ENGINEERING REPORT FOR VARICK 1 SOLID WASTE TRANSFER STATION 215 Varick Avenue Brooklyn, NY 11222

Volume 1 of 2 – Text and Plans

in support of the **PERMIT MODIFICATION - COReSM OF SOLID WASTE PERMIT No. 2-6104-00010/00001-0 PURSUANT TO 6 NYCRR PART 360**

> submitted to NYSDEC REGION 2 47-20 21ST STREET LONG ISLAND CITY, NY 11101

on behalf of WASTE MANAGEMENT OF NY, LLC 123 VARICK AVENUE BROOKLYN, NY 11237

by

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PROFESSIONAL ENGINEERS CERTIFICATION STATEMENT

The subject material was prepared under the supervision and direction of the certifying New York Stateregistered Professional Engineer.

The subject material was prepared in conformance with 6NYCRR Part 360.

The information and data provided in this Engineering Report and accompanying Drawings are accurate. The following information was provided by third parties and has not been verified as to its accuracy and or adequacy:

-Details of Equipment dimensions and performance data contained within Equipment Specifications and Cut sheets in Appendices C and L.



ENGINEERING REPORT - TEXT

ENGINEERING REPORT 215 VARICK AVENUE SOLID WASTE TRANSFER STATION PART 360 PERMIT

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LIST OF NOMENCLATURE

ACRONYM	MEANING
ACM	Asbestos Containing Material
BHD	Brooklyn Highway Datum
C&D	Construction and Demolition Debris
CORe SM	Centralized Organics Recycling Equipment
CCI	Confidential Commercial Information
DSNY	New York City Department of Sanitation
EFW	Engineered Food Waste
FEMA	Federal Emergency Management Agency
IRS	Internal Revenue Service
LOW	Liquid Organic Waste
NFPA	National Fire Protection Agency
NYC	New York City
NYCDOS	New York City Department of Sanitation
NYCDOT	New York City Department of Transportation
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYAR	New York and Atlantic Railway
OCC	Old Corrugated Cardboard
OSHA	Occupational Safety & Health Administration
PCBs	Polychlorinated Biphenyls
PPE	Personnel Protective Equipment
PSW	Putrescible Solid Waste
RCV	Refuse Collection Vehicle
RTL	Rubber Tire Loaders
SSO	Source Separated Organic Waste
TPD	Tons Per Day
USEPA	United States Environmental Protection Agency
WMNY	Waste Management of New York, LLC
WWTP	Wastewater Treatment Plant

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ENGINEERING REPORT 215 VARICK AVENUE SOLID WASTE TRANSFER STATION PART 360 PERMIT

1. INTRODUCTION

This Engineering Report is submitted on behalf of Waste Management of New York, LLC (WMNY) to the New York State Department of Environmental Conservation (NYSDEC) to support a permit modification application of the 6 NYCRR Part 360 permit for a Solid Waste Transfer Station in Brooklyn, New York to permit the acceptance of source separated and liquid organic waste streams and the mechanical processing of these waste streams to produce Engineered Food Waste (EFW). The EFW produced will be transported offsite for co-digestion or as composting additive. A table presenting Citations from 6NYCRR Part 360, Subparts 1 (General Provisions), Subpart 6 (Liquid Storage), 11 (Transfer Stations), are provided for comparison. This permit renewal application is presented in two volumes. The Engineering Report Text and Plans in Volume 1, followed by Appendices A through M in Volume 2.

The buildings, open parking areas, and processing areas at 215 Varick Avenue (herein referred to as the facility) are currently permitted by NYSDEC under Permit 2-6104-00010/00001-0 and subsequent amendments to receive a total of 4310 tpd as follows:

- 4,240 tpd of putrescible solid waste (PSW) (with up to 900 TPD of C&D in lieu of PSW);
- 10 tpd of Source Separated Organic Waste (SSO)
- 30 tpd of Sewage Screening Residue;
- 30 tpd of yard waste.

Under the modified permit the transfer station would continue to receive 4310 tpd as follows:

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- 3540 tpd of (PSW) (with up to 900 TPD of C&D in lieu of PSW)
- [CCI
- [CCI
- 30 tpd of Sewage Screens, residue
- 30 tpd of yard waste

This Engineering Report replaces all other previous Engineering Reports for the site. All previously approved modifications to the facility and other pertinent facts for the site are included in the body of this report. As detailed in Section 2 of this Report the Modifications proposed herein will be constructed in 2 phases. When a drawing is referred with an "A & B" sheet, the "A" sheet represents Phase 1 and the "B" sheet represents Phase 2

1.1 General Facility Description

The facility is located at 215 Varick Avenue in the Williamsburg Industrial Park section of Brooklyn. The property is approximately 4.6 acres in size and is located on the English Kills. Of the 4.6 acres of property, approximately 1.5 acres are occupied by buildings. This is shown on the Site Plans Sheet Nos. 5A & 5B, Drawing No. SP-1.

The existing property is currently situated between 6 and 10 feet Brooklyn Highway Datum (BHD).

The 100-year tidal surge or 100-year flood plain is at elevation 7.44 ft BHD according to Federal Emergency Management Agency (FEMA) floodplain maps. All waste handling components of the facility's operation have been placed at elevation 7.5 ft BHD or higher.

The property is located directly at the fork of the English Kills which is part of the Newtown Creek watershed. As such, the aquifer at this site is brackish in water quality and tidally influenced. As a result, this aquifer is not used as a potable water source. No wetlands are located on the site or in the surrounding area.

The zoning designation of the 215 Varick Avenue Site and the surrounding properties is M3-1 (heavy manufacturing uses with low performance standard). Utilities and rights-of way are shown on the Site Plans (Sheet Nos. 5A & 5B, Drawing No. SP-1) at the back of this report.

The configuration of this facility is able to accommodate the permitted capacity of 3,540 tons per day (tpd) of putrescible solid waste, [CCI

], 30 tpd of sewer screening residue and 30 tpd of yard waste. Receiving, handling, and processing of putrescible solid waste and the source separate organic waste delivered by truck takes place within an enclosed 64,300 ft² structure (360-11.3(a)(3); 11.4(n)(1)). The processing area consists of seven tipping bays (Bays 1-7) and (eight doors) 1 door per tipping bay and 1 SSO residual door) all on the north side of the building) for simultaneous processing of waste, as shown on the Operational Floor Plans (Sheet Nos. 8A & 8B, Drawing No. FP-1). Five tipping bays (TB-3 to TB-7) will continue to be used for receiving putrescible solid waste, one (TB-2) will be used for receiving source separate organic waste and one (TB-1) is used as access to the SSO area. Processing of PSW is accomplished using wheel loaders for pushing and compacting the waste and wheel loaders or grapples for loading of putrescible solid waste into containers on chassis or transfer trailers. Putrescible solid waste will be tipped and pre-crushed and/or compacted and loaded into containers or trailers. The transfer station will operate six days per week, 24 hours per day. Deliveries of waste are accepted from 12:01 a.m. Monday to 11:59 p.m. on Saturday. All putrescible solid waste will be loaded into containers or trailers and removed from the transfer station building within 48 hours of receipt (360-11.2(a)(3)(i)). The containers are drayed from the transfer station on a WMNY internal roadway to the Varick Avenue rail yard for loading onto flat cars for transport to the landfill listed in Appendix A. Trailers will transport the waste to one of the disposal facilities as listed in Appendix A. These disposal facilities are primarily located in Virginia, Pennsylvania, Connecticut, Maryland and New York, and each of the disposal facilities is authorized to handle the waste (360-11.2(a)(3)(iii).

The source separated organic waste is tipped from collection vehicles into tipping and processing area in the area of Bay 1 and Bay 2

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1.2 Description of Solid Waste Management Service Area (360-1.9(e)(4)(ii))

The waste accepted at the 215 Varick Avenue Transfer Station consists primarily of municipal solid waste (MSW) of residential origin from the New York City Department of Sanitation (DSNY) trucks and commercial putrescible solid waste collected by private carting firms. The service area for the 215 Varick Avenue facility consists of (360-11.2(a)(1)) NYCDOS residential PSW from collection districts in Brooklyn and commercial solid waste collected from the five boroughs of New York City and on Long Island. [

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1.3 Regulatory Issues

Operation of the 215 Varick Avenue solid waste transfer station is consistent with New York State (NYS) and New York City (NYC) solid waste management policy (360-1.9(e)(4)(iv, vi)). The site accepts PSW from residential and commercial generators in the five boroughs and Long Island and therefore supports NYS and NYC in the need to consolidate waste for out of area disposal.

The lack of local sites for the landfilling and disposal of PSW compels the carting industry to transport solid waste to approved landfills out of the area.

Based on these facts, there is a demonstrated need for PSW transfer facilities. In response to these needs, WMNY operates a PSW transfer facility to assist in the stated objectives. This facility will contribute towards the local solid waste management plans and serve to improve the general environmental condition of the reduction of solid waste flow. In addition the 215 Varick Ave. Transfer Station complies with the NYC Solid Waste Management plan in that it provides for the outbound transfer of putrescible waste by rail in lieu of trucks.

The receipt and processing of source separated organic waste and liquid waste furthers the goals of the solid waste plan by recycling/reusing a portion of the putrescible waste stream formally disposed of in landfills. Instead using this portion of waste stream to produce gas for energy production and enriching composting.

Based on an evaluation of the existing site conditions, and site operations, local zoning and environmental criteria, it is the opinion of *Savin Engineers*, *P.C.*, that the operation will continue to have no significant environmental impact to the planning units of which the facility is located and from which solid waste is to be received and will serve to meet the needs of the community.

Pursuant to **360-1.11(g)**, WMNY hereby grants authority for inspection of the facility by NYSDEC personnel.

2. FACILITY DESCRIPTION

2.1 Existing Permitted Facility Description

The 215 Varick Avenue transfer station consists of a transfer building, access roads, nine scales and two scale houses. The enclosed transfer station building is approximately 64,300 ft².

The PSW is unloaded by tipping in one of the tipping bays. PSW is then pre-crushed and/or compacted with the frontend loader and loaded into containers on chassis or trailers. The pre-crushing of putrescible waste serves to reduce the size of bulky waste and increase the density of the waste prior to loading.

Waste is loaded loose into containers on chassis or transfer trailers for transport offsite to an approved disposal facility (see Table 3.1 for List of Disposal Facilities). The Site Plans (Sheet Nos. 5A & 5B, Drawing No. SP-1) and/or the Process Floor Plans (Sheet Nos. 8A & 8B) Drawing FP-1 shows the transfer station building, access roads, inbound scale house and three inbound scales (one of which is currently not operable), outbound scale house and two outbound scales and the three outbound and one inbound transfer trailer scales located inside the east end of the transfer building, near Varick Avenue and one container on chassis scale in the center portion of the building for a total of 10 scales.

The portion of the building where waste is processed is within the existing masonry building and prefabricated steel frame buildings and consists of a concrete tipping floor (as shown on the Site Plans, Sheet Nos. 5A & 5B, Drawing No. SP-1 and/or the Process Floor Plans Sheet Nos. 8A & 8B, Drawing FP-1). The tipping floor is 16" of 5,000 psi concrete. Solid waste tipped in the tipping bays will be pushed to the processing, loading, and storage areas using wheel loaders. Once processed, the waste will be loaded into trailers (loose) using wheel loaders or grapples.

Tipping Bay 1 and 2 and the immediately adjacent area are currently used for the Engineered Food Waste (EFW) pilot project where source separated organic waste is delivered and processed into EFW for shipping to Newton Creek WWTP for use in the digester to enhance gas production.

The floor of the building is sloped from the edge of the tipping area toward a trench drain parallel to the existing door at slopes varying from 1% to 3%, depending upon the location within the building to allow water to drain from the tipping and processing areas. Existing floor drains are also located within the transfer station building. The trench drains lead to removable trash baskets where incidental debris is generally emptied as needed. Following the trash baskets, liquid is routed through a 3,000 gallon oil/water separator. From the separator, water flows into an existing sump pit for eventual discharge into the combined sewer system as shown on the attached plan (see Sheet Nos. 14A & 14B, Drawing SN-1, Water Supply, Leachate and Sanitary Sewer plan).

A container or chassis loading area within the building is equipped with a small crane and an access platform to facilitate the removal and replacement of container lids within the building. A scale is also located in this area to allow for the live loading of the containers and maximizing the right of the containers.

In order to provide adequate ventilation for truck and mobile equipment exhaust fumes, allow for emergency purging of smoke and provide odor control, the building utilizes 6 exhaust fans equipped

with wet scrubber units. These fans and scrubber units meet the operating criteria of NYCDOS. (See Sheet Nos. 15A & 15B, Drawing No. VP-1).

A dry sprinkler system is installed at the facility. The system is designed in accordance with the requirements of the NYC Building Code and the guidelines of the National Fire Protection Association (NFPA 13). The extent of its coverage is shown on Sheet No. 16 Dwg. FE-1 Fire Protection and Evacuation Plan. As shown on the Water Supply and Sanitary Sewer Plan (Sheet Nos. 14A & 14B, Drawing No. SN-1), 4 hosebibs are located within the transfer station building.

There are no known drinking water or production water supply wells at the 215 Varick Avenue facility or in the vicinity. Location of the connection to the City water supply main is shown on the Water Supply and Sanitary Sewer Plan (Sheet Nos. 14A & 14B, Drawing No. SN-1) (*360-11.2(a)(2)(i,iv)*). The Operational Floor Plan (Sheet Nos. 8A & 8B, Drawing No. FP-1), Process Flow Plan (Sheet Nos. 9A & 9B, Drawing No. PF-1), and the Drainage Plan (Sheet Nos. 13A & 13B, Drawing No. DP-1) indicates the structure elevations and dimensions, locations of the various areas within the building, and the general process flow for the transfer of solid waste within the building (*360-11.2(a)(2)(iii)*).

