

**POST OAK MUNICIPAL SOLID WASTE LANDFILL
TYPE I MSW LANDFILL
GUADALUPE COUNTY, TEXAS
TCEQ PERMIT NO. MSW - 2378**

**SITE OPERATING PLAN
PART IV**

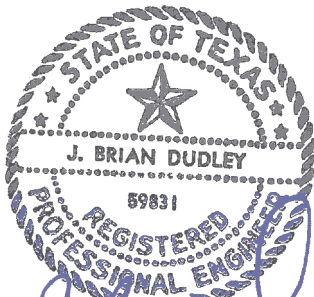
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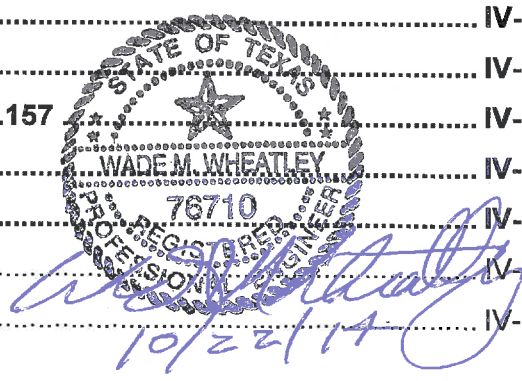
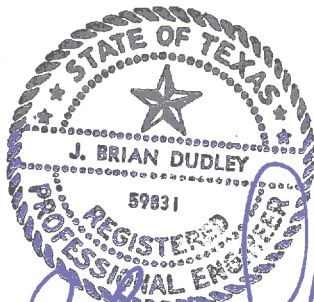


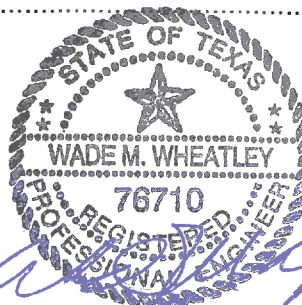


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WASTE STREAM SUMMARY



1.0 INTRODUCTION

The Post Oak Landfill is a proposed regional Type I MSW disposal facility located approximately 12 miles east of Seguin, Texas. The facility will accept the types of wastes identified in the facility's Waste Acceptance Plan (Part II, Section 2.0) for storage, processing, and/or disposal from both public and private entities in Guadalupe County, other Texas counties and from outside of Texas. Any industrial solid wastes received from generators outside of Texas must have received approval from that TCEQ that the wastes are a class 2 or 3 waste in accordance with 30 TAC 335.508(9)(B).

2.0 PRE-OPERATION NOTICE 330.123

For the initial opening of the Post Oak Landfill, preconstruction conference, preopening inspection and information submittal activities will be conducted as described in 30 TAC 330.73(c-f). Upon subsequent construction and lining of a new disposal area, Post Oak will provide written notice in the form of liner evaluation reports for TCEQ review 14 days prior to placement of waste.

3.0 RECORD KEEPING REQUIREMENTS 330.125

An Operating Record will be kept at the landfill facility and contain a complete collection of facility permit documents, designs, operating procedures, monitoring data and waste receipt information. Information listed in the table below will be placed in the Operating Record within seven working days of completion or receipt of analytical data. All information contained within the Operating Record and the different required plans will be retained for the active life of the facility, including the post-closure care period. All information will be maintained at the Post Oak Landfill facility and shall be made available for TCEQ inspection upon request.



Contents of the Operating Record

Records To Be Maintained	Frequency	Rule Citation
1. Approved landfill plans including the Site Development Plan, Site Operating Plan, Final Closure Plan, Post-Closure Maintenance Plan, Landfill Gas Management Plan and any other required plan or other related document; any and all location-restriction demonstrations	Upon TCEQ approval of each document	330.125(a), (b)(1)
2. Inspection records, training procedures, and notification procedures relating to excluding the receipt of prohibited waste.	Per occurrence	330.125(b)(2)
3. All results from gas monitoring and any remediation plans relating to explosive and other gases.	Quarterly	330.125(b)(3)
4. Any and all unit design documentation for the placement of leachate or gas condensate in the landfill	Per occurrence	330.125(b)(4)
5. Any and all demonstration, certification, findings, monitoring, testing or analytical data relating to groundwater monitoring and corrective action.	As required	330.125(b)(5)
6. Closure and post-closure care plans and any monitoring, testing, or analytical data relating to post-closure requirements.	As required	330.125(b)(6)
7. Cost estimates and financial assurance documentation relating to financial assurance for closure and post-closure.	Annually	330.125(b)(7)
8. Copies of all correspondence and responses relating to the operation of the facility, modifications to the permit, approvals, and other matters pertaining to technical assistance.	Per occurrence	330.125(b)(9)
9. Any and all documents, manifests, trip tickets, etc., involving special waste.	Per occurrence	330.125(b)(10)
10. Any other document(s) as specified by the approved permit or by the executive director.	As required	330.125(b)(12)
11. Training records in accordance with 30 TAC 335.586(d) and (e)	Per occurrence	330.125(e)
12. Operator licenses in accordance with Chapter 30, Subchapter F	As needed	330.125(f)



Records To Be Maintained	Frequency	Rule Citation
13. Records to document the annual waste acceptance rate, quarterly solid waste summary reports and the annual solid waste summary reports required by 30 TAC 330.675. If the annual waste acceptance rate exceeds that estimated in the permit application, an application to modify the permit will be submitted in accordance with 30 TAC 305.70(k), including proposed changes to the SOP.	Quarterly and Annually	330.125(h)
14. Load inspection records.	Per occurrence	330.127(5)(B)
15. Fire occurrence notices.	Per occurrence	330.129
16. Inspection records and training procedures relating to fire prevention and site safety.	As needed	330.129
17. Access control breach and repair notices.	Per occurrence	330.131
18. All site inspection and maintenance documentation.	As required	330.131
19. Record(s) of each unauthorized material removal event.	Per occurrence	330.133(b)
20. Record of alternative operating hours if applicable.	As required	330.135(d)
21. Water, crude oil and/or natural gas well location and plugging reports.	Within 30 days of discovery	330.161(a)-(c)
22. Cover inspection records.	As required	330.165(h)

3.1 LANDFILL PERSONNEL 330.127

The landfill facility will be staffed with qualified personnel that are experienced in municipal solid waste operations and earthmoving construction. Key personnel at the landfill include:



Landfill Personnel and Descriptions

Personnel	Qualifications	Roles
Landfill Manager	Must hold and maintain Landfill Supervisors license for a Type I landfill as required by 30 TAC 30.213;	Responsible for all aspects of landfill development and operations to ensure safety and compliance with all environmental regulations applicable to the facility. Specifically, solid waste regulations, water and storm water regulations, and air emission regulations applicable to the facility. Also responsible for: Managing waste disposal and cover placement operations in compliance with Facility Plans and TCEQ regulations; Maintaining information for the Operating Record; and Personnel direction.
Landfill Supervisor	1 year minimum experience in earthwork construction or equipment operation and on the job training by supervisor in SOP requirements for operations, daily cover and screening for unauthorized waste	Responsible for: Supervising waste disposal and cover placement operations; Personnel safety during waste placement and cover construction; and Landfill equipment maintenance and repair.
Equipment Operator	6 months minimum experience in equipment operation or on the job training by supervisor and training by landfill manager in SOP requirements for daily cover and unauthorized waste	Grading and excavating, necessary equipment maintenance, waste leveling and compaction, application of daily cover, and general site road maintenance. Operators are also responsible for keeping the working face in the smallest area practical and screening for unauthorized waste.
Gate Attendant	Training by landfill manager in the SOP rules, record keeping requirements, and waste screening	Determines customer fees and keeps appropriate records, controls site access, visually screens for unauthorized waste, reviews manifests and special waste documentation, and provides general customer direction and information.
Litter Control, Spotters, and Laborers	Internal safety training	As directed, picks up wind blown litter, directs traffic and customers at the working face, and performs maintenance.



