Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution
September 12, 2014

Mr. Donald J. Smith Texoma Market Area President Waste Management of Texas, Inc. 9821 Katy Freeway, Suite 700 Houston, Texas 77024-4257

Re:

New Boston Landfill – Bowie County Municipal Solid Waste (MSW) – Permit No. 576C

Major Permit Amendment Application - Technically Complete

Tracking Nos. 17346969, 17469494, 18003368, 18174035, 18465363 & 18490442;

CN603572132/RN102594892

Dear Mr. Smith:

The technical review of the above referenced MSW major permit amendment application has been completed, and it has been determined by the Texas Commission on Environmental Quality (TCEQ) MSW Permits Section that the application is technically complete. Therefore, for all administrative purposes, the subject application shall be declared technically complete as of the date of this letter.

A copy of the draft permit, the Technical Summary, the Compliance History, and the Executive Director's Preliminary Decision are enclosed. A copy of the technically complete permit application, the draft permit amendment, and the Executive Director's Preliminary Decision must be placed at the New Boston Public Library, 127 North Ellis Street, New Boston, Texas 75570-2905, for public viewing/copying as will be indicated in the "Notice of Application and Preliminary Decision". These documents must be available at this location beginning on the first day of newspaper publication. The notice and instructions for publishing will be sent to you by the TCEQ Office of the Chief Clerk.

If you have any questions, please call Mr. Ruben Meza, Jr., P.E., at (512) 239-2580. When addressing written correspondence, please use mail code MC 124.

Sincerely,

Chance Goodin, Manager

Municipal Solid Waste Permits Section

Waste Permits Division

CG/RM/sdm

cc: Mr. Kenneth J. Welch, P.E., Biggs & Mathews Environmental, Inc., Mansfield

# **Texas Commission on Environmental Quality**



# Permit for Municipal Solid Waste Management Facility Issued under Provisions of Texas Health and Safety Code Chapter 361

MSW Permit No.:	576C					
Name of Site Operator/Permittee:	Waste Management of Texas, Inc.					
Operator:	Waste Management of Texas, Inc.					
Property Owner:	Western Waste of Texas, LLC					
Facility Name:	New Boston Landfill					
Facility Address:	1030 West US Highway 82 New Boston, Texas 75570-2416					
Classification of Site:	Type I Municipal Solid Waste Landfill Facility					
limitations, requirements, and other the rules and orders of the Commiss previously issued permit. Nothing in applicable rules and regulations of t will be valid until canceled, amende	process, and dispose of wastes in accordance with the reconditions set forth herein. This permit is granted subject to sion and laws of the State of Texas and it replaces any a this permit exempts the permittee from compliance with other he Texas Commission on Environmental Quality. This permit d, or revoked by the Commission.  ccordance with Title 30 Texas Administrative Code,					
	For the Commission					

## **Table of Contents**

I.	Size and Location of Facility3						
II.	Facilities and Operations Authorized						
III.	Facility Design, Construction, and Operation4						
IV.	Financial Assurance			8			
v.	Facility Closure		<u>.</u>				
VI.	Facility Post-Closure Care						
VII.	Standard Permit Conditions			10			
	Incorporated Regulatory Require						
IX.	Special Provisions			12			
Attac	hment A		·	12			
	hment B		y.				

#### I. Size and Location of Facility

- A. The New Boston Landfill is located at 1030 West US Highway 82, in New Boston, Bowie County, Texas 75570-2416. The facility contains 331.9 acres.
- B. The legal description is contained in Part I, Appendix IC of the application, which is incorporated by reference in Attachment A of this permit.
- C. Coordinates and Elevation of Site Permanent Benchmark:

Latitude:

33° 28′ 17.5" N

Longitude:

94° 26' 45" W

Elevation:

382.03 feet above mean sea level (ft-msl)

#### II. Facilities and Operations Authorized

A. Days and Hours of Operation

The waste acceptance hours for the receipt and disposal of waste at this facility shall be any time between the hours of 7 a.m. and 7 p.m., Monday through Saturday. The operating hours at this landfill which include the use of heavy equipment shall be any time between the hours of 5 a.m. and 9 p.m., Monday through Saturday.

The operator shall post the actual operating hours on the site sign.

