40C.F.R. § 60 Subpart JJJJ and 40 C.F.R. § 63 Subpart ZZZZ. Replacement engines subject to Subpart JJJJ shall comply with testing requirements in Specific Condition #32. Replacement engines that are exempt from Subpart JJJJ shall be subject to an initial test to verify NO_X and CO emission rates within 90 days of the startup date of the replacement engine. This testing shall be conducted in accordance with Plantwide Condition #3. Unless otherwise approved by the Department, testing shall be conducted with the source operating at least at 90% of its permitted capacity. Emission testing results shall be extrapolated to correlate with 100% of the permitted capacity to demonstrate compliance. Extrapolation shall be the standard linear extrapolation or other method of extrapolation as approved by the Department prior to testing. The permittee shall measure the operation rate during the test. The testing shall be conducted in accordance with EPA Reference Method 7E for NO_X and EPA Reference Method 10 for CO. [Reg.19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4- 304 and 8-4-311, and 40 C.F.R. § 70.6]

WM Eco-Vista Landfill, LLC SC-28 Permit Status:

Due to maintenance issues with engine SN-04, a replacement engine was installed. This replacement engine was installed on May 31, 2016 and began operating on June 1, 2016. It should also be noted that a notification letter was submitted on June 7, 2016, to satisfy the 30-Day notification requirements of this SC-28. On July 9, 2019 a Engine SN-04 (Serial Number ZBA00440) was replaced with a like-kind engine (Serial Number 3RC00146). A notification letter of the July 19, 2019 like-kind engine replacement was submitted to the ADEQ on July 11, 2019. The replacement engine is exempt from the requirements of 40 CFR 60 Subpart JJJJ; therefore, an initial performance test must be completed to verify NOx and CO emission rates within 90 days of the start-up date. For this reason, the facility completed an Initial Performance Test of the replacement engine on October 3, 2019. In accordance with the WM Renewable Energy, LLC's (WMRE) routine maintenance program, SN-05, SN-06, SN-07, and SN-08 were replaced. Replacement Engines SN-05 and SN-06 were installed on 2/15/2017 and SN-07 and SN-08 commenced operation on 4/4/2017. Replacement Engine SN-06 is exempt from the requirements of 40 CFR 60 Subpart JJJJ, therefore, an initial perform test must be completed to verify NOx and CO emission rates within 90 days of the start-up date. The notification for SN-05 and SN-06 was submitted to the ADEQ on 2/20/17; while the notification for SN-07 and SN-08 was submitted to the ADEQ on 4/6/17. The facility completed an initial performance test on Replacement Engines SN-05, SN-06, SN-07, and SN-08 on 5/9-10/17.

SC-29 Permit Condition:

- SN-04 through SN-08 are 4SLB, stationary reciprocating internal combustion (RICE) engines located at Eco-Vista, LLC landfill, an area source of HAP emissions. These engines combust natural gas or landfill or digester gas equivalent to 10% or more of the gross heat input on an annual basis. All existing engines are subject to and shall comply with the applicable provisions of 40 C.F.R § 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (Appendix C). All new engines are subject to and shall comply with the applicable provisions of 40 C.F.R § 63 Subpart ZZZZ as an area source by meeting the requirements of 40 C.F.R § 60 Subpart JJJJ for spark ignition engines. No further requirements apply for any new engines under 40 C.F.R § 63 Subpart ZZZZ. [Reg.19.304 and 40 C.F.R. §§ 63.6580, 63.6590 (c)]

SC-30 Permit Condition:

- Any new engines listed in the group of SN-04 through SN-08 that are non-certified stationary spark ignition (SI) reciprocating internal combustion engines (RICE) ordered after January 1, 2008, are subject to and shall comply with 40 C.F.R. § 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (Appendix B). [Reg.19.304 and 40 C.F.R. § 60.4230(a)(4)(ii)]

SC-31 Permit Condition:

- The permittee must operate and maintain all stationary SI RICE (SN-04 through SN-08) subject to 40 C.F.R. Part 60 Subpart JJJJ in compliance with Specific Condition #20 or #24 depending on the applicable operating scenario over the entire life of the engine. [Reg.19.304 and 40 C.F.R. § 60.4234]

SC-32 Permit Condition:

- The permittee must conduct an initial performance test on each engine subject to testing under 60 Subpart JJJJ (SN-04 through SN-08) to demonstrate compliance with the applicable pollutant emission standards of Specific Conditions #19, #20, and/or #24, depending on the applicable operating scenario. Subsequent performance testing must be conducted every 8,760 hours or 3 years per engine, whichever comes first thereafter to demonstrate compliance. Each performance test must be conducted according to Plantwide Condition #3, Specific Condition #33, and as specified in the following procedures: [Reg.19.304, Reg.19.701-2, and 40 C.F.R. § 60 Subpart A, §60.8(a), 40 C.F.R. §§ 60.4243(b)(2)(ii), 60.4244(a-f)]

    a. Each performance test must be conducted within 10 % of 100 % peak (or the highest achievable) load and must comply with the testing requirements listed in 40 C.F.R. §60.8 and under the specific conditions that are specified by Table 2 of Subpart JJJJ of Part 60 - Requirements for Performance Tests;
    b. Performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 C.F.R. §60.8(c). If the engine is non-operational when a performance test is due, the engine does not need to be started up just to test it, but will need to be tested immediately upon startup;
    c. Three separate test runs must be conducted for each engine performance test as specified by §60.8(f). Each test run must be conducted within 10 % of 100 % peak (or the highest achievable) load and be at least 1 hour in duration;

d. To determine compliance with the NOX, CO and VOC mass per unit output emission limitations, the measured concentrations must be converted using the Equations 1, 2, and 3 or 4, respectively, outlined in §60.4244 of Subpart JJJJ; and

e. EPA Reference Method 10 shall be used to show compliance with the CO emission rate and EPA Reference Method 7E shall be used to show compliance with the NOX emission rate.

SC-33 Permit Condition:

- The permittee must submit a copy of each performance test as conducted in § 60.4244 within 60 days after the test has been completed. [Reg.19.304 and 40 C.F.R. § 60.4245(d)]

SC-34 Permit Condition:

- For all non-certified stationary SI RICEs subject to Subpart JJJJ greater than or equal to 500 hp (SN-04 through SN-08), the permittee must keep a maintenance plan and records for each engine of conducted maintenance and must, to the extent practicable, maintain and operate each engine and control device in a manner consistent with good air pollution control practice for minimizing emissions. [Reg.19.304 and 40 C.F.R. § 60.4243(b)(2)(ii)]

SC-35 Permit Condition:

- In addition, the permittee shall submit to the Department, maintain on-site and make available to Department personnel upon request, a comprehensive report showing compliance of each engine with NSPS Subpart JJJJ within 60 days of the completion of the initial tests rather than the 30 days as specified under Plantwide Condition #3. The report shall be submitted to the Department at the address listed in General Provision #7. The notification must include the following information:

  a. All notifications submitted to comply with 40 C.F.R. Part 60 Subpart JJJJ and all documentation supporting any notification;
  b. Maintenance conducted on each engine;
  c. Documentation that each engine meets the emission standard, as listed in Specific Condition #**28**;
  d. Name and address of the permittee;
  e. The address of each affected source;
  f. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
  g. Emission control equipment; and
  h. Fuel used.

  [Reg.19.304 and 40 C.F.R. § 60.4245(a)(1,2,4), (c)(1-5) and (d)]

WM Eco-Vista Landfill, LLC SC-29, SC-30, SC-31, SC-32, SC-33, SC-34, and SC-35 Permit Status:
EVLF's Beneficial Reuse Gas to Energy Facility became operational on November 22, 2010. An initial notification was submitted to the ADEQ in accordance with 40 CFR 60 Subpart JJJJ and SC-24 on January 21, 2011. All subsequent engine performance test notifications have been submitted to the ADEQ in accordance with 40 CFR 60 Subpart JJJJ, SC-24, and/or PWC-3, as well. In accordance with the requirements of SC-29 and SC-30, all engines subject to and operated in accordance with 40 CFR 60 Subpart JJJJ have satisfied the requirements of 40 CFR 63 Subpart ZZZZ. In accordance with SC-32, Performance testing every 8,760 hours, or 3 years per engine, whichever comes first, is required for Engine 2 (SN-05), Engine 4 (SN-07), and Engine 5 (SN-08).[4]The permittee, to the extent practicable, maintains and operates each engine and control device in a manner consistent with good air pollution control practice for minimizing emissions. A copy of the maintenance plan and maintenance records are filed onsite. The following table shows the date that the performance testing was conducted and the report submittal dates:

ENGINE PERFORMANCE TEST DATES	ENGINE PERFORMANCE TEST REPORT SUBMITTAL DATES
SN-05 (3/22-25/2011) SN-04, SN-06, SN-07, and SN-08 (5/9-11/2011)	SN-05 (4/25/2011) SN-04, SN-06, SN-07, and SN-08 (5/26/2011)
SN-04 through SN-08 (5/15-16/2012)	SN-04 through SN-08 (6/7/2012)
SN-04 through SN-08 (4/15-16/2013)	SN-04 through SN-08 (6/11/2013)
SN-04 through SN-08 (4/14-15/2014)	SN-04 through SN-08 (6/6/2014)
SN-04 through SN-08 (4/9-10/2015)	SN-04 through SN-08 (6/8/2015)
SN-04 through SN-08 (4/13-14/2016)	SN-04 through SN-08 (6/13/2016)
SN-05 through SN-08 (5/9-10/2017)	SN-05 through SN-08 (7/17/2017)
SN-05 through SN-08 (5/9-10/2018)	SN-05 through SN-08 (7/9/2018)
SN-05, SN-07, and SN-08 (4/29-30/19)	SN-05, SN-07, and SN-08 (6/27/19)
SN-04 (10/3/2019)	SN-04 (10/29/19)
SN-05, SN-07, and SN-08 (3/19-20/2020)	SN-05, SN-07, and SN-08 (5/19/2020)
SN-08 (11/18/2020)	SN-08 (1/11/2021)
SN-05, SN-07, and SN-08 (3/19/2021)	SN-05, SN-07, and SN-08 (5/18/2021)

Based on the information provided above and the results of the most recent engine performance tests, this facility has satisfied the compliance requirements SC-29 through SC-35. A copy of the engine performance test report is available onsite for review by ADEQ personnel upon request.

[4] It is important to note that Engine 1 (SN-04) and Engine 3 (SN-06) are exempt from 40 CFR 60 Subpart JJJJ requirements; therefore, they are only subject to the initial performance test requirements of 40 CFR 63 Subpart ZZZZ.

SC-36 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by combusting only waste gas at SN-09 and only post-treatment tail gas at SN-10, and by complying with Specific Condition #39 and Plantwide Condition #10. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
09	Thermal Oxidizer (1750 scfm)	PM_{10} SO_2 VOC CO NO_X	0.1 6.9 0.2 3.0 3.5	0.3 30.2 0.8 245.0* 15.4
10	Process Flare (3500 scfm Candlestick Flare)	PM_{10} SO_2 VOC CO NO_X	3.5 13.8 0.2 63.9 14.1	3.1 12.1 0.2 245.0* 12.3

*Facility-wide annual CO emission limit

SC-37 Permit Condition:

- The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by combusting only waste gas at SN-09 and only post-treatment tail gas at SN-10, and by complying with Specific Condition #39 and Plantwide Condition #10. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
09	Thermal Oxidizer (1750 scfm)	PM Single HAP Total HAP	0.1 0.85 0.96	0.3 3.71 4.20
10	Process Flare (3500 scfm Candlestick Flare)	PM Single HAP Total HAP	3.5 0.85 0.96	3.1 0.75 0.84

WM Eco-Vista Landfill, LLC SC-36 & SC-37 Permit Status:

The permittee has operated in accordance with in PWC-10 and SC-39 and by burning only landfill gas as fuel at these sources. Also, the permittee has not exceeded the emission limits as confirmed by the February 23, 2001 performance test. The permittee has demonstrated compliance with SC-36 and SC-37 by compliance with SC-39.

SC-38 Permit Condition:

- Visible emissions from the Thermal Oxidizer (SN-09) may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance shall be demonstrated by burning only post-treatment tail gas as fuel at these sources.

SN	Limit	Regulatory Citation
09	5%	Reg.18.501 and Ark. Code Ann.

SC-39 Permit Condition:

- The permittee shall maintain records to demonstrate compliance with Specific Condition #36 and #37. These records shall include the gas flow to the thermal oxidizer and flare in standard cubic feet per minute (scfm). The gas flow to the thermal oxidizer and flare shall be recorded once every 15 minutes. Electronic or paper hourly records shall be maintained of the number of engines operating and the flow rate to the flares. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain, shall be maintained on site and made available to Department personnel upon request. In the event that the gas flow meter(s) are inoperable due to extraordinary circumstances (i.e., lightning strike, flood, fire, etc.), the permittee may use daily records (instead of every 15 minutes) for a period not to exceed two weeks, unless otherwise approved by the ADEQ. The permittee must notify the ADEQ by the end of the next business day after an event has occurred and provide a description of the event, and the expected time to complete repair activities. [Reg.18.1004, Reg.19.705, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-38 and SC-39 Permit Status:

The permittee maintains operational gas flow limits on the flares in accordance with the permitted emissions listed in Specific Conditions 36. The permittee maintains records to demonstrate compliance. The gas flow to the flares and total gas flow to the thermal oxidizer is monitored and recorded every 15 minutes. These records are updated by the fifteenth day of the month following the month to which the records pertain and maintained on site and are available upon request.

SC-40 Permit Condition:

An initial visible emission test using EPA Method 22 must be completed for the flare system. The Flare (SN-10) shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. No additional Method 22 Test is required for SN-10 unless a new flare unit is installed or significant modifications are made to the flare. [Reg.19.303, Reg.19.304, 40 C.F.R. § 60.18(b) through (f), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-40 Permit Status:

A performance test on SN-02A & SN-02B and a Method 22 test was conducted on February 23, 2011. The Method 22 test results demonstrated compliance with SC-05. For this reason, no additional Method 22 Test is required for SN02A and SN02B unless a new flare unit is installed or significant modifications are made to the flares. It is also important to note that only treated LFG is used as a fuel for SN-04, SN-05, SN-06, SN-07, and SN-08; therefore, the permittee is operating in compliance with SC-40.

SC-41 Permit Condition:

- The permittee must operate the flare (SN-10) pilot flame within the design limitations and manufacturer's specifications. The pilot flame may be lit by landfill gas, natural gas, or propane. [Reg.19.303 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-41 Permit Status:

The flare system is being operated within the design limitations and manufacturer's specifications. Moreover, the pilot flame has only been ignited using landfill gas, propane, or natural gas.

SC-42 Permit Condition:

- The flare (SN-10) must have a flame present at all times of operation or if no flame is present, the orifice of the unlit flare must be closed. The presence of a flare pilot light for the flare shall be monitored continuously using a thermocouple, an ultraviolet sensor or any other equivalent device to detect the presence of a flame. [Reg.19.303, Reg.19.304, 40 C.F.R. §§ 60.18(b) through (f), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-42 Permit Status:

Either an ultraviolet sensor or a thermocouple monitors the presence of a flame. In the event of a flame failure, the gas extraction system is designed to automatically shut down to prevent passive venting of landfill gas through the flare unit.

SC-43 Permit Condition:

- Flares shall be used only with the net heating value of the landfill gas being combusted being 200 BTU/scf (7.45 MJ/scm) or greater for the non-assisted flare (SN-10). The net heating value of the gas being combusted shall be determined by the methods specified in 40 C.F.R. §60.18(f)(3). A copy of the calculations shall be kept on site and made available to Department personnel upon request. [Reg.19.303, Reg.19.304, 40 C.F.R.§ 60.18(c)(3)(ii), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4- 304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-43 Permit Status:

The net heating value of the gas being combusted was calculated in accordance with the referenced specifications. A copy of the calculation is maintained on-site as part of the February 23, 2011 Flare performance test and is available for review by Department personnel upon request.

SC-44 Permit Condition:

- The Non-assisted flare (SN-10) shall be designed for and operated with an exit velocity less than 60 ft/sec (18.3 m/sec). The maximum permitted velocity shall be calculated as specified in 40 C.F.R. § 60.18(f)(5). The actual exit velocity shall be determined as specified in 40 C.F.R. § 60.18(f)(4). A copy of the calculations shall be kept on site and made available to Department personnel upon request. [Reg.19.303, Reg.19.304, 40 C.F.R. § 60.18(f)(4-5), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC SC-44 Permit Status:

The actual exit velocity was calculated in accordance with the referenced specifications. A copy of the calculation is a maintained on-site as part of the February 23, 2011 flare performance test and is available for review by Department personnel upon request.