3.2 EQUIPMENT 330.127(2)

Sufficient equipment will be provided at the facility to effectively manage the volumes of wastes accepted and to conduct site operations in accordance with the landfill design and permit conditions.

Minimum equipment available for disposal operations and site maintenance are listed in the Table below. Equipment requirements may vary according to the volume of waste accepted and the method of landfill operations. Additional equipment or similar types of equipment may be substituted as needed. Equipment will be routinely maintained to assure that the equipment is kept in good working order so as not to create bottle-necks in the daily operations. Backup equipment will be leased when needed, and landfill construction may be performed by an outside contractor that will provide additional construction equipment.

Landfill Facility Equipment List

Equipment Type	Number Required Per Waste Acceptance Rate (Minimum)		Typical Size	Function
	<2000 tpd	2,000 to 4,000 tpd		
Scraper	1	2	34 cy	Soil excavation, transporting daily cover and fire fighting support
Roll Off Truck	2	2	40 cubic yard capacity	Transporting waste from citizen convenience area daily
Steel Wheel Compactor	1	2	80,000 lbs	Waste and soil spreading and compaction
Dozer and Front Loader	2	2	28,000 lbs	Soil and waste movement, firefighting support
Water Truck	1	1	2000 gallons	Dust control, fire fighting support
Motorgrader or similarly capable equipment	1	1	140 hp	Grading of access roads
Pickup Truck	3	3	½ ton	Personnel transport, maintenance and litter control
Pump	4	4	2-4 inch	Stormwater pumping



3.3 OPERATIONAL INSTRUCTIONS 330.127(3)

The Landfill personnel will conduct the following routine operations and inspections. The inspection documentation will be placed in the Operating Record.

Routine Site Inspections

Operation	Instruction	Frequency
Daily Cover	Inspect for proper placement and document placement, area of placement, thickness of placement and how placement was accomplished in log book.	Daily
Intermediate Cover	Inspect for proper placement and document placement, area of placement, thickness of placement and how placement was accomplished in log book.	After placement, weekly and within 72 hours of a 0.5 inch or greater rainfall event.
Final Cover	Inspect for proper placement and document placement, area of placement, thickness of placement and how placement was accomplished in log book.	After placement, weekly and within 72 hours of a 0.5 inch or greater rainfall event.
Erosion Control	Inspect intermediate and final cover and document date of detection and completion of repairs in log book.	Within 72 hours of a 0.5 inch or greater rainfall event.
Ponded Water Control	Inspect landfill for ponded water.	Within 72 hours of a 0.5 inch or greater rainfall event.
Gates and Fences	Inspect for damage and repair as necessary	Weekly
Windblown Litter	Inspect site, fences, access roads and gate for scattered litter.	Daily
Landfill Markers	Inspect for missing or damaged markers. Repair within 15 days of removal, destruction, or determination that the markers do not meet regulatory requirements.	Monthly
Waste Along Site Route	Cleanup of waste materials spilled along public access roads at least 2 miles, either direction, from facility entrance.	Daily
Public Access Roads	Remove mud and debris, if accumulated, during wet weather conditions.	Daily



3.4 PERSONNEL TRAINING 330.127(4) AND 335.586(A) AND (C)

Facility personnel must successfully complete a program of classroom instruction or on the job training that teaches them to perform their duties in a way that ensures the facility's compliance. The facility personnel must successfully complete required training within six months after the date of their employment or assignment to a new position at the facility. Employees must not work in unsupervised positions until they have completed the required training. Training will be directed by one or more persons that are trained and experienced in waste management procedures, and will include instruction on waste management procedures and contingency plan implementation relevant to the positions in which facility personnel are employed. The owner or operator must ensure that this program includes all the elements described in a written description of the type and amount of both introductory and continuing training that will be given to each person in a position responsible for any aspect of the proper operation of the facility.

At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:

- (A) procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
- (B) communications or alarm systems;
- (C) response to fires or explosions;
- (D) response to ground-water contamination incidents; and
- (E) shutdown of operations.

Training will be scheduled for all employees requiring specialized training at least once per month. Facility personnel must also take part in an annual review of the initial training. Facility training topics for all personnel are as follows:

- Site Operations
- MSW Requirements



- Equipment Maintenance
- Safety
- Fire Protection and Prevention
- Fire Extinguisher Use
- Hazardous Waste Identification
- Prohibited Waste and Random Inspections
- Emergency Response
- Litter Control
- Recordkeeping
- Stormwater Pollution Prevention Plan

3.5 DETECTION AND PREVENTION OF PROHIBITED WASTES 330.127(5)

The Post Oak Landfill will not accept and dispose of the following prohibited wastes:

- Regulated Hazardous Waste, as defined in 40 CFR Part 261, except as allowed by 330.171(c)(6) for municipal hazardous waste from a conditionally exempt small quantity generator in amounts not exceeding 220 pounds per month per generator;
- Polychlorinated Biphenyls (PCB) waste, as defined in 40 CFR Part 761;
- Radioactive Materials, as defined in 30 TAC Chapter 336, except as authorized in 30 TAC Chapter 336 or that are subject to an exemption of the Texas Department of State Health Services or TCEQ; and
- Any items containing chlorinated fluorocarbons (CFC); however, items that have been evacuated of CFC in accordance with 40 CFR 82.156(g) or (h) may be accepted as long as a signed statement to this effect is received from the person from whom the appliance or shipment of appliances is obtained.



The facility will not accept the following items for disposal, but may accept them for temporary storage until sent off-site to an authorized facility:

- Lead acid storage batteries;
- Used motor vehicle oil, unless mixed with a solid waste as an incidental and unavoidable result of mechanical shredding of motor vehicles, appliances, or other items of scrap, used or obsolete metals;
- Used oil filters from internal combustion engines;
- Scrap tires, unless processed prior to disposal in a manner acceptable to TCEQ;
- Liquid waste, as defined in 30 TAC 330.3(81), unless it is allowed in 30 TAC 330.177, or is one or more of the following:
 - (A) Bulk or containerized household waste, other than septic waste, or
 - (B) Containers holding liquid waste that:
 - (i) Are small containers similar in size to that normally found in household waste;
 - (ii) Are designated to hold liquids for use in other than storage; or
 - (iii) Contain household waste.

The facility shall establish the following procedures for the detection and prevention of disposal of the above prohibited wastes:

- a) The Landfill Manager or Supervisor shall complete a training class on the recognition and handling of the above-listed prohibited wastes.
- b) The Landfill Manager or Supervisor shall provide training classes for all personnel involved in waste screening operations which will include the following items:
 - A listing of all wastes which can and cannot be accepted at the facility.