B. Wastes Authorized at this Facility

The permittee is authorized to dispose of Municipal Solid Waste (MSW) as defined in Title 30 Texas Administrative Code (30 TAC) Section (§)330.3(88); construction, demolition, and yard waste; Class 2 and 3 non-hazardous industrial solid waste; Class 1 non-hazardous industrial solid waste that is classified as Class 1 only because of asbestos content; and specific special wastes identified in Part IV of the permit application. The acceptance of the special wastes is contingent upon such waste being handled in accordance with 30 TAC §330.171, §330.173, and in accordance with the listed and described procedures in Part IV found in Attachment A of this permit, subject to the limitations and special provisions provided herein.

C. Wastes Prohibited at this Facility

The permittee shall comply with the waste disposal restrictions set forth in 30 TAC §330.15(e). The permittee shall not accept Class 1 nonhazardous industrial solid waste and any other waste not identified in Section II.B of this permit at this facility.

D. Waste Acceptance Rate

Solid waste may be accepted for processing and disposal at this facility at the initial rate of approximately 151,600 tons per year (approximately 486 tons per day based on 312 days per year of operation) and increasing over time to a maximum acceptance rate of approximately 177,000 tons per year (approximately 568 tons per

day based on 312 days per year of operation). The actual yearly waste disposal acceptance rate is a rolling quantity based on the sum of the previous four quarters of waste acceptance.

#### E. Waste Volume Available for Disposal

The total waste disposal capacity of the landfill (including waste and daily cover) is 16,834,000 cubic yards.

#### F. Facilities Authorized

The permittee is authorized to operate a Type I MSW Landfill Facility consisting of a total area of 331.9 acres within the permit boundary. The facility will include two Type I disposal units and a Type IV disposal unit, with a combined waste disposal footprint of 132.5 acres. The permittee is also authorized to operate a large items/white goods storage area, recyclable materials staging area, citizens' convenience area, leachate storage facility, and a truck wheel wash.

All waste disposal activities authorized by this permit are to be confined to the Type I MSW Landfill which shall include the two Type I disposal Units and a Type IV disposal unit, access roads, scales, gatehouse, berms, temporary drainage channels, permanent drainage structures, detention ponds, landfill gas management system, leachate management system, final cover, groundwater monitoring system, a liner system, and other improvements.

All waste processing activities authorized by this permit are to be confined to the following waste processing units: a large items/white goods storage area, recyclable materials staging area, citizen's convenience area, leachate storage facility, and a truck wheel wash. The location of the citizen's convenience area, leachate storage facility, and the truck wheel wash are depicted in Drawing D1.2 located in Part III of the permit application. It is noted that the large items/white goods storage area will be located within the active working face of the landfill. The recyclable materials staging area will be located within existing lined areas of the facility and will be relocated periodically as the active working face moves.

#### G. Changes, Additions, or Expansions

Any proposed facility changes must be authorized in accordance with the rules in 30 TAC Chapters 305 and 330.

#### III. Facility Design, Construction, and Operation

- A. Facility design, construction, operation, and maintenance must comply with the provisions of this permit; Commission Rules, including but not limited to 30 TAC Chapter 330; special provisions contained in this permit; Parts I through IV of the permit application incorporated by reference in Attachment A of this permit; and amendments, corrections, and modifications incorporated by reference in Attachment B. The facility construction and operation shall be managed in a manner that protects human health and the environment.
- B. The entire waste management facility shall be designed, constructed, operated, and maintained to prevent the release and migration of any waste, contaminant, or

pollutant beyond the point of compliance as defined in 30 TAC §330.3 and to prevent inundation or discharge from the areas surrounding the facility components. Each receiving, storage, processing, and disposal area shall have a containment system that will collect spills and incidental precipitation in such a manner as to:

- 1. Preclude the release of any contaminated runoff, spills, or precipitation;
- 2. Prevent washout of any waste by a 100-year frequency flood; and
- 3. Prevent run-on into the disposal areas from off-site areas.
- C. The site shall be designed and operated so as not to cause a violation of:
  - 1. The requirements of §26.121 of the Texas Water Code;
  - 2. Any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements of §402, as amended, and/or the Texas Pollutant Discharge Elimination System (TPDES), as amended;
  - 3. The requirements under §404 of the Federal Clean Water Act, as amended; and
  - 4. Any requirement of an area-wide or statewide water quality management plan that has been approved under §208 or §319 of the Federal Clean Water Act, as amended.
- D. Management of Contaminated Water, Leachate, and Gas Condensate
  - 1. All contaminated water shall be handled, stored, treated, disposed of, and managed in accordance with 30 TAC §§ 330.65(c), 330.177, 330.207, 330.305(g), 330.333, and the permit application incorporated by reference in Attachment A of this permit.
  - 2. Contaminated water may also be recirculated into an on-site Type I landfill unit that is designed and constructed with a leachate collection system and a composite liner system in accordance with 30 TAC §330.177.