Vehicular access and egress to the transfer station is at Varick Avenue. Incoming vehicles enter the site via the entrance located at the intersection of Varick Avenue and Meadow Street. Incoming trucks enter either via Meadow Street or from either direction on Varick Avenue. Outgoing vehicles exit the site via the driveway closest to Ten Eyck Street at the northeast section of the property. The access areas on-site have been designed to withstand expected loads and have been paved with asphalt or concrete.

Three scales are located at the end of the access road to the facility within the yard at the southwest corner of the property. These three scales are monitored by personnel operating within a scale house as shown on the Site Plan (Sheet Nos. 5A & 5B, Drawing No. SP-1). One of the scales is used primarily for weighing incoming NYCDOS vehicles, and the other two scales are used primarily for commercial vehicles. In periods of high flow the NYCDOS vehicles use any of the three inbound scales. (One currently is in operable). The scale house is located between the incoming scale for NYCDOS vehicles and the two other inbound scales. The inbound scale house includes digital scale equipment to accurately tag and document the amount of incoming solid waste, Bicron radiation detectors to monitor radioactive unauthorized wastes, and video cameras.

Incoming RCV's queue on-site along the access road (see Sheet 17 TQ-1), allowing vehicles to queue off the street and on the WMNY facility. As one of the three incoming scales becomes available, traffic control personnel will signal to the truck driver to move onto the scale for weighing. The weight of the incoming truck is recorded electronically within the scale house or is tagged in manually by scale house personnel.

Traffic flow through the facility will be one-way. Incoming RCVs queue for tipping after being weighed on one of the three inbound scales. Traffic control personnel direct each RCV to one of the tipping bays on the site as shown on Operational Floor Plan (Sheet Nos. 8A & 8B, Drawing No. FP-1). RCVs back into the building through these doors and tip their load. The doors are closed when waste is not being tipped. Bollards are used to protect the exterior walls, roll-up door frames, and interior columns from truck damage.

2.2 Proposed Facility Modifications

The existing putrescible solid waste transfer facility and operations would remain basically unchanged under the proposed facility modifications. There would be a reduction of 1250cubic yds of available putrescible solid waste storage in the current waste storage area to accommodate a portion of the Engineered Food Waste (EFW) processing.

The facility modifications would be as follows:

- Tipping Bays 1 and 2 and the adjacent areas to the west and south currently used for the EFW pilot facility would be modified in 2 phases. [

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In Phase 2 a building extension of about 6000 ft² with an eave height of approximately 45 feet will be added to the northwest corner of the building. This building extension will be used to house [

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- Floor drains and sumps with pumps would be added in the EFW processing and storage tank areas to capture all wash water, spillage or leakage from the processing or storage of SSO, LOW or [
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- Drawing FP-2 Sheet Nos. 8A & 8B is a plan of the modified and new areas to be used for EFW.

2.3 Water Quality Protection (*360-1.14(b*))

Facility features and operational procedures are designed to prevent introduction of waste material into the surface or groundwater's of the State. Waste is unloaded, processed, and loaded onto trailers within a building designed to prevent escape of refuse or water into the environment. In addition, steel covers are placed on containers and tarps either mesh or canvas, depending on the transfer trailer contractor, are placed on the trailers before they leave the enclosed areas to avoid escape of the waste from the containers and trailers (as well as to contain odors). All bioslurry produced will be shipped from the facility in closed tanker trucks. Receiving and processing areas are swept/vacuumed regularly and properly drained such that runoff generated from the interior of the building is collected for discharge to the combined City sewer or captured and reused in the organic waste process.

The wash water and liquids generated in the organic waste processing and storage areas in both phases is collected [CCI

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A 10' high opaque metal fence is present along the north and west boundaries of the property and along the English Kills. A portion of the property is bordered by buildings and therefore a fence is not present. These physical boundaries assist in the control of blowing litter, as well as providing security against unauthorized vehicle entrance. Exterior paved areas are patrolled and swept daily to remove accumulated litter or other refuse. As discussed in the Contingency Plan (Chapter 14), means will be available to handle accidental spills of refuse or unauthorized liquid waste. As shown on the Drainage Plan (Sheet Nos. 13A & 13B, Drawing No. DP-1), all exterior paved areas are pitched toward existing catch basins or toward the English Kills. This is independent of the drainage collection system used in waste processing or equipment maintenance areas.

2.4 Confinement of Solid Waste (*360-1.14(j)*)

All solid waste received at the facility is tipped, processed, and loaded within the enclosed/covered areas of the facility. In addition, lidding of containers and tarping of the trailers will take place inside the boundaries of the building. See Section 8.1 for additional details of these operations. Consequently, minimal dust and blowing litter will result. As discussed in the Contingency Plan (Chapter 14), means will be available to handle accidental spills of refuse or unauthorized liquid waste on access roads or ramps. Perimeter fences serve to confine blowing litter which may escape from vehicles or the enclosed facility. Exterior paved areas are patrolled and swept daily to remove accumulated litter or other refuse.

2.5 Equipment Maintenance Facility (360-1.14(o))

The transfer station includes an area for the maintenance of parts and other equipment as shown on the site plan. The size of the maintenance bay is approximately 23 feet by 56 feet. Commonly used spare parts are stocked in this bay. In addition, the maintenance of mobile equipment is conducted in the small area, as shown on the Operational Floor Plan (Sheet Nos. 8A & 8B, Drawing No.FP-1). Refuse collection vehicles (RCVs) and other trucks belonging to WMNY will generally be serviced at WMNY facilities at other locations.

2.6 **Operating Personnel Facilities** (*360-1.14(t)*)

The facility is equipped with office space in several areas. There are office and personnel facilities located in the adjacent to and above the maintenance bay as shown on Sheet Nos. 8A & 8B, Drawing FP-1. The inbound and outbound scalehouses also contain office space for scalehouse personnel and other general office staff. Each of these three buildings contains water and sanitary facilities for personnel.

The facility is equipped with two-way radios allowing for communications between the office, scale house, and the operations areas. Electricity is provided by Con Edison and gas is provided by Keyspan. Water is provided by the City of New York via the water mains that run along Varick Avenue. Water is delivered to the transfer station via a 12-inch main. Locations of hosebibs within the facility indicated are on the Water Supply and Sanitary Sewer Plan (Sheet Nos. 14A & 14B, Drawing No. SN-1).

2.7 Unloading and Loading Areas (360-11.3(a))

Upon entering the transfer station at Varick Avenue, RCVs queue along the on-site entrance road to pass over one of three electronically monitored entrance scales adjacent to the scale house at the southwest corner of the site. Operation of the scales is discussed in greater detail in Chapter 3, below. As discussed in section 2.1, RCVs enter the enclosed transfer building along the northern side of the building. There are several tipping bays which RCVs back into in order to tip the solid waste. Each of these areas are shown on the Operational Floor Plans (Sheet Nos. 8A & 8B, Drawing No. FP-1), and allow adequate room for trucks to maneuver to tip their load, as directed. Trucks back into the clear area of the tipping bay to unload. The areas available for storage of loose solid waste consist of a portion of each tipping bay, and the storage and loading areas. The facility manager directs loading, unloading, and processing activities so as to maintain facility access areas and facilitate the efficient loading, unloading and the unobstructed movement of vehicles. А calculation of the facility's loose (unprocessed) waste storage capacity demonstrates that with the facility's current layout, up to 6000 cubic yards of putrescible waste can be stored at the facility at 20 feet in height. See Appendix B for Calculations. Once unloading is completed, each truck will pull forward and exit the facility by the outbound scale area located at the northeast corner of the site. Forward traffic will be only in one direction, maximizing site traffic safety. Structural elements of the building are protected by bollards.

The loading and unloading areas are paved with a 16" concrete slab. In each tipping area, material will be moved from the unloading area to the processing area by wheel loaders and/or grapples, where it will be pre-crushed and then moved to the loading areas for open-top loading of containers on chassis or transfer trailers using wheel loaders or grapples. Additional details of this operation is described in Section 5.1.

For the source separate organic waste, unloading from RCV type vehicles is as indicated in Bay #2. Dedicated storage areas for source separated organics are provided adjacent to the Bay 2 tipping and processing areas. This is capable of storing [

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3. DESCRIPTION/QUANTIFICATION OF PROCESSED MATERIAL

Pursuant to 360-11.2(a)(3)(i), this Chapter describes the waste to be processed at the facility and its design capacity, as well as means to quantify the material received at the facility. With respect to 360-1.14(r), WMNY will accept at the facility, municipal, commercial, and industrial non-hazardous putrescible solid waste, source separated organic waste, liquid organic waste and construction and demolition debris from NYCDOS, WMNY, and other private carters servicing the area described in section 1.2 above.

Only waste types specifically approved by NYSDEC will be accepted for processing. Procedures for screening loads, refusing unauthorized shipments, and managing unauthorized waste which is unloaded on the tipping floor are addressed under the unauthorized waste control program in section 5.2, below.

Efforts are made to accommodate all licensed carters however NYCDOS has priority capacity at the facility, meaning WMNY guarantees the NYCDOS 1,390 tpd of capacity. The facility is designed to accommodate a minimum of 3540 tpd (*360-1.11(i)*) of putrescible solid waste, 30 tons per day of yard waste, 30 tons per day of sewer screening residue, [CCI].

All loads entering the transfer station are measured by weight prior to entering the tipping bay and unloading (360-11.4(n)(2)). Trucks enter the facility from Varick Avenue and queue along the access road leading to the scale house to be weighed. When signaled by the scale house operator and/or traffic control personnel, each RCV, SSO or LOW truck, proceeds to one of three entrance scales, as shown on the Process Flow Plan (Sheet No. 11, Drawing No. PF-1). These three scales (one is currently inoperable) can be used interchangeably during periods of peak incoming waste flow. Information identifying the RCVs is keyed in by the scale house operator. Tare weights are be determined by the two outbound scales located in the exit driveway at the northeast corner of the site.

Trailers accessing the site for transport of loose putrescible solid waste to disposal facilities enter the site via the southern access point on Varick Avenue as shown on the Site Plan (Sheet Nos. 5A & 5B, Drawing No. SP-1). After these trailers enter the site and they proceed to one of the three scales on the western side of the site for weighing. The tare weight of the transfer trailer, the name of the trucking company, and other appropriate information is recorded. Once the empty trailer has been weighed, it proceeds around the staging area and into the building via the southwestern entrance. It will then continue onto the loading area where it will be loaded with solid waste using wheeled loaders and/or grapples. When the transfer trailer is fully loaded, it will proceed onto one of the outbound scales inside the east end of the building for final weighing and tarping. Then the trailer exits the building via the doors as shown on the Site Plan (Sheet Nos. 5A & 5B, Drawing No. SP-1). The outbound scale house operator remotely documents the quantity of waste in the truck, the trucking company's name and identification number, and other appropriate information.

Empty containers on chassis enter the building through the second doorway facing Varick Avenue on the east side of the building where they are weighed. They then proceed to the two loading positions near the western end of the building – once filled they are weighed on the scale in loading position two before exiting the building.

All putrescible solid waste, source separated organics, sewer screening residues or yard waste is

processed into and removed from the transfer station building within 48 hours of receipt. Engineered Food Waste may be stored in storage tanks for 48 hours after processing. Material is moved out as soon as possible to ensure minimal storage times (360-11.4(l)).

The expected life of the facility is approximately 50 years (360-11.2(a)(3)).

For a detailed description of the processing of each of the materials see Section 5.1.

All waste materials will be disposed of at the permitted disposal facilities listed below (360-11.2(a)(3)(i)) or any other previously approved disposal facility for the 215 Varick Avenue site:

Table 3.1

Disposal and End Use Facilities

Name of Facility	Address	Phone Number	Type of Waste
Empire (Alliance) Sanitary Landfill	P. O. Box 28, Taylor, PA 19067	(717) 562-1600	PSW
Atlantic Waste Disposal	3474 Atlantic Lane, Waverly, VA 23890	(804) 834-8300	PSW
Charles City County Landfill	800 Chambers Road, Charles City, Virginia 23030	(804) 966-7210	PSW
Grand Central	Pen Argyl, PA 18072	(610) 972-9204	PSW
GROWS Landfill	1513 Bordentown Road, Morrisville, PA 19067	(215) 736-9540	PSW
High Acres Landfill	425 Perinton Parkway Fairport, New York 14450	(585) 223-6132	PSW
Laurel Highlands	Jackson Township, Cambria, PA 15961	(814) 479-6007	PSW
Southern Alleghenies	RD3 Box 310 Valley View, Holsopple, PA 15935	(814) 479-4011	PSW
Tullytown	200 Bordentown Road, Tullytown, PA 19007	(215) 943-8114	PSW
Wheelabrator Bridgeport Resource Recovery Facility	6 Howard Avenue, Bridgeport, CT 06605	(718) 665-9825	PSW
Wheelabrator Falls	1201 New Ford Mill Road, Morrisville, PA 19067-3701	(215) 736-1760	PSW
Wheelabrator Westchester Resco	One Charles Point, Peekskill, NY 10566	(914) 739-9304	PSW
New England Farms	60 Broadman Road New Milford, CT 06768	(216) 904-6716	SSO/EFW
Table 3.1

Disposal and End Use Facilities

Name of Facility	Address	Phone Number	Type of Waste	
Newtown Creek WWTP NYCDEP	329 Greenpoint Ave. Brooklyn, NY	(917) 682-4492	EFW	
Peninsular Compost Company	612 Christiana Avenue Wilmington, DE 19801	(302) 266-7678	SSOW/EFW	
PSW = Putrescible Solid Waste SSO = Source Separated Organic Waste EFW = Engineered Food Waste				

4. TRAFFIC FLOW AND TRUCK DELIVERY ROUTES

4.1 Inbound and Outbound Truck Traffic

Designated truck routes by the NYCDOT for local truck circulation within the immediate vicinity of the transfer station are:

- Vandervoort Avenue
- Grand Street
- Metropolitan Avenue
- Lombardy Street
- Union Avenue
- Flushing Avenue

Designated through truck routes between the transfer station and other regions of the service area are:

- Brooklyn-Queens Expressway
- Williamsburg Bridge
- Manhattan Bridge
- Brooklyn Battery Tunnel
- Atlantic Avenue
- Long Island Expressway
- Throgs Neck Bridge
- Clearview Expressway
- Triboro Bridge
- Cross Island Parkway

All RCVs, SSO collection trucks and tanker trucks with LOW use the inbound entrance at the intersection of Varick Avenue and Meadow Street and all exiting RCVs use the exit at Varick Avenue and Ten Eyck Street. See Drawing SP-1, Sheet Nos. 5A & 5B for traffic flow details. Transfer trailers and containers on chassis entering the site to transport loose putrescible waste and tanker trucks enter the site at the Varick and Meadow entrance. Chassis enter the building through the Varick Ave. door. Transfer trailers and tankers proceed to the rear of the building where transfer trailers enter the building via the door at the west side of the building to be loaded. Tanker trucks are loaded at a loading pad adjacent to the existing building in Phase 1 and at one of 2 loading pads adjacent to the building extension in Phase 2. See Drawing FP-2, Sheet Nos. 9A & 9B. Trailers exit at the front, east side (along Varick Ave.) of the building and tankers exit the facility at the Varick and Ten Eyck Street exit. Containers on chassis exit the transfer station via the doorway at the south west corner and travel on internal roadways to the Varick Avenue railyard for loading on flatcars.