- Identification of signage or labeling for regulated wastes (U.S. Department of Transportation Charts and Classification Material).
 - Visual displays of hazardous wastes, containers, etc. and how they might appear comingled with other wastes.
 - Instructions for the gate-house operator and the active disposal area personnel to be alert for liquids leaking, strange odors, vapors, smoke, sealed containers over 5 gallons in size, and nervous or non-cooperative drivers, all of which can indicate unauthorized wastes.
 - Instructions for diverting for inspection or rejecting loads of incoming waste suspected of containing a prohibited waste that is still on a vehicle, and securing areas and identifying the vehicle(s) that delivered waste where suspected prohibited waste is encountered after it is off loaded.
 - Instructions for wearing the necessary safety equipment before handling the wastes.
 - First aid training for personnel.
- c) Documentation of all courses or training, attending personnel, and applicable certificates will be kept in the Operating Record.
- d) Trained staff shall visually inspect each load that is accepted at the facility and will be assigned to off loading areas at the facility to observe that only appropriate materials are off loaded in each designated area.
- e) Properly trained employees will perform random inspections on a minimum of 12 incoming waste loads per week. These visual inspections will be performed at the active disposal area or citizen convenience area depending on the load that is selected for inspection. Records of these inspections will be maintained in the Operating Record.
- f) The facility will inform customers and waste carriers of prohibited wastes by posting signs at the facility entrance and/or by sending out a list of prohibited wastes.



- g) Customer contracts will specifically list types of wastes authorized and the wastes that are prohibited. Annually, contract customers will be sent a reminder of the types of wastes that are acceptable and prohibited under the contract.
- h) Customers without contracts, including the general public, will be required to sign a delivery invoice/receipt that certifies that the wastes being delivered are authorized for receipt at the facility, do not contain a prohibited waste, and are being delivered for the proper management activity (i.e. items prohibited from disposal in the landfill but can be received for recycling are being delivered to the appropriate recycling area).
- i) Should landfill personnel suspect or identify a prohibited waste in an incoming load, then that load will be directed to an area out of the flow of traffic, and the personnel will further assess the load. If the waste has already been unloaded on the waste face, and the waste contains prohibited or suspected prohibited wastes, the material will be immediately picked up and placed back onto the vehicle. Upon verification that the load contains prohibited waste or is suspected of being a prohibited waste, the load will be rejected and directed back to the generator. The facility will maintain a record of all rejected wastes in the operating record. If a waste is determined to be a prohibited waste, the landfill manager will notify TCEQ, and advise the transporter and generator that the material must be sent to an authorized facility.
- j) If a suspected or confirmed prohibited waste is discovered after it has been deposited in the landfill and the transporter has departed the facility, the material will be segregated from other materials and marked to prevent accidental management of the material until it can be determined to be an authorized material or sent off-site to an authorized facility. The landfill manager will attempt to contact the generator identified on the manifest (or make a reasonable attempt to identify the generator in the absence of such information) to determine the proper classification of the material. If the material is determined to be a prohibited waste, the landfill manager will notify TCEQ, and ensure the material is sent to an authorized facility.

4.0 FIRE PROTECTION PLAN, 330.129

The following steps are taken at the facility to prevent fires:



- Prohibiting open burning of material at all times at the operating areas of the facility.
- Preventing burning or hot waste loads from being received in the active areas of the facility. The Gate Attendant and equipment operators will be alert for signs of burning waste such as smoke, steam, or heat being released from incoming waste loads. Vehicles that appear to be hauling “hot loads” will be directed to a staging area away from other activities and sources of combustible materials. Should it be determined that there is a significant threat of a fire or an actual fire is in progress, appropriate actions will be taken to mitigate spreading of the fire, such as separating a vehicle from the load of waste, extinguishing and/or controlling the fire with on-site resources, and calling the local fire response agency.
- Fuel spills will be contained and cleaned up immediately. Spill kits will be maintained at the gate house and on a facility pickup truck. Soil contaminated with spilled fuel will be excavated and properly managed. Contaminated soils may be excavated using a shovel for small areas or with heavy equipment as appropriate.
- Equipment that is used at the working face will be cleaned as needed by high pressure air, water or steam cleaners to remove combustible waste and caked material which can cause equipment overheating and increase fire potential. Equipment cleaning at the working face will use the minimal amount of water necessary to clean the equipment.
- Dead trees, brush, or vegetation adjacent to the facilities waste management areas will be removed to minimize the hazard of brush fires. Vegetation around the landfill will be mowed at least semi-annually so that brush fires cannot spread to the waste management or recycling areas or off-site should a fire occur at one of the waste management or recycling area.
- Smoking is not permitted on the active areas of the facility.
- Soil cover, and/or alternate daily covers, if specifically approved by the TCEQ for this facility at a future date, will be used on a daily basis.



Procedures in the Event of a Fire:

Landfill staff will take the following steps should a fire occur at the facility:

- Contact the Kingsbury Volunteer Fire Department (830/639-4499).
- Alert other facility personnel.
- Assess extent of fire, possibilities for the fire to spread, and alternatives for extinguishing the fire.
- If it appears that the fire can be safely fought with available fire fighting devices until arrival of the fire department personnel, attempt to contain or extinguish the fire.
- Upon arrival of the fire department personnel, direct them to the fire and provide assistance as appropriate.
- Will not attempt to fight the fire alone.
- Will not attempt to fight the fire without adequate personal protective equipment and be familiar with the use and limitations of firefighting equipment available onsite.

Fire Fighting Methods:

Fire fighting methods to be used against burning solid waste or combustible recyclable materials will include smothering with soil, separating burning material from other waste, and spraying with water from an on-site water truck as appropriate. Small isolated fires will be controlled with hand-held extinguishers. No water impoundment or tanks are necessary for firefighting at the facility.

Specific firefighting procedures include:

For a fire at an active disposal area, an attempt will be made to use bull dozers or a bladed compactor to isolate the burning material to prevent the fire from spreading. Firebreaks may also be cut around the fire before it can spread. If moving the waste is not possible, or if it is unsafe, efforts will be made to cover the burning material with earth to smother the fire.



If a fire occurs on a vehicle or piece of equipment, the operator will bring the vehicle to a safe stop while attempting, as safety allows, to park the vehicle away from fuel supplies, uncovered solid wastes, and other vehicles. The engine will be shut off and the brake engaged to prevent movement of the vehicle or piece of equipment.

If a fire occurs at any of the following collection areas, landfill personnel will attempt, as safety allows, extinguishing the fire with fire extinguishers and spraying with water from an on-site water truck as appropriate until the fire department arrives.

- Lead acid battery collection area;
- Used motor oil collection area;
- Used oil filter collection area;
- Scrap tire collection area; or
- Authorized liquid waste collection area.