#### E. Liner System

1. A liner system pursuant to 30 TAC §330.331 must be installed in all cells. The liner system shall be constructed and installed in accordance with the rules and the specifications in Part III, Attachments D7A and D7B of the application, and must consist of the following components (listed from top to bottom):

- a. North and West Disposal Areas (Type I Disposal Units)
  - 24-inch thick protective cover soil layer
  - 0.25-inch thick single sided geocomposite (floor) or 0.20-inch thick double sided geocomposite (side slopes)
  - 60-mil smooth High Density Polyethylene (HDPE) geomembrane (floor) or 60-mill textured HDPE geomembrane (side slopes)
  - 24-inch thick layer of re-compacted soil with a hydraulic conductivity of  $\leq 1 \times 10^{-7}$  cm/s
- b. South Disposal Area (Type IV Disposal Unit)
  - 12-inch thick protective cover soil layer
  - 36-inch thick layer of re-compacted soil with a hydraulic conductivity of  $\leq 1 \times 10^{-7}$  cm/s
- 2. The elevation of deepest excavation within the landfill disposal area is 330 ft-msl, and is located at the leachate collection sump within Sector 3 of the North Disposal Area.
- 3. The elevations of the bottom of the excavations within the waste disposal areas shall be as shown in Drawings D1.5 and D1.6 in Part III, Attachment D1, of the application.

#### F. Final Cover System

- 1. A final cover system pursuant to 30 TAC Chapter 330, Subchapter K must be installed over all waste placed in landfill cells. The final cover system shall be constructed and installed in accordance with the rules and the specifications in Part III, Attachment D8A and D8B of the application, and must consist of the following components (listed from top to bottom):
  - a. North and West Disposal Areas (Type I Disposal Units)

#### Top Slopes

- 24-inch thick soil erosion layer with the top 6 inch layer capable of sustaining native plant growth
- 8 oz. geotextile
- 40-mil smooth Linear Low Density Polyethylene (LLDPE) geomembrane
- 18-inch thick soil infiltration layer with a hydraulic conductivity of  $\leq 1 \times 10^{-5}$  cm/s

#### Side Slopes (Option A)

- 24-inch thick soil erosion layer with the top 6 inch layer capable of sustaining native plant growth
- 0.2-inch double sided geocomposite drainage layer
- 40-mil textured LLDPE geomembrane
- 18-inch thick soil infiltration layer with a hydraulic conductivity of  $\leq 1 \times 10^{-5}$  cm/s

#### Side Slopes (Option B)

- 24-inch thick soil erosion layer with the top 6 inch layer capable of sustaining native plant growth
- 8 oz. geotextile
- 40-mil textured LLDPE geomembrane with studs on top
- 18-inch thick soil infiltration layer with a hydraulic conductivity of  $\leq 1 \times 10^{-5}$  cm/s
- b. South Disposal Area (Type IV Disposal Unit)
  - 24-inch thick soil erosion layer with the top 6 inch layer capable of sustaining native plant growth
  - 18-inch thick soil infiltration layer with a hydraulic conductivity of  $\leq 1 \times 10^{-7}$  cm/s
- 2. The maximum elevation of the final cover system shall not exceed 525 ft-msl.
- 3. Best management practices for temporary erosion and sedimentation control shall remain in place until sufficient vegetative cover has been established to control and mitigate erosion on areas having final cover. Vegetative cover will be monitored and maintained throughout the post-closure care period in accordance with the Post Closure Care Plan.

#### G. Waste Placement

- 1. The lowest elevation of waste placement will be approximately 337 ft-msl.
- 2. The maximum final elevation of waste placement will be 520.5 ft-msl.