The volume of outbound containers on chassis transfer vehicles and tankers leaving the site is approximately 197 trucks. Of those approximately 64 are containers on chassis which travel only on internal roads to the rail yard. The volume of inbound and outbound trucks may vary based upon the daily waste flow conditions (360-11.2(a)(3)(iii)).

Employee and visitor parking is shown on Drawing SP-1, Sheet Nos. 5A & 5B.

4.2 On-Site Roads (*360-1.14(n)*; *11.3(b)*)

Transfer station access and service road layout has been planned to accommodate the expected traffic flow, including peak flow, in a safe and efficient manner. Upon entering the facility via the inbound entrance gate, trucks queue along the inbound access road prior to the three inbound scales. Approximately 30 vehicles can safely be queued along the access road without encroaching on Varick Avenue. Since the inbound scale house can process approximately 90 vehicles per hour, including movement on and off each of the three scales, the expected peak volume can be managed safely and efficiently. Since collection vehicle traffic will be one way through the facility and through a separate outbound exit, crossing of collection vehicle paths will be minimized in the facility.

The access roads are paved with either concrete or asphalt and are designed with a pavement thickness capable of withstanding the expected volume and loads associated with transfer station operations. Access roads and pavement will be maintained in a safe and passable condition for loaded collection and transfer vehicles in all weather conditions. Road conditions are monitored by the Facility Manager and shift supervisors, and repairs performed by WMNY as necessary. Snow removal and de-icing of access roads are also be performed by WMNY crews. De-icing is accomplished by the use of sand and/or salt, as needed.

Employee (and visitor) parking is provided in the WMNY parking lot adjacent to the 123 Varick Avenue facility.

4.3 Railyard Operations

Containers for Rail Transport are handled at the Varick Avenue Railyard and are shipped by rail as described below.

Rail Yard Operations

- Empty waste containers will arrive on rail cars at the Varick Rail Yard located between 123 and 101 Varick Avenue. The existing rail unloading track can accommodate five rail cars containing twenty containers. This track is the current NYAR through track; however, NYAR has indicated to WMNY that WMNY can use this track for the transload operation (see attached letters). In the future, should conditions warrant, a second parallel track may be constructed which would accommodate four additional rail cars containing 16 containers.
- The rail containers will be unloaded onto double drop chassis where the empty container will be delidded using a loader with a fork attachment.
- The empty container lid will be removed and placed on a flatbed trailer.
- Empty delidded containers will exit the rail yard and travel northbound on Varick Avenue for a few hundred yards where it will turn left and enter the transfer station building through the second door from the south end of the building and be weighed.
- Full containers arriving from the transfer station at the Varick Avenue Rail Yard, will be loaded onto the flat cars from which the empties have been removed.

- When rail cars are fully loaded with containers, the cars will be shifted to the New York and Atlantic off-site rail yard east of Varick Avenue and a set of cars with empty containers brought in to begin the process.
- A detailed plan of the Rail Yard area is attached (Appendix J).

4.4 Rail Operations

Local

For the initial transload operations utilizing the existing track, strings of five cars with empty containers will be delivered to the WMNY Varick Rail Yard loading track by New York and Atlantic Railroad or a contract rail operator. New York and Atlantic Railroad will stage cars for delivery to the WMNY Varick yard and cars with full containers pulled from the WMNY Varick Rail Yard at their existing yard located between Varick Avenue and Woodward Avenue just east of the WMNY Varick Rail Yard. There are four tracks at this yard – a through operating track and three storage tracks. In total, there is approximately 7,000 linear feet of track at this location to stage and assemble cars. A diagram of this yard is attached (Appendix J).

Rail yard operations and the proposed use of the existing rail tracks for loading have been coordinated with the New York and Atlantic railroad. A more detailed explanation and an MOU with the railroad for the use of the existing track as a loading track is included (Appendix J).

A one day complement of rail cars loaded with full containers (12 cars on an average day) will be assembled at the New York and Atlantic rail yard east of Varick Avenue. These rail cars will then be pulled by New York and Atlantic to Fresh Pond Junction. There is also storage capacity for cars with full and empty containers at Fresh Pond. Once at Fresh Pond, the cars with full containers will be picked up by CSX for movement to the Bronx. A letter from New York and Atlantic committing to provide this service between Varick Ave. and Fresh Pond is included as (Appendix J).

Long Haul Rail

Upon reaching the Bronx, CSX will join the loaded rail cars from Varick to the WMNY train that currently serves the Harlem River Yard for transport to waste to Atlantic Landfill in Virginia. This train currently hauls 40 to 45 cars a day but has a capacity of 100 cars a day. Therefore, there is more than ample capacity for the waste to be rail hauled from Varick.

Contingency Plan

In the event that the New York and Atlantic and or the CSX railroads are unable to provide rail service to the Varick facility due to a job action by rail crews, a force majeure or other action outside WMNY's control, the contingency for waste disposal is long haul trucking. Long haul trucking would be implemented on a temporary basis in accordance with "Remedial Truck Haul Measures" as detailed in WMNY's Service Contract with the DSNY.

5. FACILITY OPERATION

5.1 Regular Operations and Waste Control (360-11.2(a)(3)(i), 11.4(g, l))

The transfer station operates six days per week, 24 hours per day. Deliveries of authorized waste are accepted beginning at 12:01 a.m. Monday and ending at 11:59 p.m. on Saturday. Loading of trailers, containers on chassis and bioslurry tankers are performed 24 hours per day, six days per week. Attendants are on duty during all hours of operation. The Facility Manager is present during normal business hours (first shift), five days a week. A shift supervisor is present whenever other employees are working and two scale house operators are on duty during all hours the scale houses are in operation. The two Varick Avenue gates will be closed to collection vehicles and organic waste trucks from 11:59 p.m. Saturday through 12:01 a.m. Monday. A detailed description of facility staffing is provided in Chapter 15.

Trucks access the facility via Varick Avenue and are weighed as discussed in Chapter 3 above. If any evidence of unauthorized waste is detected, facility personnel will follow WMNY's unauthorized waste control plan and the procedures outlined in Section 5.2 of this Engineering Report.

Putrescible Waste

Authorized RCVs proceed to one of the tipping bays (Tipping Bay 3 through 7) and enter the processing building. Trucks are directed to back into one of the Tipping Bays (see Operational Floor Plan, Sheet Nos. 8A & 8B, Drawing No. FP-1). Trucks tip their load and then exit the building through the same door they entered through, as they proceed to the queuing area for the outbound scales. The outbound RCVs are weighed at one of the two outbound scales and tipping receipts given to each outbound RCV. Vehicles will exit the facility via the outbound gate at Varick Avenue and Ten Eyck Street.

Waste is pushed from the tipping floor receiving area to the processing area using wheel loaders and/or grapples. Laborers functioning as pickers sort through the waste within the receiving area and remove unauthorized waste materials, such as automobile batteries, tires, and other suspicious containers. Large unidentified, suspicious, or leaking containers are removed using mobile equipment and managed as discussed below. White goods are also removed and large quantities of corrugated cardboard may be removed for recycling.

Wheel loaders may be used to pre-crush or compact the waste to improve the density for shipment. This process involves the wheel loader driving over waste to crush it and reduce voids contained in the waste. The process occurs in the processing and storage area. The pre-crushing of putrescible waste serves to reduce the size of bulky waste and increase the density of the waste. Pre-crushing of the waste is not always necessary, and, as such, this step is not always included in the process. Wheel loaders or grapples will then move the waste to either of two loading areas.

For open-top loading, wheel loaders and/or grapples lift the solid waste into open-top trailers. Wheel loaders use their bucket to compact the waste into the trailers and grapples use the arm to compact the waste into the trailer. Once the trailer is fully loaded, it proceeds to one of the three outbound scales located in the building at the east side, which are fitted with a tarping rack, to be weighed and tarped. The tarping rack is a prefabricated unit which is installed on both sides of the trailer scale area. It allows personnel to safely reach the top of the trailer on both sides in order to manually

pull the cover over the transfer trailer; this prevents a person having to climb the truck to cover the waste inside. After the cover is pulled over the top of the trailer, the cover can be properly fastened, to prevent it from coming loose or coming off during transit. All of these features and areas are shown on Sheet Nos. 8A & 8B, Drawing FP-1.

The tipping floor is cleaned once per day and remains waste-free for a 1/2 hour period. The waste free period is Monday through Friday from 11:30 p.m. to 12:00 a.m and Saturday from 1:30 p.m. to 2:00 p.m.

Container on chassis loading operations are as follows:

- Empty delidded containers enter the transfer station building through the existing second bay door on the east side of the building along Varick Avenue and proceed to be loaded in one of two loading positions near the south side of the transfer station using either a front end loader or an excavator with a grapple.
- The second (westernmost) loading position is equipped with a scale where the weight of the loaded container is maximized.
- The loaded containers then move forward to a lidding/cleaning station located just inside the door on the southwest corner of the transfer station. Excess waste is removed from the outside of the container and the chassis and the lids are placed and secured on the containers using a post-mounted stationary crane.
- The container lids are transported to the lidding station from the Varick rail yard on flatbed trailers entering the transfer station through the first (southernmost) overhead door where they will be moved and positioned next to the lidding station for easy access by the pedestal style excavator crane. The removal of lids from empty containers takes place at the Varick rail yard, using a forklift or stationary postmounted crane where the lids are stacked on a flatbed trailer for transport to Varick 1.
- Full lidded and cleaned containers exit the transfer station through the door in the southwest corner of transfer station and proceed south on WMNY internal access roads along the English Kills to the Varick Avenue Rail Yard. An at grade rail crossing exists on the track at the rear of 123 Varick Avenue. Should it be necessary due to train shifting operations, these full containers on trailers can also be temporarily staged in the container storage area located to the south and west of the Varick 1 transfer station as shown on the plans.

A detailed floor plan is shown on Sheet Nos. 8A & 8B, Drawings FP-1.

Source Separated Organic Waste

Source separated organic waste is delivered to the site in RCV type trucks. The collection vehicles enter the site and are weighed in the same way as Putrescible waste vehicles. After weighing they proceed to Tipping Bay #2 and back in to tip. [

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5.2 Unauthorized Waste Control Program (360-1.14(e))

Only solid waste which this facility is permitted to handle is accepted. Generators and transporters of solid waste received at this facility are informed in writing of the acceptable material types by WMNY pursuant to **360-11.4(c)**, signs are posted at the entrance to the transfer station stating, among other things, the types of solid waste accepted, and the types <u>not</u> accepted. The location of all signs at the facility is as shown on Sheet Nos. 5A & 5B, Drawing No. SP-1. The signs are posted at the entrances and exits to the facility and again at the inbound scale house. Loads not permitted for handling at this facility will be rejected and turned away. NYCDOS loads are handled as described below. All facility staff will be trained to identify acceptable waste and instructed to report any unacceptable waste to the supervisor on duty.

As collection vehicles enter the facility, information such as vehicle type, company, and source of material is recorded either electronically, by visual identification of regular vehicles, or by interviewing the drivers. Incoming scales are equipped with Bicron radiation detectors that monitor incoming waste for radioactive material. Visual evidence of unauthorized waste will be cause for rejecting a load. Employees are trained to identify <u>all</u> types of waste. This will include, but will not be limited to, hazardous, and regulated medical waste, asbestos, construction and demolition debris, and petroleum-contaminated soil. See Section 14 Contingency Plan for details.

When a collection vehicle reaches the tipping floor, it is unloaded in the presence of facility workers who will observe the contents of the load for unauthorized wastes. If such wastes are identified, the matter will be addressed with the responsible driver and company. All incidents of unauthorized waste being inadvertently deposited at the 215 Varick Avenue Facility will be reported to NYSDEC, as required by NYS regulations (360-1.14(e)(2)). The Emergency Coordinator is responsible for alerting the appropriate authorities if the material is hazardous or regulated medical waste, except for incidental or "de minimus" quantities. A "de minimus" quantity of unauthorized waste means that it is non-radioactive and incidental to the load. Examples of "de minimus" quantities would include small paint cans, aerosol cans, and small amounts of tires.

The waste will be further examined for unauthorized wastes as it is pushed into the processing areas. In the event unauthorized wastes are delivered to the facility, such material will be adequately segregated and secured in a designated area within one hour of the discovery.

The Unauthorized Waste Storage Area (UWSA) is located in the northeast corner of the Processing Building adjacent to the White Goods storage area, as shown on Sheet Nos. 8A & 8B, Drawing No. FP-1 entitled Operational Floor Plan. The enclosed concrete construction of this area will prevent leakage or discharge of unauthorized waste from entering the facility's drainage system.