Earthen Material for Fire Control:

As a routine procedure, a stockpile of soil will be available on-site to cover the entire working face with 6 inches of soil cover for fire control. The maximum working face size is 15,000 square feet, or about 100 feet by 150 feet, and 330 cubic yards of stockpiled soil will be available for fire control, as calculated below:

$$(100 \text{ ft} \times 150 \text{ ft} \times 0.5 \text{ ft}) / 27 \text{ cf/cy} = 278 \text{ cubic yards} \times 1.2 \text{ (20\% contingency)} \Rightarrow \text{approx. 330 cubic yards}$$

As shown below, the landfill equipment identified in Section 4.2.2 will be sufficient to place a 6 inch layer of soil over the working face within one hour of detecting a fire at the working face. An on-site soil stockpile will be maintained within 1600 feet from the working face. The soil will be loaded and delivered by a scraper and distributed across the working face by the trash compactor or bulldozer. The expected time to transport soil and cover the waste is 60 minutes as calculated below:

Volume of Soil needed:	330	cy
Size of Scraper:	34	cy
Number of Scrapers:	1	



Number of Soil Transport Loads:	10	
Time to load and unload scraper	4.5	min
Average Scraper haul speed:	2200	feet/min (25 mph)
Distance from working face:	1600	feet
Average Round Trip	1.5	min
Total Load & Transport Time	6.0	min

Time Expected to Cover Working Face
(transport and covering occurs simultaneously): 60 min

Fire Equipment:

The site will be equipped with Type A, B, C or equivalent fire extinguishers on each piece of heavy equipment and at the gate house, the citizen convenience area, and the landfill office. Each fire extinguisher will be fully charged and ready for use at all times. Each extinguisher will be inspected annually and recharged as necessary. A qualified service company will perform these inspections, and all extinguishers will display a current inspection tag. Inspection and recharging will be performed following each use.

Fire Protection Training:

Training of on-site landfill operations personnel in firefighting techniques, fire prevention, response, and the fire protection aspects of the SOP will be provided by qualified professionals annually. Personnel will be familiar with the use and limitations of firefighting equipment available onsite. Records of this training will be included in the Site Operating Record.

TCEQ Notification:

When any waste fire cannot be extinguished within 10 minutes of discovery, the TCEQ San Antonio regional office (210/490-3096) will be contacted as follows:

- Contact by telephone as soon as possible, but no later than four hours following fire discovery, and
- Provide a written description of the cause and extent of the fire and the resulting fire response within 14 days of fire detection.



The fire prevention and fire control procedures for the facility will be revisited following the occurrence of a significant fire to determine if modifications to the procedures are warranted.

5.0 ACCESS CONTROL 330.131

5.1 SITE SECURITY

Public access will be controlled to minimize unauthorized vehicular traffic, unauthorized and illegal dumping, and public exposure to hazards associated with landfills. Controlled access will be provided by a combination of temporary and permanent fences and gates.

Access from other roads and parcels bordering the site will be controlled by means of a 4 ft barbed wire fence at the permit boundary with locked gates at any access points which will be used only by authorized personnel. Access for waste receipts to the facility will be controlled by staff located in the gate house at the main entrance. A second interior fence constructed of minimum 4 ft high game wire or 6ft high chain link fence will prevent the public or waste receipts from gaining access to the facility without entering through the main entrance. Gates will be positioned where the two fences cross the site entrance road. The landfill will have a single entrance for the receipt of wastes and the off-site shipment of materials such as recyclables. Entrance road gates will be closed when the waste facility is not open receive waste and locked when no personnel are present.

Inspections will be made at least weekly of the perimeter access control. If the site access is breached, the TCEQ San Antonio regional office will be notified if a permanent repair cannot be made within eight hours of detection. The notice will be made to the TCEQ regional office within 24 hours of detection. The breach must be temporarily repaired within 24 hours of detection and must be permanently repaired by the time specified to the TCEQ regional office when it was reported in the initial breach report. The TCEQ regional office will be notified when the permanent access control breach repair is completed.

5.2 TRAFFIC CONTROL

Public access to the Post Oak Landfill is provided via FM 1150, a paved all-weather road. Only vehicles authorized by the facility manager, landfill construction vehicles, facility personnel vehicles, and authorized haul vehicles will have access beyond the facility entrance. The gate



attendant will restrict site access to authorized vehicles and will direct these vehicles on how to proceed to their authorized destination within the facility.

Vehicles transporting solid waste will be directed to the appropriate waste operations areas by on-site personnel and signage. Roads not being used for access to the active waste operations areas will be blocked or otherwise marked for no entry.

6.0 UNLOADING OF WASTES 330.133

Wastes unloaded at disposal and storage/transport areas will be confined to as small an area as practical, and will vary with the rate of incoming material. Waste for disposal will be unloaded at the working face of the landfill and at the citizen convenience area. Unloading at the working face will be confined to as small an area as practical and will not exceed 15,000 sf, or about 150 ft x 100 ft.

Collection areas for materials that may be accepted for temporary storage, but not for disposal are provided in the landfill support area. Each area will be confined to a minimum area consistent with the rate of incoming material. The unloaded materials will be accumulated and packaged, as appropriate, pending removal off-site. These collection areas and maximum unloading areas are as follows:

Recyclables, Auto Liquids and Lead Acid Battery Collection Area;

A collection/storage area for recyclables, used oil and lead acid batteries is provided as part of the facility's citizen convenience area. These items will be received, staged and stored in a manner to not cause a nuisance. The maximum area for the collection/storage of recyclables, used oil and lead batteries is 2000 sf (approximately 20'x100'). All hazardous materials will be placed into this covered area and the hazardous materials will be stored within units that are provided with self containment such as containment pallets for used lead acid batteries or commercially available double walled collection tanks designed for consumer use that meet the requirements of 30 TAC 330.63(d)(1)(B) and 330.227.

Municipal Solid Waste Area;

Roll off containers will be provided at the citizen collection area to accept routine solid waste from the general public as an access control measure as well as for traffic safety in and around the active face. The maximum area for unloading of municipal solid waste is 3 – 40 cubic yard roll off containers.



Scrap Tire Collection Area:

Scrap tires received through the citizen convenience area or from the active face will be stored on site by placing them in containers or trailers. The total quantity of tires will not exceed 500 scrap tires (or weight equivalent tire pieces) on the ground, or 2,000 scrap tires in containers. The maximum area for the storage of scrap tires is one standard 40 to 52 foot enclosed trailer and one 400 sf (20'x20') area adjacent to the tire trailer for the temporary storage of less than 500 scrap tires while a trailer is waiting to be loaded or swapped out for an empty one by the vendor.

Large Items and White Goods Storage Area:

A storage area for large items/white goods is provided as part of the facility's citizen convenience area. Large items/white goods may include ovens, dishwashers, freezers, air conditioners, and other large items. These items will not be stored in excess of 180 days. The maximum area for the storage of large items/white goods is 20,350 sf (185'x110' pad).

Yard waste, Clean Wood wastes, and Brush:

Yard waste, clean wood wastes, and brush not mixed with other waste materials may be diverted to an area off-site authorized to accept these materials for recycling into mulch or composting.

Waste Unloading

Waste unloading in unauthorized areas will not be allowed. Any waste deposited in an unauthorized area must be removed immediately and properly managed. Trained staff shall have the authority and responsibility to reject unauthorized loads, have unauthorized material removed by the transporter, and/or assess appropriate surcharges, and have the unauthorized material removed and properly managed as necessary by facility staff or third party contactors as necessary. A record of unauthorized material removal will be kept in the Operating Record.

The unloading of prohibited wastes will not be allowed. Any prohibited waste will be returned immediately to the transporter or generator of the waste or otherwise properly managed by the landfill. In the event that unauthorized waste is not discovered until after the vehicle that



delivered it is gone, the waste will be segregated and controlled as necessary. An effort will first be made to identify the entity that deposited the prohibited waste and have them return to the site to properly dispose of the material. In the event that identification is not possible, the landfill manager will notify the TCEQ and seek guidance on how to dispose of the waste as soon as practical. Trained staff shall have the authority and responsibility to reject prohibited wastes, have unauthorized material removed by the transporter, and/or assess appropriate surcharges, and have the prohibited waste removed and properly managed as necessary by facility staff or third party contactors as necessary. A record of unauthorized material removal will be maintained in the Site Operating Record.