#### H. Landfill Gas Management System

- 1. A landfill gas management system to monitor and control methane gas pursuant to 30 TAC Chapter 330, Subchapter I shall be installed and operated at the landfill. The landfill gas monitoring system shall consist of a perimeter network of landfill gas monitoring probes, utility trench vents, and landfill gas monitoring equipment for facility structures. The landfill gas monitoring probes, utility trench vents, and landfill gas control system shall be located, constructed, and operated as described in Part III, Attachment G of the application and consistent with applicable rules. Landfill gas monitoring shall be conducted at a frequency not less than quarterly.
- 2. The landfill gas management system shall ensure that the concentration of methane gas generated by the facility does not exceed 5% by volume in monitoring points, probes, subsurface soils, or other matrices at the facility boundary defined by the legal description in the permit, and does not exceed 1.25% by volume in facility structures (excluding gas control or recovery system components). If methane gas levels exceeding the limits specified herein are detected, the owner or operator shall follow and implement the notification and remediation provisions described in 30 TAC §330.371(c) to ensure continuous protection of human health and the environment.

#### I. Groundwater Monitoring System

- 1. The groundwater monitoring system shall be installed and shall consist of a sufficient number of monitoring wells to monitor the quality of groundwater in the uppermost aquifer in accordance with 30 TAC §330.403. The system shall be designed, constructed, and operated in accordance with Part III, Attachment F1 of the application and consistent with the applicable rules.
- 2. Monitoring wells shall be sampled in accordance with 30 TAC §330.407 (Type I units) and 30 TAC §330.417 (Type IV unit) and Part III, Attachments F2 and F3 of the application. The frequency of groundwater sampling and reporting of data collected for each sampling event shall be in accordance with 30 TAC §330.405 and Part III, Attachments F2 and F3 of the application.

#### J. Landfill Markers

Landfill markers shall be installed and maintained in accordance with 30 TAC §330.143 and as described within Part IV, Section 8.7 of the application.

- K. Storm water runoff from the active portion(s) of the landfill shall be managed in accordance with 30 TAC §§330.63(c), 330.301 through 330.307, and 330.165(c), and as described in Part III, Attachment C of the application.
- L. The permittee shall comply with 30 TAC \$330.59(f)(3) regarding employment of a licensed solid waste facility supervisor. The permittee shall ensure that landfill personnel are familiar with safety procedures, contingency plans, the requirements of the Commission's rules and this permit, commensurate with their levels and positions of responsibility as described in Part IV, Section 3 of the permit application. All facility employees and other persons involved in facility operations shall obtain the appropriate level of training or certification as required by applicable regulations.
- M. The facility shall be properly supervised to assure that bird populations will not increase and that appropriate control procedures will be followed. Any increase in bird activity that might be hazardous to safe aircraft operations will require prompt mitigation actions.

#### IV. Financial Assurance

- A. Authorization to operate the facility is contingent upon compliance with provisions contained within this permit and maintenance of financial assurance in accordance with 30 TAC Chapter 330 Subchapter L and 30 TAC Chapter 37.
- B. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) for the cost of closure in an amount not less than \$4,176,757.75 (2013 dollars).
- C. Within 60 days after the date of issuance of this permit, the permittee shall provide financial assurance instrument(s) for the cost of post-closure care of the landfill in an amount not less than \$4,124,664 (2013 dollars).

- D. The permittee shall annually adjust the closure and/or post-closure care cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial assurance instrument pursuant to 30 TAC §§330.503 and 330.507, as applicable.
- E. If the facility closure and/or post-closure care plan is modified the permittee shall provide new cost estimates in current dollars in accordance with 30 TAC §§330.503, 330.463(b)(3)(D), and 330.507, as applicable. The amount of the financial assurance mechanism shall be adjusted within 45 days after the modification is approved. Adjustments to the cost estimates and/or the financial assurance instrument to comply with any financial assurance regulation that is adopted by the TCEQ subsequent to the issuance of this permit shall be initiated as a modification within 30 days after the effective date of the new regulation.

#### V. Facility Closure

Closure of the facility shall commence:

- A. In accordance with Part III, Attachment H of the application, when all landfill units are filled to their permitted waste disposal capacities or reach their permitted maximum waste elevations:
- B. Upon direction by the Executive Director of the TCEQ for failure to comply with the terms and conditions of this permit or violation of State or Federal regulations. The Executive Director is authorized to issue emergency orders to the permittee in accordance with §§5.501 and 5.512 of the Water Code regarding this matter after considering whether an emergency requiring immediate action to protect the public health and safety exists;
- C. Upon abandonment of the site by the permittee;
- D. Upon direction by the Executive Director of the TCEQ for failure to secure and maintain an adequate bond or other acceptable financial assurance instrument as required; or
- E. Upon the permittee's notification to the TCEQ that the landfill will cease to accept waste and no longer operate.

