

OPERATION PLAN
FOR
VISTA LANDFILL, CLASS III
APOPKA, FLORIDA

Prepared for:



WASTE MANAGEMENT INC. OF FLORIDA

Vista Landfill, LLC
242 West Keene Road
Apopka, Florida 32703

Prepared by:

*Grove Scientific & Engineering Co.
6140 Edgewater Drive, Suite F
Orlando, FL 32810*



Revised by Vista Landfill: August 2021

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Purpose and Scope of the Operation Plan	1
1.2	Facility Location	1
2	FACILITIES AND PERSONNEL	2
2.1	Designation of Responsible Persons	2
2.1.1	Employee Training	2
2.1.2	Training Records	3
2.2	Onsite Structures	4
2.2.1	Communications	4
3	ENTRANCE PROCEDURES	5
3.1	Control of Incoming Waste	5
3.2	Hours and Days of Operation	5
3.3	Weighing of Incoming Waste	5
4	TRAFFIC CONTROL AND UNLOADING	6
4.1	Facility Access Control and Security	6
4.1.1	Access to and Unloading at the Active Face	6
4.2	Signs, Traffic Flow	6
4.3	Random Load Checking Program	6
4.4	Recording Random Inspection Results	7
4.5	Management of Hazardous Wastes	7
4.6	Management of Special Wastes	8
5	WASTE RECORDS	9
6	METHOD AND SEQUENCE OF FILLING WASTE	10
6.1	Basic Operations	10
6.1.1	Filling Procedures	10
6.1.2	Working Face	10
6.1.3	Dumping	10
6.1.4	Pushing, Spreading and Compacting	11
6.1.5	Cover	11
6.1.5.1	Initial Cover	11
6.1.5.2	Intermediate Cover	11
6.1.5.3	Final Cover	11
6.2	Scavenging	11
6.3	Storm Water Control during Waste Filling	11
7	EQUIPMENT	13
7.1	Heavy Equipment and Support Equipment - Number, Type, Use	13
7.2	Back-Up Equipment	13
7.3	Equipment Care	14
7.4	Notification in Case of Equipment Failure	14
8	ENVIRONMENTAL AND OPERATIONAL CONTROLS	15
8.1	Stormwater Control	15
8.2	Dust Control	15

TABLE OF CONTENTS

8.3	Vector Control	15
8.4	Noise Control.....	15
8.5	Litter Control	15
8.6	Fire Control.....	15
8.7	Gas Control	16
8.7.1	Landfill Methane Perimeter Parameters.....	16
8.7.2	Gas Control Measures	17
8.7.2.1	Gas Flaring	17
8.7.2.2	Vertical Extraction Wells.....	18
8.7.2.3	Horizontal Collectors	18
8.7.2.4	Leachate Collection Riser Connections.....	19
8.7.2.5	Wellheads	19
8.7.2.6	Condensate	19
8.7.3	Control Point Decommissioning	19
8.8	Odor Control and Monitoring	19
8.8.1	Landfill Design and Operation	19
8.8.2	Weather	20
8.8.3	Odor Surveying.....	20
8.8.4	Odor Complaints.....	20
8.9	Water Quality Monitoring.....	21
8.10	Erosion Control	21
8.11	Leachate Containment and Control.....	22
9	CONTINGENCY OPERATIONS	23
9.1	Fire Control Plan.....	23
9.1.1	When Fire Occurs	23
9.1.2	"Hot Load" Procedures	24
9.1.3	Fire Extinguishers	24
9.2	Hurricane Preparedness	24
10	LANDFILL FINAL CLOSURE	25
10.1	Final Cover System.....	25
10.2	Erosion Minimization on Closed Areas	25
10.3	Inspections of Closed Area.....	25
11	FINANCIAL RESPONSIBILITY	25
12	OPERATING RECORD.....	27
13	OPERATIONS OF THE YARD TRASH RECYCLING FACILITY	28
13.1	Description of the Yard Trash Processing and Recycling Facility.....	28
13.2	Effective Barrier.....	28
13.3	Dust Control Methods.....	28
13.4	Fire Protection.....	28
13.5	Odor and Vector Control.....	29
13.6	Yard Trash Removal	29
13.7	Record Keeping and Reporting	29

TABLE OF CONTENTS

LIST OF FIGURES

- Figure 1 Site Location Map
Figure 2 Site Plan
Figure 3 Landfill Phasing Sequence
Figure 4 – Environmental Management Plan

ATTACHMENTS

- ATTACHMENT A PERSONNEL LIST
ATTACHMENT B GAS MONITORING REPORT FORM
ATTACHMENT C LANDFILL INSPECTION AND ODOR SURVEY FORM
ATTACHMENT D ODOR COMPLAINT FORM
ATTACHMENT E ODOR COMPLAINT TRACKING CHART
ATTACHMENT F HURRICANE PLANNING MANUAL
ATTACHMENT G GAS CONTROL FINAL BUILDOUT

1 INTRODUCTION

1.1 Purpose and Scope of the Operation Plan

The Operation Plan provides a detailed description of the daily operations of the Vista Landfill, Class III facility, including contingency operations for emergencies. This Operation Plan complies with the requirements of Chapter 62-701, Florida Administrative Code (FAC) and Chapter 66, City of Apopka Code of Ordinances (a.k.a. Solid Waste Management Ordinance – SWMO).

1.2 Facility Location

Vista Landfill, Class III facility is located in the City of Apopka. The general site location is shown in Figure 1. The site is within Section 21, Township 21 South, Range 28 East in Orange County, Florida. The main entrance of the facility is located at latitude 28°38'24.5" N, longitude 81°80'41.7"W. The currently Site Plan of the facility is shown in Figure 2.

2 FACILITIES AND PERSONNEL

2.1 Designation of Responsible Persons

In accordance with Rule 62-701.500(1), FAC, the facility has at least one trained operator at the facility during periods of waste acceptance (operation) during operation and at least one trained spotter at each working face. Note that if the trained operator is at the working face, he/she can also function as a trained spotter.

The District Manager for Vista Landfill, L.L.C. (Vista Landfill) and the Operations Supervisor/Site Manager for the Vista Landfill, Class III facility has responsibility of overall management and operation of the Vista Landfill, Class III facility. The District Manager has the authority to obtain the necessary personnel to operate the site and provide for their training and orientation. The District Manager ascertains the facility's need for equipment, has the authority to replace existing equipment or obtain new equipment, and is responsible for administering the provisions of the site operation plan.

The Environmental Protection Manager and Engineer is responsible for supporting the District Manager with facility compliance, as well as assisting with operational issues, groundwater, leachate and facility gas sampling, submittal of monitoring reports, surveying of disposal area limits, and facility planning. The day-to-day operations of the site are directed by the Operations Supervisor/Site Manager who is responsible for site personnel attendance and performance. As such, he/she routinely directs the daily activities of the operations manager, scale-house attendant, facility operators and spotters, and other support personnel.

Vista Landfill, Class III facility is currently staffed approximately as follows:

- 1 – District Manager
- 1 – Environmental Protection Manager and Engineer
- 1 – Lead Operator – Trained Operator
- 2 – Scale house Operators – Trained Spotters
- 4 – Operators
- 2 – Spotters/Laborers

A list of personnel is attached as Attachment A.

2.1.1 Employee Training

A trained operator shall be on duty whenever the facility is operating and at least one trained spotter shall be on duty at all times that waste is received at the site to inspect the incoming waste. The operator(s) and spotter(s) of the Class III disposal area at Vista Landfill, Class III facility are trained in accordance with the requirements of Rule 62-701.320(15), FAC. Further, trained personnel are aware of, have access to, and will substantially comply with at all times, this operations plan. The operators shall be properly trained to operate the facility and the spotters shall be trained to identify and properly manage any hazardous or prohibited materials that are inadvertently received at the Class III disposal facility. Any trained operator at Vista Landfill, Class III facility shall complete 24 hours of initial training, and shall pass an examination as part of that training. Within three years after passing the examination, and every three years thereafter,

operators shall complete an additional 16 hours of continued training. A trained spotter at Vista Landfill, Class III facility shall complete 8 hours of initial training. Within three years after attending the initial training, and every three years thereafter, spotters shall complete an additional 4 hours of continued training. The training of the operator and spotter is performed through those courses offered to the public through TREEO training at the University of Florida and other approved sources (see www.treeo.ufl.edu).

Vista Landfill, Class III facility will not employ a person to perform, nor may any person perform the duties of an operator or spotter at Vista Landfill, Class III facility unless that person is a trained operator or trained spotter, or an interim operator or interim spotter. A trained operator shall be on duty whenever the facility is operating and at least one trained spotter shall be on duty at all times that waste is received at the site to inspect the incoming waste. An interim operator may perform the duties of an operator or spotter, but only under the supervision of a trained onsite operator. An interim spotter may perform the duties of a spotter, but only under the supervision of a trained onsite operator or trained onsite spotter.

An interim operator is a person who has not completed the required 24-hour initial training course, but has, in the opinion of Vista Landfill, Class III facility Operations Supervisor/Site Manager, shown competency as an operator through a combination of work experience, education and/or training and who has at least one year of experience at Vista Landfill, Class III facility or other similar facility. The determination to grant interim operator status may be made at the time of hiring, based on information provided in the resume or application. Alternatively, the Operations Supervisor/Site Manager may grant interim operator status following work observations.

An interim spotter is a person who has not completed the required 8-hour initial training course, but has, in the opinion of Vista Landfill, Class III facility Operations Supervisor/Site Manager, shown competency as a spotter through a combination of work experience, education and/or training. The determination to grant interim spotter status may be made at the time of hiring, based on information provided in the resume or application. Alternatively, the Operations Supervisor/Site Manager may grant interim spotter status following work observations.

Interim status for operators and spotters is not intended to exceed three months, while the interim status for an operator is not to exceed one year. Additionally, an interim operator should not be used in lieu of a trained operator for more than three consecutive months.

2.1.2 Training Records

The training records are kept at the facility at all times and are available for inspection by Florida Department of Environmental Protection (FDEP), upon request. A list of trained personnel is attached as Attachment A.

2.2 Onsite Structures

On-site structures include an administration building, scale house, and maintenance buildings/facilities used for equipment repair. The scale house is located near the entrance to the facility along the north property boundary.

2.2.1 Communications

Communication equipment at Vista Landfill, Class III facility consists of telephone service for outside communications and cellular phones or radios for communications between ground personnel and equipment personnel.

3 ENTRANCE PROCEDURES

3.1 Control of Incoming Waste

In accordance with Rules 62-701.200(14) and 62-701.300(8)(c), FAC, only Class III waste, defined as *construction and demolition debris, processed tires, asbestos, carpet, cardboard, paper, glass, plastic, furniture other than appliances, or other materials approved by the Department that are not expected to produce leachate which poses a threat to public health or the environment*, is knowingly accepted for disposal at Vista Landfill, a lined Class III facility. In addition, soil contaminated with petroleum products or any other materials that are not hazardous wastes and does not have the potential to leach constituents in excess of Department ground water standards or criteria may be accepted at the Vista Landfill.

Vista Landfill, Class III facility does not knowingly dispose of hazardous waste, putrescible waste, liquid wastes, brown goods (small appliances, electronic goods, cathode ray tubes, etc...), or any other non-Class III waste material. Unacceptable loads are rejected as described in Section 4.2. Once Class III waste has been accepted and unloaded, if any unacceptable waste is found, spotter(s) will proceed to remove unacceptable wastes to a temporary staging area for placement at the end of the working day into containers destined for other facilities properly permitted to receive such wastes. If the generator or transporter of any unacceptable waste can be identified, they may be requested to remove the unacceptable material from the landfill.

3.2 Hours and Days of Operation

Typical hours for acceptance of waste are:

Monday through Friday 7:00 am to 5:30 pm
Saturday 7:00 am to 12:00 pm (noon)

The actual hours of operation are posted at the main entrance to the facility. The facility is closed on Sundays and designated holidays. Access by all vehicles shall be via a single secured site entrance. The entrance allows for safe and orderly traffic flow into and out of the facility. Public access and receipt of waste occurs only when an attendant is on duty.

3.3 Weighing of Incoming Waste

All solid waste accepted at the facility is weighed. Tare weights of the trucks will be determined as the emptied vehicle leaves the site. Tare weights for waste haulers that regularly visit the site are recorded so that they do not need to be weighed each time they leave the site unless specifically required by contract or to meet facility needs. Invoices are based on the weight of waste disposed.