Only those persons operating vehicles that comply with the following requirements will be authorized by the landfill manager to dispose of waste at this facility:

- All vehicles and equipment used for the collection and transportation of waste will be operated and maintained to prevent loss of waste material and to limit health and safety hazards to landfill personnel and the public.
- Collection vehicles and equipment will be maintained in a sanitary condition to preclude odors and fly breeding.
- Collection vehicles not equipped with an enclosed transport body will use other devices such as nets or tarpaulins to preclude accidental spillage.

Signs with directional arrows and/or portable traffic barricades will help to restrict traffic to designated disposal locations. Signs will be placed along the access route to the current disposal area. In addition, rules for waste disposal and prohibited waste will be prominently displayed on signs at the site entrance.

7.0 FACILITY OPERATING HOURS 330.135

Authorized Waste Acceptance Hours are 24 hours a day 7 days a week. The actual waste acceptance hours will fall within the authorized hours and will be displayed on the site sign. Daily cover will be applied as soon as possible, but not more than one hour after closure of the facility for the receipt of waste for disposal.



Other site operations may be conducted at any time, 24-hours each day, 7 days a week. These operations include construction, earthmoving, monitoring, and other non-waste acceptance operations.

8.0 SITE SIGN 330.137

A sign measuring a minimum of four feet by four feet will be maintained at the facility entrance. The sign will display the following information, in letters at least three inches in height:

Type of MSW Facility: Type I Municipal Solid Waste Landfill,

Hours and Days of Waste Acceptance,

Emergency 24 Hr. Contact Number,

Kingsbury Volunteer Fire Department Number: (830/639-4499 or 911), and

Permit Number: MSW-2378

The sign shall be located at the entrance gate and will be readable from the entrance road.

9.0 CONTROL OF WINDBLOWN SOLID WASTE AND LITTER 330.139

The site will be operated to minimize windblown material. The working face will be covered daily to avoid prolonged exposure of waste. A minimum 6 foot high wire mesh fence will be installed at the active portion of the landfill as temporary litter control fences. When feasible, the facility will attempt to have the landfill working face oriented and located to minimize wind-blown waste based on expected wind directions. Site personnel will collect litter within and around the site daily to minimize unhealthy, unsafe, or unsightly conditions.

10.0 EASEMENT AND BUFFER ZONES 330.141

There are no existing drainage or pipeline easements within or adjacent to the facility. An abandoned oil pipeline crosses the landfill, but it has been disconnected from pipelines on adjoining properties and is unused. An abandoned and unused pipeline easement parallels Nixon Road within the southeast buffer zone. A 20-foot wide powerline easement is centered on existing power lines placed on the facility property line boundary along FM 1150 and Dix Road.



The perimeter of the facility has a minimum 125-foot regulatory buffer zone as defined by 30 TAC 330.3(19), which is a setback between the permit boundary and waste processing, storage, or landfill units. In addition, the northwestern, southeastern, and southwestern perimeter of the facility will contain open space and wetland mitigation areas approximately ¼ mile wide that will provide for additional distance between the currently proposed activities and the permit boundary. The regulatory buffer zone and open space between buffer zone and active areas allow for safe passage of fire-fighting and other emergency vehicles.

11.0 LANDFILL MARKERS AND BENCHMARK 330.143

Landfill markers consist of metal or wood posts extending at least 6 feet above ground level to clearly identify significant landfill features. The markers will be maintained so they are unobscured by vegetation and will be placed in sufficient numbers to clearly indicate the required boundaries. In the event a marker falls in a roadway, waterway or other area incapable of sustaining an above ground marker, a steel post embedded in concrete may be buried in the appropriate place or offset at a documented location. The operator will inspect landfill markers monthly and maintain records of all inspections in the Operating Record. The operator will replace markers within 15 days of removal, destruction, or determination that the markers do not meet regulatory requirements.

All landfill markers are color coded as follows:

- Boundary markers (Black) - Site boundary markers will be placed at each corner of the site and along each boundary line at intervals no greater than 300 feet. Fencing may be placed within these markers as required.
- Buffer Zone markers (Yellow) - Markers identifying the 125-foot buffer zone will be placed along the northeastern buffer zone boundary and markers identifying the approximate ¼-mile buffer zone will be placed along the northwestern, southeastern, and southwestern buffer zone boundary. Markers will be placed at all corners and between corners at intervals of 300 feet.
- Easement and R.O.W. markers (Green) - Powerline easement markers will be located along FM 1150 and Dix Road.



- Landfill Grid System markers (White) - A landfill grid system will be installed for at least the area expected to be filled within the next three-year period. Markers will be spaced 100 feet apart measured along perpendicular lines.
- Lined Cell markers (Red) - Markers will be placed at the corners of new cells so that all areas which have been lined for waste disposal can be easily identified. Such markers are to provide site workers immediate knowledge of the extent of prepared disposal areas. These markers will be located so that they are not destroyed during operations until operations extend into the next cell. The location of these markers will be tied into the landfill grid system. Lined cell markers will not be placed inside the cells where damage to the liner may occur.
- 100-year Flood Limit Protection markers (Blue) – The Post Oak facility is not located in a 100-year floodplain. Therefore, blue markers are not needed.

A permanent benchmark will be established within the facility's permit boundary and in the vicinity of the landfill entrance. During the initial landfill construction at the site, a bronze survey marker will be placed at the facility and will be set in concrete. The bronze marker will be stamped with the benchmark elevation and survey date.

12.0 MATERIALS ALONG THE ROUTE TO THE SITE 330.145

Post Oak Landfill will take steps to encourage that vehicles hauling waste to the facility are enclosed or provided with a tarpaulin, net, or other means to effectively secure the load in order to prevent the escape of any part of the load by blowing or spilling. The operator will take actions such as posting signs, reporting offenders to the proper law enforcement offices, adding surcharges, or similar measures. Each day that the facility is in operation to receive waste, the operator will inspect roads for waste materials spilled along and within the right-of-way of the public access roads serving the landfill for a distance of two miles in either direction from the entrance. The facility operator will consult with agencies that have maintenance authority over the roads and cleanup public access roads and rights-of way as they may direct. This includes the Texas Department of Transportation and Guadalupe County.



13.0 DISPOSAL OF LARGE ITEMS 330.147

Large, heavy or bulky items that can be recycled, such as white goods, will be collected at the citizens convenience area. Large, heavy or bulky items that cannot be recycled, such as a fiberglass boats, which cannot be incorporated in the regular spreading, compaction and covering operations may be crushed at the working face by landfill compacting equipment such as a bulldozer before being incorporated into the working face. Items that can be classified as large, heavy, or bulky can include, but are not limited to, white goods (household appliances), air conditioner units, metal tanks, large metal pieces, and furniture. A special storage area designated for segregation and handling of white goods and metal will be maintained at the citizen convenience area. The operator will remove the items from the site at least every 180 days and often enough to prevent these items from becoming a nuisance and to preclude the discharge of pollutants from the area. Refrigerators, freezers, air conditioners, and other items containing chlorinated fluorocarbons (CFC) will be handled in accordance with 40 Code of Federal Regulations 82.156(f), as amended.

14.0 ODOR MANAGEMENT PLAN 330.149

The facility will ensure that any unit of the municipal solid waste facility does not violate any applicable requirement of the approved state implementation plan developed under the Federal Clean Air Act, 110, as amended, and 30 TAC 330.15(d) of this title (relating to General Prohibitions), which prohibits the open burning of waste at any municipal solid waste landfill facility.