#### VI. Facility Post-Closure Care

- A. Upon completion of closure requirements for all landfill units and following written acceptance by the Executive Director of the TCEQ of the certification of final closure, post-closure care shall be conducted in accordance with 30 TAC §330.463 and as described in Part III, Attachment I of the application, for a period of 30 years.
- B. The vegetation on the final cover shall be monitored and maintained throughout the post-closure care period.
- C. Following completion of the post-closure care period, the owner or operator shall submit to the Executive Director for review and approval a certification in accordance with 30 TAC §330.465, signed by an independent professional engineer

licensed in the State of Texas, verifying that post-closure care has been completed in accordance with the approved post-closure plan.

D. Upon written acceptance of the certification of completion of post-closure care by the Executive Director of the TCEQ, the permittee shall submit to the Executive Director a request for voluntary revocation of this permit.

#### VII. Standard Permit Conditions

This permit is based on and the permittee shall follow the permit application submittals dated July 22, 2013, and the revisions dated September 4, 2013, March 11, 2014, May 27, 2014, August 11, 2014, and August 26, 2014. These application submittals are hereby approved subject to the terms of this permit, the rules and regulations, and any orders of the TCEQ. These application materials are incorporated into this permit by reference in Attachment A as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission. The permittee shall maintain the application and all supporting documentation at the facility and make them available for inspection by TCEQ personnel. The contents of Part III of Attachment A of this permit shall be known as the "Approved Site Development Plan" in accordance with 30 TAC §330.63. The contents of Part IV of Attachment A of this permit shall be known as the "Approved Site Operating Plan" in accordance with 30 TAC §330.65 and 30 TAC Chapter 330, Subchapters D and E.

- A. Attachment B, consisting of amendments, modifications, and corrections to this permit, is hereby made a part of this permit.
- B. The permittee shall comply with all conditions of this permit. Failure to comply with any permit condition may constitute a violation of the permit, the rules of the Commission, and the Texas Solid Waste Disposal Act, and is grounds for an enforcement action, revocation, or suspension.
- C. A preconstruction conference shall be held pursuant to 30 TAC §330.73(c) prior to beginning physical construction of the facility to ensure that all aspects of this permit, construction activities, and inspections are met. Additional preconstruction conferences may be held prior to the opening of the facility.
- D. A pre-opening inspection shall be held pursuant to 30 TAC §330.73(e). Per 30 TAC §330.73(f) the facility shall not accept solid waste in the expansion area until the executive director has confirmed in writing that all applicable submissions required by the permit and applicable rules have been received and found to be acceptable and that construction is in compliance with the permit and the approved site development plan. If the executive director has not provided a written or verbal response within 14 days of completion of the preopening inspection, the facility shall be considered approved for acceptance of waste.
- E. The permittee shall monitor sediment accumulation in ditches and culverts on a quarterly basis, and remove sedimentation to re-establish the design flow grades on an annual basis or more frequently if necessary to maintain design flow. The roads within the facility shall be designed so as to minimize the tracking of mud onto the public access road.

- F. In accordance with 30 TAC §330.19(a), the permittee shall record in the deed records of Bowie County, a metes and bounds description of all portions within the permit boundary on which disposal of solid waste has and/or will take place. A certified copy of the recorded document(s) shall be provided to the Executive Director in accordance with 30 TAC §330.19(b).
- G. Daily cover (Type I disposal units) and weekly cover (Type IV disposal units) of the waste fill areas shall be performed with well-compacted clean earthen material that has not been in contact with garbage, rubbish, or other solid waste, or with an alternate daily cover which has been approved in accordance with 30 TAC §§330.165(d) and 305.70(k). Intermediate cover, run-on, and run-off controls shall not be constructed from soil that has been scraped up from prior daily cover or which contains waste.
- H. During construction and operation of the facility, measures shall be taken to control runoff, erosion, and sedimentation from disturbed areas. Erosion and sedimentation control measures shall be inspected and maintained at least monthly and after each storm event that meets or exceeds the design storm event. Erosion and sedimentation controls shall remain functional until disturbed areas are stabilized with established permanent re-vegetation. The permittee shall maintain the on-site access road and speed bumps/mud control devices in such a manner as to minimize the buildup of mud on the access road and to maintain a safe road surface.
- I. Erosion stability measures shall be maintained on top dome surfaces and external embankment side slopes during all phases of landfill operation, closure, and post-closure care in accordance with 30 TAC §330.305(d).
- J. In compliance with the requirements of 30 TAC §330.145, the permittee shall consult with the local District Office of the Texas Department of Transportation or other authority responsible for road maintenance, as applicable, to determine standards and frequencies for litter and mud cleanup on state, county, or city maintained roads serving the site.
- K. The permittee shall retain the right of entry onto the site until the end of the postclosure care period as required by 30 TAC §330.67(b).
- L. Inspection and entry onto the site by authorized personnel shall be allowed during the site operating life and until the end of the post-closure care period as required by \$361.032 of the Texas Health and Safety Code.
- M. The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the remainder of this permit shall not be affected.
- N. Regardless of the specific design contained in the application or adopted by reference in Attachments A and B of this permit, the permittee shall be required to meet all performance standards required by the permit, the Texas Administrative Code, and local, state, and federal laws or ordinances.