4 TRAFFIC CONTROL AND UNLOADING

4.1 Facility Access Control and Security

Traffic into and out of the site is controlled by the use of a single public entry, a complete perimeter 6-ft. chain link fence with a locking gate, and an attendant present during operating hours. There is a sign at the site entrance with an emergency contact name and phone number. Gates at all roadway points are kept locked outside of normal working hours. All refuse traffic is required to pass by the scale house to gain entry to active portions of the landfill. Public access and receipt of wastes occur only when an attendant is on duty. Additionally, signs indicating “no trespassing” are installed on the perimeter fencing and at each fence corner.

Once vehicles delivering wastes have been weighed, they follow signs posted along the access road(s) to the currently active areas of the facility. Trucks then proceed to and deposit trash at the appropriate working face. Signs and Scale house personnel direct small public vehicles to unload their loads in the appropriate disposal area.

The landfill access road and other on-site roads are maintained to allow access to monitoring devices and stormwater controls and for landfill inspections and firefighting.

4.1.1 Access to and Unloading at the Active Face

Waste haulers are directed from the controlled entrance point to the working face by use of signage and facility personnel directing drivers when and where to enter, unload, and leave. A spotter or interim spotter directs traffic to the proper waste unloading location at the active face. Operator/spotters perform load spotting as the waste is deposited and additional spotting as the waste is spread and compacted.

A spotter is stationed at each working face at all times when the landfill receives waste in order to screen for any unauthorized materials. The equipment operator may serve as the spotter. The operator then spreads the waste and performs additional spotting during each pass while compacting the waste.

4.2 Signs, Traffic Flow

Signs are utilized to inform the public of important information concerning Vista Landfill, Class III facility. Signs are placed near the entrance of the landfill to provide information concerning name of operating authority, traffic flow, operating hours, and restrictions or conditions of disposal.

Traffic control and safety requirement signs are located at and near the entrance and throughout the facility as required.

4.3 Random Load Checking Program

To monitor the waste received at Vista Landfill, Class III facility, a load-checking program to detect and discourage attempts to dispose of unauthorized wastes at the facility is implemented. The load-checking program consists of the following minimum requirements specified in Section

66-177(1)(k), SWMO and Rule 62-701.500(6)(a), FAC., and is described below. The Facility Operations Manager implements the program.

1. Landfill personnel examine at least three random loads of solid waste delivered to the landfill each week. The waste collection vehicle drivers selected by the inspector are directed to discharge their loads at a designated location within the landfill. A detailed inspection of the discharged material is then made for any unauthorized wastes.
2. If unauthorized wastes are found, Vista Landfill will contact the generator, hauler, or other party responsible for shipping the waste to the landfill to determine the identity of the waste sources.

4.4 Recording Random Inspection Results

Information and observations from each random inspection are recorded in writing and retained at the site for at least three years. The recorded information includes, at a minimum, the following information:

1. Date and time of the inspection.
2. Names of the hauling firm and the driver of the vehicle.
3. Vehicle license plate number.
4. Source of waste, as stated by the driver.
5. Observations made by the inspector during the detailed inspection.

The written record is signed by the inspector.

4.5 Management of Hazardous Wastes

If any regulated hazardous wastes are identified by random load-checking, or are otherwise discovered to be improperly deposited at the landfill, the operator will promptly notify the following parties:

1. Florida Department of Environmental Protection:
Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
DEP_CD@dep.state.fl.us
(407) 897-4100
2. Other agencies, as required.
3. The person responsible for shipping the wastes to the landfill.
4. The generator of the wastes, if known.

The area where the wastes are deposited will be immediately restricted from public access. If the generator or hauler cannot be identified, the District Manager (DM) or Operations Supervisor (OS) will assure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility. Subsequent shipments from sources found or suspected to be previously

responsible for shipping regulated hazardous waste will be subject to precautionary measures prior to the facility accepting wastes.

4.6 Management of Special Wastes

Asbestos-containing materials, non-friable and friable, are accepted and disposed at Vista only under specific conditions. The asbestos waste generator/hauler must notify the DM or OS prior to transporting the asbestos waste. The asbestos is disposed of in designated and recorded areas. The asbestos is then carefully covered in a manner so that neither equipment nor personnel come in contact with the waste.

5 WASTE RECORDS

The Scale Attendant records, in tons per day, the amount of solid waste received at the site. Waste reports will be compiled monthly, and copies will be provided to the City of Apopka quarterly and FDEP annually.

Quarterly Waste Quantity Reports are submitted to:

Richard Earp, City Engineer
City of Apopka
120 E. Main St., 2nd Floor
Apopka, FL 32704
rearp@apopka.net

FDEP through the DEP Business Portal located :

<http://www.fldepportal.com/go>

6 METHOD AND SEQUENCE OF FILLING WASTE

6.1 Basic Operations

Generally, waste placement and ongoing operations are screened from view as practical. Solid waste is placed into cells to construct horizontal lifts. The solid waste will continue to be placed in layers and compacted using landfill equipment. Lift depth may vary depending on specific conditions, daily volume of waste, width of working face, and good safety practices. The compacted waste will continue to be graded with slopes not to exceed 3H:1V. Access roads have maximum slopes of 10% in order to readily allow vehicular access to the working face even during inclement weather conditions. The working face is maintained to minimize the amount of exposed waste and initial cover necessary at the end of the week.

The landfill development sequence and current waste footprint is illustrated on the Permit Drawings and is shown in Figure 3. Current cells approved for waste disposal include cells 1 through cell 6. Waste disposal activities will continue until the final grade elevations have been reached. The final grades are also illustrated on the permitted plans.

6.1.1 Filling Procedures

The refuse cell is the basic building block of a landfill. It is composed of several compacted layers of waste and enclosed by cover material. Basic instructions for constructing the refuse cell are outlined below.

6.1.2 Working Face

The working face is the portion of the uncompleted cell on which additional waste is spread and compacted. The working face is kept as small as practical to minimize equipment movement, cover material requirements, and the area of exposed waste, thus reducing blowing litter, vector problems, and operation costs. The optimal daily working face width varies depending on the number of vehicles bringing waste to the site. The working face is kept wide enough to prevent a large backlog of trucks.

In order to facilitate proper dumping and waste placement operations, multiple working faces may be required to accommodate commercial non-tipper trailers, commercial tipper trailers, other commercial vehicles, and non-commercial vehicles.

The Operations Supervisor/Site Manager has the discretion to utilize multiple working faces on an as-needed basis, depending on site conditions. If separate working faces are used, a spotter or operator/spotter will be present at each.

6.1.3 Dumping

When top dumping, the waste is dumped as near to the edge of the active working face as safe operations permit. For safety reasons, a minimum 8 to 10 ft separation is maintained between the waste trucks and the landfill equipment.

When bottom dumping, the waste is dumped near the toe of the working face and pushed up the slope. Truck separation, as discussed above, is maintained.

6.1.4 Pushing, Spreading and Compacting

Proper cell construction involves pushing, spreading, and compacting. These functions are accomplished with a bulldozer and/or a compactor. Solid waste at Vista Landfill, Class III facility is spread in layers approximately three feet thick and compacted using suitable heavy equipment. Bulky materials that are not easily compacted are worked into other materials as much as practical.

6.1.5 Cover

6.1.5.1 Initial Cover

The initial cover will be applied and maintained in accordance with Section 66-177(1)t, SWMO, and Rule 62-701.500(7)(e) FAC. A 6-inch thick initial cover is placed on top of the waste at the end of each week's operation in order to mitigate blowing litter and aid in control of odors. An alternative weekly cover in the form of geosynthetic material, tarpaulin, or other approved materials such as 50:50 mix of soil: mulch may be applied to the active face at the conclusion of each working week.

6.1.5.2 Intermediate Cover

Intermediate cover, consisting of 12 inches of soil, shall be applied and maintained within 7 days of cell completion if additional waste will not be deposited within 180 days of cell completion. In accordance with Rule 62-701.500(7)(g), all or part of the intermediate cover may be removed before placing additional waste or installing the final cover.

6.1.5.3 Final Cover

Areas of the landfill which have been filled to design dimensions shall receive final cover within 180-days after attaining final elevation or in accordance with the closure plan for the landfill. The final cover will be constructed in accordance with Section 66-177(1)t, SWMO and Rule 62-701.600(3)(f) FAC. The barrier layer to be installed will either be a geosynthetic clay liner (GCL) or 40-mil linear low-density polyethylene (LLDPE). The barrier layer will be installed over a 6-inch, minimum, soil layer, and overlain by 18-inches of cover protective soil, and 6-inches of compost or topsoil capable of sustaining a good stand of grass. A geocomposite drainage layer will be placed above all or parts of the barrier layer, depending on the specific barrier layer selected at the time of closure.

6.2 Scavenging

Uncontrolled and unauthorized scavenging is not allowed at this facility. However, controlled removal by landfill personnel of recovered material recycling may be permitted.

6.3 Storm Water Control during Waste Filling

During waste placement activities, storm water collected within a landfill cell with waste fill elevations below natural grade is treated as leachate and managed through the leachate collection

system for the landfill. Once waste fill elevations are above natural grade and intermediate cover is in-place, storm water run-off is diverted to the storm water perimeter ditch for the landfill. Accumulated storm water within an inactive landfill cell that does not come in contact with waste is pumped to the storm water management system (e.g., storm water perimeter ditch or storm water ponds) for the landfill.

7 EQUIPMENT

7.1 Heavy Equipment and Support Equipment - Number, Type, Use

Based on the available range of handling capacities and the initial projected waste receipts, the allocation of heavy equipment presented in Table 1 is sufficient to handle the wastes received at the facility. The primary functions of heavy facility equipment are spreading and compacting solid waste, and excavating, hauling, and spreading cover material. Equipment similarities allow different equipment to perform the same function as necessary. For example, when a compactor breaks down, a bulldozer can perform the compacting operation.

Support equipment is present at the site most of the time, but some may be off-site, temporarily out of service, or rented for a specific occasion. An on-site water truck is normally positioned close to the working face for fire protection. This water truck is also equipped with spray bars for dust control. A utility mower is fitted with attachments for mowing grassed areas. A backhoe/loader is available to assist in maintaining drainage courses and ditches, and for other site maintenance duties.

Equipment makes, models, and quantities listed on Table 1 are subject to change as facility needs or requirements change.

Table 1 – Equipment Inventory.

EQUIPMENT LIST
Dozer
Compactor
Water Truck
Excavator
Service truck
Dump truck
Wheel Loader
Skid Steer
Utility Vehicle

7.2 Back-Up Equipment

The equipment selection guide indicated in Table 1 is adequate even if one of the pieces of equipment is temporarily out of service. If a piece of equipment is out of service for an extended period or if additional equipment is required on a temporary basis, this equipment is available for rental nearby and can normally be available at the site within 24 hours.

7.3 Equipment Care

Routine preventive maintenance minimizes equipment downtime and increases equipment service life. Preventive maintenance varies with each piece of equipment. Therefore, the appropriate operation and maintenance (owner's) manual should be consulted. However, three applicable maintenance activities implemented at the site are:

- A routine inspection program;
- Routine Lubrication
- Maintenance records upkeep.

7.4 Notification in Case of Equipment Failure

If there is an equipment failure that will disrupt normal operations for more than 24 hours, the Central District office of FDEP must be notified:

Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
DEP_CD@dep.state.fl.us
(407) 897-4100

8 ENVIRONMENTAL AND OPERATIONAL CONTROLS

8.1 Stormwater Control

Stormwater management within the active portion of the landfill is achieved by grading all working face areas so that stormwater will be diverted into a ditch at the landfill base channel or directly into the stormwater basin(s). This facility has no off-site discharge of stormwater.

8.2 Dust Control

Dust is controlled in landfilling areas at Vista Landfill, Class III facility by water truck and by establishing vegetative cover on areas within final and intermediate cover. Entrance roads are paved to a point beyond the scale house to minimize dust and sediment from being tracked onto the highway.

8.3 Vector Control

Vector control consists of maintaining a clean site, waste screening, constructing sufficient initial and intermediate cover, and minimizing ponded water in areas of landfill cover. Proper compaction of wastes eliminates many of the breeding areas used by these pests during the work week. Proper implementation of the drainage design inhibits ponding on the site.

8.4 Noise Control

Operational measures, such as construction of temporary berms, may be used to reduce noise generated at the site. Noise will be minimized to the best practical extent; however, some noises will continue to be present such as back-up alarms and other measures which are required by the Occupational Health and Safety Administration (OSHA) for safety.

8.5 Litter Control

A litter control policy is employed to minimize litter from leaving the working face of the landfill. Portable fences may be used, where necessary, to control blowing litter in the active landfilling areas. The litter that escapes the portable fences, or the inbound vehicles, and blows to other areas of the property is picked up on a daily basis.