The following information details compliance with the Plantwide Conditions of the permit:

PWC-1 Permit Condition:

- The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Reg.19.704, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

PWC-2 Permit Condition:

- If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Reg.19.410(B) and 40 C.F.R. § 52 Subpart E]

PWC-3 Permit Condition:

- The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Division of Environmental Quality or within 180 days of permit issuance if no date is specified. The permittee must notify the Division of Environmental Quality of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Division of Environmental Quality within sixty (60) calendar days after completing the testing. [Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC PWC-01, PWC-2, & PWC-3 Permit Status:

EVLF's Beneficial Reuse Gas to Energy Facility became operational on November 22, 2010. An initial notification was submitted to the ADEQ in accordance with 40 CFR 60 Subpart JJJJ and SC-35 on January 21, 2011. All subsequent engine performance test notifications have been submitted to the ADEQ in accordance with 40 CFR 60 Subpart JJJJ, SC-35, and/or PWC-3, as well. The following table shows the date that the performance testing was conducted and the report submittal dates:

ENGINE PERFORMANCE TEST DATES	ENGINE PERFORMANCE TEST NOTIFICATION SUBMITTAL DATES
SN-05 (3/22-25/2011) SN-04, SN-06, SN-07, and SN-08 (5/9-11/2011)	SN-04 through SN-08 (1/21/2011)
SN-04 through SN-08 (5/15-16/2012)	SN-04 through SN-08 (4/13/2012)
SN-04 through SN-08 (4/15-16/2013)	SN-04 through SN-08 (3/14/2013)
SN-04 through SN-08 (4/14-15/2014)	SN-04 through SN-08 (3/13/2014)
SN-04 through SN-08 (4/9-10/2015)	SN-04 through SN-08 (3/6/2015)
SN-04 through SN-08 (4/13-14/2016)	SN-04 through SN-08 (3/14/2016)
SN-05 through SN-08 (5/9-10/2017)	SN-05 through SN-08 (4/5/2017)
SN-05 through SN-08 (5/9-10/2018)	SN-05 through SN-08 (4/10/2018)
SN-05, SN-07, and SN-08 (4/29-30/19)	SN-05, SN-07, and SN-08 (3/29/19)
SN-04 (10/3/19)	SN-04 (9/3/19)
SN-05, SN-07, and SN-08 (3/19-20/2020)	SN-05, SN-07, and SN-08 (2/17/2020)
SN-08 (11/18/2020)	SN-08 (10/7/2020)
SN-05, SN-07, and SN-08 (3/19/2021)	SN-05, SN-07, and SN-08 (2/18/2021)

Based on the information presented above the facility has operated in compliance with PWC-1, PWC-2, and PWC-3. Copies of all notifications submitted are available onsite for review by ADEQ personnel upon request.

PWC-4 Permit Condition:

- The permittee must provide:
  a. Sampling ports adequate for applicable test methods;
  b. Safe sampling platforms;
  c. Safe access to sampling platforms; and
  d. Utilities for sampling and testing equipment.

  [Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

PWC-5 Permit Condition:

- The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Reg.19.303 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

PWC-6 Permit Condition:

- This permit subsumes and incorporates all previously issued air permits for this facility. [Reg. 26 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

PWC-7 Permit Condition:

- Unless otherwise specified in the permit, approval to construct any new major stationary source or a major modification subject to 40 C.F.R. § 52.21 shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Division of Environmental Quality may extend the 18-month period upon a satisfactory showing that an extension is justified. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]

WM Eco-Vista Landfill, LLC PWC-04, PWC-5, PWC-6, & PWC-7 Permit Status:
All of the equipment is designed and operated within its design limitations. The necessary equipment required to facilitate access for testing and sampling are also in place. Based on the design, operation, and construction of this facility, the permittee demonstrates compliance with these conditions.

PWC-8 Permit Condition:

- The facility has a maximum design capacity of 23,190,000 cubic yards (CY). The permittee shall weigh every incoming load of waste accepted by the facility on its truck scale. The permittee shall update its air permit to reflect the new capacity in the event that a new Solid Waste Permit is issued that allows an increase in the total capacity of the landfill to more than 23,190,000 CY. [Reg.19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

PWC-9 Permit Condition:

- To demonstrate compliance with Plantwide Condition #8, the permittee shall update records of the total amount of waste-in-place in cubic yards annually. These records shall be updated by the 31st day of March, shall be retained at least 5 years and submitted in accordance with General Provision #7. [Reg.19.705, Reg.18.1004, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC PWC-08 & PWC-09 Permit Status:
As stated in Plantwide Condition #8, the permittee did not exceed the design capacity of 23,190,000 cubic yards during this reporting period. Every in-coming load of waste accepted is weighed by the facility on its truck scale. In accordance with Plantwide Condition 9, the permittee maintains a lifetime in-place total, a twelve-month rolling total, and each individual month's data onsite. This information will be retained at least five (5) years and will be made available to ADEQ personnel upon request. Density conversions are documented and maintained with these records. In accordance with PWC-9 records of the annual waste-in-place has been included as **Attachment G**.

PWC-10 Permit Condition:

- The permittee shall not emit more than 245.0 tons of CO at the facility per rolling 12 month period. [Reg.19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-

4-304 and 8-4-311]

PWC-11 Permit Condition:

- The permittee shall maintain monthly calculations and records to demonstrate compliance with Plantwide Condition #10. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. Reg.19.705 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

WM Eco-Vista Landfill, LLC PWC-10 & PWC-11 Permit Status:

As stated in Plantwide Condition #10, the permittee did not emit more than 245.0 tons of CO at the facility per rolling 12- month period. The permittee maintains a lifetime in-place total, a twelve-month rolling total, and each individual month's data onsite. This information will be retained at least five (5) years and will be made available to ADEQ personnel upon request. A twelve- month rolling total of CO data has been included in **Attachment H**.

PWC-12 Permit Condition:

The permittee is subject to and shall comply with 40 C.F.R. § 60 Subpart XXX - *Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification after July 17, 2014* (Appendix A), since it has a design fill capacity in excess of 2,500,000 Mg and the facility was modified after July 17, 2014. The gas collection and control system will be subject to the monitoring requirements of 40 C.F.R. § 60 Subpart XXX – *Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification after July 17, 2014*, 30 months (June 19, 2016) after the site specific NMOC emissions are reported to be equal to or greater than 34 Mg per year. [Reg.19.304, 40 C.F.R. §§ 60.762(b), 60.764(a)(3)]

PWC-13 Permit Condition:

- The permittee shall be required to modify this permit before starting any modification, construction, or reconstruction at the facility not described in this permit. The permittee is allowed to install additional gas extraction wells and remove and/or replace existing gas extraction wells; any such modifications shall be documented and a record maintained on site and make available to Department personnel upon request. [Reg.19.304 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

PWC-14 Permit Condition:

- The permittee shall maintain records of the following on-site and make available to Department personnel upon request:
    a. An up-to-date, readily accessible plot map showing each existing collector in the system and providing a unique identification location label for each collector; and
    b. A readily accessible record of the nature, date of deposition, amount and location of asbestos-containing or non-degradable waste excluded from collection. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4- 304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

WM Eco-Vista Landfill, LLC PWC-12, PWC-13 & PWC-14 Permit Status:
The facility has satisfied the requirements of PWC-12 during this reporting period. In accordance with the requirements of PWC-13 and PWC-14, a map that displays all existing gas collectors is maintained onsite. No areas are currently excluded from the overall GCCS design at this time.

PWC-15 Permit Condition:

- Since the calculated Tier 2 NMOC emission rate is equal to or greater than the 34 Mg/yr threshold level, the permittee shall:
    a. Install a collection and control system that captures the gas generated within the landfill areas required paragraphs by 40 C.F.R. §60.762(b)(2)(ii)(A) or (B) and (b)(2)(iii) by May 23, 2019 (which is within 30 months after the first annual report in which the emission rate equals or exceeds 34 Mg/yr). [Reg.19.304 and 40 C.F.R. § 60.762(b)]

PWC-16 Permit Condition:

- The GCCS Design plan may allow for alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 C.F.R. §§ 60.763 through 60.768 and the applicable operating parameters of this permit when approved by the administrator. Any approved alternatives in the current plan may be used when applicable under the terms of this permit. [Reg.19.304 and 40 C.F.R. § 60.762]

WM Eco-Vista Landfill, LLC PWC-12, PWC-13 Permit Status:
EVLF Currently has a GCCS in place. In accordance with PWC-15, expansion of the existing GCCS will be expanded to address the 5-Year/2-Year Rule of the NSPS. It is also important to note that existing flares are designed in accordance with 40 CFR 60.18 to maintain 98% destruction efficiency of the LFG, as well as, a NSPS-Compliant Treatment to treat the LFG prior to utilization by the LFG-Fired Engines. Moreover, in accordance with PWC-16, any alternatives included in the current, approved NSPS Design plan have been implemented at the facility.

PWC-17 Permit Condition:

- The permittee is subject to and shall comply with 40 C.F.R. § 63 Subpart AAAA – National Emission Standards for Hazardous Air Pollutants – Municipal Solid Waste Landfills on June 19, 2016. [Reg.19.304 and 40 C.F.R. § 63.1935(a)(3)]

PWC-18 Permit Condition:

- The permittee is subject to the applicable requirements of 40 C.F.R. § 63.1930 through § 63.1990 and to the general provisions of 40 C.F.R. § 63 as specified in Table 1 of 40 C.F.R. § 63 Subpart AAAA. [Reg.19.304 and 40 C.F.R. § 63.1955(b)]

PWC-19 Permit Condition:

Compliance with 40 C.F.R. § 63 Subpart AAAA is determined in the same way it is determined for 40 C.F.R. § 60 Subpart XXX, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 C.F.R. §60.756(b)(1), (c)(1), and (d) of Subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, the permittee has failed to meet the control device operating conditions described in 40 C.F.R. § 63 Subpart AAAA and has deviated from the requirements of 40 C.F.R. § 63 Subpart AAAA. The permittee must develop a written SSM plan according to the provisions in 40 C.F.R. § 63.6(e)(3) until September 27, 2021. A copy of the SSM plan must be maintained on site until September 27, 2021. Failure to write or maintain a copy of the SSM plan prior to September 27, 2021 is a deviation from the requirements of 40 C.F.R. § 63 Subpart AAAA. [Reg.19.304 and 40 C.F.R. § 63.1960]

PWC-20 Permit Condition:

- A deviation is defined in §63.1965. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of 40 C.F.R. § 63.1975. [Reg.19.304 and 40 C.F.R. § 63.1965]

    a. A deviation occurs when the control device operating parameter boundaries described in 40 C.F.R. 63.1983(c)(1) of Subpart AAAA are exceeded.
    b. A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
    c. Before September 28, 2021, a deviation occurs when a SSM plan is not developed or maintained on site.

PWC-21 Permit Condition:

- Before September 28, 2021, averages are calculated in the same way as they are calculated in 40 C.F.R. §60.758(c) for 3-hour average combustion temperature. No later than September 27, 2021, average combustion temperature must be calculated the same way as 40 C.F.R. §63.1983(b)(2)(i), except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:

    a. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
    b. Startups.
    c. Shutdowns.
    d. Malfunctions.

    [Reg.19.304 and 40 C.F.R. § 63.1965]

PWC-22 Permit Condition:

- The permittee must keep records and reports as specified in 40 C.F.R. § 60 Subpart WWW, with one exception: The permittee must submit the annual report described in 40 C.F.R. § 60.757(f) every 6 months until September 27, 2021. After September 27, 2021 the permittee must submit the annual report described in 40 C.F.R. § 60.767(f) (40 C.F.R. § 60 Subpart XXX) every six months. [Reg.19.304 and 40 C.F.R. § 63.1981(h)]

PWC-23 Permit Condition:

The permittee must also keep records and reports as specified in the general provisions of 40 C.F.R. § 60 and of 40 C.F.R. § 63 as shown in Table 1 of 40 C.F.R. § 63 Subpart AAAA. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports. [Reg.19.304 and 40 C.F.R. § 63.1980(b)]

PWC-24 Permit Condition:

- Until September 27, 2021, the permittee must prepare and implement a Startup, Shutdown, and Malfunction Plan (SSM). If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Reg.19.304 and 40 C.F.R. § 63.6 (e)(3)]

WM Eco-Vista Landfill, LLC PWC-17 through PWC-24 Permit Status:

As of June 19, 2016, the permittee has begun operating in accordance with the requirements of PWC-17 and PWC-18. There are three (3) control devices installed at this facility. Two (2) candlestick flares (SN-02A and SN-02B) and a LFG Treatment System. In accordance with the requirements of PWC-19 and PWC-24, the written SSM plan developed and implemented on June 19, 2016 is kept onsite and available for review by ADEQ personnel. Additionally, all applicable parameters associated with the control equipment will be monitored in accordance with the applicable requirements of PWC-19, as well. Since none of the control devices onsite are enclosed combustors the requirements of PWC-20 and PWC-21 do not apply. The permittee has submitted the report required by PWC-22. In accordance with the requirements of PWC-23 maintains a copy of all applicable records and reports including the SSM Plan and SSM reports onsite. These documents are available for review upon request by ADEQ personnel.

PWC-25 Permit Condition:

- The permittee is subject to and shall comply with Regulation 21, Arkansas Asbestos Abatement Regulation, §11.2 Standards for Waste Disposal Sites. [Reg.21, § 11.2(A-D), and 40 C.F.R. § 60.752]

PWC-26 Permit Condition:

- The permittee of an active waste disposal site that received asbestos-containing waste material from a source covered by Regulation 21 shall meet the following requirements: [Reg.21, § 11.2(A)(i-ii)]
    a. At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

i. Be covered with at least 6 inches of compacted nonasbestos-containing material; or
ii. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particulate dust by the dust suppression agent manufacturers to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Director. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

b. Use an alternative emissions control method that has received prior written approval by the Director demonstrating the following criteria:
   i. The alternative method will control asbestos emissions equivalent to currently required methods;
   ii. The suitability of the alternative method for the intended application;
   iii. The alternative method will not violate other regulations; and
   iv. The alternative method will not result in increased water pollution, land pollution, or occupational hazards.
c. Location of any temporary storage site and the final disposal site.

WM Eco-Vista Landfill, LLC PWC-25 & PWC-26 Permit Status:
The facility handles asbestos containing waste in accordance with the noted provisions.

PWC-27 Permit Condition:

- The permittee shall maintain waste shipment records (WSR) of all asbestos-containing waste material received: [Reg.19.705 and Reg.21, §11.2(B)(i-vii)]

  a. Maintain waste shipment records (WSR), using a form with the following information:
     i. The name, address, and telephone number of the waste generator;
     ii. The name, address, and telephone number of the transporter(s);
     iii. The quantity of the asbestos-containing waste material in tons;
     iv. The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the Department Official responsible for administering the Asbestos program for the waste generator (identified in the WSR, and, if different the local, State, or EPA regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the WSR along with the report; and
     v. The date of the receipt.
  b. The permittee shall as soon as possible and no longer than 30 days after receipt of the asbestos-containing waste, send a copy of the signed WSR to the waste generator. [Regulation 21, §11.2(B)(ii)]
  c. The permittee shall check the WSR that accompanies each asbestos-containing waste shipment that arrives at the waste disposal site for accuracy of the quantity of waste designated and attempt to reconcile any discrepancy with the waste

generator. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee will immediately report in writing to the specific agency responsible for administering the NESHAP program for the waste generator. Describe the discrepancy and attempts to reconcile it, and submit a copy of the WSR along with the report. [Regulation 19, §19.705 and Regulation 21, §11.2(B)(iii)]

d. Furnish upon request and make available during normal business hours for inspection by the Department, all records required under Regulation 21, §11.2. [Reg.21 § 21.11.2(B)(iv)]
e. The permittee shall maintain a copy of all records and reports required by Regulation 21, §11.2 on-site for at least 2 years. [Regulation 21, §11.2(B)(v)]
f. Maintain until landfill closure, records of the location, depth and area, and quantity in tons of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area. [Reg.21 § 11.2(B)(vi)]
g. Submit to the Director, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities. [Reg.21 § 11.2(B)(vii)]

WM Eco-Vista Landfill, LLC PWC-27 Permit Status:
The facility maintains records of all incoming asbestos containing materials. Records are kept on site for review by Department personnel upon request.

PWC-28 Permit Condition:

- The permittee shall notify the Department in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at the waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Department at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. The following information shall be included in the notice: [Reg.21 § 11.2(C)(i-iv)]

    a. Schedule starting and completion dates;
    b. Reason for disturbing the waste;
    c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material (if deemed necessary, the Department may require changes in the emission control procedures to be used); and
    d. Location of any temporary storage site and the final disposal site.

WM Eco-Vista Landfill, LLC PWC-28 Permit Status:
WM makes notifications to ADEQ in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material. If the excavation date changes, a 10-day notice is provided.

PWC-29 Permit Condition:

- Within 60 days of a site becoming inactive, the permittee shall record a notation, in accordance with Arkansas State law, on the deed to the facility property and on any other instrument that would normally be examined during a title search. This notation will in

perpetuity notify any potential purchaser of the property that: [Reg.21 § 11.2(D)(i-ii)]

a. The land has been used for the disposal of asbestos-containing waste material; and
b. The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in Regulation 21, §11.2(B)(vi) have been filed with the Department.

WM Eco-Vista Landfill, LLC PWC-29 Permit Status:
The site is active, however, within 60 days of the site becoming inactive, the permittee shall record on the deed, and any other instrument that would normally be examined during a title search, information indicating that the landfill has been used for disposal of ACWM and a survey plot and record of the location and quantity ACWM disposed of at the facility required to be filed by with the department in Regulation 21.

PWC-30 Permit Condition:

- The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 C.F.R. § 82 Subpart E]
    a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to § 82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
    c. The form of the label bearing the required warning must comply with the requirements pursuant to § 82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

PWC-31 Permit Condition:

- The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 C.F.R. § 82 Subpart F]
    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
    c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
    d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to § 82.166. ("MVAC like appliance" as defined at § 82.152)
    e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.156.
    f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such

appliances pursuant to § 82.166.