Common items, such as automobile batteries and tires, will be removed regularly as needed. Dangerous unauthorized materials, such as hazardous and regulated medical waste, asbestos, and petroleum-contaminated soil will be removed from the facility within 72 hours after the discovery or as soon as possible. WMNY will notify the NYSDEC in advance, if the dangerous unauthorized materials cannot be removed within 72 hours. Removal will be performed by a waste transporter permitted to handle such material pursuant to 6 NYCRR Part 364.

A logbook will be maintained by the Emergency Coordinator to record events, date, time, description, actions/repairs, etc. All incidents of receipt of unauthorized waste will be recorded in the respective daily log with such information included in the subsequent annual report to the Department.

Unauthorized waste encountered at the facility will be handled in accordance with WMNY's Unauthorized Waste Procedures (see Appendix D). These procedures are intended to meet the requirements set forth in Title 6 NYCRR Paragraph 360-1.14(f). Acceptable wastes tipped within the processing building will include only recognizable, uncontaminated, putrescible solid waste (PSW), yard waste, and sewage grit and screenings.

5.3 Salvage Policy/Management (360-1.14(v))

Salvaging is not permitted at this facility.

6. MACHINERY AND EQUIPMENT

6.1 Processing and Support Equipment (*360-11.2(a)*(*3*)(*ii*))

The table below provides a description of the major types of mobile equipment that is used at the transfer station, as well as major items of fixed equipment used to support the operation of the facility. It should be noted that the types of equipment listed in Table 6-1 and Table 6-2 are typical, and the listed equipment may be replaced by "or equal" equipment during actual construction, should maintenance be required, the equipment breaks down, etc.

ltem (Qty)	Manufacturer	Model No.	Function
Mobile Equipment			
Wheel Loader (2)	Volvo	L180F	Pushing waste, loading waste, compaction
Wheel Loader (1)	Volvo	L220	Pushing waste, loading waste, compaction
Grapple	Volvo	EC290	Loading, adjusting, and consolidating waste
Excavator	Caterpillar	330D	Loading, adjusting, and consolidating waste
Sweeper (1)	Volvo	L70E	Sweeping, washing
Wheel Loader	Volvo	L90	Pushing, loading organic waste
Forklift	Hyster	L180FT	Lifting, placing lids
Skid Steer Loader	Bobcat	S130	Loading SSO to Auger/Grinder
Fixed Equipment			
Scale (10)*	Emery Winslow	Series 80	Truck weighing
Oil-Water Separator	Xerxes	FRP Doublewall 3,000 Gal	Removal of Oil and Floatables
Radiation Detector (2)	Ludlum	375P-1000	Monitor incoming waste
		Fan(NH-120)	
Odor Control Wet Scrubbers(6)	Duall	Scrubber(F105- 224S)	Ventilation, Dust and Odor Control
Note: The equipment listed in this table may be replaced with equal equipment should the listed equipment require maintenance, the equipment breaks down, etc.			

Table 6-1
General Transfer Station Equipment List

*There are ten scales at the transfer station, one of the inbound scale house scales is currently inoperable and will not be repaired or replaced at this time.

Table 6-2 COReSM Process Equipment List

6.2 Maintenance and Operation (360-1.14(f))

Adequate equipment and spare parts are maintained at the facility at all times for proper functioning of the transfer station operations. A list of equipment and machinery to be utilized is provided above. Mobile equipment is diesel-powered. Equipment fueling will take place as needed on the tipping floors, in the maintenance bay, or in exterior paved areas using a fuel truck provided by contract with an outside vendor. As outlined in the Staffing Plan (Chapter 15), a mechanic and a helper is on duty for both the first and second shift to provide on-site maintenance of mobile and stationary equipment. All equipment is maintained in good working order, and the facility is operated in accordance with the terms of the permit. Maintenance of the equipment takes place in one of the maintenance bays located in the northeast corner of the building as shown on Sheet Nos. 8A & 8B Dwg. FP-1. The spare parts are also located in this area. Spare equipment mobile from the other WMNY facilities or local equipment companies could be brought to the facility, if necessary.

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WMNY, as the facility operator, engages in a program of monitoring employees and customers for compliance with the regulations pertaining to the facility. The Facility Manager monitors and inspects the facility for malfunctions, deteriorations, and possible environmental discharges. Areas are inspected weekly include, but are not limited to: waste handling areas; mobile equipment; air ventilation systems; unauthorized waste control program and containers; scale house; computer systems and recordkeeping; dust, vector and odor control; site drainage; access roads; structural components; readiness of firefighting equipment; and the integrity of the security system, including fences and gates.

Problems are promptly addressed and remedial action is taken when necessary. A logbook is maintained for inspections, identifying the specific equipment and structures inspected, and recording observations as well as the date and nature of any remedial actions or repairs implemented.

All equipment is periodically washed and serviced as required by the manufacturer's specifications. Routine preventative maintenance is conducted on a scheduled basis. A large parts inventory is maintained on-site and includes items like bearings, seals, valves, motors, etc. Nearly all maintenance is performed by an on-site maintenance mechanic.

COReSM Fixed Equipment

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6.3 **Operator Use of Controls**

Equipment operators will activate all equipment in accordance with the manufacturers' specifications.

7. CONTROL OF ACCESS

7.1 Control Measures (*360-1.14(c, d), 11.4(d)*)

The perimeter of the transfer station is secured against unauthorized vehicle entry with ten-foot high opaque metal fence, adjacent buildings as barriers, and sliding gates, as shown on the Site Plan (Sheet Nos. 5A & 5B, Drawing No. SP-1). Access to the facility is monitored by facility personnel and limited through lockable gates at the truck entrances/exits, and the maintenance of the fenced perimeter. A sliding gate is located at the Varick Avenue and Ten Eyck Street exit. The main entrance at Varick Avenue and Meadow Street is open for collection vehicle access during normal operating hours, 24 hours per day, six days per week, from 12:01 a.m. on Monday through 11:59 p.m. on Saturday.

Solid waste is accepted at the facility only during operating hours when attendants are on duty. Signs are posted at the main entrance stating the hours of operation, types of waste accepted, and those not accepted, as discussed below. Access for dumping by the general public will not be permitted; only licensed carters will be permitted to unload waste at the 215 Varick Avenue transfer station. The facility is equipped with a video recorder and camera system with displays in the scale houses and offices to additionally monitor incoming and outgoing traffic and events. The facility is also equipped with two-way radios for communication among the offices, scale houses, equipment operators, and the loading areas. As noted in the Contingency Plan (Chapter 14), telephone numbers for police and fire departments and emergency responders will be posted prominently by public telephones and in the office.

Visitors to the 215 Varick Avenue facility proceed to the existing office trailer located at the scales in the building's rear. Visitors are escorted through the facility by WMNY personnel.

7.2 Signs (*360-11.4*(*c*))

Signs are posted along Varick Avenue at the entrance driveway with the name and address of the facility, the hours of operation, the types of solid waste accepted, types of waste not accepted, and a statement directing visitors and unauthorized persons to report first to the facility office upon entering. Signage also notes that only licensed carters will be permitted to unload at the facility. Attendants on duty will oversee those attempting to access the facility.

Signs are also located at the end of the access driveway to the facility, directing drivers to obey traffic control personnel and to proceed slowly. In addition, signs are posted numbering each of the seven tipping bays. In the loading dock area safety signs are posted indicating that truck drivers must chock their wheels prior to loading. The locations of all signs are as shown on the Site Plan, Sheet Nos. 5A & 5B, Drawing No. SP-1.

8. WASTE TRANSFER AND DISPOSAL (*360-11.2(a*)(*3*)(*i*, *iii*); *11.4(b*))

8.1 Waste Transfer Plan - Loose Putrescible Waste

Trailers accessing the site for transport of loose putrescible solid waste to disposal facilities enter the site via the southern access point at Varick Avenue and Meadow Street as shown on the Site Plan (Sheet Nos. 5A & 5B, Drawing No. SP-1). Transfer trailers to be loaded with loose putrescible waste enter the site and proceed to the inbound scales on the western side of the site for weighing. Once the empty trailer has been weighed on one of the three scales (one is currently inoperable), it proceeds around the open-top staging (queuing) area (See Sheet 17) and into the building via the western entrance. It then continues onto the loading area where it is loaded with solid waste using wheeled loaders and/or grapples. When the transfer trailer is fully loaded, it proceeds onto the outbound scales inside the east side of the building for final weighing and tarping. Tarping is done by the truck driver while the truck is on the scales inside the building. Each scale is equipped with a tarping rack to aid in the drivers access to the tarps.

Empty containers on chassis for transporting PSW arrive from the WMNY Varick Rail Yard and enter the transfer station through the second door facing Varick Avenue. They then proceed to one of two loading positions located in the Southwest corner of the transfer station where they are loaded and weighed. The containers are then lidded using the stationary crane and cleaned of loose debris before exiting the transfer building and proceeding along the internal roadway to the WMNY Varick Rail Yard. The containers are then loaded on flat cars for rail transportation to one of the out of state landfills. See Section 5.1 for additional details on loading operation.

Outbound transfer trailers proceed to one of several disposal facilities located in Virginia, Pennsylvania, Connecticut, Maryland or New York. A list of disposal sites is shown in Section 3, Table 3.1. The transfer trailers are dispatched to one of these facilities based upon daily waste flow conditions at the landfills by WMNY dispatch. Each transfer trailer holds on average approximately between 22 and 23 tons of putrescible solid waste.

8.2 Waste Transfer Plan – Engineered Food Waste

Tanker trucks to transfer bioslurry will enter the site at Varick and Meadow Street and proceed to the three scales at the rear of the building for empty weighing in. The trucks will then proceed to one of the 2 load out areas where they will be connected by the driver to a load out pipe and filled with bioslurry from the storage tanks. The load out areas will have spill containment pads on which the tanker truck will be positioned for loading. The spill containment pads will have a sump which will pump any spilled material back to the storage tanks. Once filled the tankers will proceed to the scales at the northeast corner for weighing out before exiting the site. Details of the loadout pads, sumps and piping is discussed in Section 5.1 and shown on Drawing FP-2 Sheet Nos. 9A & 9B.

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9. STATION CLEANING AND WATER MANAGEMENT

9.1 Station and Transfer Vehicle Cleaning (360-11.4(e), (n)(3))

The PSW tipping floor is cleaned at least once in a 24-hour period, during the designated waste-free period of 11: 30 p.m. to 12:00 a.m. Monday to Friday and 1:30 p.m. to 2:00 p.m. on Saturday. Waste is pushed from all areas of the floor (*i.e.*, unloading area, pre-crushing/compaction area, and loading area), loaded for off-site disposal, and a sweeper with water spray will be used for cleaning the floor. Surfactants or deodorizers may be added to the water spray to improve the cleaning. Each tipping floor will remain waste-free for at least one half hour during this process per NYCDOS regulations. Following waste removal and dry sweeping, the entire operations area (the tipping floors and truck operating lanes, etc.) will be cleaned with surfactants, disinfectants, deodorizers, or other cleaning agents, as appropriate, and washed down.

The organic waste processing area will be washed down as necessary during the operating day to keep the area clean and minimize odors. [

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The exterior paved surfaces, including access roads and scales are swept daily (except during snow removal) for control of dust, litter, and any refuse which may have exited the facility despite precautions. Water spray will be used as necessary during dry periods. Provision is made in the Contingency Plan (Chapter 14) for cleanup of spills on the access roads. Daily cleaning of the office area, employee facilities, interiors of the scale houses, and restrooms will be performed.

Collection vehicles are not owned or operated by WMNY or this transfer station and will be cleaned elsewhere at the locations of their owner/operator.

9.2 Water Supply and Drainage Systems (360-11.2(a)(3)(iv), 11.4(f))

As indicated on the Water Supply Leachate Collection and Sanitary Sewer Plan (Sheet Nos. 14A & 14B, Drawing No. SN-1), water supply to the facility is provided via a 12-inch water main from Varick Avenue. No production wells for potable or process water are located at 215 Varick Avenue or in the vicinity.

All material will be unloaded, pre-crushed and/or compacted, and loaded into trailers within confined areas (*i.e.*, the enclosed building). An additional line of containment for potential windblown material will be provided by a fence around the property perimeter as shown on the Site Plan (Sheet Nos. 5A & 5B, Drawing No. SP-1). In addition, the presence of adjacent masonry buildings also provides a natural barrier. Solid waste will be prevented from entering the surface waters or groundwaters through the confinement of waste handling and processing operations, paving, fencing, sweeping, and daily inspections for litter.

As indicated on the Operational Floor Plan (Sheet Nos. 8A & 8B, Drawing No. FP-1), the floor within the building is sloped between 1% and 3% to provide proper drainage toward the trench drain located parallel to the doors located at the southern section of the building along the two wide door openings. The trench drains are cleaned periodically to ensure flow of liquid collected. Liquid is routed through an oil/water separator. From the separator, water flows into the combined City sewer system. The routing of all flow is shown on Sheet Nos. 14A & 14B, Drawing SN-1.

As indicated on the Grading Plan (Sheet Nos. 13A & 13B, Drawing No. DP-1) stormwater will be collected from roofs and exterior paved areas through catch basins and exterior trench drains, and conveyed through a drainage system to the existing outfall.

As shown on Sheet Nos. 8A & 8B FP-1 and Sheet Nos. 9A & 9B, FP-2, a close looped dedicated drainage system is used to manage the washdown water and liquid generated by the organic waste processing. The floor in these area(s) will be sloped to drain to a sump areas adjacent to the SSO storage area. [

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10. RECORDKEEPING

10.1 Operational Records and Annual Report (360-1.14(i), 11.4(i, j))

Daily logs are kept including the date, signature of the recorder, the quantity, description and origin of all material received (including PSW, SSO, LOW, C&D, Screening and yard waste), the quantity and destination of PSW, C&D and EFW sent from the facility, and the quantity and the destination of unauthorized material removed from the processing area, by category, and sent from the facility for disposal. These records account for all material handled at the facility, such as spills, security problems, contingency transfer events, unscheduled shut-downs, summary of unauthorized waste, and malfunctions and remedies. In addition, records are kept of all self-inspection activities and any significant events at the facility, such as spills, security problems, contingency transfer events, unscheduled shut-downs, and malfunctions and remedies. Copies of shipping documents, including manifests as needed for unauthorized wastes will be retained in accordance with applicable regulations. Appendix G shows daily operations logs for the facility.