Litter is policed in the immediate proximity of the landfill, as necessary, to control any problems which may arise from debris blowing from trucks traveling along West Keene Road to the landfill. Vista Landfill, Class III facility employees observe West Keene Road daily, and often several times each working day. The litter along West Keene Road is picked up at least weekly, from Clarcona Road to the facility entrance, or more often if necessary, as evaluated by employee observation. Vista Landfill understands that Vista Landfill, Class III facility is part of a community, and that litter policing is part of being a good neighbor within that community.

8.6 Fire Control

Fire protection procedures include maintaining soil stockpiles in the vicinity of the working face. The cover used in the landfill operation provides an effective firewall.

Should a fire occur at the landfill, the application of soil will be used to cut off the flow of oxygen into the burning areas. The local fire department will be contacted to assist site personnel and equipment. Appropriate fire extinguishers are carried on the equipment at all times and can be used to control any small equipment fire that may occur. Greater detail for dealing with fires is given in Section 9.1 of this plan.

8.7 Gas Control

8.7.1 Landfill Methane Perimeter Parameters

Vista accepts, and will continue to accept, only Class III materials which generate low levels of methane gas in comparison to generation rates at Class I landfills. The gas monitoring system will consist of 25 permanent gas monitoring probe locations in total build-out, as shown on the site plan presented in Figure 4. The gas probes are monitored on a quarterly basis for explosive gas content. Additionally, on-site structures are monitored quarterly.

Action must be taken whenever the measured methane concentration in soil monitoring probes exceeds the Lower Exposure Limit (LEL) for combustible gases at or beyond the landfill property boundary or exceeds 25% of the LEL in onsite structures. If the results of monitoring show that combustible gas levels exceed these concentrations, either the Site Engineer or the Compliance Manager will:

1. immediately take all necessary steps to ensure protection of human health and notify the Department;
2. submit a gas remediation plan to the Department within 7 days of the exceedance;
3. complete remediation within 60 days of exceedance, unless otherwise approved by the Department.

Quarterly methane monitoring reports, using the form in Attachment B, are reviewed by the Site Engineer or Environmental Protection Manager and submitted to the Department at the following address:

Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
DEP_CD@dep.state.fl.us
(407) 897-4100

In the event that a permanent gas probe is not available for sampling, a “bar hole” is created in the vicinity of the damaged or missing probe by hammering a 3-foot long by ½-inch diameter metal “bar” into the ground the full length of the bar (i.e., three feet), and removing it, thus creating a “hole.” Methane concentration is measured in this bar hole by inserting the instrument probe into the void and aspirating sample gas through the meter for 20-30 pumps on the aspirator bulb. If methane is encountered, aspiration continues until a steady-state reading is obtained, typically within 20 pumps and always within 30 pumps. If no methane is encountered, aspiration is concluded after 30 pumps and “0%” is recorded.

Every attempt is made to replace a damaged or missing gas probe within a reasonable time frame, typically before the next quarterly sampling event. Site conditions such as construction may make this time frame impractical to achieve, however. Vista Landfill uses drilling vendors to replace permanent gas probes. One such vendor is listed below; however, other vendors may be used.

Carlson Environmental Consultants PC, CEC, 305 S. Main Street, Monroe, NC 28112
704-283-9765

8.7.2 Gas Control Measures

Vista has proactively installed control measures to reduce the migration and maintain compliance with Rule 62-701.530, FAC. Such control measures include a combination of passive and active gas management system components to reduce migration and maintain compliance with regulations.

8.7.2.1 Gas Flaring

Gas is collected from both the Keene Road Recycling and Disposal Facility (Keene) as well as Vista Landfill and treated via flaring in the following devices:

- A 400 standard cubic feet per minute (scfm) utility flare to treat gas from Parcel 3 of Keene Road;
- A 2,800 scfm utility flare that treats gas collected from Keene Road Parcels 1 and 2 as well as from Vista; and
- As part of this modification, an additional 1,500 scfm utility flare is being used to also treat the gas from Keene Road Parcels 1 and 2 as well as from Vista.

Refer to Attachment G for figures showing the flare locations as well as details for the 1,500 scfm utility flare. Upon installation of the 1,500 scfm flare the vendor’s operations manual is located in the Vista Office.

Gas is collected through a combination of vertical extraction wells, horizontal collectors, and tie-ins to the leachate collection system. While WMIF intends to install vertical extraction wells to the maximum extent practical, particularly on sideslopes or in areas at or near final grade, horizontal collectors may be employed at interim conditions when installation of vertical wells is not appropriate due to site geometry or sequence of filling. In areas where horizontal collectors

are installed, additional vertical wells may be required at final buildout depending on the performance of the collectors.

8.7.2.2 Vertical Extraction Wells

The design of vertical extraction wells at the site will vary depending on the landfill area in which the wells will be installed. In landfill areas with geomembrane liners, vertical wells will typically terminate at least 10 feet above the bottom of refuse. Vertical wells typically have an effective radius of influence that ranges from approximately 2.0 to 2.25 times the well depth. Consequently, the well spacing at Vista varies generally from 100 to 200 feet, depending on the estimated radii of influence of the wells.

Vertical wells will be constructed of either HDPE or PVC pipe installed in 30-inch or 36-inch diameter boreholes, unless an engineering judgment is made that an alternate sized borehole is more appropriate. Typically, approximately the lower two-thirds of the well pipe will be perforated or slotted. However, perforations/slots will not be closer than 15 feet from the landfill surface unless the wells are being installed in an active area and additional refuse will be filled around the wells within a reasonable period of time. Perforations typically will be either 5/8-inch diameter holes staggered 180 degrees apart, or 3/8-inch wide by 8-inch long slots spaced 12-inches apart on center. However, alternative slot or perforation designs which provide comparable performance may be considered.

8.7.2.3 Horizontal Collectors

Horizontal collectors typically have a horizontal zone of influence of approximately 75 feet, which results in a lateral spacing of approximately 150 feet between collectors. Horizontal collector lengths will vary depending on site conditions at the time of system expansion, but generally will be less than 1,000 feet long.

Horizontal collectors will be constructed to include the following features:

- Collector pipe will normally be 6- or 8-inch diameter solid HDPE pipe with a smooth interior wall with sufficient strength to resist crushing force due to the overburden of the landfill.
- The perforated/slotted collector pipe will be installed in a trench filled with appropriate aggregate material. The permeable backfill material will be sized so as to not pose significant risk of clogging the pipe perforations. Tire chips may also be used as backfill material.
- Perforated pipe will cease and the remaining length of collector will be solid-wall pipe. This will reduce the potential for air infiltration into the collectors.
- Perforations in the pipe will be sufficiently large to not cause excessive head loss detrimental to LFG collection.

8.7.2.4 Leachate Collection Riser Connections

To provide supplemental LFG collection during interim conditions, WMIF may install tie-ins to existing and future leachate collection riser pipes. These collectors are intended to provide supplemental collection for landfill gas migration purposes.

8.7.2.5 Wellheads

Each extraction well and horizontal collector will include a wellhead constructed of appropriate materials. Wellheads will include a valve for flow control and monitoring ports for measuring gas quality, temperature, and flow rate.

8.7.2.6 Condensate

Condensate that is generated in the LFG extraction process is pumped back into Vista's leachate control system where it is comingled with the site's leachate. Leachate is collected at the site's 160,000 gallon capacity storage tank and conveyed to a municipal sanitary sewer line located on West Keene Road for off-site treatment and disposal at the City of Apopka Waste Water Treatment Plant (WWTP). At this time, condensate sampling and analysis is not performed. Leachate is analyzed annually in accordance with the site's Solid Waste Operating Permit (No. SO48-0165969-018).

8.7.3 Control Point Decommissioning

Based on the performance of each individual collection point, it may be necessary to decommission them at some point. To decommission a collection point, the wellhead will be removed and the vertical well casing and/or horizontal collector casing will be capped with a fused or slip-on cap.

Over the life of the site, individual collection points may be replaced, the new collections points will be renamed or given another alternative name.

8.8 Odor Control and Monitoring

Class III waste materials do represent a potential for the generation of odorous gasses. Most commonly, the odors are derived from the anaerobic decomposition of gypsum wallboard, which forms hydrogen sulfide (H₂S) gas. The following sections address Vista Landfill, Class III facility's routine control, monitoring, and response procedures for odors caused by H₂S.

8.8.1 Landfill Design and Operation

The primary lines of defense against odor generation are design and operation. The Class III landfill has been designed with base grades that remain above the seasonal high water table and with final grades that help shed stormwater runoff. This design helps to minimize the potential for saturating the waste, which could subsequently lead to odor generation. Operations at Vista Landfill, Class III facility ensure that waste is compacted and graded to remain consistent with the intent of the design. Attention to waste placement, compaction, grading, covering and surveying

will help maintain this record. Any poorly drained or ponded areas on top of the waste should be regraded in a timely manner.

8.8.2 Weather

Another important factor that affects odor generation and transport is weather. Understanding seasonal and daily weather patterns can assist the understanding of what may be happening to transport odors once they are generated. Radiation inversions have been identified as an atmospheric condition that can trap odors near the ground, preventing dispersion. These inversions are caused when air near the ground surface is cooled more rapidly than the air above it. So, they are strongest just before daylight and during periods of clear skies and light winds.

The Operations Supervisor/Site Manager or Compliance Engineer record weather data from the on-site weather station on the Odor Survey Form (Attachment C). These daily weather logs are maintained on site and are available for review by FDEP and the City of Apopka upon request.

8.8.3 Odor Surveying

At least once daily, Vista Landfill, Class III facility personnel patrol the property to detect and document odors. Attachment C provides a log for the odor patrol. The log includes information such as odor descriptors and locations. Additionally, staff should perform the patrol as early as possible in the day to document what will likely be the worst-case weather conditions for odors. If a moderate or strong odor is detected near the property line, staff may proceed off site in an effort to document the lateral extent (or off-site source) of the odor. Vista Landfill, Class III facility personnel will not enter onto private property for odor studies without the consent of the property owner.

Odor surveying may also be supplemented by use of a hydrogen sulfide meter to quantify hydrogen sulfide concentrations (see section 8.8.4 for discussion of H₂S meter use).

8.8.4 Odor Complaints

Attachments D and E provide a mechanism to log and track odor complaint calls received by Vista Landfill, Class III facility at its main telephone number: 407-886-2920. Complaints are logged and compared to Vista Landfill, Class III facility's own odor observations and daily odor log. The Vista Landfill, Class III facility Operations Supervisor/Site Manager or Compliance Engineer will acknowledge complaints within one business day and address them within three business days.

Vista Landfill, Class III facility continues to endeavor to be an environmentally conscientious neighbor and take appropriate responses to odor complaints. The initial response is to cover waste. Any eroded cover will be addressed first, followed by the minimization of working face (as much as practical) by the application of initial cover. Other responses include dispersal of granular deodorizer or monitoring and recording H₂S concentrations around the perimeter of the landfill or at offsite locations using a hydrogen sulfide meter. The Operations Supervisor/Site Manager or Compliance Engineer will determine an appropriate response to any given complaint.

Several levels of analysis are used to determine an appropriate response to a complaint. The first level of analysis is the comparison of complaints to weather data. An analysis of the wind strength and direction during the time of the odor problem may help verify or refute that Vista Landfill, Class III facility is causing odors. Other patterns may be identified to help explain the cause of the odors. For example, odors may be noticed following rain events, or during periods of low pressure. Data gathered during the daily odor monitoring is also evaluated. Data from monitoring and recording H₂S concentrations around the perimeter of the landfill or at offsite locations using a hydrogen sulfide meter may also be evaluated.

Vista Landfill may conduct monitoring and recording of H₂S concentrations around the perimeter of the landfill or at offsite locations using a borrowed or rented hydrogen sulfide meter. Hydrogen sulfide meters, such as the Jerome 631-X or other similar meter, are available from the Waste Management office located in Atlanta, GA, (770) 805-4130, or a meter may be borrowed or rented from the following companies:

SCS Engineers
3012 U.S. Hwy 301 N., Suite 700
Tampa, FL 33619
Tel: 813-621-0080

Grove Scientific & Engineering
6140 Edgewater Drive, Suite F
Orlando, FL 32810
Tel: 407-298-2282

Alternatively, Vista Landfill may employ the services of a qualified professional to monitor and record H₂S concentrations around the perimeter of the landfill or at offsite locations.

8.9 Water Quality Monitoring

Groundwater and leachate are monitored in accordance with the requirements of FDEP and City of Apopka Operating Permits and Standard Operating Procedures (SOPs), as applicable. Extensive water quality monitoring is conducted at Vista Landfill, Class III facility on an annual (for leachate) and semi-annual (for groundwater) basis. The water quality monitoring locations are shown on the Permit Drawings. The Water Quality Monitoring Plan for the Vista Landfill, Class III facility provides detailed sampling and collection procedures in accordance with Rule 62-701.510, FAC.