PWC-32 Permit Condition:

- If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 C.F.R. § 82 Subpart A, Production and Consumption Controls.

PWC-33 Permit Condition:

- If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 C.F.R. § 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.

PWC-34 Permit Condition:

- The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

PWC-35 Permit Condition:

- The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 C.F.R. § 82 Subpart G.

WM Eco-Vista Landfill, LLC PWC-30, PWC-31, PWC-32, PWC-33, PWC-34, & PWC-35 Permit Status:

The permittee operated in compliance with the applicable Permit Conditions of PC-30 through PC-35 during this reporting period.

Arkansas Air Operating Permit Semi-Annual Monitoring Report
In Accordance With General Provision 7 and
40 CFR 70.6(a)(3)(iii)(A)

Semi-Annual Title V Report
Permit # 1884-AOP-R7/R8 AFIN: #72-00144

The following information details compliance with the General Provisions of the permit:

General Provision #1:

- Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 C.F.R.§ 70.6(b)(2)]

General Provision #2:

- This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 C.F.R. § 70.6(a)(2) and Reg.26.701(B)]

General Provision #3:

- The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Division of Environmental Quality takes final action on the renewal application. The Division of Environmental Quality will not necessarily notify the permittee when the permit renewal application is due. [Reg.26.406]

General Provision #4:

- Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 C.F.R. § 70.6(a)(1)(ii) and Reg.26.701(A)(2)]

WM Eco-Vista Landfill, LLC General Provision #s 1-4 Status:

The permittee operated in compliance with the applicable General Provisions one (GP-1) through GP-4 during this reporting period.

Arkansas Air Operating Permit Semi-Annual Monitoring Report
In Accordance With General Provision 7 and
40 CFR 70.6(a)(3)(iii)(A)

Semi-Annual Title V Report
Permit # 1884-AOP-R7/R8 AFIN: #72-00144

General Provision #5:

- The permittee must maintain the following records of monitoring information as required by this permit.
  a. The date, place as defined in this permit, and time of sampling or measurements;
  b. The date(s) analyses performed;
  c. The company or entity performing the analyses;
  d. The analytical techniques or methods used;
  e. The results of such analyses; and
  f. The operating conditions existing at the time of sampling or measurement.
  [40C.F.R. § 70.6(a)(3)(ii)(A) and Reg.26.701(C)(2)]

General Provision #6:

- The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 C.F.R. § 70.6(a)(3)(ii)(B) and Reg.26.701(C)(2)(b)]

General Provision #7:

- The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. The first report due after issuance of the initial Title V permit shall contain six months of data and each report thereafter shall contain 12 months of data. The report shall contain data for all monitoring requirements in effect during the reporting period. If a monitoring requirement is not in effect for the entire reporting period, only those months of data in which the monitoring requirement was in effect are required to be reported. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Reg.26.2 must certify all required reports. The permittee will send the reports electronically using https://eportal.adeq.state.ar.us or mail them to the address below:

  Division of Environmental Quality Office of Air Quality
  ATTN: Compliance Inspector Supervisor 5301 Northshore Drive
  North Little Rock, AR 72118-5317

  [40 C.F.R. § 70.6(a)(3)(iii)(A) and Reg.26.701(C)(3)(a)]

General Provision #8:

- The permittee shall report to the Division of Environmental Quality all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

    a. For all upset conditions (as defined in Reg.19.601), the permittee will make an initial report to the Division of Environmental Quality by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

        i. The facility name and location;
        ii. The process unit or emission source deviating from the permit limit;
        iii. The permit limit, including the identification of pollutants, from which deviation occurs;
        iv. The date and time the deviation started;
        v. The duration of the deviation;
        vi. The emissions during the deviation;
        vii. The probable cause of such deviations;
        viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
        ix. The name of the person submitting the report.

    The permittee shall make a full report in writing to the Division of Environmental Quality within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

    b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

    [Reg.19.601, Reg.19.602, Reg.26.701(C)(3)(b), and 40 C.F.R. § 70.6(a)(3)(iii)(B)]

WM Eco-Vista Landfill, LLC General Provision #s 5-8 Status:
The permittee maintained records and submitted reports in compliance with GP-5 through GP-8.

General Provision #9:

- If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 C.F.R.§ 70.6(a)(5), Reg.26.701(E), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

General Provision #10:

- The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. § 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 C.F.R. § 70.6(a)(6)(i) and Reg.26.701(F)(1)]

General Provision #11:

- It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 C.F.R. § 70.6(a)(6)(ii) and Reg.26.701(F)(2)]

General Provision #12:

- The Division of Environmental Quality may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 C.F.R. § 70.6(a)(6)(iii) and Reg.26.701(F)(3)]

General Provision #13:

- This permit does not convey any property rights of any sort, or any exclusive privilege. [40 C.F.R. § 70.6(a)(6)(iv) and Reg.26.701(F)(4)]

General Provision #14:

- The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Division of Environmental Quality may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 C.F.R. § 70.6(a)(6)(v) and Reg.26.701(F)(5)]

General Provision #15:

- The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 C.F.R. § 70.6(a)(7) and Reg.26.701(G)]

General Provision #16:

- No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 C.F.R. § 70.6(a)(8) and Reg.26.701(H)]

General Provision #17:

- If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 C.F.R. § 70.6(a)(9)(i) and Reg.26.701(I)(1)]

General Provision #18:

- The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Division of Environmental Quality specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 C.F.R. § 70.6(b) and Reg.26.702(A) and (B)]

General Provision #19:

- Any document (including reports) required by this permit pursuant to 40 C.F.R. § 70 must contain a certification by a responsible official as defined in Reg.26.2. [40 C.F.R. § 70.6(c)(1) and Reg.26.703(A)]

General Provision #20:

- The permittee must allow an authorized representative of the Division of Environmental Quality, upon presentation of credentials, to perform the following: [40 C.F.R. § 70.6(c)(2) and Reg.26.703(B)]
    a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
    b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
    d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

WM Eco-Vista Landfill, LLC General Provision #s 9-20 Status:

The permittee operated in compliance with the applicable requirements of GP-9 through GP-20. The permittee has paid all required fees, allowed authorized representatives access to the facility, and submitted required reports.

General Provision #21:

- The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Division of Environmental Quality.

All compliance certifications required by this permit must include the following: [40 C.F.R. § 70.6(c)(5) and Reg.26.703(E)(3)]

a. The identification of each term or condition of the permit that is the basis of the certification;
b. The compliance status;
c. Whether compliance was continuous or intermittent;
d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
e. Such other facts as the Division of Environmental Quality may require elsewhere in this permit or by § 114(a)(3) and § 504(b) of the Act.

General Provision #22:

- Nothing in this permit will alter or affect the following: [Reg.26.704(C)]

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
c. The applicable requirements of the acid rain program, consistent with § 408(a) of the Act; or
d. The ability of EPA to obtain information from a source pursuant to § 114 of the Act.

General Provision #23:

- This permit authorizes only those pollutant emitting activities addressed in this permit. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

General Provision #24:

- The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Division of Environmental Quality approval. The Division of Environmental Quality may grant such a request, at its discretion in the following circumstances:

a. Such an extension does not violate a federal requirement;
b. The permittee demonstrates the need for the extension; and
c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Reg.18.314(A), Reg.19.416(A), Reg.26.1013(A), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

General Provision #25:

- The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Division of Environmental Quality approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Division of

Environmental Quality may grant such a request, at its discretion under the following conditions:

a. Such a request does not violate a federal requirement;
b. Such a request is temporary in nature;
c. Such a request will not result in a condition of air pollution;
d. The request contains such information necessary for the Division of Environmental Quality to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Reg.18.314(B), Reg.19.416(B), Reg.26.1013(B), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

General Provision #26:

- The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Division of Environmental Quality approval. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:

  a. The request does not violate a federal requirement;
  b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
  c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

  [Reg.18.314(C), Reg.19.416(C), Reg.26.1013(C), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

General Provision #27:

- Any credible evidence based on sampling, monitoring, and reporting may be used to determine violations of applicable emission limitations. [Reg.18.1001, Reg.19.701, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

WM Eco-Vista Landfill, LLC #s 21-26 Status:
The permittee operated in compliance with the applicable requirements of GP-21 through GP-27.
Deviations

Deviations

No deviations occurred during this reporting period.

Attachment B – GP-7 Certification Statement
(Submitted Under Separate Cover)

Attachment C – DAR Authorization
(Submitted Under Separate Cover)

Attachment D – Surface Emissions Monitoring Information

CEC

CARLSON ENVIRONMENTAL CONSULTANTS, PC

LANDFILL GAS AND SOLID WASTE SPECIALISTS

April 30, 2021

Ms. Jodi Reynolds
Environmental Protection Manager
Eco Vista Landfill
2210 WM Drive
Springdale, AR 72762

Subject: First Quarter 2021 NSPS Surface Emissions Monitoring
Eco Vista Landfill –Springdale, Arkansas

Dear Ms. Reynolds:

Carlson Environmental Consultants, PC (CEC) is pleased to present this First Quarter 2021 New Source Performance Standards (NSPS) Surface Emissions Monitoring Report for the Eco Vista Landfill (Landfill) located in Springdale, Arkansas. CEC conducted quarterly surface emissions monitoring at the Landfill on March 10, and March 11, 2021. The monitoring was performed in accordance with 40 CFR 60, Appendix A, Method 21. These regulations require surface emissions monitoring around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals where waste exceeds two (2) years in age at final grade or five (5) years in age at interim grade.

An IRwin Inficon SX (IRwin) Methane Leak Detector and a Thermo TVA-1000B Flame Ionization Detector (FID) were used to monitor the emission levels of methane from the landfill surface. CEC continuously monitored along the landfill's site-specific surface emissions monitoring route within the landfill and around the perimeter of the collection area. Surface emission monitoring was conducted at a minimum along the 30 meter path. The path may depict additional monitoring of off-route areas such as distressed vegetation, cracks or seeps, which can indicate an increased presence of landfill gas. Additionally, dangerous areas were excluded as allowed under NSPS Subpart XXX (CFR 60.763(d)).

During the initial surface emissions monitoring route, CEC did not detect any locations where methane emissions exceeded the 500 ppm threshold above the background concentration. In addition, the technician monitored cover penetrations and openings as required by NSPS XXX, 40 CFR 60.763(d). During the penetration surface emissions monitoring, CEC detected two (2) locations where methane emissions exceeded the 500 ppm threshold above the background concentration. These locations were flagged and recorded as monitoring points 119, and 149. Site personnel added coversoil around the penetrations, and tuned the well field to address the exceedances. This monitoring was performed separate from the serpentine monitoring. For purposes of this evaluation, the following definitions were assumed:

- A "penetration" is any landfill gas collection well or landfill gas collection device that completely passes through the landfill cover into waste and is located within an area of the landfill where waste has been placed and a gas collection system is required. Cover penetrations do not include items such as survey stakes, fencing or litter fencing, flags, signs, trees, and utility poles.
- An "opening" is any penetration defined above, and any area where gas collection is required that exhibits distressed vegetation and cracks or seeps in the cover.

CEC re-monitored the exceedance locations on March 11, 2021 which is within ten (10) days of the initial exceedances. During this re-monitoring event, the points were measured with methane concentrations below 500 ppm. CEC also re-monitored the locations on April 8, 2021 which is within one (1) month of the initial exceedances. During this re-monitoring event, the two (2) exceedance points had measured methane concentrations below 500 ppm.

Monitoring exceedance data is presented in Table 1 in Attachment A. Calibration logs, site, and weather information are provided in Attachment B. The Certificates of Analysis for the gases used to calibrate the IRwin and FID are provided in Attachment C. No further surface emissions monitoring will be required until the Second Quarter of 2021. Eco Vista complies with the requirements of 40 CFR 60.763 (d) for Municipal Solid Waste (MSW) Landfills.

CEC appreciates this opportunity to provide landfill gas surface emissions monitoring services at the Eco Vista Landfill. Please feel free to call either of the undersigned at (704) 283-9765 if you have any questions or require additional information.

Sincerely,

Ms. Kathryn M. Fauerby, EIT
Staff Engineer
Carlson Environmental Consultants, PC

Mr. Kristofer L. Carlson, P.E.
President
Carlson Environmental Consultants, PC

Cc: Nathan Swan, Eco Vista Landfill

ATTACHMENT A

MONITORING EXCEEDANCE DATA

Table 1

ECO VISTA LANDFILL
Surface Monitoring Exceedances and Corrective Actions

Year: 2021 Quarter: 1

Initial Monitoring Event					10-day Follow-up Event		Additional 10-day Follow-up Event		1-Month Follow-up Event		Additional 10-day Follow-up Event		Additional Corrective Actions	
Monitoring Date	Landfill Name	Location ID	Concentration (ppm)	Initial Corrective Action	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Date	Additional Corrective Actions Implemented (If Applicable)
3/11/2021	Eco Vista Landfill	#119 (LE-18) Lat: 36.13903 Long: -94.25076	19383.15	Added cover soil and tuned well	3/11/2021	< 500	NA	NA	4/8/2021	< 500	NA	NA	NA	NA
3/11/2021	Eco Vista Landfill	#149 (Riser 6) Lat: 36.14055 Long: -94.25179	2073.45	Added cover soil	3/11/2021	< 500	NA	NA	4/8/2021	< 500	NA	NA	NA	NA

Project Number: 101.69.07

Initial Monitoring Exceedance:

Date: 3/11/2021 Time: 11:19 AM Monitoring Technician Initials: JF
Instrument reading - Background reading: 19389.10 ppm - 5.95 ppm = 19383.15 ppm

Location of monitored exceedance (include description of field marker used):

Point 1 of 2, Location ID #119 (LE-18)
Eastern Slope

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:
Added Cover Soil and Tuned Well

Remonitor location within 10 calendar days of initial exceedance:

Date: 3/11/2021 Time: 1:20 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 83.10 ppm - 5.95 ppm = 77.15 ppm

If 10-day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: 4/8/2021 Time: 4:42 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 32.27 ppm - 5.69 ppm = 26.58 ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

Remonitor location within 10 calendar days of 2nd exceedance:

Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)*

*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

Signature Jackson Fogarty

Project Number: 101.69.07

Initial Monitoring Exceedance:

Date: 3/11/2021 Time: 11:48 AM Monitoring Technician Initials: JF
Instrument reading - Background reading: 2079.40 ppm - 5.95 ppm = 2073.45 ppm

Location of monitored exceedance (include description of field marker used):

Point 2 of 2, Location ID #149 (Riser 6)
Bottom of Eastern Slope

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:
Added cover soil

Remonitor location within 10 calendar days of initial exceedance:

Date: 3/11/2021 Time: 2:07 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 108.90 ppm - 5.95 ppm = 102.95 ppm

If 10-day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: 4/8/2021 Time: 4:45 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 46.11 ppm - 5.69 ppm = 40.42 ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

Remonitor location within 10 calendar days of 2nd exceedance:

Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)*

*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

Signature Jackson Fogarty

ATTACHMENT B

CALIBRATION LOGS AND SITE INFORMATION

March 10, 2021

SITE INFORMATION

LANDFILL NAME: Eco Vista Landfill **DATE:** March 10, 2021

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground (www.wunderground.com)

Beginning of Monitoring Event			End of Monitoring Event	
Time:	9:19 AM		**Time:**	2:36 PM
Temperature:	62.0 °F		**Temperature:**	66.0 °F
Barometer:	30.03 " Hg		**Barometer:**	29.94 " Hg
Humidity:	66 %		**Humidity:**	65 %
Wind Speed:	26.0 mph		**Wind Speed:**	14.0 mph
Wind Direction:	S °		**Wind Direction:**	S °

TABLE 1

CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: March 10, 2021

TIME: 9:19 **AM** [x] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 497.30 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 497.00 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 497.70 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

= 0.53%

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane:NorLAB (500 ppm)	**Zero Air: NorLAB (0 ppm)**
Lot #: 9-226-202	**Lot #: 9-070-200**
Expiration Date: 08/2022	**Expiration Date: 03/2022**

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: March 10, 2021

TIME: 9:19 **AM** [x] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 497.30 **ppm**

90% of the Stabilized Reading: = 447.57 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 497.00 **ppm**

90% of the Stabilized Reading: = 447.30 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 497.70 **ppm**

90% of the Stabilized Reading: = 447.93 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 6.33 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3

STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: March 10, 2021

TIME: 9:25 **AM** [x] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 497.30 **ppm**

MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 497.00 **ppm**

MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 497.70 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 497.33 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 1.10 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 6.10 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 3.60 **ppm**

PERFORMED BY: Jackson Fogarty

March 11, 2021

SITE INFORMATION

LANDFILL NAME: Eco Vista Landfill **DATE:** March 11, 2021

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground (www.wunderground.com)

Beginning of Monitoring Event		End of Monitoring Event	
Time:	7:54 AM	**Time:**	2:07 PM
Temperature:	63.0 °F	**Temperature:**	69.0 °F
Barometer:	30.03 " Hg	**Barometer:**	30.03 " Hg
Humidity:	84 %	**Humidity:**	73 %
Wind Speed:	7.0 mph	**Wind Speed:**	13.0 mph
Wind Direction:	S °	**Wind Direction:**	S °

TABLE 1

CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: March 11, 2021

TIME: 7:54 AM [x] PM [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

CALIBRATION GAS STANDARD: 500 ppm

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 ppm (1)

Meter Reading for Calibration Gas: 499.30 ppm (2)

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 ppm (3)