Annual reports will be prepared which will identify equipment additions and facility changes, and detail the weight and volume of various types of solid waste handled. These reports are completed on forms supplied by the Department, and are submitted to the NYSDEC Central Office as well as to the NYSDEC Region 2 office no later than 60 days after the first of January following each year of operation. These records are maintained on site and at WMNY's New York office.

WMNY retains copies of all records relating to the operation of the facility. Copies of all documentation supporting all NYSDEC permit applications will be retained throughout the active life of the facility.

Most records to be retained by WMNY are maintained in files for current reference and as repositories. Files are located based on easy access for the major user. Using this principle the major files maintained by the company can be divided into the following categories:

- 1. Administrative Files
- 2. Marketing Files
- 3. Operational Files
- 4. Maintenance & Equipment Files
- 5. Engineering Drawings Files
- 6. Regulatory Files

These files are set up in either chronological or alphabetical order. Additional records are stored on computers for easy access. Retention periods are set up for each type of file depending on company requirements as well as those of different government agencies. The sole purpose of all the foregoing effort is to enable information to be retrieved accurately and economically within a reasonable time.

Most files are retained in one of two states:

- a) <u>Active</u> such files are retained in readily accessible locations.
- b) <u>Inactive</u> these files are usually stored in less accessible location (i.e., in archives or secured storage area).

The state of activity is determined for various categories of documents through standardized retention periods and starting dates. At the end of the active period, the files may be transferred to an inactive file. At the end of the inactive period, the files may be destroyed.

Retention time for records

The retention time for each record is chosen based on the following considerations:

- 1. The frequency and extent of reference to the record by employees.
- 2. The existence of the same information elsewhere.
- 3. The extent to which the record is transcribed or summarized in another record to be retained for a longer period of time.
- 4 The necessity of the record as a support or explanation of another record to be retained for a longer period of time.
- 5. The importance of the record as an integral segment of the historic documents of the organization.
- 6. The usefulness of the record in its original state for purpose of reporting data, legal activities, and regulatory compliance.
- 7. The effect that a change of law, regulation, or procedure many have on the value of the record.
- 8. Retention periods mandated by government agencies (i.e., IRS, USEPA, OSHA, NYSDEC, NYSDOH, etc.)

Records security

WMNY will use two types of record security:

- 1. Protection from unauthorized use (e.g., theft, espionage, etc.). The usual practice is to maintain these records under lock and key. Most personnel and medical records are considered as secured files. These records are released only to authorized individuals.
- 2. Protection against damage from natural causes (e.g., heat, water, dust, etc.). This protection is provided by selection of adequate file cabinets. In addition, redundant copies of important documents are retained in separate offices.

Inventory of pertinent records

The table below provides a list of pertinent records and their location at the facility:

Table 10-1

Record Locations & Retention Period

Type of Record	Retention Period	Location of Record
Permits	*Historic	Administrative/Operations Manager/Engineer
Annual Reports	7 years	Operations Manager
Quarterly Reports	7 years	Operations Manager
Engineering Report	*Historic	Operations Manager and/or Engineer
Equipment Specifications	* Historic	Operations Manager
Construction Drawings	*Historic	Operations Manager and/or Engineer
Correspondence with Agencies	7 years	Operations Manager and/or Engineer
Training Records	7 years	Operations Manager
Medical Records	*Historic	Administrative
Maintenance logs	7 years	Operations Manager

NOTE: Historic records are maintained for the life of the facility.

10.2 Monitoring Samples and Records (*360-1.14(h)*)

All processing activities take place within an enclosed building, elevated and isolated from the ground surface by a concrete slab, minimum one foot thick. All concrete surfaces are maintained in good condition, and sacrificial thicknesses replaced when appropriate. As a result, there is no need for routine monitoring of groundwater or soil at the facility. Routine sampling of waste is also not planned.

11. FACILITY START-UP AND SHUT-DOWN

As noted in Section 5.1 above, the facility accepts waste 24 hours per day, six days per week. Each day, there will also be a period during when the tipping floor is waste-free for cleaning and deodorizing.

11.1 Weekly Facility Start-Up and Scheduled Shut-Down

Initiation of daily processing activities is preceded by an inspection of all mechanical equipment. Equipment operators will engage the machinery and establish that it is functioning properly. Each shift will have a designated supervisor, who will be responsible for verifying that equipment is functioning properly prior to start-up or start of the shift. The facility's on-site mechanics will perform routine equipment and facility maintenance throughout the workweek.

At the end of the final shift on Saturday, the wheels and exterior surfaces of all mobile equipment will be hosed down during floor cleaning activities, and parked in the enclosed building until start-up the following Monday. The mist deodorizing system and air ventilation equipment will be shut down. The scale houses and all doors and gates will be closed and locked.

11.2 Unscheduled Shut-Down

In the event that a mechanical problem, fire, or other unforeseen circumstance requires an unscheduled shut-down, all material which is on-site will be processed and loaded for transport, if possible. Incoming putrescible solid waste will be re-routed to the WMNY facility at 485 Scott Avenue in Brooklyn. In addition, loaded waste could be transported to WMNY Harlem River Yard transfer station in a contingency situation. If necessary, waste already delivered may be reloaded into containers on trucks and carted to one of these alternate WMNY transfer stations, within 24 hours of receipt.

If there is an unscheduled shutdown in COReSM equipment and the transfer station continues to operate, inbound source separated organic waste will be disposed of along with the putrescible waste operations. It can also be diverted to the Waste Management of New Jersey facility on Flora Street in Elizabeth, New Jersey.

Emergency Coordinators will organize personnel to secure the waste and shut down all equipment, unless dangerous conditions prohibit such action, and will advise emergency responders, as appropriate. Recommended spare parts for the mobile and mechanical equipment will be kept available to facilitate repairs and bring the facility back on line in the event of mechanical difficulties. A Contingency Plan included in Chapter 14 of this report outlines the appropriate procedures to be followed during unscheduled shut-downs caused by fire or other non-equipment related emergency.

12. INTERNAL COMMUNICATIONS

The facility is equipped with two-way radios for communication among the office, scale houses, equipment operators, and the loading areas. As noted in the Contingency Plan (Chapter 14), telephone numbers for police and fire departments and emergency responders will be posted prominently by public telephones and in the office. Closed-circuit TV cameras will be used for monitoring activities as appropriate.

13. HAZARD AND NUISANCE CONTROL

13.1 Fire Prevention and Control (*360-1.14(q*))

Open burning is expressly prohibited at all times. Spills will be attended to immediately and removed using dry methods. Access to all areas of the facility will be maintained at all times for fire-fighting and emergency response equipment. In the event that the facility requires evacuation, operators will activate the alarm and supervisory personnel will verbally direct personnel to posted evacuation routes.

Outdoor operations are restricted to weighing of collection vehicles receipt of LOW and loading of EFW into tanker trucks. All waste tipping, processing, and loading activities, including lidding of containers and tarping of trailers, are conducted within enclosed buildings. All exterior paved areas are swept daily to capture loose litter which escapes the enclosed facility, minimizing fire hazards. The slurry truck loading area will be graded and equipped with a sump to capture any bioslurry which might spill during loading operations. Captured spilled material will be diverted back into the system.

Portable extinguishers are located in the scale houses and on the sweeper. "No Smoking" signs will be posted in accordance with the requirements.

A dry sprinkler system is installed at the existing facility and will be extended to the building extension housing the storage tanks. The system is in accordance with the requirements of the NYC Building Code and the guidelines of the National Fire Protection Association (NFPA 13). See Sheet 16 Fire Protection/Evacuation Plan Drawing FE-1. As shown on the Water Supply and Sanitary Sewer Plan (Sheet Nos. 14A & 14B, Drawing No. SN-1), four hosebibs are located within the transfer station building. Exhaust fans and roof vent components of the wet scrubber system are present for emergency purging of smoke (see Sheet Nos. 15A & 15B, Drawing No. VP-1). Water is supplied to the building via a 12-inch main as shown on the Water Supply and Sanitary Sewer Plan (Sheet Nos. 14A & 14B, Drawing No. SN-1). "No Smoking" signs will be posted as required.

Periodic inspections of the serviceability of portable extinguishers and an annual maintenance check of fire extinguishers by a qualified vendor will be performed. Also, periodic inspections of areas known to contain fire hazards will be performed. Employees will be informed of fire hazards in their work area or job duties. The Fire Prevention Program includes procedures for notifying workers and the Fire Department, fire extinguisher usage training, and a posted evacuation route.

13.2 Dust Control (*360-1.14(k)*)

Dust in outdoor operations areas may occasionally be generated by sand used for deicing roadways, by windblown deposition from other areas of the development, and by tracking of vehicles through the facility. Paved areas are swept daily, with the use of water spray during dry periods as necessary to facilitate dust suppression and removal.

Inside the facility, dust may be generated by tracking of road dirt by collection vehicles, and the tipping, processing, and loading of solid wastes. The water truck, sweeper, and hoses used for floor washdown will also be available for dust control operations.

The measures described above will maintain dust emission levels within the performance standards for an M3-1 zone as contained in New York City's Zoning Resolution.

13.3 Vector Control (*360-1.14(l)*)

The operation of the facility will not constitute an opportunistic environment for the breeding of vectors. Putrescible material is handled indoors and removed from the transfer station building within 24 hours of receipt. The tipping floor is completely emptied, cleaned, and deodorized daily. Outdoor paved areas are swept daily to remove windblown litter which happens to escape from the building. WMNY maintains a contract for weekly visits of control of vectors (see Appendix H).

13.4 Odor Control (*360-1.14(m)*)

All putrescible solid waste, SSO, yard waste, and sewage screening residuals are processed and stored indoors. Putrescible solid waste, and yard waste is processed within 48 hours and sewage screening residuals, SSO within 24, thus preventing the material from becoming a nuisance. Primary odor control is provided by a wet scrubber system. The six exhaust fan/scrubber units are installed on the roof of the building with intake ductwork suspended from the ceiling. These units contain fans which provide 6 air changes per hour.

Odor control will be provided for the source separated organic waste storage area by the existing odor control system. Targeted odor control for the extension will include additional ducting of the storage tanks to the existing odor control system intake ducts for the scrubbers.

Appropriate routine measures for the control of odors also includes, the use of deodorizing granules and odor neutralizing and/or masking agents, the implementation of daily facility washdowns of the putrescible solid waste handling areas, weekly washdowns of the emptied facility.

Backup odor control to reduce impacts on the surrounding population will be provided by placing drums of deodorizing agents near vehicle entrances and exits. For additional odor control, a deodorizing agent may be added to the water in the sweeper, if necessary.

13.5 Noise Levels (*360-1.14(p)*)

The facility is designed to minimize sound resulting from the facility's operations that could exceed the allowable levels at or beyond the property line. The majority of noise generating operations, such as the operation of heavy mobile and processing equipment, are designed to take place within the building. The putrescible handling area is located within the processing building which is set back approximately 50 feet from Varick Avenue. None of these activities generate excessive noise. Any noise produced from the facility operations is reduced significantly either by the walls of the transfer building or the buffer between the operations and surrounding properties.

In June 2008, a series of sound level monitoring at the property line of the facility occurred to evaluate compliance with New York City zoning and operational requirements. The ambient noise levels at the facility were measured with and without facility operations taking place. The results of the noise monitoring indicated that there was no significant difference between ambient noise levels at the facility operations were shutdown and noise levels when facility operations were taking place. This was true over all octave bands tested. This result demonstrated the dominance of background noises at the facility from such sources as the offsite traffic and other surrounding

industrial facilities. Since the facility does not generate noise levels that can be distinguished from the background at the property line, it follows that the facility would not produce an LEQ in excess of the background LEQ (excluding any contributions from the facility) as per Part 360-1.14(p)(1).

All equipment owned by WMNY of New York, LLC are regularly maintained and serviced. The mufflers for internal combustion-powered equipment are maintained and serviced as needed so the original noise control features of the equipment are not degraded. The facility is therefore capable of complying with (360-1.14(p)(4)).

13.6 Public Streets

Varick Avenue is located directly adjacent to the transfer station building. Varick Avenue and all on-site roads will be swept by a mechanical sweeper as needed to remove any fugitive waste or dirt, as specified in section 9.1.

14. CONTINGENCY PLAN (*360-1.9(h*)(*1*), *1.14(g*))

WMNY Unauthorized Waste Procedures are included as Appendix D.

14.1 Emergency Responder Arrangements (360-1.9(h)(1)(i), 1.14(s))

Arrangements will be coordinated with the respective emergency response teams in the event that their service is required at the facility. WMNY maintains contact with the local fire department, police department, and first aid/ambulance squads. Prints of the facility layout showing location of site features and processing areas, doors, hosebibs, hydrants, and standpipes will be provided to each responder, if desired.