The sources of odor at the landfill could include wastes being delivered to the facility (i.e. septage, grease trap waste, dead animals), the open working face, ponded water, spray recirculated leachate or gas condensate and landfill gas. Odors will be controlled by the following methods:

- Odorous wastes as identified by the operator will be covered immediately after placement on the working face of the landfill, either by incoming waste or daily cover. Dead animals will be covered by three feet of waste or at least two feet of soil.
- Ponded water will be controlled according to the Ponded Water section of this plan.



- Recirculated leachate and condensate will not be spray-applied to waste surfaces at times when winds will blow nuisance odors across the permit boundary; and
- Landfill Gas will be managed and controlled according to the Site Gas Management Plan.

Because of the nature of the waste material handled at the facility, the facility is permitted by rule and does not require a site-specific air permit (30 TAC 106.532).

15.0 DISEASE VECTOR CONTROL 330.151

A vector is defined as an animal, such as an insect, snake, rodent, or bird, capable of mechanically or biologically transferring a pathogen from one organism to another. Vectors will be controlled by the proper compaction of the waste, the use of six inches of daily cover or an approved alternate, and adherence to the ponded water plan. These measures will eliminate the need for any additional methods of vector control under normal circumstances. However, the operator at the site shall continuously evaluate the situation and take additional action should it be required. Professional exterminators will be contacted, if necessary, to eliminate rodents or other pests that may appear at the site.

16.0 SITE ACCESS ROADS 330.153

The site entrance road will be an asphalt-surfaced or concrete road constructed and maintained by Post Oak Landfill. Other internal roadways to waste operations areas will have an all-weather design and will be properly maintained to provide continuous access during dry and wet weather. Tracking of mud and trash onto public roadways from the site will be minimized by the presence of the on-site paved road used to exit the facility. Mud on the road will be removed daily. Dust from on-site and roads will not become a nuisance. A water truck will be provided as necessary to sprinkle the on-site road for dust control. Litter and debris along the landfill access roads will be picked up daily. The on-site roads will be graded at least once a month or more often as necessary to minimize depressions, ruts and potholes.

17.0 SALVAGING AND SCAVENGING 330.155

Salvaging will not be allowed to interfere with the prompt sanitary disposal of solid waste or to create public health nuisances. Salvaged materials may be considered as potential recycled materials. The operator will remove the salvaged items from the facility often enough to prevent



the items from becoming a nuisance, to prevent the discharge of any pollutants from the area, and to prevent an excessive accumulation of the material at the facility.

Special wastes received at the facility will not be salvaged. Pesticide, fungicide, rodenticide, and herbicide containers must not be salvaged unless being salvaged through a state-supported recycling program.

Scavenging is not allowed.

18.0 ENDANGERED SPECIES PROTECTION 330.157

No potential habitat for federally listed threatened or endangered species occurs on the 1003 acre landfill permit area, and no federally listed threatened or endangered species have been observed on the property. No federally designated critical habitat occurs on the property.

No State listed threatened or endangered species have been observed on the property, and the property contains only marginally suitable habitat for two species, Texas horned lizard and Texas tortoise. Neither of these species has been observed on the property in any of the site surveys. To ensure that construction and operation of the facility will not cause or contribute to the taking of any state listed endangered or threatened species, the applicant has agreed to meet all recommendations included in Texas Parks and Wildlife Department (TPWD) correspondence on this project. The most current TPWD recommendations are included as Part II, Attachment 6.

19.0 LANDFILL GAS CONTROL 330.159

Landfill gas monitoring for the presence of methane gas at the site will be conducted quarterly or as approved by TCEQ. In particular, the area outside the perimeter of the landfill will be monitored by permanent gas probes to identify whether there exists the possibility of off-site methane migration or perimeter methane concentrations exceeding the lower explosive limit. Additionally, on-site enclosed structures will contain permanent monitors to confirm that methane concentrations do not exceed 25 percent of the lower explosive limit. The allowable limits and details of gas monitoring are more fully described in Attachment 6, Landfill Gas Management Plan.

Monitoring locations are specified in the Plan. All monitoring results and observations will be reviewed by the Site Supervisor to determine if any additional monitoring may be warranted.



In the event that methane levels are detected that exceed allowable lower limits, the TCEQ and local officials will be notified and steps will be taken to ensure the protection of human health. The reports and other submittals required by the Landfill Gas Management Plan and Subchapter I of the TCEQ Regulations will be included in the Operating Record and submitted to TCEQ when regulatory methane limits are exceeded or as otherwise directed by TCEQ.

20.0 OIL, GAS AND WATER WELLS 330.161

20.1 WATER WELLS

There are no known abandoned water wells within the permit boundary. There are three active water wells located within the permit boundary; however, none of these wells is located within the limits of the waste disposal area. The locations of these wells are shown in Part II, Figure 8. Post Oak Landfill will cap, plug, and close these wells before commencement of landfill operations in accordance with all applicable rules and regulations of the TCEQ or other state agency. Should a new onsite water well be needed in the future, Post Oak will seek TCEQ approval prior to installation of any new well and will submit a modification or amendment of the application if required to allow such installation.

Should abandoned water wells be discovered during facility development, Post Oak will notify the executive director within 30 days of the discovery and provide written certification that the wells have been capped, plugged, and closed in accordance with all applicable rules and regulations of the TCEQ or other state agency.

20.2 OIL AND GAS WELLS

There are 36 known oil wells located within the permit boundary including two abandoned oil wells located within the waste disposal area. Prior to commencing landfill operations, Post Oak will ensure the abandoned oil wells within the waste disposal area have been properly plugged and abandoned and within 30 days after such, will provide to the executive director written certification that the wells have properly capped, plugged, and closed in accordance with all applicable rules and regulations of the Railroad Commission of Texas.

Should additional abandoned oil or natural gas wells, or other wells associated with mineral recovery under the jurisdiction of the Railroad Commission of Texas be discovered during



facility development, Post Oak will provide written notification to the executive director of their location within 30 days of their discovery.

21.0 COMPACTION 330.163

Solid waste will be spread and compacted by repeated passage of the compaction equipment so that each layer of solid waste is a compact mass with minimal voids. The compactor will shape the waste in a working lift thickness of two feet or less, and several lifts may be placed over the same area during the course of the day.

22.0 LANDFILL COVER 330.165

22.1 DAILY COVER 330.165(A)

Daily cover is provided as a means to control disease vectors, fires, odors, windblown litter, and scavenging. The cover material will be six inches of soil not previously mixed with solid waste. The soil will be compacted sufficiently to minimize rutting and erosion, prevent windblown trash, and prevent insect and rodent problems. Cover soil will be placed on the working face at the end of each operating day, except when the landfill is open for continuous operation around the clock. For 24 hour operation, the working face must be covered at least once every 24 hours.

The smallest practical working face will be maintained during operations to minimize the amount of daily cover soil required. A working face no larger than 75 x 100 ft will normally be maintained for the compactor to spread and compact the waste. A 15,000 sf area is the largest working face that will be allowed and only when necessary for operational requirements.