Meter Reading for Calibration Gas: 502.30 ppm (4)

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 ppm (5)

Meter Reading for Calibration Gas: 493.60 ppm (6)

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

= 0.63%

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane:NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-070-200
Expiration Date: 08/2022	Expiration Date: 03/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: March 11, 2021

TIME: 7:54 **AM** [x] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 499.30 **ppm**

90% of the Stabilized Reading: = 449.37 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 502.30 **ppm**

90% of the Stabilized Reading: = 452.07 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 493.60 **ppm**

90% of the Stabilized Reading: = 444.24 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 6.33 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3

STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: March 11, 2021

TIME: 8:11 **AM** [x] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 499.30 **ppm**
MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 502.30 **ppm**
MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 493.60 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 498.40 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 0.00 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 11.90 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 5.95 **ppm**

PERFORMED BY: Jackson Fogarty

April 8, 2021

SITE INFORMATION

LANDFILL NAME: Eco Vista Landfill **DATE:** April 8, 2021

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground (www.wunderground.com)

Beginning of Monitoring Event		End of Monitoring Event	
Time:	4:19 PM	**Time:**	4:45 PM
Temperature:	70.0 °F	**Temperature:**	71.0 °F
Barometer:	29.65 " Hg	**Barometer:**	29.65 " Hg
Humidity:	32 %	**Humidity:**	31 %
Wind Speed:	28.0 mph	**Wind Speed:**	27.0 mph
Wind Direction:	N °	**Wind Direction:**	N °

TABLE 1

CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: April 8, 2021

TIME: 4:19 **AM** [ ] **PM** [x]

INSTRUMENT MAKE: TVA **MODEL:** 1000B **S/N:** 032330000001103

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.04 **ppm (1)**

Meter Reading for Calibration Gas: 492.00 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 495.00 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.14 **ppm (5)**

Meter Reading for Calibration Gas: 499.00 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

= 0.93%

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane:NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-070-200
Expiration Date: 08/2022	Expiration Date: 03/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: April 8, 2021

TIME: 4:19 **AM** [ ] **PM** [x]

INSTRUMENT MAKE: TVA **MODEL:** 1000B **S/N:** 032330000001103

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 492.00 **ppm**

90% of the Stabilized Reading: = 442.80 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 8 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 495.00 **ppm**

90% of the Stabilized Reading: = 445.50 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 8 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 499.00 **ppm**

90% of the Stabilized Reading: = 449.10 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 8 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 8.00 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3

STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: April 8, 2021

TIME: 4:31 **AM** [ ] **PM** [x]

INSTRUMENT MAKE: TVA **MODEL:** 1000B **S/N:** 032330000001103

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 492.00 **ppm**
MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 495.00 **ppm**
MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 499.00 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 495.33 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 2.36 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 9.02 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 5.69 **ppm**

PERFORMED BY: Jackson Fogarty

ATTACHMENT C

CALIBRATION GAS CERTIFICATES OF ANALYSIS

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

JJS Technical Services
Suite 950
1900 E. Golf Road
Schaumburg, IL 60173

Cust Number P9060
Order Number 61788940
PO Number 20096

Lot Number	9-226-202
Norlab Part#	E1971500PA
Cylinder Size	550 Liter
Number of Cyl	2
Customer Part#	N/A

Date on Manufacture	8/19/2019
Expires	08/2022
Analytical Accuracy	+/- 2 %

Component	Reported Concentration	Requested Concentration
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs.

NIST Traceable Numbers 20180519 and 20180224

Approved: David Reed Date Signed: 8/19/2019
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-8038 • 800-657-6672

NorLAB®

A DIVISION OF NORCO, INC.

Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

JJS Technical Services

1900 E. Golf Road
Schaumburg, IL 60173

Cust Number P9060
Order Number 60612445
PO Number 19236

Lot Number 9-070-200
Norlab Part# E1002
Cylinder Size 550 Liter
Number of Cyl 2

Customer Part# N/A

Date on Manufacture 3/20/2019
Expires 03/2022
Analytical Accuracy Certified

Component	Reported Concentration	Requested Concentration
Air	Zero Grade	Zero Grade
Oxygen	20.9 %	20.9 %
T.H.C. (as Methane)	< 1.0 ppm	< 1.0 ppm
Nitrogen	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

Minor constituents tested with standards traceable to NIST by mass or comparison to SRM's (Standard Reference Materials).

NIST Traceable Numbers 20180519 and 20180224

Approved: _____ Date Signed: 3/20/2019
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-3038 • 800-657-6672

CEC

CARLSON ENVIRONMENTAL CONSULTANTS, PC

LANDFILL GAS AND SOLID WASTE SPECIALISTS

June 18, 2021

Ms. Jodi Reynolds
Environmental Protection Manager
Eco Vista Landfill
2210 WM Drive
Springdale, AR 72762

Subject: Second Quarter 2021 NSPS Surface Emissions Monitoring
Eco Vista Landfill –Springdale, Arkansas

Dear Ms. Reynolds:

Carlson Environmental Consultants, PC (CEC) is pleased to present this Second Quarter 2021 New Source Performance Standards (NSPS) Surface Emissions Monitoring Report for the Eco Vista Landfill (Landfill) located in Springdale, Arkansas. CEC conducted quarterly surface emissions monitoring at the Landfill on May 12, 2021. The monitoring was performed in accordance with 40 CFR 60, Appendix A, Method 21. These regulations require surface emissions monitoring around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals where waste exceeds two (2) years in age at final grade or five (5) years in age at interim grade.

An IRwin Inficon SX (IRwin) Methane Leak Detector was used to monitor the emission levels of methane from the landfill surface. CEC continuously monitored along the landfill's site-specific surface emissions monitoring route within the landfill and around the perimeter of the collection area. Surface emission monitoring was conducted at a minimum along the 30 meter path. The path may depict additional monitoring of off-route areas such as distressed vegetation, cracks or seeps, which can indicate an increased presence of landfill gas. Additionally, dangerous areas were excluded as allowed under NSPS Subpart XXX (CFR 60.763(d)).

During the initial surface emissions monitoring route, CEC did not detect any locations where methane emissions exceeded the 500 ppm threshold above the background concentration. In addition, the technician monitored cover penetrations and openings as required by NSPS XXX, 40 CFR 60.763(d). During the penetration surface emissions monitoring, CEC detected four (4) locations where methane emissions exceeded the 500 ppm threshold above the background concentration. These locations were flagged and recorded as monitoring points 174, 180, 197 and 198. Site personnel added foam around the penetrations, and tuned the well field to address the exceedances. This monitoring was performed separate from the serpentine monitoring. For purposes of this evaluation, the following definitions were assumed:

- A "penetration" is any landfill gas collection well or landfill gas collection device that completely passes through the landfill cover into waste and is located within an area of the landfill where waste has been placed and a gas collection system is required. Cover penetrations do not include items such as survey stakes, fencing or litter fencing, flags, signs, trees, and utility poles.
- An "opening" is any penetration defined above, and any area where gas collection is required that exhibits distressed vegetation and cracks or seeps in the cover.

CEC re-monitored the exceedance locations on May 12, 2021 which is within ten (10) days of the initial exceedances. During this re-monitoring event, the points were measured with methane concentrations below 500 ppm. CEC also re-monitored the locations on June 9, 2021 which is within one (1) month of the initial exceedances. During this re-monitoring event, the four (4) exceedance points had measured methane concentrations below 500 ppm.

Monitoring exceedance data is presented in Table 1 in Attachment A. Calibration logs, site, and weather information are provided in Attachment B. The Certificates of Analysis for the gases used to calibrate the IRwin are provided in Attachment C. No further surface emissions monitoring will be required until the Third Quarter of 2021. Eco Vista complies with the requirements of 40 CFR 60.763 (d) for Municipal Solid Waste (MSW) Landfills.

CEC appreciates this opportunity to provide landfill gas surface emissions monitoring services at the Eco Vista Landfill. Please feel free to call either of the undersigned at (704) 283-9765 if you have any questions or require additional information.

Sincerely,

Ms. Kathryn M. Fauerby, EIT
Staff Engineer
Carlson Environmental Consultants, PC

Mr. Kristofer L. Carlson, P.E.
President
Carlson Environmental Consultants, PC

Cc: Nathan Swan, Eco Vista Landfill

ATTACHMENT A

MONITORING EXCEEDANCE DATA

Table 1

ECO VISTA LANDFILL
Surface Monitoring Exceedances and Corrective Actions

Year: 2021 Quarter: 2

Initial Monitoring Event					10-day Follow-up Event		Additional 10-day Follow-up Event		1-Month Follow-up Event		Additional 10-day Follow-up Event		Additional Corrective Actions	
Monitoring Date	Landfill Name	Location ID	Concentration (ppm)	Initial Corrective Action	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Date	Additional Corrective Actions Implemented (If Applicable)
5/12/2021	Eco Vista Landfill	#174 (LE-45) Lat: 36.14231 Long: -94.25489	2180.40	Added foam and tuned well	5/12/2021	< 500	NA	NA	6/9/2021	< 500	NA	NA	NA	NA
5/12/2021	Eco Vista Landfill	#180 (LE-43) Lat: 36.14172 Long: -94.25408	1536.20	Added foam and tuned well	5/12/2021	< 500	NA	NA	6/9/2021	< 500	NA	NA	NA	NA
5/12/2021	Eco Vista Landfill	#197 (LE-31) Lat: 36.14070 Long: -94.25288	2136.30	Added foam and tuned well	5/12/2021	< 500	NA	NA	6/9/2021	< 500	NA	NA	NA	NA
5/12/2021	Eco Vista Landfill	#198 (LE-58) Lat: 36.14086 Long: -94.25352	1128.20	Added foam and tuned well	5/12/2021	< 500	NA	NA	6/9/2021	< 500	NA	NA	NA	NA

Project Number: 101.69.07

Initial Monitoring Exceedance:

Date: 5/12/2021 Time: 12:56 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 2180.40 ppm - 0.00 ppm = 2180.40 ppm

Location of monitored exceedance (include description of field marker used):

Point 1 of 4, Location ID #174 (LE-45)
Northern Slope

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:
Added Foam and Tuned Well

Remonitor location within 10 calendar days of initial exceedance:

Date: 5/12/2021 Time: 4:08 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 118.50 ppm - 0.00 ppm = 118.50 ppm

If 10-day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: 6/9/2021 Time: 3:36 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 222.60 ppm - 7.50 ppm = 215.10 ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

Remonitor location within 10 calendar days of 2nd exceedance:

Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)*

*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

Signature Jackson Fogarty

Project Number: 101.69.07

Initial Monitoring Exceedance:

Date: 5/12/2021 Time: 1:11 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 1536.20 ppm - 0.00 ppm = 1536.20 ppm

Location of monitored exceedance (include description of field marker used):

Point 2 of 4, Location ID #180 (LE-43)
Northern Slope

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:
Added Foam and Tuned Well

Remonitor location within 10 calendar days of initial exceedance:

Date: 5/12/2021 Time: 4:11 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 67.10 ppm - 0.00 ppm = 67.10 ppm

If 10-day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: 6/9/2021 Time: 3:34 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 31.70 ppm - 7.50 ppm = 24.20 ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

Remonitor location within 10 calendar days of 2nd exceedance:

Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)*

*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

Signature Jackson Fogarty

Project Number: 101.69.07

Initial Monitoring Exceedance:

Date: 5/12/2021 Time: 1:35 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 2136.30 ppm - 0.00 ppm = 2136.30 ppm

Location of monitored exceedance (include description of field marker used):

Point 3 of 4, Location ID #197 (LE-31)
Northeastern Slope

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:
Added Foam and Tuned Well

Remonitor location within 10 calendar days of initial exceedance:

Date: 5/12/2021 Time: 4:13 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 13.70 ppm - 0.00 ppm = 13.70 ppm

If 10-day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: 6/9/2021 Time: 3:31 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 19.60 ppm - 7.50 ppm = 12.10 ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

Remonitor location within 10 calendar days of 2nd exceedance:

Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)*

*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

Signature Jackson Fogarty

Project Number: 101.69.07

Initial Monitoring Exceedance:

Date: 5/12/2021 Time: 1:37 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 1128.20 ppm - 0.00 ppm = 1128.20 ppm

Location of monitored exceedance (include description of field marker used):

Point 4 of 4, Location ID #198 (LE-58)
Northeastern Slope

Describe cover maintenance or adjustments to the vacuum of adjacent wells to increase gas collection in vicinity of measured exceedance before remonitoring in 10 days:
Added Foam and Tuned Well

Remonitor location within 10 calendar days of initial exceedance:

Date: 5/12/2021 Time: 4:15 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 0.00 ppm - 0.00 ppm = 0.00 ppm

If 10-day remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: 6/9/2021 Time: 3:33 PM Monitoring Technician Initials: JF
Instrument reading - Background reading: 0.00 ppm - 7.50 ppm = 0.00 ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

Remonitor location within 10 calendar days of 2nd exceedance:

Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 10 day remonitoring is <500 ppm, remonitor 1 month from initial exceedance:
Date: _____ Time: _____ Monitoring Technician Initials: _____
Instrument reading - Background reading: _____ ppm - _____ ppm = _____ ppm

If the 1 month remonitoring is <500 ppm, resume normal quarterly monitoring.
If the 1 month remonitoring shows an exceedance, describe additional corrective action taken before remonitoring again within 10 days:

(use additional forms if necessary)*

*If remonitoring shows 3 consecutive exceedances within a quarterly period a new well or other collection device must be installed within 120 days of initial exceedance or alternative remedies/timelines may be submitted to the Administrator for approval. Further monitoring is not necessary until the remedy is completed.

Signature Jackson Fogarty

ATTACHMENT B

CALIBRATION LOGS AND SITE INFORMATION

May 12, 2021

SITE INFORMATION

LANDFILL NAME: Eco Vista Landfill **DATE:** May 12, 2021

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground (www.wunderground.com)

Beginning of Monitoring Event		End of Monitoring Event	
Time:	8:46 AM	**Time:**	4:15 PM
Temperature:	52.0 °F	**Temperature:**	65.0 °F
Barometer:	30.32 " Hg	**Barometer:**	30.26 " Hg
Humidity:	72 %	**Humidity:**	52 %
Wind Speed:	8.0 mph	**Wind Speed:**	7.0 mph
Wind Direction:	N °	**Wind Direction:**	NE °

TABLE 1

CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: May 12, 2021

TIME: 8:46 **AM** [x] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 501.30 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 491.80 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 491.90 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

= 1.17%

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane:NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-070-200
Expiration Date: 08/2022	Expiration Date: 03/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: May 12, 2021

TIME: 8:46 **AM** [x] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas:		501.30 ppm
90% of the Stabilized Reading:	=	451.17 ppm
Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas:		7 seconds (1)

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas:		491.80 ppm
90% of the Stabilized Reading:	=	442.62 ppm
Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas:		7 seconds (2)

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas:		491.90 ppm
90% of the Stabilized Reading:	=	442.71 ppm
Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas:		7 seconds (3)

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 7.00 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3

STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: May 12, 2021

TIME: 9:07 **AM** [x] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 501.30 **ppm**
MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 491.80 **ppm**
MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 491.90 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 495.00 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 0.00 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 0.00 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 0.00 **ppm**

PERFORMED BY: Jackson Fogarty

June 9, 2021

SITE INFORMATION

LANDFILL NAME: Eco Vista Landfill **DATE:** June 9, 2021

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground (www.wunderground.com)

Beginning of Monitoring Event		End of Monitoring Event	
Time:	3:05 PM	**Time:**	3:36 PM
Temperature:	84.0 °F	**Temperature:**	90.0 °F
Barometer:	29.95 " Hg	**Barometer:**	29.94 " Hg
Humidity:	69 %	**Humidity:**	70 %
Wind Speed:	3.0 mph	**Wind Speed:**	3.0 mph
Wind Direction:	S °	**Wind Direction:**	SW °

TABLE 1

CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: June 9, 2021

TIME: 3:05 **AM** [ ] **PM** [x]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 507.00 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 494.40 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 492.90 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

= 1.31%

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane:NorLAB (500 ppm)	**Zero Air: NorLAB (0 ppm)**
Lot #: 9-226-202	**Lot #: 9-070-200**
Expiration Date: 08/2022	**Expiration Date: 03/2022**

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: June 9, 2021

TIME: 3:05 **AM** [ ] **PM** [x]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas:		507.00 ppm
90% of the Stabilized Reading:	=	456.30 ppm
Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas:		7 seconds (1)

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas:		494.40 ppm
90% of the Stabilized Reading:	=	444.96 ppm
Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas:		6 seconds (2)

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas:		492.90 ppm
90% of the Stabilized Reading:	=	443.61 ppm
Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas:		6 seconds (3)

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 6.33 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3

STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: June 9, 2021

TIME: 3:14 **AM** [ ] **PM** [x]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92001829

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 507.00 **ppm**
MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 494.40 **ppm**
MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 492.90 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 498.10 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 0.00 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 14.90 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 7.50 **ppm**

PERFORMED BY: Jackson Fogarty

ATTACHMENT C

CALIBRATION GAS CERTIFICATES OF ANALYSIS

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

JJS Technical Services
Suite 950
1900 E. Golf Road
Schaumburg, IL 60173

Cust Number P9060
Order Number 61788940
PO Number 20096

Lot Number	9-226-202
Norlab Part#	E1971500PA
Cylinder Size	550 Liter
Number of Cyl	2
Customer Part#	N/A

Date on Manufacture	8/19/2019
Expires	08/2022
Analytical Accuracy	+/- 2 %

Component	Reported Concentration	Requested Concentration
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs.