Surface water monitoring is not required for the Vista Landfill, Class III facility in accordance with the current solid waste permit for the site.

8.10 Erosion Control

The landfill is inspected daily using the form in Attachment C. Corrective action to repair areas of erosion where waste is exposed or which cause malfunction of the storm water management system will be implemented within three days of occurrence. If the erosion cannot be corrected within seven days of occurrence the landfill operator will notify FDEP with a proposed correction schedule.

Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
DEP_CD@dep.state.fl.us
(407) 897-4100

8.11 Leachate Containment and Control

Vista Landfill, Class III facility is equipped with a geomembrane liner system. Any liquid entering the landfill that may have contacted waste is collected in a Leachate Control System (LCS). The LCS drains collected liquid to the cell sump. Leachate in the sump is pumped to an auxiliary leachate storage facility with approximately 160,000 gallons of capacity and conveyed to a municipal sanitary sewer line located on West Keene Road for off-site treatment and disposal at the City of Apopka Waste Water Treatment Plant (WWTP) or an alternative WWTP. Quantities of leachate collected by the LCS are recorded in gallons per day at each cell and maintained as part of the landfill operating record.

9 CONTINGENCY OPERATIONS

Contingency operations include emergencies such as fire, natural disasters, and equipment failure. Waste will not normally be delivered to the site during emergency conditions; however, the following procedures will be initiated at the onset of a major event that may cause an emergency.

Emergency Coordinators

Primary: Anthony Roman (321)288-2840

Secondary: Daniel Galarza, Lead Operator (407)553-4935

9.1 Fire Control Plan

On-site fire protection facilities consist of soil stockpiles in the vicinity of the working face. The initial cover used in the landfill operation provides an effective firewall. Instructions on firefighting procedures are routinely provided for site personnel. Should fire occur at Vista Landfill, Class III facility, the application of additional cover will be used to cut off the flow of oxygen into the burning area. The local fire department will be contacted to assist Vista Landfill, Class III facility personnel and equipment, if necessary. Appropriate fire extinguishers are carried on the equipment at all times.

9.1.1 When Fire Occurs

The following procedures are followed in the event of a fire at the facility:

1. Extinguish small fires with fire extinguisher or smother with soil - do not remain near large fires or explosive materials;
2. Determine location, extent, type, and, if possible, cause of fire or explosion;
3. Notify on-site personnel and implement safety and fire control procedures;
4. If the fire cannot be immediately controlled, the following steps should be taken:
 - a) Notify facility emergency coordinator
 - b) Notify City of Apopka Fire Department (911, or 407-703-1756). Clearly state:
 - Location of facility
 - Location of fire or explosion in facility
 - Extent of fire or explosion
 - Type of fire or explosion
 - Actions now being taken
 - Injuries
 - c) Notify rescue squad, if necessary
 - d) Notify health care facility, if necessary
5. Notify Florida Department of Environmental Protection within 24 hours via phone (407-897-4100), e-mail (DEP_CD@dep.state.fl.us). A letter must be submitted to FDEP within five days describing how the fire began, what was done to extinguish it and what will be done to prevent future fires.

9.1.2 "Hot Load" Procedures

In the unlikely event that a "hot load" is not identified before entrance into the facility, the following procedures are implemented:

- The truck carrying the "hot load" is directed to dump the load in the landfill but away from the working face;
- The load is placed on top of intermediate cover which provides sufficient protection from the "hot load" and the underlying waste;
- Soil is then spread over the load to smother the "hot load"; and
- The "hot load" is monitored until there is no evidence of smoldering or high temperatures.

At the end of the day, or at a time when the waste has been well extinguished and cooled, the load is worked into the waste placement working face. The designated area for extinguishing the "hot loads" varies depending on the location of the working face, but is always away from the working face.

9.1.3 Fire Extinguishers

Fire extinguishers are installed in the following locations:

- Onsite buildings
- Heavy equipment.

9.2 Hurricane Preparedness

The following is a general guideline that is to be followed before, during and after any hurricane. Due to the nature of these storms, there may be some deviation from this guide. A Hurricane Planning Manual has been included in Attachment F, which provides key procedures regarding landfill facility shutdown in the days prior to landfall of any storm.

The Emergency Coordinator will oversee all preparations for the incoming storm and remain aware of any pending situation by monitoring weather reports. Other Landfill personnel will report to the Emergency Coordinator as follows:

Landfill Alternate Emergency Coordinator
Shop Mechanic/Next Senior Operator
Office Senior Clerk

Adequate cover material soil will be stockpiled. All ditches will be checked and cleaned for adequate flow. All lightweight signs and equipment will be collected and stored in a secure area.

Vista Landfill also has prepared a Hurricane Preparation and Planning Emergency Supplier Response Resource Notebook to be used as a tool to aid Market Area Hurricane Response Managers in their efforts to obtain, manage, and maintain open supply lines for needed goods, materials, and services as part of their hurricane preparation and recovery plan(s). This notebook is available for review by FDEP and the City of Apopka upon request.

10 LANDFILL FINAL CLOSURE

A separate Closure Plan will be prepared for Vista Landfill, Class III facility at the time of closure. This closure plan will contain a closure report, closure design, closure operation plan, closure procedures, and discussions on long-term care and financial assurance.

10.1 Final Cover System

As shown in the Permit Drawings, the final cover system consists of a geomembrane barrier, a two-foot soil layer, and vegetative cover. The grades of the final cover system are 3H:1V on the side slopes.

10.2 Erosion Minimization on Closed Areas

Erosion of the final cover system is minimized by the establishment of vegetative cover as well as the installation of final cover swales, downchutes, and other surface water management systems. The swales intercept sheet flow from the final cover system and direct the water via downchutes to perimeter storm water ponds.

A vegetative cover is placed on the final cover slopes of the landfill to minimize erosion and reduce soil loss from the surface of the final cover system. Any substantial erosion damage or vegetative stress will be repaired before significant erosion has a chance to develop. Ruts or rills which are six (6) inches or greater in depth are considered substantial.

Corrective action to repair areas of erosion will be implemented within three (3) days of occurrence, weather permitting. If the erosion cannot be corrected within seven (7) days of occurrence the landfill operator will notify FDEP with a proposed correction schedule.

10.3 Inspections of Closed Area

The final cover system will be inspected quarterly using the form in Attachment C. The inspection will include observations for erosion, vegetative stress, obvious differential settlement, and ponding of water. The surface water control structures will be inspected and cleaned if they become obstructed.

FINANCIAL RESPONSIBILITY

Proof of financial responsibility is prepared in accordance with FDEP requirements. The final closure cost estimates will be updated annually between January 1 and March 1 by the Site Engineer and/or the Compliance Manager and sent for review and approval to:

Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
DEP_CD@dep.state.fl.us
(407) 897-4100

Upon receipt of approval of the updated estimate, a revised mechanism in the form of a bond, insurance certificate, or other acceptable financial assurance mechanism to demonstrate financial responsibility will be provided by Vista Landfill.

The revised mechanism is sent to:

Financial Coordinator
Florida Department of Environmental Protection
2600 Blair Stone Road, MS 4565
Tallahassee, FL 32399

with a copy to:

City of Apopka:
Richard Earp., City Engineer
City of Apopka
120 East Main Street - 2nd Floor
Apopka, Florida 32703

11 OPERATING RECORD

In accordance with Rule 62-701.500(3), FAC, an operating record shall be maintained at the site including all records, reports, analytical results and notification required by Chapter 62-701, FAC, as well as the training verifications required by Chapter 62-701, FAC. This record is kept at the facility and is available for inspection by the FDEP and the City of Apopka.

As part of the operating record, waste records are maintained in accordance with Rule 62-701.500(4), FAC. These waste records indicate the amount of each type of waste received each day. Waste reports, summarizing the waste records, are compiled monthly and copies are provided to FDEP annually. The waste records are kept at the facility and are available for inspection by the FDEP and the City of Apopka.

The operating record also includes the information and observations resulting from each random inspection of a waste load conducted as part of the load-checking program in accordance with Rule 62-701.500(6), FAC.

In addition, to satisfy the requirements of Rule 62-701.500(3), FAC, the operating record also includes the following:

- Records of all information used to develop or support the permit applications and any supplemental information required
- Records of all monthly information, including calibration and maintenance records, and water quality records
- An annual estimate of the remaining life and capacity in cubic yards of the existing, constructed facility and remaining life and capacity of other permitted areas not yet constructed (this estimate is reported annually to FDEP).

The operating records are maintained at the facility throughout the design life of the facility.

12 OPERATIONS OF THE YARD TRASH RECYCLING FACILITY

12.1 Description of the Yard Trash Processing and Recycling Facility

Yard trash will be collected from landscapers, tree service companies, and clearing contractors, as well as yard trash materials collected under curbside collection programs. Also included are clean lumber and pallets. Yard trash as defined in rule 62-709, F.A.C.:

Yard trash means vegetative matter resulting from landscaping maintenance or land clearing operations and includes materials such as tree and shrub trimmings, grass clippings, palm fronds, trees and tree stumps, and associated rocks and soils. For purposes of this chapter, it also includes clean wood.

Yard trash accepted for processing will not contain significant amounts of rock or soil. Painted, treated, or chemically altered wood or lumber along with other prohibited wastes are specifically excluded. The yard trash will be processed mechanically to reduce the particle size in preparation for use by landfill operations for erosion control, intermediate cover, or shipped off site for use as fuel or other.

12.2 Effective Barrier

The yard trash mulching area located within Vista Landfill, Class III will maintain an effective barrier. Access to Vista Landfill by all vehicles shall be via a single secured site entrance. The entrance will allow for safe and orderly traffic flow into and out of the facility. Signs will be posted at the site entrance indicating the name of the facility, name of the operating authority, hours and days of operation. Once vehicles delivering wastes have been weighed or measured, they will follow signs posted along the access road(s). Traffic control and safety requirement signs will be located near the entrance to the area as required.

12.3 Dust Control Methods

Dust control at Vista Landfill, Class III and the Yard Trash Processing Area will be performed with the use of a water truck. The water truck is listed in Section 7.1 as standard equipment designated for operation of the Vista Landfill, Class III. The access roads and other areas utilized for the handling, processing and storage of yard trash will be watered on an as-needed basis to control dust.

12.4 Fire Protection

Fire control at Vista Landfill, Class III is addressed in Part 8.6 of this Operation Plan. In addition, the water truck that will be used for dust control is also equipped with a pump and hose to assist with fire control. Activities involving an open flame shall not be allowed in the vicinity of this operation and, in no case, closer than 50 feet to any stored or processed yard trash. The area would be designated as smoke free, and processing equipment would be fitted with mufflers and appropriate spark arresters.

On-site fire protection facilities consist of soil stockpiles in the vicinity of the yard trash area. The initial cover used in the landfill operation provides an effective firewall. Instructions on firefighting procedures are routinely provided for site personnel. Should fire occur at Vista Landfill, Class III facility, the application of soil cover will be used to cut off the flow of oxygen into the burning area. The local fire department will be contacted to assist Vista Landfill, Class III facility personnel and equipment, if necessary. Appropriate fire extinguishers are carried on the equipment at all times.

The area around any stored materials (processed or unprocessed) will be maintained for access by firefighting equipment. An all-weather access road will be maintained.

12.5 Odor and Vector Control

The landfill will be operated to control odors and vectors. Odor and vector control will be accomplished by following sound management procedures.

Odors will also be monitored should the facility choose to recirculate process liquids. During the recirculation process, onsite personnel will monitor for objectionable offsite odors. This process will be ceased if any objectionable odors are detected.

12.6 Yard Trash Removal

Any surplus processed will be used as erosion control at Vista Landfill LLC or shipped off site for use as fuel or other.

Although not expected to occur, any yard trash received at the facility, not utilized for mixing with organic materials shall be removed within 18 months. Logs with a diameter of 6 inches or greater will be separated and stored apart from the other materials. The logs may be stored for up to 18 months prior to removal.

The Yard Trash Processing Area will accept only yard trash and bags used to collect yard trash. Any other materials discovered within the yard trash shall be placed in containers and removed in accordance with this Operation Plan. All Class I material, other than incidental content and other prohibited wastes will be removed and managed as approved by FDEP.