22.2 INTERMEDIATE COVER 330.165 (C)

All areas that will receive additional waste but will be inactive for longer than 180 days will be covered with intermediate cover. The intermediate cover will be a total of at least 12 inches of well-compacted earthen material not previously mixed with garbage, rubbish, or other solid waste. The intermediate cover will include six inches of suitable earthen material that can support vegetative growth or will have other temporary erosion control features such as the best management practices (BMP's) shown on Figure 2C-3 or use of mulch/soil mixtures. The intermediate cover will be graded to prevent ponding of water. Plant growth or other erosion control features will be maintained. Intermediate cover may also be placed on areas where it will improve management of storm water as the working face advances. The interim cover and



temporary storm water diversion berms will be used to minimize run-off from coming in contact with waste and becoming contaminated stormwater or leachate.

22.3 ALTERNATE COVER 330.165(D)

Post Oak Landfill does not intend to use alternate cover at this time. If Post Oak decides to use alternate cover as some point in the future, the facility will seek temporary authorization under 30 TAC 305.70(m), followed by an amendment or modification to the permit.

22.4 FINAL COVER 330.165(F)

The final cover will contain:

- an erosion layer comprised of vegetated soil and a drainage geocomposite configured to minimize erosion, and
- an infiltration layer comprised of a geomembrane and cohesive soil to act as a barrier to stormwater infiltration.

The specific components of the system are (from the top of waste up) (also see Part III, Appendix 3, Figure 3-12):

- 1.5 ft of cohesive soil compacted to achieve a hydraulic conductivity less than or equal to 1×10^{-5} cm/sec;
- a 40-mil linear low-density polyethylene (LLDPE) geomembrane;
- a geocomposite drainage layer composed of geotextile overlying geonet for the flatter top portion of the landfill and a geotextile on both sides of the geonet for the sideslopes;
- 2 ft of soil capable of sustaining native vegetation, and
- Graded drainage features and a vegetated surface.

The final cover slopes range from 5 percent on the top surface to 25 percent on the sideslopes. Drainage control berms, sideslope drainage terraces and rock-lined rundown channels convey and control storm water runoff from the landfill surface to drainage ditches at the perimeter to



reduce the potential for soil erosion. Specific stormwater and erosion control design is contained in Part III, Attachment 2, Surface Water Drainage.

The final cover will be constructed as described in Part III, Attachment 3, Exhibit 3D-1, Soils and Geosynthetics Construction Quality Assurance Plan.

22.5 EROSION OF COVER 330.165(G)

Erosion gullies or washed-out areas exceeding 4 inches deep (as measured from the vertical plane from the erosion feature and the 90-degree intersection of this plane with the horizontal slope face or surface) must be repaired within five days of detection by restoring the cover material, grading and compacting, unless the TCEQ San Antonio regional office approves otherwise based on the extent of the damage and wet weather conditions. Periodic inspections and restorations are required during the entire operational life and for the post-closure maintenance period.

22.6 COVER INSPECTION RECORD 330.165(H)

The cover application record will be kept on site and will be readily available for inspection by TCEQ representatives and authorized agents or employees of local governments having jurisdiction. The record will specify the date cover was accomplished, how it was installed, and the area covered. This applies to daily and intermediate cover. For final cover, the record will specify the area covered, the date cover was applied, and the thickness applied that date. Each entry will be certified by the signature of the on-site supervisor that the work was accomplished as stated in the record. The cover inspection record must document erosion inspections as described above, the findings, and any required corrective action taken.

23.0 PONDED WATER 330.167

The ponding of water over waste on the landfill will be prevented. Pondered water that occurs over waste will be removed and the depression filled in and graded within seven days of the occurrence. The following ponding prevention techniques will be used:

- Surface water controls at the landfill are designed to prevent rainfall run-off from coming into contact with waste and minimize erosion. Ponding of water over waste will be prevented by proper grading.



- Where possible, landfill cover is graded so that storm water falling on the site is diverted away from the active working area and into the natural drainage ways. Temporary diversion berms constructed upslope of active waste placement areas prevent run-on from mixing with waste and becoming contaminated. This uncontaminated water is diverted off the landfill surface and to the perimeter drainage system.
- Run-off from unused portions of below-grade disposal cells may be prevented from flowing into the waste by constructing soil containment berms at the edge of the waste. If necessary, this uncontaminated run-off will be pumped to the surface to drain away from the landfill.

As waste is placed in lifts above the base of the landfill cell, containment berms will be constructed down slope of active disposal areas that are expected to generate contaminated runoff. These berms will be constructed about 1.5 to 3.5 ft high to contain run-off from rainfall which has contacted solid waste. Calculations and a summary of typical containment berm heights are contained in Part II, Attachment 3, Exhibit 3C-4. Pondered water within these containment berms will be managed by transport to an on-site evaporation pond or an off-site wastewater treatment plant.

24.0 DISPOSAL OF SPECIAL WASTES 330.171

Special wastes, as defined in 30 TAC 330.3, may be accepted in accordance with the provisions of 30 TAC 330.171 and the facility's Waste Acceptance Plan. Special Wastes consisting of soils contaminated by petroleum products, crude oils, or chemicals in concentrations of greater than 1,500 milligram per kilogram (mg/kg) total petroleum hydrocarbons; or contaminated by constituents of concern that exceed the concentrations listed in Table 1, Constituents of Concern and Their Maximum Leachable Concentrations in §335.521(a)(1) of this title (relating to Appendices) will not be accepted for disposal. The receipt of the following special wastes does not require further TCEQ authorization, but must be handled as described below (see also 30 TAC 330.171(c)):

- Dead animals and/or slaughter house waste provided the carcasses and/or slaughterhouse waste will be covered immediately by either three feet of other solid waste or at least two feet of soil.



- Non-regulated asbestos containing materials (non-RACM) provided the waste is placed on the active working face and is not placed on any surface or roadway subject to vehicular traffic or disposed of by any other means by which the material can be crumbled into a friable state.
- Empty containers that have been used for pesticides, herbicides, fungicides, or rodenticides provided that containers are triple-rinsed and rendered unusable prior to receipt at the landfill. Containers will be covered by the end of the same working day.
- Municipal hazardous waste from conditionally exempt small quantity generators, provided that the quantity of waste does not exceed 220 pounds per month per generator, and Post Oak Landfill authorizes acceptance of the waste.
- Sludge, grease trap waste, grit trap waste, or liquid waste from municipal sources, provided that the material has been, or will be, treated or processed and the treated/processed material has been tested in accordance with Test Method 9095 (EPA Publication Number SW-846) and is certified to contain no free liquids. Prior to treatment or processing, Post Oak Landfill will provide written notification to the executive director of the liquids processing activity as required in 30 TAC 330.11.

Receipt of other special wastes requires written approval from TCEQ as described in 30 TAC 330.171.

25.0 DISPOSAL OF INDUSTRIAL SOLID WASTES 330.173

Class I non-hazardous waste will not be accepted at the facility. Class 2 and 3 industrial solid wastes may be accepted at the facility in accordance with the facility's Waste Acceptance Plan, provided disposal of these wastes does not interfere with proper operation of the facility.

26.0 VISUAL SCREENING OF DEPOSITED WASTE 330.175

The landfill is located about ¼ mile or more from public roads except on the northeastern side of the landfill. In this area, the site will maintain a 125 foot buffer zone adjacent to FM 1150. In areas within this FM 1150 buffer that the waste disposal operations are visible, the facility will maintain an earth berm and/or vegetation to screen the view of the waste. Part III, Attachment 3, Figure 3-1 shows a conceptual alignment for a screening berm.