NIST Traceable Numbers 20180519 and 20180224

Approved: David Reed Date Signed: 8/19/2019
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-8038 • 800-657-6672

NorLAB®

A DIVISION OF NORCO, INC.

Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

JJS Technical Services

1900 E. Golf Road
Schaumburg, IL 60173

Cust Number P9060
Order Number 60612445
PO Number 19236

Lot Number 9-070-200
Norlab Part# E1002
Cylinder Size 550 Liter
Number of Cyl 2

Customer Part# N/A

Date on Manufacture 3/20/2019
Expires 03/2022
Analytical Accuracy Certified

Component	Reported Concentration	Requested Concentration
Air	Zero Grade	Zero Grade
Oxygen	20.9 %	20.9 %
T.H.C. (as Methane)	< 1.0 ppm	< 1.0 ppm
Nitrogen	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

Minor constituents tested with standards traceable to NIST by mass or comparison to SRM's (Standard Reference Materials).

NIST Traceable Numbers 20180519 and 20180224

Approved: _____ Date Signed: 3/20/2019
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-3038 • 800-657-6672

CEC

CARLSON ENVIRONMENTAL CONSULTANTS, PC

LANDFILL GAS AND SOLID WASTE SPECIALISTS

October 29, 2021

Ms. Jodi Reynolds
Environmental Protection Manager
Eco Vista Landfill
2210 WM Drive
Springdale, AR 72762

Subject: Third Quarter 2021 NSPS Surface Emissions Monitoring
Eco Vista Landfill –Springdale, Arkansas

Dear Ms. Reynolds:

On August 4th & 5th, 2021, Carlson Environmental Consultants, PC (CEC) conducted the third quarter New Source Performance Standards (NSPS) and Subpart OOO Surface Emissions Monitoring (SEM) Event for the Eco Vista Landfill located in Springdale, Arkansas. The monitoring was conducted in accordance with Code of Federal Regulations (CFR) Title 40, Part 60, Appendix A, Method 21.

Mr. Jackson Fogarty performed the calibration evaluation and monitoring using an IRwin Inficon SX Methane Leak Detector to determine surface methane levels. Attachment 1 contains the monitoring instrument performance evaluation and calibration documentation. Attachment 2 provides copies of the certificates of analysis for the calibration gases used to complete the initial monitoring and any associated rechecks. The monitoring included the entire perimeter of the collection area and a serpentine pattern at 30 meter intervals where waste exceeds two (2) years in age at final grade or five (5) years in age at interim grade, as required in 40 CFR 60.763(d) and 40 CFR 62.16716(d). The technician also monitored areas where visual observations indicated elevated concentrations of landfill gas such as distressed vegetation and cracks or seeps in the cover. Furthermore, the technician avoided dangerous areas.

In addition, the technician monitored cover penetrations and openings as required by 40 CFR 60.763(d) and 40 CFR 62 Subpart OOO. This monitoring was performed separate from the serpentine monitoring. For purposes of this evaluation, the following definitions were assumed:

- Cover penetration means a wellhead, a part of a landfill gas collection or operations system, and/or any other object that completely passes through the landfill cover. The landfill cover includes that portion which covers the waste, as well as the portion which borders the waste extended to the point where it is sealed with the landfill liner or the surrounding land mass.
- Examples of what is not a penetration for purposes of this subpart include but are not limited to: survey stakes, fencing including litter fences, flags, signs, utility posts, and trees so long as these items do not pass through the landfill cover.
- For monitoring "any openings", the site defines "openings" to mean any cover penetration as defined above and any area where waste has been placed and a gas collection system is required by Subpart OOO/NESHAP AAAA/NSPS XXX that visually exhibits distressed vegetation and cracks and seeps in the cover.

During the surface scan, the following areas were avoided for safety reasons, as stated under 40 CFR 60.763(d) and 40 CFR 62.16716(d):

No areas were excluded from the monitoring due to safety reasons.

The Old Hill is monitored on an annual basis and will require monitoring next during the First Quarter of 2022.

Attachment 3 contains the Surface Monitoring Exceedances & Corrective Actions Table, which provides a summary of the locations that exhibited a reading of 500 ppm above background or greater during the initial SEM event. Also included in the table is a summary of monitored exceedances and corrective actions implemented at each location along with the results of all follow-up monitoring. Attachment 3 also includes individual summary pages of the exceedances. The Eco Vista Landfill facility complies with the requirements of 40 CFR 60.753(d) and 40 CFR 62.16716(d) for Municipal Solid Waste (MSW) Landfills.

CEC appreciates this opportunity to provide landfill gas surface emissions monitoring services at the Eco Vista Landfill. Please feel free to call either of the undersigned at (704) 283-9765 if you have any questions or require additional information.

Sincerely,

Kathryn M Fauerby

Ms. Kathryn M. Fauerby, EIT
Staff Engineer
Carlson Environmental Consultants, PC

Mr. Kristofer L. Carlson, P.E.
President
Carlson Environmental Consultants, PC

Cc: Nathan Swan, Eco Vista Landfill

ATTACHMENT 1

SITE INFORMATION AND CALIBRATION RECORDS

LANDFILL NAME: Eco Vista Landfill **DATE:** August 4, 2021

Site Information

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground (www.wunderground.com)

Beginning of Monitoring Event			End of Monitoring Event	
Time:	**8:05 AM**		**Time:**	**11:17 AM**
Temperature:	**65.0 °F**		**Temperature:**	**78.0 °F**
Barometer:	**30.01 " Hg**		**Barometer:**	**29.98 " Hg**
Humidity:	**93 %**		**Humidity:**	**72 %**
Wind Speed:	**4.0 mph**		**Wind Speed:**	**3.0 mph**
Wind Direction:	**E °**		**Wind Direction:**	**SE °**

TABLE 1

CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: August 4, 2021

TIME: 8:05 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92003876

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 499.47 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 506.81 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 496.73 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

$$= 0.71\%$$

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane: NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-226-203
Expiration Date: 08/2022	Expiration Date: 08/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: August 4, 2021

TIME: 8:05 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92003876

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 499.47 **ppm**

90% of the Stabilized Reading: = 449.52 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 5 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 506.81 **ppm**

90% of the Stabilized Reading: = 456.13 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 5 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 496.73 **ppm**

90% of the Stabilized Reading: = 447.06 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 5 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 5 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3

STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: August 4, 2021

TIME: 8:22 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92003876

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 499.47 **ppm**

MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 506.81 **ppm**

MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 496.73 **ppm**

Stable instrument reading: $\frac{\text{Measurement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 501.00 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 1.78 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 5.21 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 3.49 **ppm**

PERFORMED BY: Jackson Fogarty

LANDFILL NAME: Eco Vista Landfill **DATE:** August 5, 2021

Site Information

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground (www.wunderground.com)

Beginning of Monitoring Event			End of Monitoring Event	
Time:	**7:48 AM**		**Time:**	**11:24 AM**
Temperature:	**69.0 °F**		**Temperature:**	**79.0 °F**
Barometer:	**30.04 " Hg**		**Barometer:**	**29.98 " Hg**
Humidity:	**79 %**		**Humidity:**	**68 %**
Wind Speed:	**7.0 mph**		**Wind Speed:**	**5.0 mph**
Wind Direction:	**S °**		**Wind Direction:**	**S °**

TABLE 1

CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: August 5, 2021

TIME: 7:48 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92003876

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 497.27 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 495.73 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 496.02 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

$$= 0.73\%$$

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane: NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-226-203
Expiration Date: 08/2022	Expiration Date: 08/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista landfill

DATE: August 5, 2021

TIME: 7:48 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92003876

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 497.27 **ppm**

90% of the Stabilized Reading: = 447.54 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 495.73 **ppm**

90% of the Stabilized Reading: = 446.16 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 496.02 **ppm**

90% of the Stabilized Reading: = 446.42 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 6.67 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3

STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: August 5, 2021

TIME: 8:00 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92003876

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 497.27 **ppm**
MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 495.73 **ppm**
MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 496.02 **ppm**

Stable instrument reading: $\frac{\text{Measurement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 496.34 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 1.56 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 3.78 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 2.67 **ppm**

PERFORMED BY: Jackson Fogarty

LANDFILL NAME: Eco Vista Landfill **DATE:** September 2, 2021

Site Information

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground (www.wunderground.com)

Beginning of Monitoring Event			End of Monitoring Event	
Time:	**4:05 PM**		**Time:**	**4:46 PM**
Temperature:	**88.0 °F**		**Temperature:**	**90.0 °F**
Barometer:	**29.99 " Hg**		**Barometer:**	**29.98 " Hg**
Humidity:	**62 %**		**Humidity:**	**58 %**
Wind Speed:	**6.0 mph**		**Wind Speed:**	**7.0 mph**
Wind Direction:	**SE °**		**Wind Direction:**	**SE °**

TABLE 1

CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: September 2, 2021

TIME: 4:05 **AM** [ ] **PM** [X]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 920033876

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 497.74 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 492.94 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 498.10 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

$$= 0.75\%$$

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane: NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-226-203
Expiration Date: 08/2022	Expiration Date: 08/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: September 2, 2021

TIME: 4:05 **AM** [ ] **PM** [X]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 920033876

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 497.74 **ppm**

90% of the Stabilized Reading: = 447.97 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 5 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 492.94 **ppm**

90% of the Stabilized Reading: = 443.65 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 498.10 **ppm**

90% of the Stabilized Reading: = 448.29 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 5.67 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3

STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: September 2, 2021

TIME: 4:08 **AM** [ ] **PM** [X]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 920033876

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 497.74 **ppm**

MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 492.94 **ppm**

MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 498.10 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 496.26 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 1.29 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 1.30 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 1.30 **ppm**

PERFORMED BY: Jackson Fogarty

ATTACHMENT 2

CALIBRATION GAS CERTIFICATES OF ANALYSIS

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

JJS Technical Services
Suite 950
1900 E. Golf Road
Schaumburg, IL 60173

Cust Number P9060
Order Number 61788940
PO Number 20096

Lot Number	9-226-202
Norlab Part#	E1971500PA
Cylinder Size	550 Liter
Number of Cyl	2
Customer Part#	N/A

Date on Manufacture	8/19/2019
Expires	08/2022
Analytical Accuracy	+/- 2 %

Component	Reported Concentration	Requested Concentration
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs.

NIST Traceable Numbers 20180519 and 20180224

Approved: David Reed Date Signed: 8/19/2019
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-8038 • 800-657-6672

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

JJS Technical Services
Suite 950
1900 E. Golf Road
Schaumburg, IL 60173

Cust Number P9060
Order Number 61788901
PO Number 20095

Lot Number 9-226-203
Norlab Part# E1002
Cylinder Size 550 Liter
Number of Cyl 2

Customer Part# N/A

Date on Manufacture 8/19/2019
Expires 08/2022
Analytical Accuracy Certified

Component	Reported Concentration	Requested Concentration
Air	Zero Grade	Zero Grade
Oxygen	20.9 %	20.9 %
T.H.C. (as Methane)	< 1.0 ppm	< 1.0 ppm
Nitrogen	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

Minor constituents tested with standards traceable to NIST by mass or comparison to SRM's (Standard Reference Materials).

NIST Traceable Numbers 20180519 and 20180224

Approved: David Reed Date Signed: 8/19/2019
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-3038 • 800-657-6672

ATTACHMENT 3

EXCEEDANCE DATA

Table 1

ECO VISTA LANDFILL
Surface Monitoring Exceedances and Corrective Actions

Year: 2021 Quarter: 3

Initial Monitoring Event					10-day Follow-up Event		Additional 10-day Follow-up Event		1-Month Follow-up Event		Additional 10-day Follow-up Event		Additional Corrective Actions	
Monitoring Date	Landfill Name	Location ID	Concentration (ppm)	Initial Corrective Action	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Date	Additional Corrective Actions Implemented (If Applicable)
8/4/2021	Eco Vista	#8 (EVLFLR01) Lat: 36.13714 Long: -94.24973	1520	Added cover soils	8/4/2021	< 500	NA	NA	9/2/2021	< 500	NA	NA	NA	NA
8/4/2021	Eco Vista	#25 (EVLLE118) Lat: 36.13924 Long: -94.25122	2820	Added cover soils	8/4/2021	< 500	NA	NA	9/2/2021	< 500	NA	NA	NA	NA
8/4/2021	Eco Vista	#66 (EVLFLE39) Lat: 36.14208 Long: -94.25295	1263	Added cover soils	8/4/2021	< 500	NA	NA	9/2/2021	< 500	NA	NA	NA	NA

EXCEEDANCE RECORD

LANDFILL NAME: **Eco Vista Landfill**

INITIAL EXCEEDANCE: **EXCEEDANCE #:** **1 of 3**

MEASUREMENT: 1519.64 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **August 4, 2021** **TIME:** **8:48** **AM** [X] **PM** [ ]

LOCATION: **EVLFLR01: Bottom of the southeastern slope**
Lat: 36.13714, Long: -94.24973

CORRECTIVE ACTION: **Added additional cover in the area of the exceedance**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF INITIAL EXCEEDANCE):

MEASUREMENT: 65.64 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **August 4, 2021** **TIME:** **11:08** **AM** [X] **PM** [ ]

If ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If no exceedance is found then location shall be remonitored within one (1) calender month of initial exceedance.

CORRECTIVE ACTION (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):(IF REQUIRED)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If the second ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days (this will be the one (1) month remonitoring).

CORRECTIVE ACTION (if required)**:** _____

ONE (1) MONTH REMONITORING :

MEASUREMENT: 272.14 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **September 2, 2021** **TIME:** **4:36** **AM** [ ] **PM** [X]

If one (1) month remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

CORRECTIVE ACTION/REMEDY (if required)**:** _____

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):
(REQUIRED IF SECOND EXCEEDANCE IS FOUND DURING ONE (1) MONTH REMONITORING)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If this remonitoring shows that exceedance has not been corrected, the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

REMEDY (if required)**:** _____

EXCEEDANCE RECORD

LANDFILL NAME: **Eco Vista Landfill**

INITIAL EXCEEDANCE: **EXCEEDANCE #:** **2 of 3**

MEASUREMENT: 2819.93 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **August 4, 2021** **TIME:** **9:08** **AM** [X] **PM** [ ]

LOCATION: **EVLLE118: Eastern slope**

Lat: 36.13924, Long: -94.25122

CORRECTIVE ACTION: **Added additional cover in the area of the exceedance**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF INITIAL EXCEEDANCE):

MEASUREMENT: 8.42 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **August 4, 2021** **TIME:** **11:01** **AM** [X] **PM** [ ]

If ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If no exceedance is found then location shall be remonitored within one (1) calender month of initial exceedance.

CORRECTIVE ACTION (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):(IF REQUIRED)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If the second ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days (this will be the one (1) month remonitoring).

CORRECTIVE ACTION (if required)**:** _____

ONE (1) MONTH REMONITORING :

MEASUREMENT: 5.16 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **September 2, 2021** **TIME:** **4:41** **AM** [ ] **PM** [X]

If one (1) month remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

CORRECTIVE ACTION/REMEDY (if required)**:** _____

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):
(REQUIRED IF SECOND EXCEEDANCE IS FOUND DURING ONE (1) MONTH REMONITORING)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If this remonitoring shows that exceedance has not been corrected, the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

REMEDY (if required)**:** _____

EXCEEDANCE RECORD

LANDFILL NAME: **Eco Vista Landfill**

INITIAL EXCEEDANCE: **EXCEEDANCE #:** **3 of 3**

MEASUREMENT: 1263.09 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **August 4, 2021** **TIME:** **9:33** **AM** [X] **PM** [ ]

LOCATION: **EVLFLE39: Northern slope**

Lat: 36.14208, Long: -94.25295

CORRECTIVE ACTION: **Added additional cover in the area of the exceedance**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF INITIAL EXCEEDANCE):

MEASUREMENT: 51.74 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **August 4, 2021** **TIME:** **11:17** **AM** [X] **PM** [ ]

If ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If no exceedance is found then location shall be remonitored within one (1) calender month of initial exceedance.

CORRECTIVE ACTION (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):(IF REQUIRED)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If the second ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days (this will be the one (1) month remonitoring).

CORRECTIVE ACTION (if required)**:** _____

ONE (1) MONTH REMONITORING :

MEASUREMENT: 1.49 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **September 2, 2021** **TIME:** **4:46** **AM** [ ] **PM** [X]

If one (1) month remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

CORRECTIVE ACTION/REMEDY (if required)**:** _____

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):
(REQUIRED IF SECOND EXCEEDANCE IS FOUND DURING ONE (1) MONTH REMONITORING)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If this remonitoring shows that exceedance has not been corrected, the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

REMEDY (if required)**:** _____

CEC

CARLSON ENVIRONMENTAL CONSULTANTS, PC

LANDFILL GAS AND SOLID WASTE SPECIALISTS

December 24, 2021

Ms. Jodi Reynolds
Environmental Protection Manager
Eco Vista Landfill
2210 WM Drive
Springdale, AR 72762

Subject: Fourth Quarter 2021 NSPS Surface Emissions Monitoring
Eco Vista Landfill –Springdale, Arkansas

Dear Ms. Reynolds:

On November 3rd & 4th, 2021, Carlson Environmental Consultants, PC (CEC) conducted the fourth quarter National Emissions Standards for Hazardous Air Pollutants AAAA (NESHAP AAAA) Surface Emissions Monitoring (SEM) Event for the Eco Vista Landfill located in Springdale, Arkansas. The monitoring was conducted in accordance with Code of Federal Regulations (CFR) Title 40, Part 60, Appendix A, Method 21.