12.7 Record Keeping and Reporting

To comply with the record keeping, and reporting requirements of Chapter 62-709.330, Vista Landfill will:

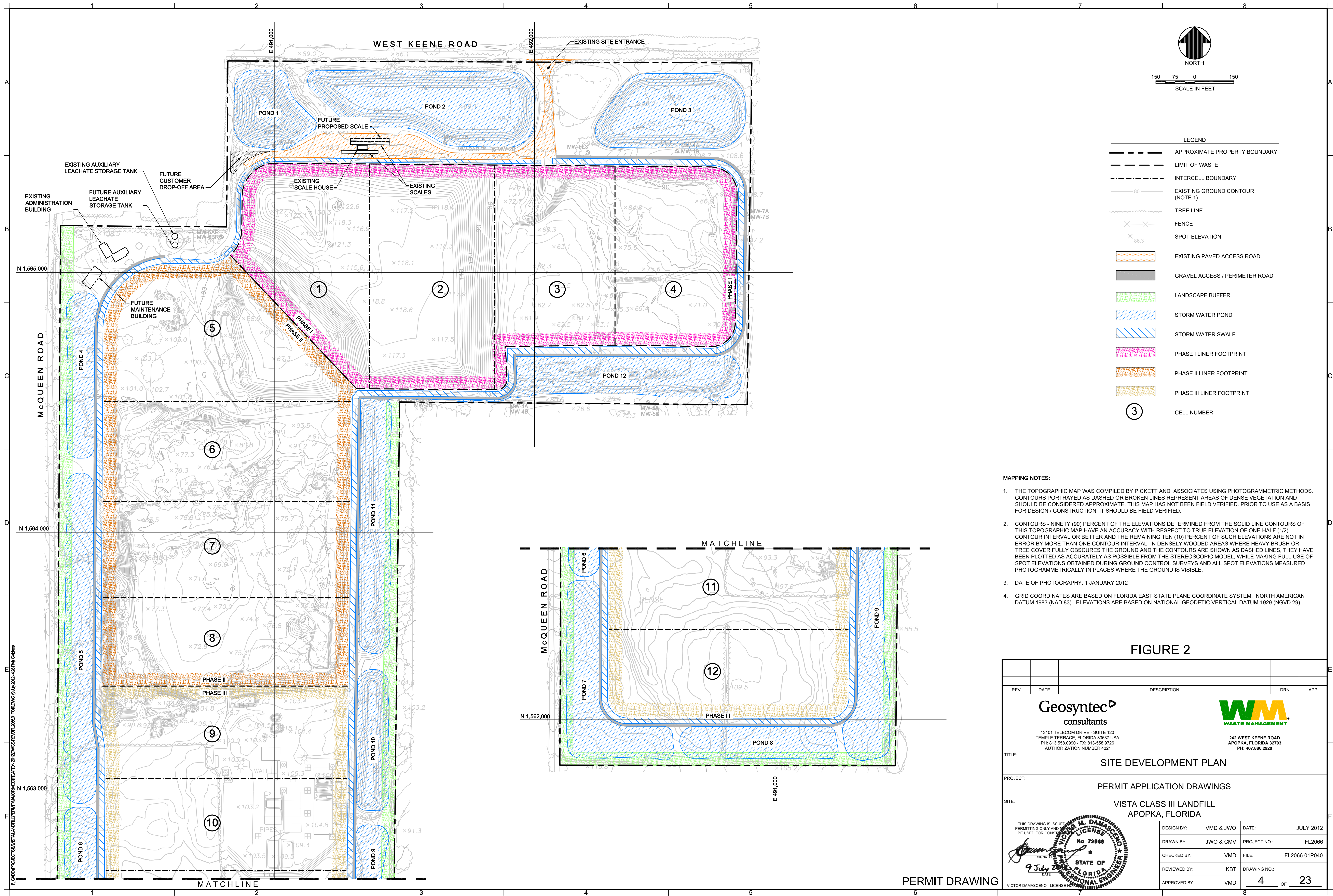
1. Record and maintain for three years the following information for each month of operation of the facility. Records shall be available for inspection by Department personnel during normal business hours and shall be sent to the Department upon request.
2. Submit to the Department an annual report by July 1. The report shall be submitted on Form 62-709.901(3), Annual Report for a Yard Trash facility, through the DEP Business Portal at:

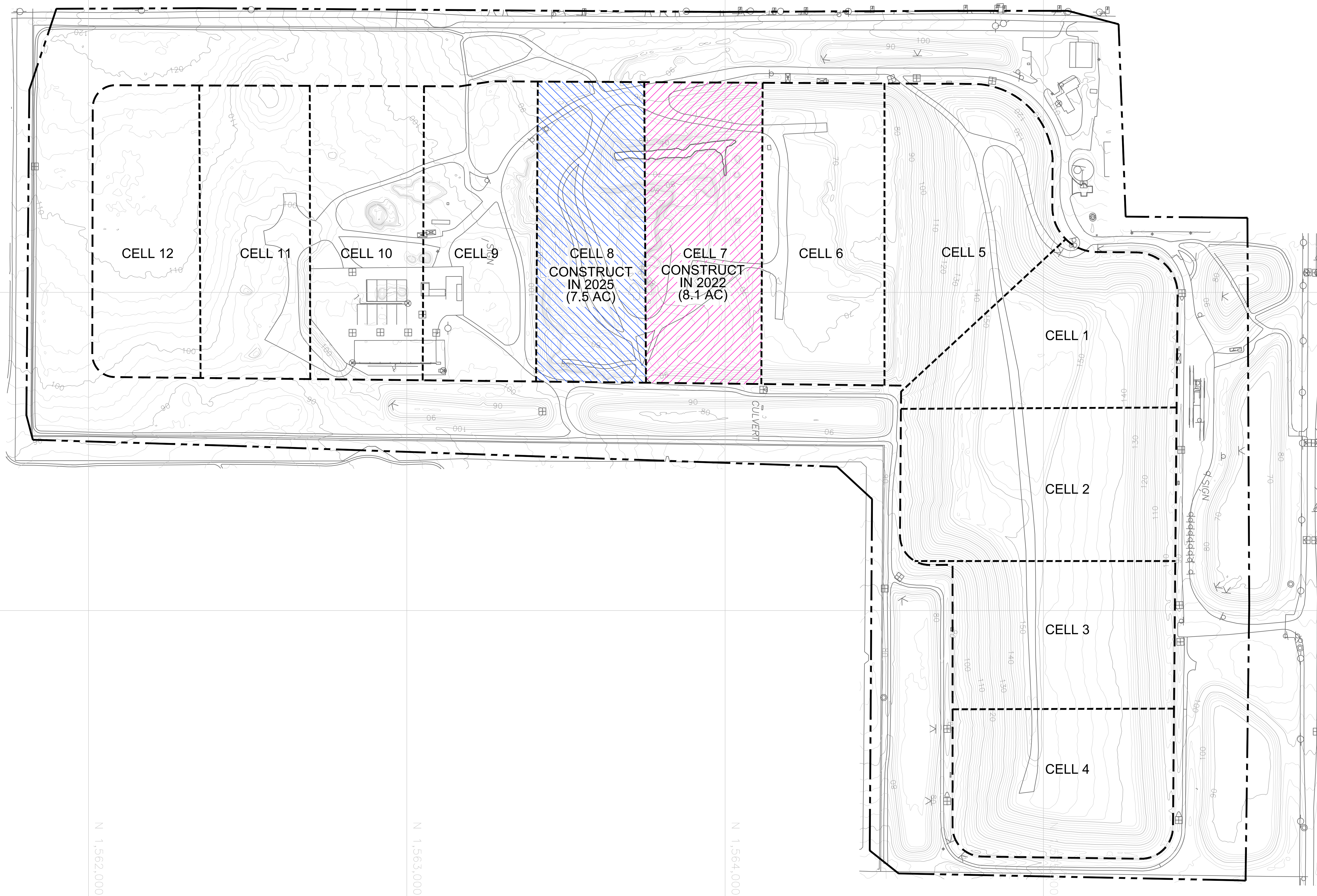
<http://www.fldepportal.com/go>



NOTE: THE PROPERTY BOUNDARY SHOWN IN THIS DRAWING WAS SUPERIMPOSED ONTO THE AERIAL MAP AT ITS APPROXIMATE LOCATION FOR PRESENTATION PURPOSES.

FIGURE 1. SITE LOCATION MAP, VISTA LANDFILL, APOPKA, FLORIDA





- LEGEND**
- PROPERTY BOUNDARY
 - - - PERMITTED LIMITS OF WASTE
 - 5-FOOT CONTOUR LINE
 - - - - - CELL BOUNDARY

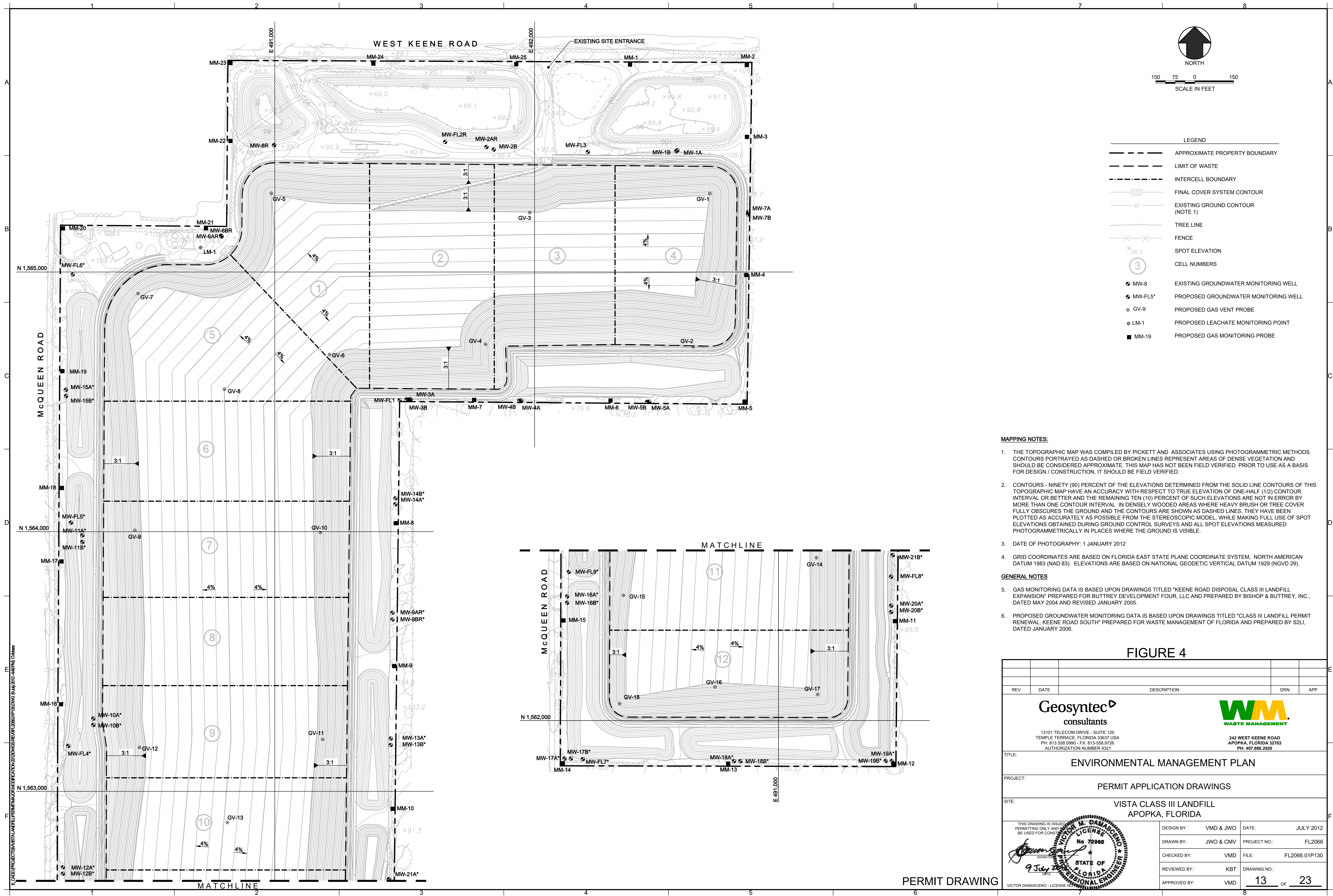
NOTES

1. AERIAL TOPOGRAPHY COMPILED BY PICKETT AND ASSOCIATES, INC. FROM AERIAL PHOTOGRAPH FLOWN ON JANUARY 20, 2020.

**FIGURE 3
FOR PLANNING PURPOSES ONLY**



FIGURE 3 - Landfill Fill Sequence
VISTA LANDFILL



Attachment A

VISTA CLASS III LANDFILL FACILITY PERSONNEL LISTING

Position	Certification
District Manager	FDEP Operator
Market Area Engineer	
Lead Operator	FDEP Operator
Operator	
Operator	
Scale Operator	FDEP Spotter
Operator	FDEP Operator
Lead Tech	
Maintenance Tech	FDEP Operator
Spotter/Laborer	
Spotter/Laborer	FDEP Spotter
Operator	

GAS MONITORING REPORT

Signature: _____

VISTA LANDFILL LLC DAILY INSPECTION

Date	
Time	
Inspector	

ACTIVE AREA			
Northing		Temperature	
Easting		Wind Direction	
Elevation		Weather Condition	
Cell #		Rainfall	
SURVEY POINT ID # / LOCATION	ODOR INTENSITY S=strong, M=Medium, SL= slight and N=None	ODOR DESCRIPTION EG=Rotten Egg, LFG=LF gas. NW=New Waste & O=Other (describe)	COMMENTS/OBSERVATIONS
1. Front Gate			
2. Scale House			
3. Leachate Tanks			
4. NW Property Corner			
5. SW Property Corner			
6. SE Property Corner			
7. Active Face			

DAILY INSPECTION ITEMS	OK	NOT OK	COMMENT
Inspect for windblown litter/ debris and ensure that litter control devices are functioning correctly.			
Inspect for flagging debris.			
Inspect for unacceptable waste stored in designated areas.			
Inspect for dust leaving site.			
Inspect for mud/sediment leaving site at gates.			
Inspect for erosion and condition of access roads.			