27.0 LEACHATE AND GAS CONDENSATE RECIRCULATION 330.177

The Post Oak Landfill will install and operate a leachate and methane gas condensate recirculation system in the active cells containing a clay liner under the geomembrane liner. Recirculation will be accomplished by reintroducing the collected leachate or gas condensate back into the disposal cell in a manner that prevents ponding or significant accumulations of leachate in any one area. Typical recirculation methods involve application to the top of waste at intermediate cover and operating areas of the landfill. Spray application or spreader bar distribution from a tanker truck may occur at the working face. Additionally, irrigation may occur at the top surface of the waste using pipes or hoses with perforations or non-aerial spray emitters, such that daily or intermediate cover soils are not saturated nor become a source of contaminated runoff. A representation of irrigation at a daily or intermediate cover location is contained in Part III, Appendix 2C, Figure 2C-2. Contaminated runoff and groundwater will not be recirculated.

28.0 OPERATING PLANS FOR WASTES AND RECYCLABLES NOT MANAGED AT THE LANDFILL WORKING FACE 330.63(d)(1)(A)-(C)

28.1 YARD WASTE, CLEAN WOOD WASTES, AND BRUSH

Yard waste, clean wood wastes, and brush not mixed with other waste materials may be diverted to an area off-site authorized to accept these materials for recycling into mulch or composting.

28.2 RECYCLABLES, USED OIL AND LEAD BATTERY STORAGE

A collection/storage area for recyclables, used oil and lead acid batteries is provided as part of the facility's citizen convenience area. These items will be received, staged and stored in a manner to not cause a nuisance nor stored in excess of 180 days. The facility will send these materials off-site with facility approved third party vendors. As part of third party approval, the facility will verify if all federal, state and/or local authorizations have been issued to the vendor as needed.

28.3 SCRAP TIRE AREA

Scrap tires received through the citizen convenience area or from the active face will be stored on site by placing them in containers or trailers. The total quantity of tires will not exceed 500



scrap tires (or weight equivalent tire pieces) on the ground, or 2,000 scrap tires in containers. Also, as needed chipped tires may be brought to the site to be used in construction projects. Containers holding tires will be monitored for vectors on days the citizen convenience area receives waste. Manifests will be used for shipments of scrap tires offsite. The facility will send these materials off-site with facility approved third party vendors. As part of third party approval, the facility will verify if all federal, state and/or local authorization have been issued to the vendor as needed.

28.4 LARGE ITEMS AND WHITE GOODS

A storage area for large items/white goods is provided within the waste disposal area and as part of the facility's citizen convenience area. Large items/white goods may include ovens, dishwashers, freezers, air conditioners, and other large items. These large items will be stored on an all-weather surface or in roll-off containers located in the citizen collection area prior to being transported off-site by a recycler. These items will not be stored in excess of 180 days.

Large items that are not recycled will be disposed of at the active face. When placing large items at the active face, personnel will ensure that large items will not be placed within 5 feet of the liner protective cover. Additionally, large items will not be placed in such a way to interfere with waste filling, and municipal solid waste will be placed around the large items and compacted.

White goods containing chlorinated fluorocarbon (CFC) refrigerant will be handled in accordance with 40 Code of Federal Regulations (CFR) 82.156(f), as amended. Items containing CFC will not be accepted for disposal unless the CFC contained in the item has been captured and sent to an approved CFC disposal site or recycling facility. If CFCs are removed prior to delivery for disposal, the generator will be required to provide written documentation/certification that the CFC has been properly evacuated from the item. A customer may contract with the facility to have any CFC removed from an item prior to disposal and the facility operator will be responsible for proper management of the CFC containing device. The facility may send these materials off-site with facility approved third party vendors. As part of third party approval, the facility will verify if all federal, state and/or local authorization have been issued to the vendor as needed.



28.5 REUSABLE MATERIALS STAGING AREA

Inert material including but not limited to asphalt, brick, concrete and shingles are often received and staged at the facility for use as roadbase material for facility access roads and staging areas or erosion control in drainage structures. No additional run-on or run-off controls from rainfall will be required as these materials are inert. Additionally there is no storage time frame as these materials will be used for site operations.

28.6 MUNICIPAL SOLID WASTE CONTAINERS IN THE CITIZENS CONVENIENCE AREA, 330.209 AND 330.211

Rolloff containers (maximum of 3 x 40CY) located in the Citizens Convenience area will be uncovered and emptied at the working face of the landfill when full and at the end of each working day. Waste will not remain in these containers when the landfill is not open to receive waste. It is estimated a maximum of 360 CY of waste will be collected in this area of the facility from citizens in any given day.

All other containers storing wastes and recovered material will be enclosed or covered as needed so that they do not constitute a fire, safety or health hazard, provide food or harborage for animals and vectors, or become a windblown waste problem.

Reusable containers containing food wastes will be maintained in a clean condition so that they do not constitute a nuisance and to retard the presence of vectors. If a vector problem develops, a pest control service will be consulted and actions taken to eliminate the problem. Storage containers will be provided of an adequate size and strength, and in sufficient numbers, to contain all solid waste that the facility generates in the period between collections for waste removal. Nonreusable containers must be of suitable strength to minimize animal scavenging or rupturing during collection operations. Containers to be emptied manually must be capable of being serviced without the collector coming into physical contact with the solid waste, and containers to be mechanically handled must be designed to prevent spillage or leakage during storage, handling and transport.



Waste Stream Processing Summary – Citizen Convenience Area (CCA)

Unit in CCA	Source of material	Average Volume Received	Max. Stored	Max Storage Time	Ave. Time	Max Process Time	Ave Process Time	Destination Upon Leaving
Waste Collection	Private Residence	120 CY Per Day	80 CY	<24 hours	4 hours	Collection Only	NA	Onsite Landfill
Single Stream Recyclables	Source Separated Recyclables	5 CY Per Day	80 CY	30 Days	15 Days	Collection Only	NA	Authorized MRF
Used Oil	Source Separated Recyclables	10 GPD	500 Gallons	90 Days	30 Days	Collection Only	NA	Authorized Used Oil Recycler
Used Oil Filters	Source Separated Recyclables	5 GPD	200 Gallons	120 Days	30 Days	Collection Only	NA	Authorized Recycler \$328.24
Lead Acid Batteries	Source Separated Recyclables	0.1 TPD	2 Ton	30 Days	15 Days	Collection Only	NA	Authorized Facility \$328.13
White Goods	Source Separated Recyclables	1.5 TPD	60 Ton	60 Days	30 Days	Collection Only	NA	Authorized Metal Recycler
Scrap Tires	Source Separated Recyclables	25 Tires Per Day	<2000 Tires	120 Days	45 Days	Collection Only	NA	Authorized Facility

28.7 CONTAMINATED WATER MANAGEMENT

The operations do not produce any processing wastewater. Unintended or small amounts of spilled liquids that may be incidental to waste and recyclable handling at the Citizen Convenience area will be collected using absorbent materials and disposed as on-site generated solid waste. Water that may have contacted stored waste in the citizen convenience area will be contained close to its source, pumped out, and placed in evaporation ponds or transferred to an authorized wastewater treatment facility. Wastewater sent to a treatment facility permitted under the Texas Water Code, Chapter 26, will not create conditions at the plant that are described in 330.207(f). Contact water will not be discharged or released from the facility in a manner that will result in water pollution. Any off-site discharge must be first approved by the TCEQ TPDES Section.