Mr. Jackson Fogarty performed the calibration evaluation and monitoring using an IRwin Inficon SX Methane Leak Detector to determine surface methane levels. Attachment 1 contains the monitoring instrument performance evaluation and calibration documentation. Attachment 2 provides copies of the certificates of analysis for the calibration gases used to complete the initial monitoring and any associated rechecks. The monitoring included the entire perimeter of the collection area and a serpentine pattern at 30 meter intervals where waste exceeds two (2) years in age at final grade or five (5) years in age at interim grade, as required in 40 CFR 63.1958(a). The technician also monitored areas where visual observations indicated elevated concentrations of landfill gas such as distressed vegetation and cracks or seeps in the cover. Furthermore, the technician avoided dangerous areas.

In addition, the technician monitored cover penetrations and openings as required by 40 CFR 63.1958(d)(2). This monitoring was performed separate from the serpentine monitoring. For purposes of this evaluation, the following definitions were assumed:

- Cover penetration means a wellhead, a part of a landfill gas collection or operations system, and/or any other object that completely passes through the landfill cover. The landfill cover includes that portion which covers the waste, as well as the portion which borders the waste extended to the point where it is sealed with the landfill liner or the surrounding land mass.
- Examples of what is not a penetration for purposes of this subpart include but are not limited to: survey stakes, fencing including litter fences, flags, signs, utility posts, and trees so long as these items do not pass through the landfill cover.
- For monitoring "any openings", the site defines "openings" to mean any cover penetration as defined above and any area where waste has been placed and a gas collection system is required by NESHAP AAAA that visually exhibits distressed vegetation and cracks and seeps in the cover.

During the surface scan, the following areas were avoided for safety reasons, as stated under 40 CFR 63.1958(d)(1):

There were no areas excluded from the monitoring due to safety reasons.

The Old Hill is monitored on an annual basis and will require monitoring next during the First Quarter of 2022.

Attachment 3 contains the Surface Monitoring Exceedances & Corrective Actions Table, which provides a summary of the locations that exhibited a reading of 500 ppm above background or greater during the initial SEM event. Also included in the table is a summary of monitored exceedances and corrective actions implemented at each location along with the results of all follow-up monitoring. Attachment 3 also includes individual summary pages of the exceedances. The Eco Vista Landfill facility also complies with the requirements of 40 CFR 60.763(d) and 40 CFR 62.16716(d) for Municipal Solid Waste (MSW) Landfills.

CEC appreciates this opportunity to provide landfill gas surface emissions monitoring services at the Eco Vista Landfill. Please feel free to call either of the undersigned at (704) 283-9765 if you have any questions or require additional information.

Sincerely,

Mr. Dennis DiSanto
Environmental Scientist
Carlson Environmental Consultants, PC

Mr. Kristofer L. Carlson, P.E.
President
Carlson Environmental Consultants, PC

Cc: Nathan Swan, Eco Vista Landfill

ATTACHMENT 1

SITE INFORMATION AND CALIBRATION RECORDS

LANDFILL NAME: Eco Vista Landfill **DATE:** November 3, 2021

Site Information

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground(www.wunderground.com)

Beginning of Monitoring Event			End of Monitoring Event	
Time:	**8:54 AM**		**Time:**	**11:57 AM**
Temperature:	**42.0 °F**		**Temperature:**	**43.0 °F**
Barometer:	**30.41 " Hg**		**Barometer:**	**30.39 " Hg**
Humidity:	**98 %**		**Humidity:**	**82 %**
Wind Speed:	**9.0 mph**		**Wind Speed:**	**6.0 mph**
Wind Direction:	**E °**		**Wind Direction:**	**E °**

TABLE 1
CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: November 3, 2021

TIME: 8:54 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 498.09 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 497.02 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 496.36 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

= 0.57%

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane: NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-226-203
Expiration Date: 08/2022	Expiration Date: 08/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: November 3, 2021

TIME: 8:54 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 498.09 **ppm**

90% of the Stabilized Reading: = 448.28 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 497.02 **ppm**

90% of the Stabilized Reading: = 447.32 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 496.36 **ppm**

90% of the Stabilized Reading: = 446.73 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 7.00 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3
STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: November 3, 2021

TIME: 9:01 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 498.09 **ppm**

MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 497.02 **ppm**

MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 496.36 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 497.16 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 0.00 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 12.13 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 6.07 **ppm**

PERFORMED BY: Jackson Fogarty

LANDFILL NAME: Eco Vista Landfill **DATE:** November 4, 2021

Site Information

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground(www.wunderground.com)

Beginning of Monitoring Event			End of Monitoring Event	
Time:	**8:19 AM**		**Time:**	**11:46 AM**
Temperature:	**38.0 °F**		**Temperature:**	**44.0 °F**
Barometer:	**30.36 " Hg**		**Barometer:**	**30.35 " Hg**
Humidity:	**90 %**		**Humidity:**	**56 %**
Wind Speed:	**1.0 mph**		**Wind Speed:**	**2.0 mph**
Wind Direction:	**E °**		**Wind Direction:**	**SW °**

TABLE 1
CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: November 4, 2021

TIME: 8:19 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 495.54 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 495.72 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 497.07 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

= 0.78%

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane: NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-226-203
Expiration Date: 08/2022	Expiration Date: 08/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: November 4, 2021

TIME: 8:19 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 495.54 **ppm**

90% of the Stabilized Reading: = 445.98 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 495.72 **ppm**

90% of the Stabilized Reading: = 446.15 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 7 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 497.07 **ppm**

90% of the Stabilized Reading: = 447.36 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 6.67 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3
STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: November 4, 2021

TIME: 8:26 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 495.54 **ppm**

MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 495.72 **ppm**

MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 497.07 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 496.11 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 0.00 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 0.00 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 0.00 **ppm**

PERFORMED BY: Jackson Fogarty

LANDFILL NAME: Eco Vista Landfill **DATE:** December 2, 2021

Site Information

Section 1 - Weather Data

Weather Recorded From: [ ] On-Site Weather Station [ ] Portable Device [X] Other

If "OTHER", describe device utilized for the collection of weather information below.

Weather Underground(www.weatherunderground.com)

Beginning of Monitoring Event		End of Monitoring Event	
Time:	**10:31 AM**	**Time:**	**11:09 AM**
Temperature:	**65.0 °F**	**Temperature:**	**68.0 °F**
Barometer:	**30.08 " Hg**	**Barometer:**	**30.07 " Hg**
Humidity:	**51 %**	**Humidity:**	**46 %**
Wind Speed:	**5.0 mph**	**Wind Speed:**	**5.0 mph**
Wind Direction:	**W °**	**Wind Direction:**	**W °**

TABLE 1
CALIBRATION PRECISION TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: December 2, 2021

TIME: 10:31 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

CALIBRATION GAS STANDARD: 500 **ppm**

MEASUREMENT #1:

Meter Reading for Zero Air: 0.00 **ppm (1)**

Meter Reading for Calibration Gas: 498.09 **ppm (2)**

MEASUREMENT #2:

Meter Reading for Zero Air: 0.00 **ppm (3)**

Meter Reading for Calibration Gas: 499.89 **ppm (4)**

MEASUREMENT #3:

Meter Reading for Zero Air: 0.00 **ppm (5)**

Meter Reading for Calibration Gas: 490.34 **ppm (6)**

CALCULATE PRECISION:

$$\frac{[(500) - (2)] + [(500) - (4)] + [(500) - (6)]}{3} \times \frac{1}{500} \times \frac{100}{1}$$

$$= 0.78\%$$

PERFORMED BY: Jackson Fogarty

CALIBRATION GAS CERTIFICATION DATA AND EXPIRATION DATE:	
Methane: NorLAB (500 ppm)	Zero Air: NorLAB (0 ppm)
Lot #: 9-226-202	Lot #: 9-226-203
Expiration Date: 08/2022	Expiration Date: 08/2022

INCLUDE A COPY OF THE CALIBRATION GAS CERTIFICATION SHEET FROM GAS SUPPLIER/MANUFACTURER

TABLE 2

RESPONSE TIME TEST RECORD

LANDFILL NAME: Eco Vista Landfill

DATE: December 2, 2021

TIME: 10:31 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

MEASUREMENT #1:

Stabilized Reading Using Calibration Gas: 498.09 **ppm**

90% of the Stabilized Reading: = 448.28 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 6 **seconds (1)**

MEASUREMENT #2:

Stabilized Reading Using Calibration Gas: 499.89 **ppm**

90% of the Stabilized Reading: = 449.90 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 10 **seconds (2)**

MEASUREMENT #3:

Stabilized Reading Using Calibration Gas: 490.34 **ppm**

90% of the Stabilized Reading: = 441.30 **ppm**

Time to reach 90% of Stabilized Reading After Switching from Zero Air to Calibration Gas: 8 **seconds (3)**

CALCULATE RESPONSE TIME:

$$\frac{(1)+(2)+(3)}{3}$$

= 8.00 **SECONDS (MUST BE LESS THAN 30 SECONDS)**

PERFORMED BY: Jackson Fogarty

TABLE 3
STABILIZED READING AND BACKGROUND DETERMINATION

LANDFILL NAME: Eco Vista Landfill

DATE: December 2, 2021

TIME: 10:34 **AM** [X] **PM** [ ]

INSTRUMENT MAKE: IRwin **MODEL:** Inficon SX **S/N:** 92002366

Stabilized Reading Determination Procedure

Calibration gas standard: 500 **ppm**

MEASUREMENT #1:
Stabilized Reading Using Calibration Gas: 498.09 **ppm**

MEASUREMENT #2:
Stabilized Reading Using Calibration Gas: 499.89 **ppm**

MEASUREMENT #3:
Stabilized Reading Using Calibration Gas: 490.34 **ppm**

Stable instrument reading: $\frac{\text{Meausrement \#1 + Measurement \#2 + Measurement \#3}}{3}$

Stable instrument reading: 496.11 **ppm**

Background Determination Procedure

1. **Upwind Reading (highest in 30 seconds):** 0.15 **ppm (1)**

2. **Downwind Reading (highest in 30 seconds):** 8.47 **ppm (2)**

Calculate Background Value:

$$\frac{(1) + (2)}{2}$$

Background = 4.31 **ppm**

PERFORMED BY: Jackson Fogarty

ATTACHMENT 2

CALIBRATION GAS CERTIFICATES OF ANALYSIS

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

JJS Technical Services
Suite 950
1900 E. Golf Road
Schaumburg, IL 60173

Cust Number P9060
Order Number 61788940
PO Number 20096

Lot Number	9-226-202
Norlab Part#	E1971500PA
Cylinder Size	550 Liter
Number of Cyl	2
Customer Part#	N/A

Date on Manufacture	8/19/2019
Expires	08/2022
Analytical Accuracy	+/- 2 %

Component	Reported Concentration	Requested Concentration
Methane	500 ppm	500 ppm
Air	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

The cylinders in this lot were transfilled from cylinders prepared gravimetrically and traceable to the NIST by the certified weights used to calibrate the scale. The transfilled cylinders were then analyzed against standards traceable to the NIST by weights or SRMs.

NIST Traceable Numbers 20180519 and 20180224

Approved: David Reed Date Signed: 8/19/2019
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-8038 • 800-657-6672

NorLAB®
A DIVISION OF NORCO, INC.
Calibration Gases & Equipment

CERTIFICATE OF ANALYSIS

JJS Technical Services
Suite 950
1900 E. Golf Road
Schaumburg, IL 60173

Cust Number P9060
Order Number 61788901
PO Number 20095

Lot Number 9-226-203
Norlab Part# E1002
Cylinder Size 550 Liter
Number of Cyl 2

Customer Part# N/A

Date on Manufacture 8/19/2019
Expires 08/2022
Analytical Accuracy Certified

Component	Reported Concentration	Requested Concentration
Air	Zero Grade	Zero Grade
Oxygen	20.9 %	20.9 %
T.H.C. (as Methane)	< 1.0 ppm	< 1.0 ppm
Nitrogen	Balance	Balance

Storage: Keep away from heat, flames, and sparks. Store and use with adequate ventilation. Close valve when not in use and when empty. Never allow cylinder temperature to exceed 125 degrees F.

Minor constituents tested with standards traceable to NIST by mass or comparison to SRM's (Standard Reference Materials).

NIST Traceable Numbers 20180519 and 20180224

Approved: David Reed Date Signed: 8/19/2019
David Reed
Lab Technician

898 W. GOWEN ROAD • BOISE, IDAHO 83705
Phone (208) 336-1643 • Fax (208) 331-3038 • 800-657-6672

ATTACHMENT 3

EXCEEDANCE DATA

Table 1

ECO VISTA LANDFILL
Surface Monitoring Exceedances and Corrective Actions

Year: 2021 Quarter: 4

Initial Monitoring Event					10-day Follow-up Event		Additional 10-day Follow-up Event		1-Month Follow-up Event		Additional 10-day Follow-up Event		Additional Corrective Actions	
Monitoring Date	Landfill Name	Location ID	Concentration (ppm)	Initial Corrective Action	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Monitoring Date	Concentration (ppm)	Date	Additional Corrective Actions Implemented (If Applicable)
11/3/2021	Eco Vista	EVLFCS01 Lat: 36.13900 Long: -94.25343	14,136	Foam and Well Tuning	11/4/2021	< 500	NA	NA	12/2/2021	< 500	NA	NA	NA	NA
11/3/2021	Eco Vista	EVLFLE79 Lat: 36.14184 Long: -94.25590	612	Foam and Well Tuning	11/4/2021	< 500	NA	NA	12/2/2021	< 500	NA	NA	NA	NA
11/3/2021	Eco Vista	EVLLE41R Lat: 36.14190 Long: -94.25381	5,904	Foam and Well Tuning	11/4/2021	< 500	NA	NA	12/2/2021	< 500	NA	NA	NA	NA
11/3/2021	Eco Vista	EVLFCS09 Lat: 36.14133 Long: -94.25225	2,022	Foam and Well Tuning	11/4/2021	< 500	NA	NA	12/2/2021	< 500	NA	NA	NA	NA

EXCEEDANCE RECORD

LANDFILL NAME: **Eco Vista Landfill**

INITIAL EXCEEDANCE: **EXCEEDANCE #:** **1 of 4**

MEASUREMENT: 14135.51 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **November 3, 2021** **TIME:** **9:43** **AM** [X] **PM** [ ]

LOCATION: **EVLFCS01: Cell 3 Western Slope**
Lat: 36.13900, Long: -94.25343

CORRECTIVE ACTION: **Added additional foam cover in the area of the exceedance and well tuning**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF INITIAL EXCEEDANCE):

MEASUREMENT: 28.14 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **November 4, 2021** **TIME:** **8:59** **AM** [X] **PM** [ ]

If ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If no exceedance is found then location shall be remonitored within one (1) calender month of initial exceedance.

CORRECTIVE ACTION (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):(IF REQUIRED)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If the second ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days (this will be the one (1) month remonitoring).

CORRECTIVE ACTION (if required)**:** _____

ONE (1) MONTH REMONITORING :

MEASUREMENT: 128.05 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **December 2, 2021** **TIME:** **11:09** **AM** [X] **PM** [ ]

If one (1) month remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

CORRECTIVE ACTION/REMEDY (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):
(REQUIRED IF SECOND EXCEEDANCE IS FOUND DURING ONE (1) MONTH REMONITORING)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If this remonitoring shows that exceedance has not been corrected, the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

REMEDY (if required)**:** _____

EXCEEDANCE RECORD

LANDFILL NAME: **Eco Vista Landfill**

INITIAL EXCEEDANCE: **EXCEEDANCE #:** **2 of 4**

MEASUREMENT: 611.77 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **November 3, 2021** **TIME:** **9:59** **AM** [X] **PM** [ ]

LOCATION: **EVLFLE79: Cell 9 North Western Slope**
Lat: 36.14184, Long: -94.25590

CORRECTIVE ACTION: **Added additional foam cover in the area of the exceedance and well tuning**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF INITIAL EXCEEDANCE):

MEASUREMENT: 54.89 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **November 4, 2021** **TIME:** **9:06** **AM** [X] **PM** [ ]

If ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If no exceedance is found then location shall be remonitored within one (1) calender month of initial exceedance.

CORRECTIVE ACTION (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):(IF REQUIRED)

MEASUREMENT: **ppm** **TECHNICIAN:**

DATE: **TIME:** **AM** [ ] **PM** [ ]

If the second ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days (this will be the one (1) month remonitoring).