Emergency coordinators for the site are as follows:

Primary:	Peter DeLuca	
(Facility	Business Phone:	718-533-5266
Manager)	Cell Phone:	917-734-6392
U /		
Secondary:	John Sullivan	
<u>Secondary</u> : (District	John Sullivan Business Phone:	718-533-5271

The following emergency numbers will be conspicuously posted at the site near telephones:

- Fire Department (Emergency) 911 Nearest Engine Company New York City Fire Department - 911 or (718) 963-5311 Engine Company 206 1201 Grand Street Brooklyn, NY 11237 Major Cross Streets - Stewart and Morgan Avenue
- 2. *Police Department*

New York City Police Department - 911 or (718) 876-8500 90th Precinct 211 Union Avenue Brooklyn, New York 11211 Major Cross Street - Broadway and Montrose

New York City Police Department - 911 or (718) 383-3879 94th Precinct 100 Messerole Avenue Brooklyn, New York 11222 Major Cross Street - Manhattan Avenue and Lorimer Street 3. Nearest Hospitals

Woodhull Hospital 1720 Flushing Avenue Brooklyn, New York 11206 Major Cross Streets - Broadway & Grand Avenue Emergency Service 24 Hours Per Day Ambulance Service - Yes Phone (718) 936-8000

Astoria General Hospital 25-10 30th Avenue Long Island City, New York 11102 Major Cross Streets - Crescent and 30th Avenue Emergency 24 Hours Per Day Ambulance Service - 911 Phone (718) 932-1000

Boothe Memorial Medical Center 56-45 Main Street Flushing, New York 11355 Major Cross Streets - Booth Memorial and Main Street Emergency Service 24 Hours Per Day Ambulance Service - Yes Phone (718) 670-1100

Saint John's Hospital 70-35 113 Street Forest Hills, New York 11375 Major Cross Streets - Queens Blvd., Jewel Ave. and Main Street Emergency Service 24 Hours Per Day Ambulance Service - 911 Phone (718) 457-1300

Kings County Hospital 451 Clarkson Avenue Brooklyn, New York 11203 Major Cross Streets - New York Avenue & Albany Avenue Emergency Service 24 Hours Per Day Ambulance Service - Yes Phone (718) 735-3745

Brooklyn Hospital 121 DeKalb Avenue Brooklyn, New York 11201 Major Cross Streets - Ash Land Place and Flatbush Avenue Emergency Service 24 Hours Per Day Ambulance Service - 911 Phone (718) 403-8000
Wyckoff Heights Hospital 374 Stockholm Street Brooklyn, New York 11237 Major Cross Streets - St. Nicholas and Wyckoff Avenue Emergency Service 24 Hours Per Day Ambulance Service - 911 Phone (718) 963-7272

4. Government Response Agencies

New York State Department of Environmental Conservation Phone (518) 402-8652 Spills Hotline (800) 457-7362

New York State Department of Environmental Conservation – Region 2 Division of Materials Management 47-40 21st Ave. Long Island City, NY 11101 (718) 482-4996

DSNY Permits and Inspections (646) 885-5027

New York City DEP Complaints and Emergency Services (718) 699-9811

14.2 Emergency Coordinators (360-1.9(h)(1)(ii))

The shift supervisor is designated as the primary Emergency Coordinator for his/her respective shift. Home telephone numbers for these individuals are listed above. A supervisor will be present on-site during each operating shift. It is the responsibility of this person to identify and coordinate any special or emergency activities during operating hours. Events that require the attention of the Emergency Coordinator include fire, explosion, air/soil releases, unscheduled facility shut-down, power failure, and delivery of unauthorized waste to the facility (other than an incidental amount).

Should an event take place, the Emergency Coordinator will secure the facility by closing off the affected area. Once the area has been isolated from traffic, appropriate actions will be taken, for example, activation of fire extinguishers, or removal of combustible material. A logbook will be maintained by the Emergency Coordinator to record events, date, time, description, actions/repairs, etc. All incidents of receipt of unauthorized waste will be recorded in the respective daily logs with such information included in the subsequent annual report to the NYSDEC.

The Emergency Coordinator will be responsible for contacting any additional support teams as needed to assist in responding to an event. If evacuation of the facility is necessary, the Emergency Coordinator will activate the alarm, and use walkie talkies and cell phones to alert employees, direct employees to evacuation routes and oversee roll calls at assembly areas. If the emergency shutdown

results in an unscheduled facility shutdown lasting more than 24 hours NYSDEC staff will be notified immediately.

14.3 Spill Control and Cleanup

Waste materials not permitted to be unloaded at this facility are discussed in the Unauthorized Waste Control Program (section 5.2). Such materials include, but are not limited to, hazardous and regulated medical waste, asbestos, and petroleum-contaminated soil. Some of the items which may impact the operation if delivered or spilled at the facility include drums of unknown hazardous materials; chemicals in fiber packs, bottles or plastic containers; solvents; old electrical transformers possibly containing polychlorinated biphenyls (PCBs); medical wastes; or asbestos containing material (ACM). Materials which are not acceptable for unloading at the transfer station may be unknowingly or deliberately brought to the facility, hidden among the other debris in the load.

As noted in section 5.2, all facility staff will be trained to identify acceptable waste and instructed to report any unacceptable waste to the shift supervisor on duty who also serves as the Emergency Coordinator for the shift. Shift supervisors, spotters, and mobile equipment operators will also receive training in handling unauthorized wastes in containers and managing limited spills of other materials, as appropriate, while awaiting aid from a HazMat team, if necessary. These staff will be trained to identify substances which may require outside assistance. If no special control is required then operations at the facility will continue. Reference to Personnel Training Plans are contained in Section 16. If special controls are required then part or all of the activities at the facility may need to be halted. In the case of violent chemical reactions, fire, or dangerous vapors resulting from a spill evacuation procedures will be followed.

Depending on the nature of the spill, affected areas of the transfer station may need to be segregated. Solid material spills, such as soils or muds may be easily scooped up with a shovel or a wheel loader, and placed into a containment drum labeled and staged for alternative off-site disposal. Sweeping or washing of the area may be all that is required to complete the cleanup.

For liquid waste spills, such as for chemicals or petroleum products, cleanup may be performed by: segregating the spilled material from the surrounding waste by pushing the wastes away with a shovel or wheel loader; placing an absorptive barrier (such as absorptive pillows) around, or on the down slope side of the spill, or on the spill; identifying and neutralizing the material with spill control powders; and finally, scooping the material into containment drums using shovels or a wheel loader. Final cleanup of the floor residue may be performed by working dry absorptive powders into the material and drumming the waste.

Suspect ACM may be segregated by pushing away adjacent wastes and covering the ACM with 6 mil polyethylene sheets prior to removal by trained asbestos abatement personnel; bulging or rusted drums and containers of unknown liquid wastes may be kept segregated for a licensed hazardous waste handler to overpack, remove and dispose; unlabeled electrical transformers may be segregated for removal and disposal by a licensed PCB waste handler; fuming liquids, moist fuming solids, materials spontaneously producing heat (exothermic materials) and bulk chemicals may require notification of a HazMat team for control and removal.

Appendix D contains WMNY's Unauthorized Waste Procedures

"In the case of each of the following events: (i) a fatality or injury on-site; (ii) a fire, explosion, or

other significant event which affects facility operation; (iii) the activation of the facility's alarm system; or (iv) an unscheduled closure of the subject facility exceeding 24 hours, the Waste Management will take the following steps, as appropriate. If the event occurs on a non-holiday weekday, from 9am-4pm, Waste Management will, within one hour following such event, send the Regional Materials Management Engineer (DEC Engineer) a telephone message (at 718-483-4996) and an e-mail message (pursuant to the Department's instructions delivered to the Permittee prior to the issuance of the instant permit) with the following information: (a) the name and address of the facility where the event occurred; (b) the date, time, and nature of the event; and (c) the name and phone number of a facility staff person the Department can contact regarding such event. (If the event occurs at a time other than a non-holiday weekday, from 9am-4pm, Waste Management will, within one hour following the event, leave such information in e-mail and voicemail messages for the DEC Engineer). Regardless of the time of the event, before noon on the first business day following the event, Waste Management will, in addition, e-mail a statement to the DEC Engineer with the following information: (a) the name and address of the facility where the event occurred, (b) the date, time, and specific location of the event; (c) the circumstances leading up to the event, (d) an adequately detailed description of the subject event; (e) an explanation of how the event was handled; (f) an explanation of the steps that Waste Management will take to avoid and/or better handle such an event; and (g) the name and phone number of a facility staff person the Department can contact regarding such event."

14.4 Emergency Equipment (*360-1.9(h)*(*1*)(*iii*), *11.4(k)*)

Potential safety hazards presented by the operation of this facility consist of fire and smoke or exposure to hazardous chemicals. Occupational hazards could result from the use of mechanical equipment, as well as slip/trip/fall hazards.

All employees engaged in the processing of solid waste will be required to wear work boots, dust masks, gloves, goggles or face shields, and ear protection as appropriate. Mobile equipment will have environmentally controlled cabs for protection of the operators. All employees will receive basic first aid training and will be shown the location of all safety equipment (including equipment emergency shut-offs) during their training.

Fire Protection equipment is provided as shown on the water and sewer plan, Sheet Nos. 14A & 14B, Drawing No. SN-1 and the Fire Protection/Evacuation Plan, Sheet No. 16, Drawing FE-1.

Spill control gear and materials and personal protective equipment will be kept in the unauthorized waste storage area. Base stocks of materials will be maintained by the designated individuals and inventories checked on a regular schedule. Missing or consumed items will be restocked. Stock items include oil absorptive pillows and dams, absorptive powders, neutralizing agents, shovels, and brooms, and cleanup support items such as drums and overpack containment drums. Personnel protective equipment (PPE) items may include poly-coated TYVEK protective coveralls, protective gloves, and splash shields. For more serious situations, contractors trained in hazardous materials handling will supply air purifying respirators with cartridges or self contained breathing apparatus to perform their work, if needed.

14.5 Evacuation Plan (360-1.9(h)(1)(iv))

During emergency situations, evacuation signals will be given by the fire alarm system or alternately through the use of bullhorns. In the event of a fire, facility smoke detectors will activate the fire

alarm system, signaling all site personnel to quickly and calmly exit the facility. In other emergency situations, an evacuation signal will be broadcast by activating the alarm system manually or through the use of bullhorns. The scale house operator will direct all trucks to exit the facility to make room for emergency responders.

Upon hearing the evacuation alarm, all employees will shut off and leave operations equipment, and proceed calmly to the nearest personnel door. Tipping floor spotters will direct all collection vehicle drivers to discontinue unloading, shut off all engines, and exit the building with facility employees. Evacuation routes from the building and the site are shown on Sheet No. 16, Drawing No. FE-1 (360-1.9(h)(1)(iv)). All employees will assemble in the scale house area for further instructions and assistance by emergency responders.

Fire drills, as well as initial safety training, will be conducted for each shift to rehearse these procedures.

14.6 Operational Contingencies (*360-11.2(a)(3)(vi)*)

This Contingency Plan addresses the hazards most likely to be encountered during the operation of the proposed facility. This plan is not, however, to be construed as a compilation of all possible emergencies or hazards which might occur or exist at the site. It is the sole responsibility of the facility operator to ensure that the facility is operated, at a minimum, in conformance with the Occupational Safety and Health Agency (OSHA) regulations detailed in 29 CFR Parts 1900 through 1910, inclusive, and any other pertinent local regulations, so that the health and welfare of all workers is adequately safeguarded.

Potential hazards

This facility does not accept any hazardous, liquid, radioactive, regulated medical, contained gaseous, or other wastes not specifically identified previously. Therefore, the hazards for which a potential exists at this facility and which this plan addresses are fire, explosion, equipment breakdown, plant shutdown, unusual traffic conditions, and receipt of unauthorized waste. In the event where any of these major hazards occur (as listed above), WMNY personnel will call the appropriate NYSDEC and NYCDOS offices and personnel.

Fire and explosion

All putrescible solid waste is handled indoors. This material is moved through the facility using mobile equipment in a quick and efficient manner minimizing the possibility of heat buildup and spontaneous combustion.

Fire protection for the facility is provided by portable fire extinguishers located throughout the facility and in each route collection vehicle. In addition, a fire sprinkler system is installed in the building. Fire hydrants are located on all streets in the vicinity of the facility (Varick Avenue, Ten Eyck Street, Meadow Street).

In the event of a fire, the following steps will be taken:

1) The person first observing the fire will notify his supervisor immediately. The supervisor will notify the NYC Fire Department.

- 2) Area personnel will secure the nearest fire extinguishers and apply these to the fire.
- 3) Machine operators will turn the waste pile so as to expose any combusting material.
- 4) Hoses will be deployed from hose stations.
- 5) Fire Department personnel will extinguish any fire not controllable by site personnel.
- 6) Evacuation will be implemented if this is necessary.
- 7) Until clearance is given by the Fire Department no waste will be tipped within the facility.

Fire extinguishers will be available inside the transfer station building, at the on-site office, and on vehicles. All fire extinguishers will be capable of fighting class A, B, and C fires as defined by the Underwriters Laboratories. All operating personnel will receive periodic training in the proper use of firefighting equipment. Plant personnel will be trained in the use of fire extinguishers and to immediately call for professional assistance when necessary.

The New York City Fire Department, Engine Company 206 is located at 1201 Grand Street, Brooklyn, NY.

Equipment breakdown

Most equipment failures will not cause a plant shutdown due to the availability of replacement equipment and available storage volume for putrescible solid waste. In the event an equipment malfunction or storm event prompts a plant shutdown, several alternatives are available depending on the magnitude of the malfunction. The following options for mechanical equipment items are listed in order of preference. Should a certain action be inadequate to address the malfunction, the next action listed will be attempted. The following actions will be taken, as appropriate, to remedy equipment malfunction:

- troubleshoot and repair,
- obtain alternate equipment from the BQE facility or another WMNY facility,
- rent alternate equipment,
- bypass the affected operation.

In the event of facility shutdown, commercial waste could be turned away at the gate. An attempt may be made to cancel scheduled deliveries. In some instances, equipment failure will not cause an interruption of an extended nature because equipment repairs can be made or alternate equipment obtained quickly. In such instances, the facility may implement a suspension of affected processing operations and if necessary suspend acceptance of certain type(s) of waste, without implementing a full facility shutdown. During this suspension, waste may still be accepted provided that the facility's daily cutoff for incoming waste will not be exceeded. However, processing operations affected by the equipment breakdown and, if necessary, acceptance of certain type(s) of waste would be temporarily suspended. Staffing and controls sufficient to handle the waste in accordance with Part 360 would be maintained at the facility during the period when affected processing operations are suspended. Under the circumstances described above, the facility will continue to comply strictly with all documents supporting the permit application, including operating the facility as described in the NYSDEC-approved engineering report and as shown on all NYSDEC-approved plans as per Part 360-1.7(a)(1)(i).