WEEKLY INSPECTION ITEMS	OK	NOT OK	COMMENT
Inspect the condition of the leachate tank and system. Ensure needed repairs are documented.			
Inspect 3 random loads a week and maintain records.			
Inspect stormwater structures for sediment and erosion. Ensure structures are free flowing.			
Inspect landfill entrance, tanks and ensure they are in place and correct.			
Confirm that odor or dust complaints have been investigated and followed up on.			

LEACHATE DISCHARGE TO CITY TOTAL FLOW METER READING	CELL 1	CELL 2	CELL 3	CELL 4	CELL 5	CELL 6

SIGNATURE _____

ATTACHMENT C (2 of 2)

DAILY FIELD ODOR SURVEY FORM

Facility Name:
Facility Address:

Date: _____

Time:-----

Surveyor:-----

Are there any reasons for odor, such as a significantly large amount of trash being dumped, uncovering of trash that was covered the night before, odor producing leachate storage methods, new gas well installations or waste excavations? -----

If odors are possible, are they due to landfill gas or from landfill operations?-----

Are there odors detected from other nearby sources or activities going on that may generate nuisance odors? Describe **them**:-----

Weather Conditions

Wind Speed and Direction: _____
Barometric Pressure: _____

Rainfall: _____
Humidity: _____

Temp: _____

Odor Surveying Points

Survey Point ID/ Location	Odor Intensity S = Strong M = Medium SL = Slight N = None	Odor Description EG = rotten egg LFG = landfill gas NW = New Waste O = Other (describe)	Comments & Observations
1.			
2.			
3.			
4.			
5.			
6.			
7.			

DAILY - Condition of Landfill

Slopes and Berms: _____ Haul Road Condition: _____ Landfill Perimeter: _____
Litter and Debris: _____ **Flagging**:----- **Erosion**:-----

WEEKLY - Cover

Weekly Cover applied at active area(s) (Y) _ (N) _ Week ending: _____

QUARTERLY - Closed Areas

Final Cover: erosion _____ vegetation _____ differential sett _____ ponding _____
Surf Water Control Structures: _____ Quarter Ending _____

Signature: _____

ATTACHMENT D

ODOR COMPLAINT FORM

FACILITY NAME: _____
FACILITY ADDRESS: _____

RECEIVED BY: _____

DATE: _____
TIME: _____

Contact Information of the Com

plainant Name: _____
Address: _____
Address2: _____
Phone: _____

Odor Information

Date Detected: _____
Time Detected: _____
Location Detected: _____
Grid Coordinates: _____

Description of Com

plaint Type of Odor: _____

Intensity of Odor: _____

Weather Conditions when odor was detected: _____

Were odors noticed at this location in past: _____

\\Weather Conditions (At the time odors were detected)

Wind Direction and **Speed**: _____

Barometric Pressure: _____

Rainfall: _____

Humidity: _____

Temperature: _____

Remarks

(Include infonnation such as special waste being received, wash down of transfer station floor occurring, new gas well installation, location of current working face, etc.)

Follow-u p Contact with Com plaina nt

Was follow-up contact made with the complainant? _____

Ifso, answer the following questions:

When was contact made? Date: _____ Time: _____

By whom and how was contact made? _____

How was the contact made? (Letter, Phone Call, etc.) _____

What issues were discussed with the complainant? _____

ATTACHMENT E

ODOR COMPLAINT TRACKING CHART

FACILITY NAME:

REPORT COMPLETED BY: - _ _ _ _ _

MONTH: _____
YEAR: _____

[illegible]



EXHIBIT B - Landfill Facility Shutdown Checklist

In the days before landfall of any storm, it is imperative that we follow key procedures to "shutdown" our facilities. Listed below are the key items to be accomplished. Based on your site, there may be other items specific to your site. You should use the space at the bottom provided at the bottom of each day to identify the specific items and track their completion.

Follow all steps of the Consolidated Hurricane Plan and the items listed below:

Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
1	LF DM takes full responsibility for fuel inventory management. Fuel deliveries will be scheduled as far as possible in advance based on daily usage and storage capacity. Make sure to account for the possible need to supply employees with gasoline both immediately before and after the storm. MAFM working with Procurement will assist with logistics and deliveries.	Day ?	DM must monitor fuel supplies daily and ensure that tanks are topped off just prior to the storm.	LF DM		
2	Perform a general site assessment. Walk around the site and, at a minimum review/check: <ul style="list-style-type: none"> Check all erosion issues. Check side slopes. Check drainage issues. Check cap/cover issues. Clean/Repair all storm water swales and down falls. Check fence for overhanging trees and trim as necessary. Dispose of branches -do not leave in yard. Check metal building for loose 	Day ?	See Guidelines for Landfill Hurricane Preparations at the back of this exhibit. See Exhibit O - Hazardous Materials Checklist. See Exhibit V - Provisions & Safety Supplies.	LF DM		



Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
	siding or loose roof panels and repair as needed. <ul style="list-style-type: none"> • Check all office roofs to be sure that the drainage systems are clear. • Inspect garage doors and check wind rating from manufacturer. If doors are the older type with low wind ratings, determine if some type of supports could be fabricated to keep doors from being blown out. • Inspect storm drains to insure they have been maintained and are currently functional. Repair as needed. • Check water pumps (washracks, etc) and treatment locations for proper mounting and protection from wind damage to filtration systems. Fix as required. • If oil water separator is present and receives flows from any areas other than those areas under roof, the valves associated with these areas should be closed prior to landfall • Check storage and condition of all Hazardous Materials. See Hazardous Materials Checklist (Exhibit 0) and complete. Move materials to safe location if necessary. • Check to ensure that scalehouse and other temporary buildings are properly anchored. 					



Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
	<ul style="list-style-type: none"> • Insure that facilities with on-site well water serving buildings can power the pumps with a generator in the event of power loss or have portable toilets available in case of pump damage. Make plans as necessary. • Inspect hurricane supplies to insure they are complete. Check all equipment for proper operation. • Inspect storm ponds. Take any necessary actions. • Perform general housekeeping. CLEAN THE YARD of items that are not needed. Organize. Make note of items requiring tie-down or anchoring. • Note any other items required to be attended to prior to the storm. Use common sense. 					
3	Review Emergency Plan as outlined in the site operating permit. In addition to following the Steps of this plan, follow your Site Operating Permit completely.	Day 7	See Site Operating Permit	LFDM		
4	Inspect supplies to protect buildings, computers, etc. Each site should have a stockpile of goods (sheet plastic, plywood, etc) that was purchased in the spring. Review the list and purchase any supplies necessary.	Day 7	See Exhibit K - Hurricane Materials Worksheet	LFDM		

					Completed by Initials	Date Completed
5	Review current inventory levels of all critical items needed to keep equipment running (parts lubricants, etc). Schedule to have any extra inventory delivered and lubricant tanks topped off within next three days.	Day 7		LF DM		
6	Make contact with local electricians. Inform them that you may need to use their services after the storm to hook-up emergency generators. Get names and contact numbers for after the storm and keep with you at all times.	Day 7		LF DM		
7	Survey your leachate storage capacity, discuss with the Market Area if there is a need to pump additional leachate. Develop plan to pump out.	Day ?		LF DM		
8	Review the Equipment and Employee Evacuation Plan that was developed for the site. Discuss with all local management employees make any final changes necessary and discuss with MAGM.	Day 7	Review Exhibit D - Equipment and Employee Evacuation Plans	LF DM		
9	Based on the review of all of the steps above, create a specific work plan/punch list of items that must be accomplished before landfall.	Day 7		LF DM.		
10	Other items specific to the site:	Day 7				

Waste Management -Hurricane Planning Manual

Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
11	If there is a need to pump/transport additional leachate, contact service providers and determine routing/transportation.	Day 6		LF DM		
12	Follow-up on walk around inspection and punch list. Ensure that all items are being completed.	Day 6		LF DM		
13	Any other items specific to the site:	Day 6				
14	Follow-up on facility walk around inspection and punch list. Clean-up/store/secure any loose debris, materials and equipment that could become wind-blown.	Day 5		LF DM		
15	Notify all major customers and host community as to what the current plans are for closing the landfill. Scale house attendants should communicate to each truck driver what our current site closure estimate is.	Day 5	See Exhibit D – Equipment and Employee Evacuation Plans	LF DM		
16	Review the landfill SPCC and SWPPP plans discuss as necessary with the MA Environmental Protection Manager.	Day 5		LF DM		
17	Verify critical inventories (parts, lubricants) are in place and all lubricants have been topped off.	Day 5		LF DM		



Activity	Activity Risk	Completion Date	Responsible Party	Assigned To	Optimistic	Pessimistic
18	Begin daily briefings with all employees. Discuss all on-going preparation plans, current status of personal preparations, work schedules, etc.	Day 5	See Exhibit D Equipment and Employee Evacuation Plans	LF DM		
19	Any other items specific to the site:	Day s				
20	Check status of all issues found in the facility walk around inspection and punch list. Ensure activities are on track to completion.	Day 4	See Guidelines for Landfill Hurricane Preparations at the back of this exhibit	LF DM		
21	Conduct daily briefing with all employees. Discuss all on-going preparation plans, current status of personal preparations, work schedules. etc.	Day 4	See Exhibit D – Equipment and Employee Evacuation Plans	LF DM		
22	Notify all major customers and host community as to what the current plans are for closing the landfill. Scale house attendants should communicate to each truck	Day 4	See Exhibit D – Equipment and Employee Evacuation Plans	LF DM		



No.	Activity / Task	Complete By	Comments	Assign	Priority	Cpm: Add
	driver what our current site closure estimate is.					
23	Survey your leachate storage capacity, discuss with the Market Area if there is a need to our additional leachate.	Day 4		LFDM		
24	Any other items specific to the site:	Day 4				
25	Check status of all issues found in the facility walk around inspection and punch list. Ensure activities are on track to completion.	Day 3	See Guidelines for Landfill Hurricane Preparations at the back of this exhibit	LFDM		
26	Finish all "clean-up" activities on the site. All supplies should be in indoors or otherwise secured.	Day 3		LFDM		
27	Begin to install plywood or other coverings over windows and doors. Begin the process of "boarding up".	Day 3		LFDM		
28	Meet with all employees. Identify all employees who plan to evacuate area and determine their final timeline for departure. Review Wallet card, WMID badge, communication protocols. DO NOT ALLOW any employee to evacuate without a Wallet Card, Photo ID, and safe transit	Day 3	See Exhibit D – Equipment and Employee Evacuation Plans See Exhibit F – Hurricane	LFDM		

Item	Activity /Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
	letter from Group Legal (if available). Also, be sure to update Exhibit F -Employee Phone/Address tree with contact information for employees who intend to evacuate the area.		Preparedness Contact Information, Section 14 Employee Phone/Address Tree			
29	Notify an major customers and host community as to what the current plans are for closing the landfill. Scale house attendants should communicate to each truck driver what our current site closure estimate is.	Day 3	Se Exhibit D Equipment and Employee Evacuation Plans	LF DM		
30	Any other items specific to the site:	Day 3				
31	Complete activities identified in walk around inspection and punch list.	Day 2	See Guidelines for Landfill Hurricane Preparations at the back of this exhibit	LF DM		
32	Begin to monitor wind speeds. The site will start to shut down when wind speeds begin to exceed a safe level (note this is typically 40 :MPH). Notify all major customers and host community as to what the current plans are °for c'losing the landfill. Scale house attendants should com:ununicate to each truck driver what our current site closure estimate is. Note: if wind speeds are approaching 40 MPH it is critical that the site begins to perform the DAY 1activities below.	Day 2	See ExhibitD – Equipment and Employee Evacuation Plans	LFDM		



Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Complete
33	Stage any equipment not being used in its designated parking location.	Day 2	See Exhibit D – Equipment and Employee Evacuation Plans	LF DM		
34	Any other items specific to the site:	Day 2				
35	Review all activities, on the list above. Insure completion.	Day 1		LF DM		
36	Secure YELLOW IRON and other equipment. Take the following steps: - Fully fuel (top-off) all equipment. Move equipment to your pre-determined staging area. Park equipment a minimum of 25 feet apart (for fire protection). Do not park near or under power lines. Do not park near gravel or loose rock. Position to minimize exposure of all hydraulic cylinders. Turn off all power and master	Day 1		LF DM		

GAS MONITORING REPORT

Facility Name: _____

ANALYST: _____

DATE:

GAS INSTRUMENT TYPE: _____

SERIAL NO.:

PRESSURE INSTRUMENT TYPE: _____

SERIAL NO. _____

WATER LEVEL INSTRUMENT TYPE: _____

SERIAL NO.: _____

WEATHER CONDITIONS:-—————BAROMETRIC PRESSURE:_____

CALIBRATION	Response	Adjustment	Acceptable	Int.
SPAN GAS 2.5% (by vol.)				
SPAN GAS 50% (by vol.)				