CORRECTIVE ACTION (if required)**:**

ONE (1) MONTH REMONITORING :

MEASUREMENT: 2.37 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **December 2, 2021** **TIME:** **10:53** **AM** [X] **PM** [ ]

If one (1) month remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

CORRECTIVE ACTION/REMEDY (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):
(REQUIRED IF SECOND EXCEEDANCE IS FOUND DURING ONE (1) MONTH REMONITORING)

MEASUREMENT: **ppm** **TECHNICIAN:**

DATE: **TIME:** **AM** [ ] **PM** [ ]

If this remonitoring shows that exceedance has not been corrected, the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

REMEDY (if required)**:**

EXCEEDANCE RECORD

LANDFILL NAME: **Eco Vista Landfill**

INITIAL EXCEEDANCE: **EXCEEDANCE #:** **3 of 4**

MEASUREMENT: 5903.99 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **November 3, 2021** **TIME:** **11:08** **AM** [X] **PM** [ ]

LOCATION: **EVLLE41R: Cell 7 Northern Slope**
Lat: 36.14190, Long: -94.25381

CORRECTIVE ACTION: **Added additional foam cover in the area of the exceedance and well tuning**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF INITIAL EXCEEDANCE):

MEASUREMENT: 94.14 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **November 4, 2021** **TIME:** **10:01** **AM** [X] **PM** [ ]

If ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If no exceedance is found then location shall be remonitored within one (1) calender month of initial exceedance.

CORRECTIVE ACTION (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):(IF REQUIRED)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If the second ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days (this will be the one (1) month remonitoring).

CORRECTIVE ACTION (if required)**:** _____

ONE (1) MONTH REMONITORING :

MEASUREMENT: 6.15 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **December 2, 2021** **TIME:** **10:50** **AM** [X] **PM** [ ]

If one (1) month remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

CORRECTIVE ACTION/REMEDY (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):
(REQUIRED IF SECOND EXCEEDANCE IS FOUND DURING ONE (1) MONTH REMONITORING)

MEASUREMENT: _____ **ppm** **TECHNICIAN:** _____

DATE: _____ **TIME:** _____ **AM** [ ] **PM** [ ]

If this remonitoring shows that exceedance has not been corrected, the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

REMEDY (if required)**:** _____

EXCEEDANCE RECORD

LANDFILL NAME: **Eco Vista Landfill**

INITIAL EXCEEDANCE: **EXCEEDANCE #:** **4 of 4**

MEASUREMENT: 2021.71 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **November 3, 2021** **TIME:** **11:38** **AM** [X] **PM** [ ]

LOCATION: **EVLFCS09: Cell 7 Eastern Slope**
Lat: 36.14133, Long: -94.25225

CORRECTIVE ACTION: **Added additional foam cover in the area of the exceedance and well tuning**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF INITIAL EXCEEDANCE):

MEASUREMENT: 55.91 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **November 4, 2021** **TIME:** **9:52** **AM** [X] **PM** [ ]

If ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If no exceedance is found then location shall be remonitored within one (1) calender month of initial exceedance.

CORRECTIVE ACTION (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):(IF REQUIRED)

MEASUREMENT: **ppm** **TECHNICIAN:**

DATE: **TIME:** **AM** [ ] **PM** [ ]

If the second ten (10) day remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days (this will be the one (1) month remonitoring).

CORRECTIVE ACTION (if required)**:**

ONE (1) MONTH REMONITORING :

MEASUREMENT: 39.45 **ppm** **TECHNICIAN:** **Jackson Fogarty**

DATE: **December 2, 2021** **TIME:** **11:02** **AM** [X] **PM** [ ]

If one (1) month remonitoring show that exceedance has not been corrected an additional corrective action shall be performed and location remonitored within ten (10) calender days. If the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

CORRECTIVE ACTION/REMEDY (if required)**:** **N/A**

REMONITORING (WITHIN TEN (10) CALENDAR DAYS OF SECOND EXCEEDANCE):
(REQUIRED IF SECOND EXCEEDANCE IS FOUND DURING ONE (1) MONTH REMONITORING)

MEASUREMENT: **ppm** **TECHNICIAN:**

DATE: **TIME:** **AM** [ ] **PM** [ ]

If this remonitoring shows that exceedance has not been corrected, the exceedance is third exceedance monitored at this location within the quarterly monitoring period, the system must be expanded within 120 days of the date of initial exceedance. Alternative remedies and/or timelines must be subitted to Administrator for approval. No further remonitoring of this location is required until remedy is complete. If monitoring shows no exceedance, no further remonitoring is required, resume normal quarterly surface emissions monitoring schedule

REMEDY (if required)**:**

Attachment E – Control Device Shutdown Log

Waste Management Eco-Vista Landfill - 1884-AOP-R7/R8		
Control System Shutdown Log (January 11, 2021 through December 31, 2021)		
Date	**Duration (hours)**	**Reason for Shutdown Event**
1/29/2021	0.25	Flare Maintenance
2/23/2021	2.25	GCCS Construction
2/25/2021	0.25	GCCS Construction
4/3/2021	0.75	Power Outage
4/3/2021	1.25	Power Outage
6/4/2021	8	GCCS Construction
8/13/2021	1.25	Power Outage
9/4/2021	1	Power Outage
9/15/2021	1.5	Power Outage

Note: The control system is considered shutdown when both Flares and the Treatment are simultaneously out of operation for more than an hour. No collection system downtime in excess of five (5) days was recorded during this reporting period. When the Control System was not functional, facility personnel expeditiously corrected issues to start-up the Control System as promptly as possible.

Attachment F – GCCS Exceedance Data

ECO-VISTA LANDFILL NSPS WWW PARAMETERS (1/1/2021 - 6/30/2021)

Well ID	Date/Time	O_2 (%)	Initial Gas Temp (°F)	Adjusted Gas Temp (°F)	Initial Static Pressure ("WC)	Adjusted Static Pressure ("WC)	Comments
EVLE122R	5/13/2021 3:10:20PM	0.00	116.40	119.60	0.14	-0.12	NSPS/EG CAI;Inc. Flow/Vac.;Pump in Well
EVLE122R	6/8/2021 3:56:40PM	0.00	114.90	122.80	0.29	-0.08	NSPS/EG CAI;Inc. Flow/Vac.
EVLFHGC3	2/4/2021 4:28:13PM	0.00	70.30	70.70	0.73	-0.13	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE03	4/19/2021 3:50:58PM	0.00	83.10	83.00	1.93	1.95	NSPS/EG CAI
EVLFLE03	4/30/2021 1:24:53PM	0.50	89.80	89.80	0.08	0.08	NSPS/EG CAI
EVLFLE03	5/3/2021 4:15:51PM	0.00	107.30	107.30	-16.52	-16.64	NSPS/EG CAI;No Adj. Made
EVLFLE05	3/12/2021 1:48:48PM	6.50	83.40	82.70	-18.15	-16.46	NSPS/EG CAI;Dec. Flow/Vac.
EVLFLE05	3/15/2021 2:31:03PM	0.50	88.00	88.80	-18.24	-17.60	NSPS/EG CAI;Dec. Flow/Vac.;Check for Air Leaks
EVLFLE07	4/19/2021 4:00:10PM	0.00	82.00	78.70	4.41	-5.05	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE31	4/21/2021 2:56:40PM	0.00	81.90	83.80	2.53	-1.57	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE62	3/15/2021 1:56:14PM	10.90	66.60	66.60	-16.55	-13.55	NSPS/EG CAI;Dec. Flow/Vac.
EVLFLE62	3/16/2021 11:26:20AM	0.20	78.50	78.80	-3.09	-2.66	Dec. Flow/Vac.;Scheduled Repairs
EVLFLE71	1/14/2021 4:24:50PM	7.10	77.10	76.80	-2.26	-1.37	NSPS/EG CAI;Dec. Flow/Vac.
EVLFLE71	1/19/2021 12:33:04PM	0.90	61.00	70.30	-1.17	-2.12	Inc. Flow/Vac.;Surging
EVLFLE71	4/2/2021 4:11:03PM	0.00	71.50	71.80	0.01	-0.05	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE71	5/14/2021 9:48:48AM	7.30	77.90	77.70	-0.12	-0.06	NSPS/EG CAI;Dec. Flow/Vac.
EVLFLE71	5/17/2021 1:03:12PM	0.00	77.90	77.90	-0.02	-0.19	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE87	6/11/2021 12:09:25PM	0.00	98.60	98.80	0.09	-0.35	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE116	3/15/2021 12:46:08PM	0.00	88.80	90.50	1.43	-1.30	NSPS/EG CAI;Inc. Flow/Vac.

ECO-VISTA LANDFILL NSPS WWW PARAMETERS (1/1/2021 - 6/30/2021)

Well ID	Date/Time	O_2 (%)	Initial Gas Temp (°F)	Adjusted Gas Temp (°F)	Initial Static Pressure ("WC)	Adjusted Static Pressure ("WC)	Comments
EVLLE119	2/5/2021 4:03:35PM	0.00	92.10	95.10	1.41	1.32	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong;Watered In
EVLLE119	2/5/2021 5:25:48PM	0.00	100.30	109.90	-0.12	-0.58	Inc. Flow/Vac.
EVLLE34R	4/21/2021 3:46:32PM	0.00	105.30	109.80	0.65	-0.68	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE41R	3/4/2021 5:06:24PM	2.20	137.30	135.80	-16.88	-13.51	Dec. Flow/Vac.;Orifice Size Wrong
EVLLE41R	3/4/2021 6:01:26PM	0.90	133.50	132.80	-10.98	-9.46	NSPS/EG CAI;Dec. Flow/Vac.;Orifice Size Wrong
EVLLE41R	3/11/2021 2:43:41PM	0.00	125.70	125.70	-4.79	-4.64	NSPS/EG CAI;Dec. Flow/Vac.
EVLLE50R	4/22/2021 10:41:00AM	0.00	85.70	100.50	0.39	-0.14	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE50R	5/13/2021 4:12:14PM	0.00	110.20	112.30	0.03	-0.32	NSPS/EG CAI;Inc. Flow/Vac.;Pump in Well
EVLLE50R	6/25/2021 5:07:11PM	0.00	116.40	117.10	0.03	-0.12	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE53R	3/9/2021 1:03:38PM	0.00	115.40	116.00	0.24	-0.19	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE53R	4/21/2021 5:16:35PM	0.00	112.70	114.90	1.76	-0.47	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE73R	3/12/2021 4:02:42PM	0.00	115.30	115.90	0.02	-0.14	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong
EVLLE73R	6/14/2021 5:02:16PM	0.00	117.10	117.20	0.08	-0.16	NSPS/EG CAI;Inc. Flow/Vac.
EVLLF114	3/15/2021 12:39:37PM	5.30	89.10	88.90	-5.07	-4.30	NSPS/EG CAI;Dec. Flow/Vac.
EVLLF114	3/16/2021 11:13:41AM	0.00	92.30	95.20	-4.90	-5.91	Inc. Flow/Vac.;Check for Air Leaks;Orifice Size Wrong
TOTIEW01	3/11/2021 4:50:05PM	8.10	59.60	59.60	-0.10	-0.04	NSPS/EG CAI;Dec. Flow/Vac.;Orifice Size Wrong
TOTIEW01	3/12/2021 12:30:29PM	0.00	63.70	62.70	-0.04	-0.03	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong;Check for Air Leaks

ECO-VISTA LANDFILL NSPS WWW PARAMETERS (1/1/2021 - 6/30/2021)

Well ID	Date/Time	O_2 (%)	Initial Gas Temp (°F)	Adjusted Gas Temp (°F)	Initial Static Pressure ("WC)	Adjusted Static Pressure ("WC)	Comments
TOTIEW20	2/2/2021 12:36:18PM	0.00	60.00	60.20	0.08	-0.03	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW42	4/19/2021 2:37:43PM	0.00	82.90	82.90	0.99	1.01	NSPS/EG CAI
TOTIEW42	4/29/2021 3:59:52PM	0.40	102.20	102.20	-36.26	-36.25	NSPS/EG CAI;No Adj. Made
TOTIEW44	2/3/2021 1:51:11PM	0.00	90.80	93.70	0.04	-0.01	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW45	6/16/2021 3:08:21PM	0.00	104.00	102.70	0.50	-1.03	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW54	6/16/2021 3:45:33PM	5.10	107.70	107.30	0.01	-0.01	NSPS/EG CAI;Inc. Flow/Vac.;Check for Air Leaks
TOTIEW55	2/3/2021 1:40:22PM	0.00	70.50	70.70	0.00	-0.05	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong

ECO-VISTA LANDFILL NSPS XXX/NESHAP PARAMETERS (7/1/2021 - 12/31/2021)

Well ID	Date/Time	O_2 (%)	Initial Gas Temp (°F)	Adjusted Gas Temp (°F)	Initial Static Pressure ("WC)	Adjusted Static Pressure ("WC)	Comments
EVLFHGC5	11/10/2021 3:57:18PM	0.00	100.70	100.70	0.03	-1.10	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE18	11/10/2021 12:31:32PM	0.00	93.00	98.60	0.09	-0.01	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE19	9/9/2021 2:14:46PM	2.40	99.20	98.70	0.04	-0.01	NSPS/EG CAI;Inc. Flow/Vac.;Barely Open
EVLFLE19	11/10/2021 12:38:03PM	0.00	83.90	87.10	0.10	-0.02	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE71	12/1/2021 11:59:01AM	0.00	79.20	78.70	0.01	-0.01	NSPS/EG CAI;Inc. Flow/Vac.
EVLFLE86	8/9/2021 10:58:18AM	16.60	89.70	89.90	-38.37	-38.31	NSPS/EG CAI;No Adj. Made;Watered In
EVLFLE86	8/9/2021 5:10:44PM	0.00	99.10	99.10	-7.03	-7.03	NSPS/EG CAI;No Adj. Made
EVLFLE87	11/10/2021 11:04:26AM	0.00	101.50	101.80	0.75	0.33	NSPS/EG CAI;Inc. Flow/Vac.;Pump in Well
EVLFLE87	11/15/2021 11:25:55AM	0.00	101.70	101.70	0.25	-0.01	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE116	11/11/2021 1:34:25PM	0.00	78.20	100.00	17.64	-4.89	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE13R	7/8/2021 2:41:11PM	0.00	104.80	104.90	0.01	-0.02	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE50R	9/8/2021 2:35:01PM	0.00	112.50	117.50	0.29	-0.59	NSPS/EG CAI;Inc. Flow/Vac.;Pump in Well
EVLLE52R	11/10/2021 3:34:05PM	0.00	117.40	118.60	0.05	-0.18	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE55R	11/10/2021 3:27:27PM	0.00	107.20	119.10	0.56	-0.11	NSPS/EG CAI;Inc. Flow/Vac.
EVLLE58R	12/1/2021 2:02:54PM	0.00	120.90	124.90	0.50	-0.13	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW01	8/9/2021 11:54:40AM	0.00	94.10	89.90	0.06	-0.02	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW07	8/9/2021 3:52:13PM	0.00	94.30	92.70	0.53	-0.19	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW09	7/8/2021 5:20:07PM	1.00	91.90	88.40	0.45	-0.26	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW09	8/9/2021 3:48:11PM	0.00	89.80	89.10	0.02	-0.42	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW11	7/8/2021 5:15:02PM	0.00	95.20	93.00	0.97	-0.37	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW11	8/9/2021 3:37:43PM	0.00	92.30	93.30	0.38	-0.48	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW12	8/10/2021 11:59:37AM	0.00	96.40	98.70	0.97	-2.06	NSPS/EG CAI;Inc. Flow/Vac.;Surging;Orifice Size Wrong
TOTIEW12	12/2/2021 1:21:46PM	0.00	88.80	87.40	0.78	-0.06	NSPS/EG CAI;Inc. Flow/Vac.;Barely Open

ECO-VISTA LANDFILL NSPS XXX/NESHAP PARAMETERS (7/1/2021 - 12/31/2021)

Well ID	Date/Time	O_2 (%)	Initial Gas Temp (°F)	Adjusted Gas Temp (°F)	Initial Static Pressure ("WC)	Adjusted Static Pressure ("WC)	Comments
TOTIEW15	7/8/2021 5:46:26PM	0.00	93.60	93.10	0.88	-0.57	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW18	7/8/2021 2:48:56PM	0.10	93.20	94.60	0.63	-4.51	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW20	7/8/2021 3:18:03PM	0.00	82.10	75.90	0.53	-0.07	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW20	10/7/2021 2:17:46PM	0.00	90.00	83.80	0.11	-0.11	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong
TOTIEW22	8/10/2021 12:07:33PM	0.00	101.30	101.10	0.13	-0.36	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW22	9/9/2021 11:17:06AM	0.00	100.20	100.20	0.25	-0.45	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong
TOTIEW23	7/9/2021 10:01:48AM	0.00	97.10	95.50	0.80	-0.03	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW24	8/10/2021 11:27:03AM	0.00	91.50	90.00	0.64	-0.16	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW25	8/10/2021 11:04:45AM	0.00	96.90	91.60	1.54	-1.53	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong
TOTIEW25	10/7/2021 5:12:10PM	0.00	89.00	87.30	1.03	-0.03	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong
TOTIEW26	10/7/2021 5:02:46PM	0.00	87.60	86.70	0.34	-0.83	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW26	12/2/2021 1:41:39PM	0.00	87.40	73.90	1.93	-0.02	NSPS/EG CAI;Inc. Flow/Vac.;Barely Open
TOTIEW41	8/10/2021 2:24:50PM	0.00	102.40	99.60	0.05	-0.09	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW49	8/10/2021 12:47:54PM	0.00	93.80	94.60	0.72	-0.72	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW54	8/10/2021 1:54:47PM	0.10	96.70	96.30	0.06	-0.27	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong
TOTIEW54	9/15/2021 10:59:37AM	0.00	94.40	89.80	0.08	-1.96	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong
TOTIEW54	10/8/2021 11:13:38AM	2.30	87.80	86.00	0.01	-0.26	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong;Orifice Changed
TOTIEW55	8/10/2021 2:00:44PM	0.00	98.70	96.10	0.35	-0.15	NSPS/EG CAI;Inc. Flow/Vac.
TOTIEW58	8/10/2021 1:16:06PM	0.00	94.30	94.40	1.10	-1.37	NSPS/EG CAI;Inc. Flow/Vac.;Orifice Size Wrong
TOTIEW6R	8/9/2021 3:58:42PM	0.00	94.90	92.20	0.70	-0.03	NSPS/EG CAI;Inc. Flow/Vac.