Mechanical equipment to be used at the facility will consist of the following:

- 1. Rubber Tire Loaders
- 2. Grapples and excavators
- 3. Forklifts
- 4. Scales

In the event of equipment breakdown, several alternatives are available, depending on the degree of malfunction and the time required for repair. The Contingency Plan calls for the following (in order to priority):

A. <u>Rubber Tire Loaders (RTL), Grapples, and Forklifts</u>

- 1. Service and repair of RTL's;
- 2. Use other RTL's at the facility;
- 3. Obtain alternate equipment from the BQE or Varick 2 facility or another WMNY facility;
- 4. Divert solid waste to an alternate site for processing;
- 5. Direct transport of solid waste to an approved disposal site.
- B. <u>Scales</u>
 - 1. Service and repair of scale;
 - 2. Use alternate scale at facility;
 - 3. Install temporary scale until existing scale can be fixed.

Plant shutdown

The 215 Varick Avenue facility is serviced by Con Edison (electric) and the New York City Department of Environmental Protection, Bureau of Water Supply (water).

An interruption of water service would have little effect on the facility's operation. In the event that water service is lost at the facility, dust control could be accomplished through the use of a water truck. This water truck could be filled at other WMNY facilities in the area. The water truck would be used to maintain moisture conditions on facility roads and processing areas to minimize dust.

In the event of a wide-spread interruption of utility services due to weather damage, waste could still be accepted, since there is available storage volume at the site. The facility's lights, ventilation, odor control systems, scale house and other critical equipment can be powered by generators. Monitoring of incoming waste would be accomplished by maintaining a record of all trucks entering and leaving the facility including information on the type and capacity of the trucks or containers, and the type and weight of the material it is carrying. The weight of the material will be monitored by generating manual tickets for the inbound and outbound trucks using data from the scales. The facility will keep a running total of waste processed to ensure that the NYSDEC permitted capacity for the facility is not exceeded.

In the event of a wide spread interruption that disables the organics processing equipment SSO would not be processed into EFW and instead be diverted to the putrescible waste transfer station for codisposed with the PSW. *Electrical Shutdown*

In the event of an electrical shutdown, the scales and scale houses are equipped with back-up generators, facilitating their constant use and data exchange. During an electrical shutdown, the remainder of the facility will be served by back-up generators. However, if these generators cannot be used, PSW will be loaded into open-top trailers until power is restored.

Unusual traffic conditions

WMNY maintains contracts for vehicles to transport waste to and from its facility. Unusual traffic conditions will be handled in accordance with State DOT standard procedures and the terms of the transporters Contingency Plan. Street traffic in and around the facility is directed at all times by several spotters and gate managers at each gate. Spotters will be used at all times to verify lateral and vertical clearance and traffic conflicts during all vehicle movement. The facility provides easy access to collection and transfer vehicles during normal operations. Traffic within the facility is directed by traffic control personnel and by a security officer located at the facility's entrance. However, the waste haulers are responsible for all plans and procedures for handling unusual traffic conditions outside of the facility (360-11.2(a)(3)(vi)). WMNY does maintain contracts with many licensed solid waste trucking companies in the event that an unusual traffic condition prevents certain haulers' transfer trailers from reaching the Varick I facility. By maintaining contracts with many trucking companies, the Varick I facility has multiple options available to help maintain an adequate supply of trailers to remove the waste from the facility.

WMNY operations can be reached at (718) 533-5266, 24-hours a day, six days a week. Also, several key personnel are always on call to personally supervise any emergencies. The person in charge of emergency response is Peter DeLuca. The following emergency response procedures for the Transfer Facility apply for transportation incidents.

Truck breakdown

- 1. In the event of a mechanical breakdown either from the generator to the transfer facility or the transfer facility to the landfill, the driver is instructed to remove his truck from the road, to the extent possible, leaving the trailer/container closed at all times. He/she will remain with the truck at all times.
- 2. The driver will contact the 215 Varick Avenue transfer facility with either an onboard telephone or a CB or two-way radio to notify WMNY of the situation. The transfer facility or landfill (depending upon which is closer) will then dispatch a repair crew, either from the transfer facility or landfill directly, or through contracted emergency response crews. These crews are available 24 hours per day, seven days a week.
- 3. WMNY will notify the local police and fire department in the event that the truck cannot be rendered operational within 24 hours of the original notification from the driver.
- 4. If the truck cannot be made operational, it will be towed to the transfer facility or landfill and the waste material will be off-loaded.

Accident

- 1. In the event of an accident, the following procedures shall be followed:
 - a. For accidents resulting in damage only to the truck, the procedures set forth above in A., Truck Breakdown, shall be followed.
 - b. In the event of an accident which results in damage creating any potential for release of solid waste a replacement truck will be dispatched in addition to the above procedures.

Site evacuation

In the event that the emergency response gear maintained at the facility is inadequate for the task at hand and the nature of the emergency is such that there is a real and present risk of injury to the site personnel, the site will be evacuated. Such an evacuation will be announced by use of an alarm horn and verbal instructions from supervisors. Appropriate agencies, specifically the New York City Police Department (90th Precinct) at 211 Union Ave., and the New York City Fire Department (Engine Company 206 at 1201 Grand Street) shall be immediately notified of such a decision so that any dangers to the public at large may be promptly and adequately assessed. The senior person at the site will make the decision to evacuate the site and will, at that time, indicate his decision by verbally notifying all personnel, should such action be possible, and activating an alarm. The evacuation will proceed according to posted evacuation routes; personnel will assemble at the entrance gate. Roll calls will be performed at the assembly areas so that all personnel may be accounted for.

Evacuation routes will lead out onto Varick Avenue, and assemble at the front of the WMNY facility entrance at 215 Varick Avenue, (see Sheet No. 16, Drawing No. FE-1). Evacuation routes will be labeled as per 29 CFR 1910.145 and any applicable local rules and regulations.

Safety and emergency equipment

Emergency equipment will be placed and stored at the facility and will include the following:

- 1. First Aid kits, eye wash fountain, safety glasses, work gloves, safety drum plugs, Speedy Dry absorbent.
- 2. Fire extinguishers, Type ABC
- 3. Equipment for moving containers or debris
- 4. Two way radio communication on personal Walkie Talkie and intercom system.

Vehicles on location may be used to transport persons to hospitals when the need arises.

14.7 Emergency Operations

Due to winter storm events, New York City Department of Sanitation (DSNY), may intermittently request, in writing, that the facility operator temporarily receive up to 5000 TPD of PSW. In addition, the facility operator may periodically request, in writing, that the NYSDEC allow WMNY's 215 Varick Avenue facility to temporarily modify its operation based on a rail carrier's written report to WMNY of a failure in rail service.

Each such request by DSNY or WMNY shall contain the following information: The cause of the emergency operation, reasons why the condition is an emergency, and the effects of the emergency in general; the effects of the emergency that create the need for the emergency operation; the date and time that the emergency operation shall commence, and the date and time it is expected to end; what the requestor has done, is doing and plans to do to address the causes and effects of the emergency; the requestors potential alternatives to resolving the emergency and its effects; the advantages and disadvantages of such alternatives; the names and addresses of each facility where the emergency operation is requested; the emergency operation that is requested at each such facility, and the name, signature, title, and phone and fax number of the person making such request.

In order to act on such requests in a manner that (1) adequately protects the environment and (2) provides adequate notification of NYSDEC the facility operator shall deliver three copies of a completed "Notification of Emergency Operation" to NYSDEC; on to the Regional Permit Administrator, by fax, and two to the Regional Solid Materials Engineer, one by fax and one by email. A sample of such notice is attached. Prior to commencement or renewal of each such emergency operation, as appropriate, three copies of such notice shall be so delivered to the NYSDEC. For emergency operation requested by the DSNY such delivery shall occur at least one business day prior to such commencement or renewal. For emergency operation requested by Waste Management based on its receipt of a rail carriers written report of a failure in rail service such delivery shall occur at least one business day prior to such commencement or renewal, or as soon as possible following Waste Management's receipt of such written notice. Upon the facility operator's receipt of NYSDEC written direction, the facility operator shall cease or modify such emergency operation as so directed.

(on facility letterhead)

[insert date] Notification of Emergency Operation Waste Management of New York at 215 Varick Avenue, Brooklyn, NY 11237 NYSDEC No. 2-6104-00010-0001

1. The emergency operation is effective at 12:01m on **[insert proposed start date]**. The emergency operation shall expire at 11:59pm **[insert proposed end date]** or at the conclusion of the emergency condition (whichever is sooner) described in and pursuant to the attached **[insert date]** request for emergency operation (hereinafter, "request") from (check one)

New York City Department of Sanitation (DSNY)

Waste Management of New York, based on the attached written report from a rail carrier of a failure in rail service

The facility's emergency operation shall not continue for more than 21 consecutive days without written authorization from NYSDEC.

- 2. During the emergency operation, the facility operator may accept up to the daily throughput of PSW specified in the request; however, the facility operator shall not accept more than 5,000 TPD of PSW. During the emergency operation, the facility operator shall store no more than 10,000 cubic yards of PSW at any one time. Any increase in the subject facility operator's throughput or storage capacity, as defined in its current NYSDEC permit, shall be limited to PSW delivered to the facility operator by DSNY or its authorized representative(s).
- 3. During the emergency operation, the facility operator shall (check all that apply)



suspend its removal of PSW within 48 hours of receipt

- on Sunday(s), short-haul PSW to its Harlem River Yard facility
- 4. During the emergency operation, the facility operator shall meet all applicable performance standards (other than the waivers specified herein) found in (a) 6 NYCRR Part 360, (b) its current NYSDEC permit, (c) the Engineering Report and other documentation cited in its current NYSDEC permit, and (d) the SEQR Determination(s) pertinent to its subject operation. In addition, the subject facility may operate on any Sunday specified in the attached request.
- 5. During the emergency operation, the facility operator shall perform all work in a manner that prevents nuisance odors, complies with the truck queuing and parking restrictions set forth in the facility operator's current NYSDEC permit, and otherwise adequately protects life, health, safety, property, and the environment.
- 6. Within two days following the end of the emergency operation, the facility operator shall fax and e-mail to the NYSDEC's Regional Solid Materials Engineer, a report specifying the date and time the emergency operation commenced and ended, the number of tons of PSW and the number of collection vehicles it received each day of the emergency operation, and how it handled any unexpected or unusual occurrences it experienced during the emergency operation. For not less than seven years, a copy of such report shall be maintained at the subject facility and available for inspection by the Department.
- 7. Starting 30 September 2008, within two days following the issuance of the instant "Notification of Emergency Operation" and each associated request and report, each such document shall be posted on the facility operator's public web site and maintained thereon for at least two years.
- 8. Upon inspection of the subject facility, the NYSDEC may decrease the above-listed capacities or otherwise reduce or condition the subject facility's operation under the subject emergency operation. Upon the facility operator's receipt of NYSDEC's written direction, the facility operator shall cease or modify such emergency operation, as so directed.

signature (print name) (print title)

 \square

15. STAFFING PLAN

The 215 Varick Avenue facility is staffed by the facility manager and other personnel to ensure the safe and efficient operations of the facility.

The transfer station is operated under the oversight of a Facility Manager, who is present at the facility during normal business hours, Monday through Friday. A clerical assistant on duty during the same hours keeps time cards and maintain facility records. The transfer station operates six days per week, 24 hours per day.

Personnel operating within the transfer station and scale house are trained in all operational and safety aspects of the facility. Waste Management has a comprehensive training program for all personnel. The elements of this program are presented in Section 16. This includes protocols for the safe tipping, compaction, and loading of materials, recognizing and handling unauthorized wastes (see Appendix D for copies of the Unauthorized Waste Procedures and Employee Training Document), dealing with unlicensed carters, etc. In addition, facility personnel will be OSHA trained, as appropriate.

Descriptions of the duties of each of these staff are provided below.

Transfer Facility Manager: Overall responsibility for all aspects of operations. Conducts facility self-inspections, and plans and oversees all remedies of malfunctions. Prepares or approves all reports associated with facility operations. Authorized to implement contingency plan. Participates in the development and implementation of training and safety programs. Responsible for staffing, terminations, and all personnel matters. Direct authority over all facility personnel. Responsible for purchasing decisions and equipment readiness, within company guidelines.

Clerical Assistant: Responsible for computer data entry, word processing, filing, maintaining purchasing records and employee timecards, switchboard/reception.

Shift Supervisor: Line supervisor for all shift personnel. Coordinates and supervises all operations, repairs, and maintenance. Manages and supervises handling of unauthorized wastes.

Scale House Operator: Responsible for overseeing and recording the weight, content, origin/destination of vehicles transporting waste to the facility. Responsible for initial inspection for unauthorized waste. Responsible to monitor gate traffic. Helper assists in all assigned activities.

Equipment Operator: Operates mobile equipment used in handling and processing solid waste. Operates sweeper. Responsible for equipment inspection and requests for maintenance or repair. Trained in proper inspection and safety procedures. Identifies unauthorized wastes.

Process Equipment Operators: Operates organic waste processing equipment, test organic slurry for target properties, blends slurry for desired slurry products, loads out slurry.

Traffic Controller: Directs incoming RCVs into the site. Directs unloading traffic accessing the tipping floors. Directs outgoing RCVs to the outbound scales. Coordinates flow of trailers into and out of the site.

Laborer: Sorts through solid waste to identify unauthorized wastes; segregates such material and

transfers it to designated storage areas. Performs washdown of the emptied tipping floor. Assists with spill cleanup and other miscellaneous tasks as necessary.