MONITOR POINT	TIME	PRESSURE (inches)	METHANE (% by Vol. air)	METHANE (% LEL)	LIQUID LEVEL (FT. TOC)	COMMENTS
1						

COMMENTS: BH = Bar Hole completed by hammering a bar (3 feet long x 1/2 inch dia.) into the ground then removing.

The subsequent void is then measured for methane by inserting the instrument probe into the void and

Aspirating sample gas through the meter. No liquid level possible for a Bar Hole.

Signature: _____

LANDFILL INSPECTION AND DAILY FIELD ODOR SURVEY FORM

Facility Name:
Facility Address:

Date: _____

Time: _____

Surveyor: _____

Are there any reasons for odor, such as a significantly large amount of trash being dumped, uncovering of trash that was covered the night before, odor producing leachate storage methods, new gas well installations or waste excavations? _____

If odors are possible, are they due to landfill gas or from landfill operations? _____

Are there odors detected from other nearby sources or activities going on that may generate nuisance odors? Describe them: _____

Weather Conditions

Wind Speed and Direction: _____

Rainfall: _____

Temp: _____

Barometric Pressure: _____

Humidity: _____

Odor Surveying Points

Survey Point ID/ Location	Odor Intensity S = Strong M = Medium SL = Slight N = None	Odor Description EG = rotten egg LFG = landfill gas NW = New Waste 0 = Other (describe)	Comments & Observations
1.			
2.			
3.			
4.			
5.			
6.			
7.			

DAILY - Condition of Landfill

Slopes and Berms: _____

Haul Road Condition: _____ Landfill Perimeter: _____

Litter and Debris: _____

Flagging: _____ Erosion: _____

WEEKLY - Cover

Weekly Cover applied at active area (s) (Y) _____ (N) _____ Weekending _____

QUARTERLY - Closed Areas

Quarter Ending _____

Final Cover: erosion vegetation differential settlement ponding _____

Surface Water Control Structures: _____

Signature: _____

ODOR COMPLAINT FORM

FACILITY NAME: _____
FACILITY ADDRESS: _____

RECEIVED BY: _____

DATE: _____
TIME: _____

Contact Information of the Complainant

Complainant Name: _____
Address: _____
Address2: _____
Phone: _____

Odor Information

Date Detected: _____
Time Detected: _____
Location Detected: _____
Grid Coordinates: _____

Description of Complaint

Complaint Type of Odor: _____

Intensity of Odor: _____

Weather Conditions when odor was detected: _____

Were odors noticed at this location in past: _____

Weather Conditions (At the time odors were detected)

Wind Direction and Speed: _____

Rainfall: _____ Temperature: _____
Humidity: _____

Barometric Pressure: _____

Remarks

(Include information such as special waste being received, wash down of transfer station floor occurring, new gas well installation, location of current working face, etc.)

Follow-up Contact with Complainant

Was follow-up contact made with the complainant? _____

If so, answer the following questions:

When was contact made? Date: _____ Time: _____

By whom and how was contact made? _____

How was the contact made? (Letter, Phone Call, etc.) _____

What issues were discussed with the complainant? _____

ODOR COMPLAINT TRACKING CHART

FACILITY NAME:
REPORT COMPLETED BY: - - - - -
=

MONTH: _____
YEAR: _____

[illegible]



EXHIBIT B - Landfill Facility Shutdown Checklist

In the days before landfall of any storm, it is imperative that we follow key procedures to "shutdown" our facilities. Listed below are the key items to be accomplished. Based on your site, there may be other items specific to your site. You should use the space at the bottom provided at the bottom of each day to identify the specific items and track their completion.

Follow all steps of the Consolidated Hurricane Plan and the items listed below:

Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
1	LF DM takes full responsibility for fuel inventory management. Fuel deliveries will be scheduled as far as possible in advance based on daily usage and storage capacity. Make sure to account for the possible need to supply employees with gasoline both immediately before and after the storm. MAFM working with Procurement will assist with logistics and deliveries.	Day ?	DM must monitor fuel supplies daily and ensure that tanks are topped off just prior to the storm.	LF DM		
2	Perform a general site assessment. Walk around the site and, at a minimum review/check: <ul style="list-style-type: none"> Check all erosion issues. Check side slopes. Check drainage issues. Check cap/cover issues. Clean/Repair all storm water swales and down falls. Check fence for overhanging trees and trim as necessary. Dispose of branches -do not leave in yard. Check metal building for loose 	Day ?	See Guidelines for Landfill Hurricane Preparations at the back of this exhibit. See Exhibit O - Hazardous Materials Checklist. See Exhibit V - Provisions & Safety Supplies.	LF DM		



Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
	<p>siding or loose roof panels and repair as needed.</p> <ul style="list-style-type: none"> • Check all office roofs to be sure that the drainage systems are clear. • Inspect garage doors and check wind rating from manufacturer. If doors are the older type with low wind ratings, determine if some type of supports could be fabricated to keep doors from being blown out. • Inspect storm drains to insure they have been maintained and are currently functional. Repair as needed. • Check water pumps (washracks, etc) and treatment locations for proper mounting and protection from wind damage to filtration systems. Fix as required. • If oil water separator is present and receives flows from any areas other than those areas under roof, the valves associated with these areas should be closed prior to landfall • Check storage and condition of all Hazardous Materials. See Hazardous Materials Checklist (Exhibit 0) and complete. Move materials to safe location if necessary. • Check to ensure that scalehouse and other temporary buildings are properly anchored. 					



Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
	<ul style="list-style-type: none"> • Insure that facilities with on-site well water serving buildings can power the pumps with a generator in the event of power loss or have portable toilets available in case of pump damage. Make plans as necessary. • Inspect hurricane supplies to insure they are complete. Check all equipment for proper operation. • Inspect storm ponds. Take any necessary actions. • Perform general housekeeping. CLEAN THE YARD of items that are not needed. Organize. Make note of items requiring tie-down or anchoring. • Note any other items required to be attended to prior to the storm. Use common sense. 					
3	Review Emergency Plan as outlined in the site operating permit. In addition to following the Steps of this plan, follow your Site Operating Permit completely.	Day 7	See Site Operating Permit	LFDM		
4	Inspect supplies to protect buildings, computers, etc. Each site should have a stockpile of goods (sheet plastic, plywood, etc) that was purchased in the spring. Review the list and purchase any supplies necessary.	Day 7	See Exhibit K - Hurricane Materials Worksheet	LFDM		

					Completed by Initials	Date Completed
5	Review current inventory levels of all critical items needed to keep equipment running (parts lubricants, etc). Schedule to have any extra inventory delivered and lubricant tanks topped off within next three days.	Day 7		LF DM		
6	Make contact with local electricians. Inform them that you may need to use their services after the storm to hook-up emergency generators. Get names and contact numbers for after the storm and keep with you at all times.	Day 7		LF DM		
7	Survey your leachate storage capacity, discuss with the Market Area if there is a need to pump additional leachate. Develop plan to pump out.	Day ?		LF DM		
8	Review the Equipment and Employee Evacuation Plan that was developed for the site. Discuss with all local management employees make any final changes necessary and discuss with MAGM.	Day 7	Review Exhibit D - Equipment and Employee Evacuation Plans	LF DM		
9	Based on the review of all of the steps above, create a specific work plan/punch list of items that must be accomplished before landfall.	Day 7		LF DM.		
10	Other items specific to the site:	Day 7				

Waste Management -Hurricane Planning Manual

Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
11	If there is a need to pump/transport additional leachate, contact service providers and determine routing/transportation.	Day 6		LF DM		
12	Follow-up on walk around inspection and punch list. Ensure that all items are being completed.	Day 6		LF DM		
13	Any other items specific to the site:	Day 6				
14	Follow-up on facility walk around inspection and punch list. Clean-up/store/secure any loose debris, materials and equipment that could become wind-blown.	Day 5		LF DM		
15	Notify all major customers and host community as to what the current plans are for closing the landfill. Scale house attendants should communicate to each truck driver what our current site closure estimate is.	Day 5	See Exhibit D – Equipment and Employee Evacuation Plans	LF DM		
16	Review the landfill SPCC and SWPPP plans discuss as necessary with the MA Environmental Protection Manager.	Day 5		LF DM		
17	Verify critical inventories (parts, lubricants) are in place and all lubricants have been topped off.	Day 5		LF DM		



Activity	Activity Risk	Completion Date	Responsible Party	Assigned To	Optimistic	Pessimistic
18	Begin daily briefings with all employees. Discuss all on-going preparation plans, current status of personal preparations, work schedules, etc.	Day 5	See Exhibit D Equipment and Employee Evacuation Plans	LF DM		
19	Any other items specific to the site:	Day s				
20	Check status of all issues found in the facility walk around inspection and punch list. Ensure activities are on track to completion.	Day 4	See Guidelines for Landfill Hurricane Preparations at the back of this exhibit	LF DM		
21	Conduct daily briefing with all employees. Discuss all on-going preparation plans, current status of personal preparations, work schedules, etc.	Day 4	See Exhibit D – Equipment and Employee Evacuation Plans	LF DM		
22	Notify all major customers and host community as to what the current plans are for closing the landfill. Scale house attendants should communicate to each truck	Day 4	See Exhibit D – Equipment and Employee Evacuation Plans	LF DM		



No.	Activity / Task	Complete By	Comments	Assign	Priority	Cpm: Add
	driver what our current site closure estimate is.					
23	Survey your leachate storage capacity, discuss with the Market Area if there is a need to our additional leachate.	Day 4		LFDM		
24	Any other items specific to the site:	Day 4				
25	Check status of all issues found in the facility walk around inspection and punch list. Ensure activities are on track to completion.	Day 3	See Guidelines for Landfill Hurricane Preparations at the back of this exhibit	LFDM		
26	Finish all "clean-up" activities on the site. All supplies should be in indoors or otherwise secured.	Day 3		LFDM		
27	Begin to install plywood or other coverings over windows and doors. Begin the process of "boarding up".	Day 3		LFDM		
28	Meet with all employees. Identify all employees who plan to evacuate area and determine their final timeline for departure. Review Wallet card, WMID badge, communication protocols. DO NOT ALLOW any employee to evacuate without a Wallet Card, Photo ID, and safe transit	Day 3	See Exhibit D – Equipment and Employee Evacuation Plans See Exhibit F – Hurricane	LFDM		

Item	Activity /Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
	letter from Group Legal (if available). Also, be sure to update Exhibit F -Employee Phone/Address tree with contact information for employees who intend to evacuate the area.		Preparedness Contact Information, Section 14 Employee Phone/Address Tree			
29	Notify an major customers and host community as to what the current plans are for closing the landfill. Scale house attendants should communicate to each truck driver what our current site closure estimate is.	Day 3	Se Exhibit D Equipment and Employee Evacuation Plans	LF DM		
30	Any other items specific to the site:	Day 3				
31	Complete activities identified in walk around inspection and punch list.	Day 2	See Guidelines for Landfill Hurricane Preparations at the back of this exhibit	LF DM		
32	Begin to monitor wind speeds. The site will start to shut down when wind speeds begin to exceed a safe level (note this is typically 40 :MPH). Notify all major customers and host community as to what the current plans are °for c'losing the landfill. Scale house attendants should com:ununicate to each truck driver what our current site closure estimate is. Note: if wind speeds are approaching 40 MPH it is critical that the site begins to perform the DAY 1activities below.	Day 2	See ExhibitD – Equipment and Employee Evacuation Plans	LFDM		



Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Complete
33	Stage any equipment not being used in its designated parking location.	Day 2	See Exhibit D – Equipment and Employee Evacuation Plans	LF DM		
34	Any other items specific to the site:	Day 2				
35	Review all activities, on the list above. Insure completion.	Day 1		LF DM		
36	Secure YELLOW IRON and other equipment. Take the following steps: - Fully fuel (top-off) all equipment. Move equipment to your pre-determined staging area. Park equipment a minimum of 25 feet apart (for fire protection). Do not park near or under power lines. Do not park near gravel or loose rock. Position to minimize exposure of all hydraulic cylinders. Turn off all power and master	Day 1		LF DM		

Waste Management -Hurricane Planning Manual

Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
	switch. - Lock cab if possible.					
37	Secure all fueling equipment: Insure that all tanks are protected from possible water entry. Secure blow-off caps to insure that wind does not lift and allow water entry. Test all tanks for water using stick and paste. Record results (this will be used to provide a benchmark after the storm). Make sure all fuel nozzles are secured and locked.	Day 1		LF DM		
38	Double check and ensure that all containment area valves have been closed/locked.	Day 1		LF DM		
39	Finish boarding up the facility. Sandbag all shop doors to prevent water penetration under the doors.	Day 1		LF DM		
40	Notify all major customers and your host community as to what your current plans are for closing the landfill. For instance, you will be closing the landfill once the wind speed reaches 40 MPH. Make sure that your scale house attendants communicate to each truck driver what our current site closure estimate is.	Day 1		LF DM		
41	Hardware and files: Hardware: Unplug (electrical, Ethernet, etc) all computers and place on top of desks to elevate them off of the floor. Cover/wrap all computers in plastic. Move them to locations away from windows if possible.	Day 1		LF DM		



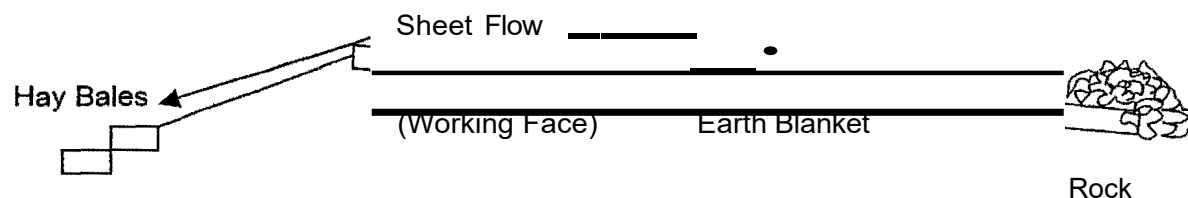
Item	Activity / Task	Complete By Date	Comments	Assigned To:	Completed By Initials	Date Completed
	Files: Secure as best as possible cover/wrap all file cabinets in plastic.					
42	Charge all batteries and spare batteries for laptops and cell phones. Take your laptop and spare batteries/chargers with you when you leave.	Day 1		LF DM		
43	Turn off all electrical breaker boxes to your buildings (only). Do NOT turn off electricity to your flares, pumps, etc unless you have made provisions for generator power and the generators are hooked-up and working. Your goal here is to protect buildings from electrical fires. If you only have one panel that controls the building and the Flares/pumps, etc. then you should leave the electricity on.	Day 1		LF DM		
44	Take this manual with you when you leave.	Day 1		LF DM		
45	Lock all buildings and secure all gates as you are leaving.	Day 1		LF DM		
46	Any other items specific to the site:	Day 1		LF DM		



Guidelines for Landfill Hurricane Preparations (Working Face, Roads, Slopes, and Drainage Features)

Preface: A hurricane may present conditions that can adversely effect landfill operations. The main threats are high wind, heavy rain and flooding. It is the intent of this document to provide basic guidelines that, when properly implemented, can greatly reduce the effects of these potential impacts.

Working Face: The working face of the landfill should be protected from excess water intrusion from heavy rains. This can be done by providing proper grading and cover that promotes the shedding of water off of the working face toward drainage features. Cover should be applied a minimum of 6" thick (1 foot preferred) or as required by permit conditions at the site. Cover material should be compacted into place (walked-in) so that the soil is tightly packed. If a tarp is used it should be anchored or covered to prevent being removed by high winds. A back-up tarp may be needed if the tarp in use becomes damaged or washed/ blown away by the storm. The working face should be developed and covered to minimize steep slopes that are subject to erosion during heavy rain and to eliminate points of entry for rain and surface water. Consideration should be given to the potential for erosion areas that may develop. In steep areas benching, rock, hay bales, or other measures to discourage erosion should be installed.



Access Roads: Roadways should be graded to promote drainage and limit erosion. A slight crown or angle should be applied to the road to allow sheet flow off of the road way into drainage swales (ditches). This is especially critical on steep roads to prevent a river effect down the roadway. The drainage swales (ditches) should have periodic erosion barriers to limit the speed of flow of water within them. This is best accomplished installing gabions or check dams to absorb and dissipate the energy of the flowing water. Some examples of this are the placement of rock, hay bales, benches, concrete or other control devices placed across the swale to slow the flow of drainage.

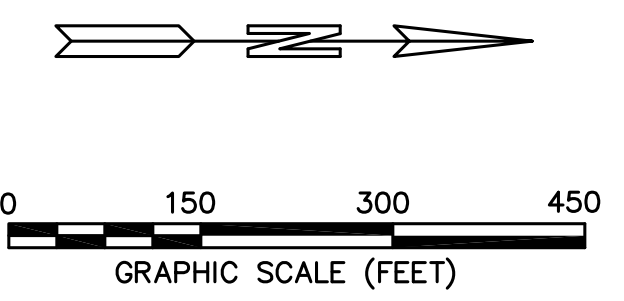
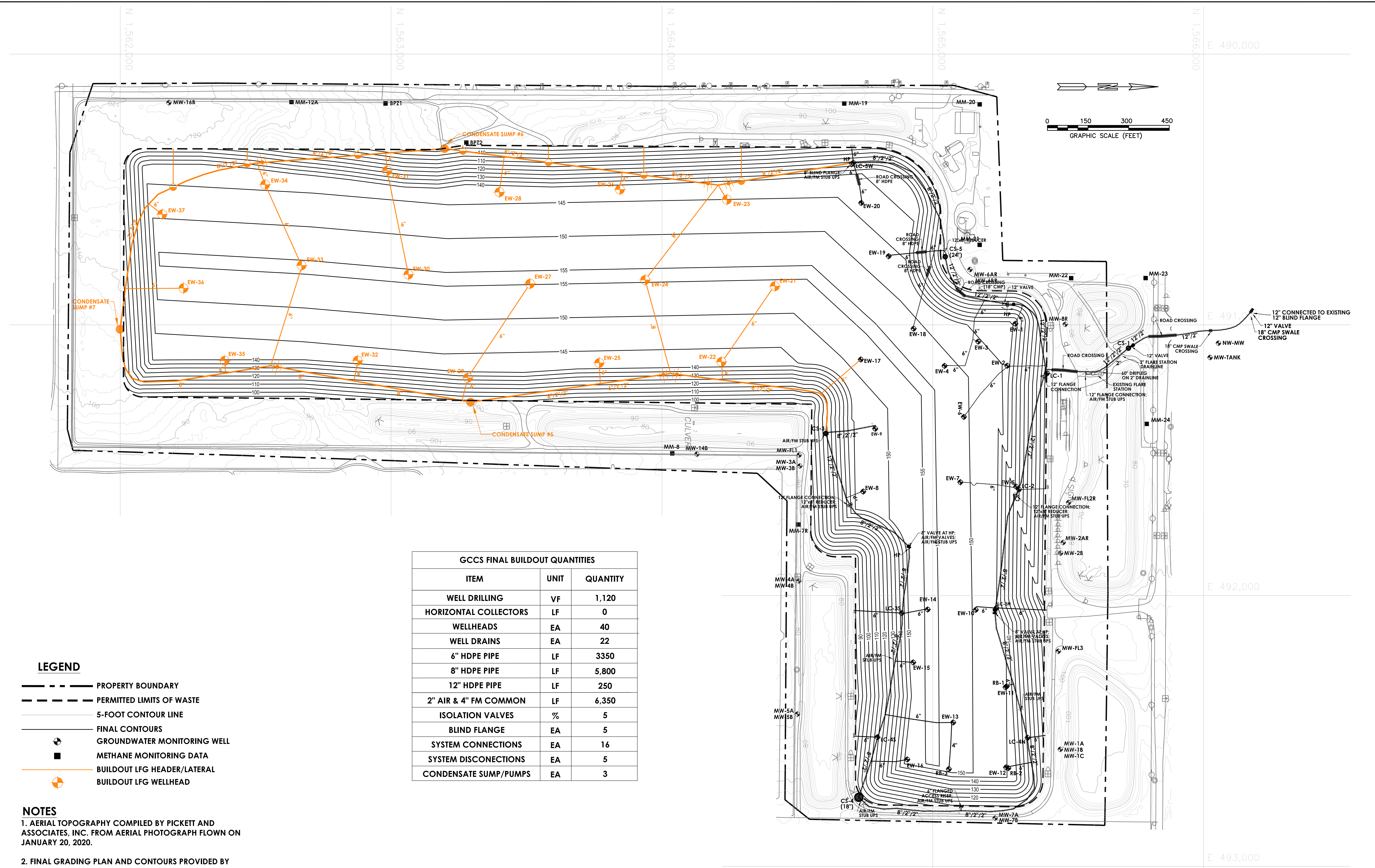


Slopes/ Drainage Features: Sloped areas are subject to erosion when exposed to heavy rains. Ongoing efforts to establish healthy vegetation on sloped areas are needed to prevent and control the potential effects from erosion. Surface treatments such as geo-matting, sod and hydro-seeding should be considered in advance of storm events. Establishing and maintaining designed drainage features also plays an important role in keeping sloped area intact. Benching, down chutes, and down drains provide a means of conveying water from the top of the hill down. These features should be checked to ensure that they are in proper working order. If areas are bare (no vegetation) consideration should be given to the potential impact of heavy rain on the area. The placement of additional cover material, uphill diversion berms or hay bales may help protect these areas from excess erosion. A good rule of thumb is to focus on areas that have shown evidence of erosion in the past. These areas are likely to be impacted to a greater degree during a hurricane.

Drainage Features: In addition to the drainage features discussed above, other drainage features may be present at landfills. These include storm water swales, storm water ponds, outfalls and other control devices. On an ongoing basis all of these features should be maintained. The primary concern is the blockage of these features with silt, debris or vegetation. The entire storm water system should be inspected to identify and remove any such blockage so that excess storm water that may accompany a hurricane. Again, focus should be on areas that have been problematic in the past.



Rock/ Dirt Stockpile: Rock and dirt should be stockpiled for use following a storm. These materials may be needed to repair roadways, slopes and swales impacted by erosion associated with the storm. Keep in mind that the availability of cover material may also be impacted by a hurricane. Road closures, lack of fuel or damage to hauling contractors may prevent the delivery of cover material for several days or longer. **The** quantity of material needed is site specific and dependent on several factors. When planning stockpile needs consider the amount of material that has been needed in the past to repair roads and side slopes following heavy rain. Also consider daily cover needs. A sufficient quantity of rock or crushed concrete and soil should be available to repair expected road and slope damage. Stockpiles should be located in areas that are not subject to flooding or surface flow impact so that they can be accessed and used following the storm.



LEGEND

- PROPERTY BOUNDARY
- PERMITTED LIMITS OF WASTE
- 5-FOOT CONTOUR LINE
- FINAL CONTOURS
- ⊕ GROUNDWATER MONITORING WELL
- METHANE MONITORING DATA
- BUILDOUT LFG HEADER/LATERAL
- ⊕ BUILDOUT LFG WELLHEAD

NOTES

1. AERIAL TOPOGRAPHY COMPILED BY PICKETT AND ASSOCIATES, INC. FROM AERIAL PHOTOGRAPH FLOWN ON JANUARY 20, 2020.
2. FINAL GRADING PLAN AND CONTOURS PROVIDED BY APPLIED TECHNOLOGY & MANAGEMENT, INC. IN MAY 2012.

GCCS FINAL BUILDOUT QUANTITIES		
ITEM	UNIT	QUANTITY
WELL DRILLING	VF	1,120
HORIZONTAL COLLECTORS	LF	0
WELLHEADS	EA	40
WELL DRAINS	EA	22
6" HDPE PIPE	LF	3350
8" HDPE PIPE	LF	5,800
12" HDPE PIPE	LF	250
2" AIR & 4" FM COMMON	LF	6,350
ISOLATION VALVES	%	5
BLIND FLANGE	EA	5
SYSTEM CONNECTIONS	EA	16
SYSTEM DISCONNECTIONS	EA	5
CONDENSATE SUMP/PUMPS	EA	3