Attachment G – Annual Waste-In-Place Volume

WM ECO-VISTA LANDFILL

CLASS 1 LANDFILL

Annual Reporting (GP-21) Period: Jan 1, 20xx thru Dec 31, 20xx
Report Date: February 1, 20xx
Semi-annual Reporting (GP-7) Period: Jan 1, 20xx thru Dec 31, 20xx
Report Date: February 1, 20xx & August 1, 20xx

Air Permit Number: 1884-AOP-R6 First Issued
Specific Conditions: 7 Date: Dec. 19, 2003
Maximum Permit Capacity: 15,990,000 CY
Solid Waste Permit No.: 0290-S1-R3

Year - By - Year Acceptance Rate		
	Waste Received	Total Waste
Year	(in tons)	In Place (tons)
1980	63,481	63,481
1981	63,481	126,962
1982	63,481	190,443
1983	63,481	253,924
1984	63,481	317,405
1985	63,481	380,886
1986	63,481	444,367
1987	63,481	507,848
1988	63,481	571,329
1989	63,481	634,810
1990	63,481	698,291
1991	63,481	761,772
1992	63,481	825,253
1993	63,481	888,734
1994	63,481	952,215
1995	63,481	1,015,696
1996	63,481	1,079,177
1997	89,209	1,168,386
1998	183,735	1,352,121
1999	204,275	1,556,396
2000	214,600	1,770,996
2001	223,145	1,994,141
2002	137,281	2,131,423
2003	243,386	2,374,809
2004	316,248	2,691,057
2005	253,064	2,944,120
2006	233,753	3,177,873
2007	232,579	3,410,452
2008	357,067	3,767,519
2009	367,990	4,135,510
2010	318,195	4,453,705
2011	364,359	4,818,064
2012	325,888	5,143,953
2013	370,533	5,514,485
2014	388,872	5,903,357
2015	471,764	6,375,121
2016	540,059	6,915,181
2017	526,066	7,441,247
2018	553,582	7,994,829
2019	599,732	8,594,561
2020	624,555	9,219,115
2021	652,899	9,872,015

Monthly Waste Received in 2021			Rolling
	Waste Received	Total Waste	12-Month Tonnage
Month	(in tons)	In Place (tons)	Volume
January	49,510	49,510	560,898
February	39,413	88,923	562,072
March	59,138	148,061	576,075
April	57,097	205,158	587,485
May	53,995	259,153	590,448
June	60,370	319,523	606,387
July	58,029	377,552	613,284
August	57,930	435,482	618,073
September	53,534	489,015	627,366
October	55,296	544,311	633,375
November	54,341	598,652	643,039
December	54,247	652,899	652,899

Comparison of tonnage in place to permit capacity:

(Tonnage-in-Place) X (1 C.Y./0.65Tons) = Cubic Yards-in-Place

(Current density conversion is 1 in-place C.Y. equals 0.65 in-place tons)

9,872,015 / (0.65) = 15,187,715

15,187,715 C.Y. is less than 23,190,000 Permit C.Y.

Attachment H – 12-Month Rolling Total of CO

ECO-VISTA TOTAL SITE-WIDE CO EMISSIONS 12-MONTH ROLLING TOTAL					
Date	**Year**	**Total Engine CO Emissions for the Month (tons)**	**Total Flare CO Emissions for the Month (tons)**	**Total Site CO Emissions for the Month (tons)**	**Rolling Total Site CO Emissions (tons)**
January	2021	9.688	1.525	11.213	11.21
February	2021	8.201	1.780	9.981	21.19
March	2021	9.376	1.843	11.219	32.41
April	2021	7.755	2.740	10.495	42.91
May	2021	9.358	2.615	11.974	54.88
June	2021	8.726	0.003	8.729	63.61
July	2021	9.153	0.004	9.157	72.77
August	2021	9.315	0.003	9.319	82.09
September	2021	8.971	0.003	8.974	91.06
October	2021	9.242	0.003	9.245	100.31
November	2021	9.064	0.003	9.067	109.37
December	2021	9.294	0.003	9.297	118.67

ECO-VISTA LANDILL ROLLING MONTHLY ENGINE CO EMISSIONS																					
Date	Year	Engine SN-04 EF (g/bhp-hr)	Engine SN-04 (hours)	Engine SN-04 Rated Capacity (HP)	Engine SN-04 (tons)	Engine SN-05 EF (g/bhp-hr)	Engine SN-05 (hours)	Engine SN-05 Rated Capacity (HP)	Engine SN-05 (tons)	Engine SN-06 EF (g/bhp-hr)	Engine SN-06 (hours)	Engine SN-06 Rated Capacity (HP)	Engine SN-06 (tons)	Engine SN-07 EF (g/bhp-hr)	Engine SN-07 (hours)	Engine SN-07 Rated Capacity (HP)	Engine SN-07 (tons)	Engine SN-08 EF (g/bhp-hr)	Engine SN-08 (hours)	Engine SN-08 Rated Capacity (HP)	Engine SN-08 (tons)	Total Engine CO Emissions for the Month (tons)	12-Month Rolling Total Engine CO Emissions (tpy)
January	2021	2.12	742.00	1,148	1.991	2.19	717.00	1,148	1.987	2.20	743.00	1,148	2.068	2.17	735.00	1,148	2.018	1.77	725.00	1,148	1.624	9.688	9.69
February	2021	2.12	642.00	1,148	1.722	2.19	638.00	1,148	1.768	2.20	574.00	1,148	1.598	2.17	605.00	1,148	1.661	1.77	648.00	1,148	1.451	8.201	17.89
March	2021	2.12	739.00	1,148	1.983	2.06	739.00	1,148	1.926	2.20	736.00	1,148	2.049	2.00	740.00	1,148	1.873	1.65	740.00	1,148	1.545	9.376	27.27
April	2021	2.12	716.00	1,148	1.921	2.06	714.00	1,148	1.861	2.20	241.00	1,148	0.671	2.00	715.00	1,148	1.810	1.65	715.00	1,148	1.493	7.755	35.02
May	2021	2.12	741.00	1,148	1.988	2.06	734.00	1,148	1.913	2.20	731.00	1,148	2.035	2.00	740.00	1,148	1.873	1.65	742.00	1,148	1.549	9.358	44.38
June	2021	2.12	680.00	1,148	1.824	2.06	686.00	1,148	1.788	2.20	705.00	1,148	1.963	2.00	660.00	1,148	1.670	1.65	709.00	1,148	1.480	8.726	53.11
July	2021	2.12	744.00	1,148	1.996	2.06	683.00	1,148	1.780	2.20	739.00	1,148	2.057	2.00	701.00	1,148	1.774	1.65	740.00	1,148	1.545	9.153	62.26
August	2021	2.12	735.00	1,148	1.972	2.06	738.00	1,148	1.924	2.20	720.00	1,148	2.004	2.00	739.00	1,148	1.870	1.65	740.00	1,148	1.545	9.315	71.57
September	2021	2.12	706.00	1,148	1.894	2.06	711.00	1,148	1.853	2.20	705.00	1,148	1.963	2.00	706.00	1,148	1.787	1.65	706.00	1,148	1.474	8.971	80.54
October	2021	2.12	740.00	1,148	1.985	2.06	694.00	1,148	1.809	2.20	730.00	1,148	2.032	2.00	739.00	1,148	1.870	1.65	740.00	1,148	1.545	9.242	89.79
November	2021	2.12	715.00	1,148	1.918	2.06	704.00	1,148	1.835	2.20	713.00	1,148	1.985	2.00	720.00	1,148	1.822	1.65	720.00	1,148	1.503	9.064	98.85
December	2021	2.12	735.00	1,148	1.972	2.06	734.00	1,148	1.913	2.20	728.00	1,148	2.027	2.00	729.00	1,148	1.845	1.65	736.00	1,148	1.537	9.294	108.14

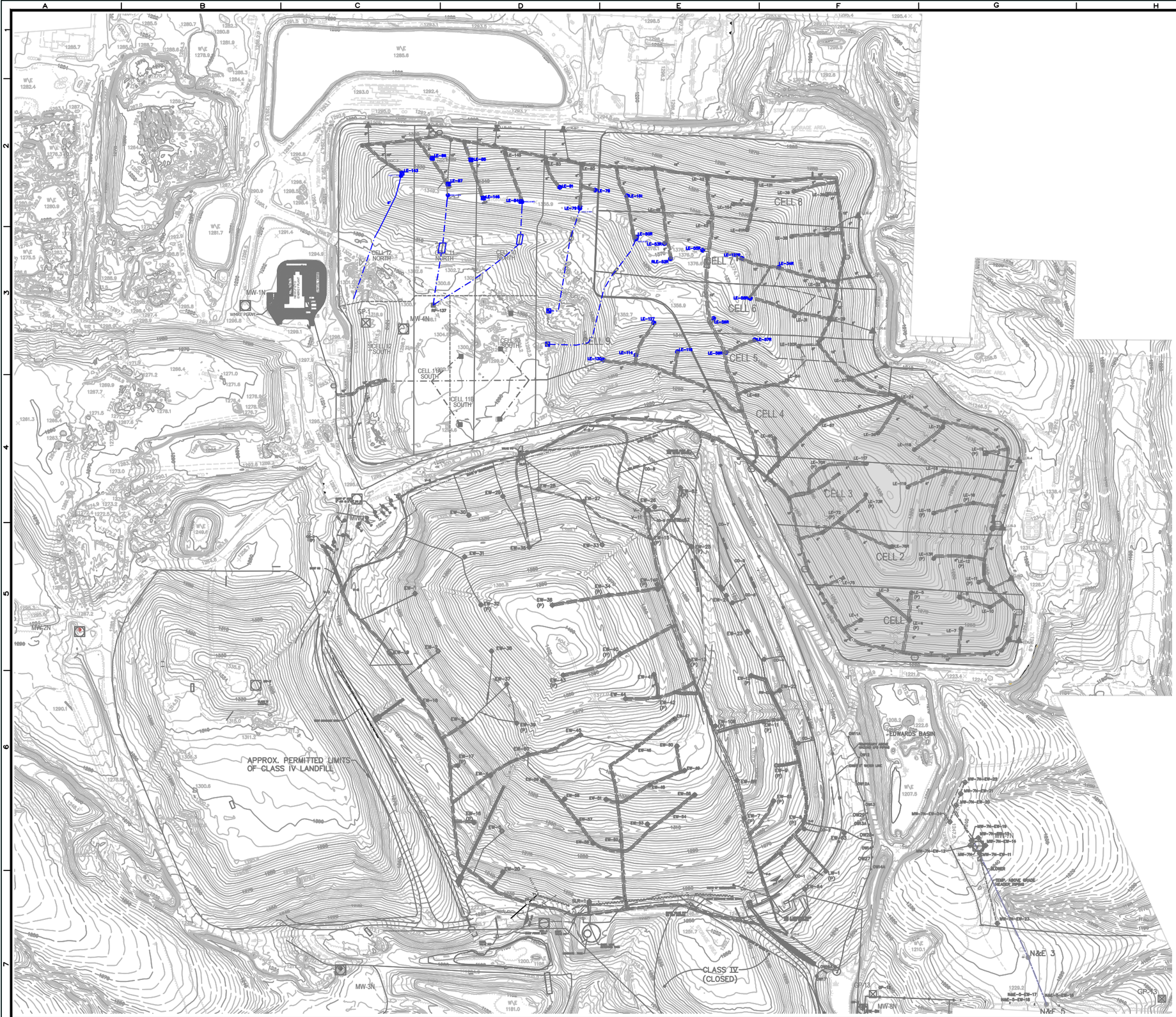
SN-04 (ENG 1): The emission factor is based on the most recent Performance Test completed on 10/3/2019.
SN-05 (ENG 2): The emission factor is based on the most recent Performance Test completed on 3/19/2020.
SN-06 (ENG 3): The emission factor is based on the most recent Performance Test completed on 5/10/2017.
SN-07 (ENG 4): The emission factor is based on the most recent Performance Test completed on 3/19/2020.
SN-08 (ENG 5): The emission factor is based on the most recent Performance Test completed on 11/18/2020.

Conversion Factor fro grams to pounds = 453.6 grams/lb
Conversion Factor fro pounds to tons = 2,000 lb/ton

ECO-VISTA TOTAL SITE-WIDE CO EMISSIONS 12-MONTH ROLLING TOTAL											
Date	**Year**	**Flare 1 Total Monthly Flow (scf)**	**Flare 1 Total Monthly Down Time (hrs)**	**Flare 1 Total Monthly Operating Time (hrs)**	**Flare 1 CO Emissions for the Month (tons)**	**Flare 2 Total Monthly Flow (scf)**	**Flare 2 Total Monthly Down Time (hrs)**	**Flare 2 Total Monthly Operating Time (hrs)**	**Flare 2 CO Emissions for the Month (tons)**	**Total Monthly Flare CO Emissions (tons)**	**Rolling Total Site CO Emissions (tons)**
January	2021	22,973	743.75	0.25	0.002	19,423,755	107.50	636.50	1.523	1.525	1.53
February	2021	7,080	671.75	0.25	0.001	22,683,225	3.00	669.00	1.779	1.780	3.30
March	2021	1,950,795	664.25	78.75	0.153	21,552,833	54.50	688.50	1.690	1.843	5.15
April	2021	34,477,635	19.75	700.25	2.704	453,225	704.50	15.50	0.036	2.740	7.89
May	2021	0	744.00	0.00	0.000	33,343,178	2.00	742.00	2.615	2.615	10.50
June	2021	37,829	89.75	630.25	0.003	3,836	637.75	82.25	0.000	0.003	10.51
July	2021	46,950	1.75	742.25	0.004	0	744.00	0.00	0.000	0.004	10.51
August	2021	5,170	655.25	88.75	0.000	34,912	87.25	656.75	0.003	0.003	10.51
September	2021	19,452	344.75	375.25	0.002	19,302	374.50	345.50	0.002	0.003	10.52
October	2021	25,522	275.50	468.50	0.002	15,223	464.25	279.75	0.001	0.003	10.52
November	2021	0	721.00	0.00	0.000	41,494	0.00	720.00	0.003	0.003	10.52
December	2021	26,099	296.75	447.25	0.002	16,950	439.50	304.50	0.001	0.003	10.53

CO EF =	**0.31**	lbs/MMBTU
Heat Content =	**1012**	BTU/scf
Methane Content =	**50%**	
Weight Conversion =	**2,000**	lbs/ton

Attachment I – GCCS Expansion Site Plan



LEGEND

- EXISTING GAS LINE
- SPIDER COLLECTOR
- INSTALLED EXTRACTION WELL (EW-1)
- EXISTING EXTRACTION WELL (EW-1)
- REMOTE WELL-HEAD
- SPIDER WELLHEAD
- GAS/AIR/CONDENSATE FORCEMAIN ISOLATION VALVES
- CONDENSATE SUMP (CS)
- ROAD CROSSING
- LEACHATE RISER
- BLIND FLANGE
- BUTT-CAP
- REDUCER
- EXISTING FINAL CAP AREA

NOTES:

1. CURRENT 12/2020 TOPOGRAPHY MAP PROVIDED BY SOUTHERN RESOURCES MAPPING CORPORATION.
2. ALL AIRLINES ARE YELLOW STRIPED 2" SDR-9 AND ALL FORCEMAIN LINES ARE 4" SDR-11.

Well Number	Commissioning Date
LE-34R	3/2/2021
LE-50R	3/2/2021
LE-52R	8/12/2020
LE-53R	3/2/2021
LE-55R	7/29/2020
LE-56R	8/12/2020
LE-57R	8/12/2020
LE-58R	3/2/2021
LE-59R	8/12/2020
LE-78	8/20/2020
LE-79	8/12/2020
LE-81	8/14/2020
LE-84	3/2/2021
LE-85	3/2/2021
LE-86	3/4/2021
LE-87	3/2/2021
LE-114	8/14/2020
LE-116	8/14/2020
LE-120R	3/2/2021
LE-122R	3/15/2021
LE-127	8/14/2020
LE-130	8/14/2020
LE-143	3/2/2021
LE-146	3/2/2021
LE-151	8/14/2020
HGC-3	8/20/2020
HGC-4	8/20/2020
HGC-5	3/2/2021
HGC-6	3/2/2021
HGC-7	5/14/2021

DATE:	ISSUE	DESCRIPTION

Franklin Engineers & Consultants, LLC.

WM WASTE MANAGEMENT

2021 AS-BUILT SITE PLAN
2021 NSPS DRAWINGS
ECOVISTA LANDFILL
SPRINGDALE, ARKANSAS

N

0 200
SCALE

01

DATE: July 22, 2021
PROJECT NO. 21-008

C:\Users\Stephanie\Dropbox (FE&C)\FE&C Team Folder\Projects-Prop\Projects\Waste Management\Ecovista Project Folder\Air\Reports\Semi-Annual Reports\EVL 2021\1st Half 2021\Drawing\EVL 2021 NSPS Site.dwg - July 22, 2021 - Stephanie