Mechanic: Responsible for on-site maintenance and repairs of equipment/machinery. Helper assists in all assigned activities.

16. **PERSONNEL TRAINING REQUIREMENTS** (*360-1.14(e, u)*; *11.2(a)*(*3)*(*v*))

Waste Management of New York, LLC Health and Safety Plan is kept on site and readily available at all times (See Appendix I).

In addition to the requirements of the Health and Safety Training Plan, employees are required to attend and successfully complete several WM training courses on transfer station operations and safety. These include the following course elements:

- Universal Waste
- Air Quality
- Inspections and Interactions
- Prohibited and Special Wastes
- Vehicle and Equipment Leaks
- Internally Generated Waste
- CFC-Containing Appliances and E-Waste
- Process Water Management
- Storm Water Management
- Nuisance Mgmt and Community Compatibility
- Housekeeping
- Recognizing and Reporting Environmental Issues

If Department approved training programs are available, employees must also attend these courses.

Pursuant to 360-1.14(u), operation of the facility is conducted under the direction of a facility manager who has the responsibility, authority and knowledge to make and implement decisions regarding operating conditions at the facility (see Appendix D and Section 15 for information on Unauthorized Waste - Employee Training).

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17. CLOSURE PLAN (360-1.14(w))

The design life of the transfer station is 30 years. Upon termination of use, including cessation of operations for more than a year, the facility will be closed and maintained in a manner that will minimize the need for on-going maintenance or corrective actions. At the end of the useful life of the transfer station, closure will provide for the complete decommissioning of the facility, in such a manner at to present no adverse environmental impact to the community. There will be no routine discharges or releases to the environment. Spills will be contained and removed at the time of occurrence, with the assistance of emergency responders, if necessary, and monitored as required. Therefore, the need for a site investigation to facilitate closure is not anticipated. WMNY will employ a licensed exterminator to investigate the building for vectors. If vectors are found during the investigation appropriate treatment to be performed, and treatment will continue until such time as the building is demolished. This investigation and possible treatment will be documented and provided to the NYSDEC as part of the closure report. The documentation for the investigation and treatment is also required by the New York Building Code prior to any demolition of the building.

Upon making a decision to close the facility, WMNY will notify NYSDEC at least 180 days prior to beginning closure activities. No solid waste will be accepted at the facility within 30 days prior to the actual closure date. Within 24 hours of receiving the final quantity of solid waste, WMNY will load all such material into transfer trailers and remove it from the building. Within 30 days of the final shipment, all residual unauthorized wastes will be removed from the facility and properly disposed. The entire facility will be cleaned thoroughly. The operations floor of the processing building will be pressure washed and deodorized, and the auxiliary areas cleaned appropriately. All mobile equipment, spare parts, and waste oils and other fluids will be removed and the maintenance areas cleaned.

Once the facility cleaning is completed, the facility will be left intact for inspection by NYSDEC. These activities will be completed within 90 days of receiving the final quantity of waste. Final disposition of the structures, scales, and stationary equipment will depend on the intended subsequent use of the property, if any. Closure activities will be performed in compliance with NYSDEC directives.

When closure is completed, WMNY will submit to the NYSDEC certification by an individual licensed to practice engineering in the State of New York that the facility has been closed in accordance with the NYSDEC's requirements. This certification of completion will be submitted to NYSDEC within 10 days after the closure of the facility.

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18. SURETY/FINANCIAL ASSURANCE (*360-1.12*)

WMNY will maintain an insurance policy to protect against losses related to property damage and/or personal injury. The current policy provides coverage for no less than \$5 million in such losses.

A financial surety in the amount of \$795,943.00 has been obtained by WMNY and submitted to NYSDEC to cover the cost of having the facility properly closed should WMNY fail to perform such closure in a Department-approved manner. A copy of this bond is included in Appendix N. Upon NYSDEC approval of the closure performed by the facility owner/operator, such surety will be withdrawn.

An account has been established to cover the Department's costs in monitoring the facility. This account is replenished quarterly.

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ENGINEERING REPORT - PLANS

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WASTE MANAGEMENT OF NEW YORK, LLC PART 360 PERMIT MODIFICATION - CORest ENGINEERING PLANS

LIST OF DRAWINGS

SHEE ⁻ NO.	T DWG NO.	TITLE
1	TS-1	TITLE SHEET
2	AL-1	ABBREVIATIONS AND LEGEND
3	RP-1	REGIONAL PLAN
4	VC-1	VICINITY PLAN
5A	SP-1	OVERALL SITE PLAN - PHASE 1
5B	SP-1	OVERALL SITE PLAN - PHASE 2
6	SP-2	SITE PLAN AND DRAINAGE CONNECTING ROADWAY AND CONTAINER STORAGE AREA
7	SP-3	SITE PLAN AND DRAINAGE 101 VARICK AVENUE YARD
8A	FP-1 (CCI)	OPERATIONAL FLOOR PLAN 215 VARICK AVENUE – PHASE 1
8B	FP-1 (CCI)	OPERATIONAL FLOOR PLAN 215 VARICK AVENUE – PHASE 2
9A	FP-2 (CCI)	ORGANIC AREA DETAILED FLOOR PLAN AND EQUIPMENT LAYOUT PHASE 1
9B	FP-2 (CCI)	ORGANIC AREA DETAILED FLOOR PLAN AND EQUIPMENT LAYOUT - PHASE 2
10	FP-3 (CCI)	STORAGE TANKS SECTION
11	PF-1 (CCI)	PROCESS FLOW DIAGRAM AND MASS BALANCE - ORGANIC WASTE
12	PS-1 (CCI)	PROCESS SCHEMATIC
13A	DP-1 (CCI)	DRAINAGE PLAN 215 VARICK AVENUE – PHASE 1
13B	DP-1 (CCI)	DRAINAGE PLAN 215 VARICK AVENUE – PHASE 2
14A	SN-1 (CCI)	WATER SUPPLY, LEACHATE COLLECTION AND SANITARY SEWER PLAN 215 VARICK AVENUE — PHASE 1
14B	SN-1 (CCI)	WATER SUPPLY, LEACHATE COLLECTION AND SANITARY SEWER PLAN 215 VARICK AVENUE – PHASE 2
15A	VP-1 (CCI)	VENTILATION PLAN - PHASE 1
15B	VP-1 (CCI)	VENTILATION PLAN - PHASE 2
16	FE-1	FIRE PROTECTION/EVACUATION PLAN
17	TQ-1	
		INALLIC QUEING FLAN

215 VARICK AVENUE TRANSFER STATION **BROOKLYN, NEW YORK** DEC PERMIT No 2-6104-00010/00001

LIST OF APPLICABLE REGULATIONS

NEW YORK CITY

TITLE 16 - DEPARTMENT OF SANITATION CHAPTER 4 - TRANSFER STATIONS SUBCHAPTER A - NON-PUTRESCIBLE SOLID WASTE TRANSFER STATIONS SUBCHAPTER B - PUTRESCIBLE SOLID WASTE TRANSFER STATIONS

TITLE 15 - DEPARTMENT OF ENVIRONMENTAL PROTECTION CHAPTER 18 - PROTECTION OF CONTAMINATION OF THE NYC WATER SUPPLY CHAPTER 19 - USE OF PUBLIC SEWERS

TITLE 24 - DEPARTMENT OF HEALTH TITLE IV - ENVIRONMENTAL SANITATION

TITLE 27 - CONSTRUCTION AND MAINTENANCE CHAPTER 1 - BUILDING CODE

ZONING RESOLUTIONS OF THE CITY OF NEW YORK ARTICLE IV - MANUFACTURING DISTRICT REGULATIONS CHAPTER 2 - USE REGULATIONS

FEDERAL

CODE OF FEDERAL REGULATIONS TITLE 40 - PROTECTION OF ENVIRONMENT PART 122 – EPA ADMINISTERED PERMIT PROGRAMS NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PART 123 - STATE PROGRAM REQUIREMENTS PART 257 - CRITERIA FOR CLASSIFICATION OF SOLID WASTE

DISPOSAL FACILITES AND PRACTICES

NEW YORK STATE

TITLE 6 - DEPARTMENT OF ENVIRONMENTAL CONSERVATION CHAPTER IV - QUALITY SERVICES SUBCHAPTER B - SOLID WASTES PART 360 - SOLID WASTE MANAGEMENT FACILITIES

TITLE 6 CHAPTER X - DIVISION OF WATER RESOURCES SUBCHAPTER A - GENERAL ARTICLE 3 - SPDES SUBCHAPTER B - CLASSES & STANDARDS OF QUALITY AND PURITY ASSIGNED TO FRESH SURFACE AND TIDAL SALT WATERS ARTICLE 13 - NYC WATER SERIES PART 890 - NYC WATERS



IT IS A VIOLATION OF THE PROFESSIONAL LICENSE LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY. UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THE ALTERING ENGINEER SHALL AFFIX HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE AND DATE OF ALTERATION.

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LEGEND

Sa	PROPOSED SANITARY SEWER PIPE
<u>S</u>	Existing Sanitary Sewer Pipe
	PROPOSED WATER SUPPLY PIPE
······································	Existing Water Supply Pipe
G	Existing Gas Line
X	Existing Fence
	PROPOSED DRAINAGE SYSTEM PIPE
	Existing Edge of Pavement
	PROPERTY LINE
	Existing Easement
	PROPOSED 10' CONTOUR

ABBREVIATIONS

A.F.F. = ABOVE FINISHED FLOOR

- APPROX. = APPROXIMATE
- AVE. = AVENUE
- BLDG. = BUILDING
- BW = BOTTOM OF WALL
- CB = CATCH BASIN
- C&D/CD = CONSTRUCTION AND DEMOLITION DEBRIS
- CONC. = CONCRETE
- CY = CUBIC YARDS
- D.I. = DROP INLET
- DIA. = DIAMETER
- DIP = DUCTILE IRON PIPE
- DSNY = NEW YORK CITY DEPARTMENT OF SANITATION
- DWG. = DRAWING
- EL. = ELEVATION
- ELECT. = ELECTRICAL
- EFW = ENGINEERED FOOD WASTE
- EXIST. = EXISTING
- FM = FORCE MAIN
- H.B. = HOSE BIBB

FT. = FEET

- H.P. = HIGH POINT
- HT. = HEIGHT
- HYD. = HYDRANT
- INV = INVERT
- LF = LINEAR FEET
- LOW = LIQUID ORGANIC WASTE
- LP = LEACHING POOL
- MAINT. = MAINTENANCE
- MEZZ. = MEZZANINE
- MH = MANHOLE
- MSW = MUNICIPAL SOLID WASTE
- NTS = NOT TO SCALE
- NYAR = NEW YORK AND ATLANTIC RAIL
- NYCDOS = NEW YORK CITY DEPARTMENT OF SANITATION
- OHD = OVERHEAD DOOR
- PROP. = PROPOSED
- RCP = REINFORCED CONCRETE PIPE
- RCV = REFUSE COLLECTION VEHICLE
- PSW = PUTRESCIBLE SOLID WASTE
- S = SLOPE OF PIPE
- SAN = SANITARY
- SERV. = SERVICE
- SMH = STORM WATER MANHOLE
- SS = STAINLESS STEEL
- SSO = SOURCE SEPARATED ORGANIC WASTE
- ST = STORM
- TYP. = TYPICAL

W = WATER

TW. = TOP OF WALL

SYMBOLS

- PROPOSED DROP INLET
- Existing Catchbasin
- PROPOSED MANHOLE •
- 0 Existing Manhole
- PROPOSED SPOT ELEVATION _x15.0
- Ø Existing Hydrant
- ------Existing Utility Pole
- SURFACE DRAINAGE FLOW ARROW $\overline{}$
- FLOW DIRECTION IN PIPE
- PROPOSED TRENCH DRAIN _____
- (S)LOCATION OF SPOTTERS FOR TRAFFIC CONTROL
- \bigcirc LOCATION OF ODOR CONTROL MOUNTED ON 55-GALLON DRUMS
- TRAILERS
- RCVs \longrightarrow

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<u>GENERAL NOTES</u>

- 1. BASE MAPS OF DRAWINGS IN THIS SUBMISSION WERE DEVELOPED FROM DRAWINGS CREATED BY EARTH TECH IN 2007. ACTUAL EXISTING SURFACE FEATURES AND CONDITIONS MAY HAVE CHANGED.
- 2. ALL ELEVATIONS REFERENCE THE BROOKLYN HIGHWAY DATUM, UNLESS OTHERWISE NOTED.

FOR PERMIT ONLY REVISED SUBMITTAL JUNE 2014 DESCRIPTION DATE APPROV SYMBOL REVISIONS Prepared by: Prepared for: SAVIN ENGINEERS, P.C. 3 CAMPUS DRIVE PLEASANTVILLE, NY 10570 WASTE MANAGEMENT OF NEW YORK, LLC 123 VARICK AVENUE BROOKLYN, N.Y. 11237 DESIGNED BY: NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION K. SEAMAN, PE PART 360 PERMIT MODIFICATION - CORe* VARICK 1 TRANSFER STATION DRAWN BY: G. NICOLAIS ABBREVIATIONS AND LEGEND CHECKED BY: J. FITENI, PE SUBMITTED BY: SHEET NO .: DATE: SCALE: DRAWING NO .: AUGUST 2013 | NO SCALE J. FITENI, PE 2 AL-1





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SOURCE: ZONING MAPS 13a, 13b, 13c, AND 13d, THE NEW YORK CITY PLANNING COMMISSION.

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Major Zoning Classifications: The number(s) and/or latter(s) that follows on R, C or M Jatriet designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.

 R - RESIDENTIAL DISTRICT
C - COMMERCIAL DISTRICT
M MANUFACTURING DISTRICT
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	DESIGNED BY: K. SEAMAN, PE DRAWN BY: G. NICOLAIS	NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION PART 360 PERMIT MODIFICATION - CORE VARICK 1 TRANSFER STATION PROCESS SCHEMATIC							
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