- O. The permittee shall comply with the requirements of the air permit exemption in 30 TAC §106.534, if applicable, and the applicable requirements of 30 TAC Chapters 106 and 116, and 30 TAC Chapter 330, Subchapter U.
- P. All discharge of stormwater will be in accordance with the US Environmental Protection Agency NPDES requirements and/or the State of Texas TPDES requirements, as applicable.

#### VIII. Incorporated Regulatory Requirements

- A. The permittee shall comply with all applicable federal, state, and local regulations and shall obtain any and all other required permits prior to the beginning of any onsite improvements or construction approved by this permit.
- B. To the extent applicable, the requirements of 30 TAC Chapters 37, 281, 305, and 330 are adopted by reference and are hereby made provisions and conditions of this permit.

#### IX. Special Provisions

The facility may not begin construction activities and operations within the expansion area until the facility receives concurrence from the Federal Emergency Management Agency regarding the applicant's June 2013 request for a Letter of Map Revision.

#### Attachment A

Parts I through IV of the permit application.

#### **Attachment B**

Amendments, corrections, and modifications issued for MSW Permit No. 576C.

# Technical Summary of the

# New Boston Landfill Municipal Solid Waste (MSW) Permit Amendment Application No. 576C

Type I MSW Landfill Facility Bowie County, Texas

Applicant: Waste Management of Texas, Inc.

Date Prepared: September 2014

By the MSW Permits Section Office of Waste, Waste Permits Division Texas Commission on Environmental Quality

This summary was prepared in accordance with 30 Texas Administrative Code Section 281.21(c). The information contained in this summary is based upon the permit application and has not been independently verified.

Technical Summary New Boston Landfill - Permit No. 576C Page 2

Name of Applicant:

Waste Management of Texas, Inc. 9821 Katy Freeway, Suite 700

Houston, Texas 77024-4257

Name of Facility:

New Boston Landfill

Contact Person:

Mr. Chuck Rivette, P.E. 9821 Katy Freeway, Suite 700

Houston, Texas 77024-4257

(713) 647-5542

Consulting Engineer:

Mr. Kenneth J. Welch, P.E. Biggs & Mathews Environmental 1700 Robert Road, Suite 100 Mansfield, Texas 76063

(817) 563-1144

#### 1.0 GENERAL

#### 1.2 Purpose:

The applicant has submitted a major permit amendment application to authorize the lateral expansion of a Type I municipal solid waste (MSW) landfill in Bowie County, Texas, to allow the construction of two additional disposal units. The total permitted facility will include 331.9 acres of which approximately 132.5 acres will be used for waste disposal. The maximum elevation of the final cover system will remain at 525 feet above mean sea level (ft-msl).

#### 1.2 Wastes to be Accepted:

Solid waste to be disposed of will consist of Municipal Solid Waste (MSW) resulting from or incidental to municipal, community, commercial, institutional, and recreational activities, including garbage, rubbish, ashes, street cleanings, dead animals, abandoned automobiles, and all other solid waste other than industrial solid waste; construction, demolition, and yard waste; Class 1 non-hazardous industrial solid waste that is classified as Class 1 only because of asbestos content; Class 2 and Class 3 non-hazardous industrial solid waste; and special wastes as defined in Title 30, Texas Administrative Code (30 TAC) Section (§)§330.3(148), 330.171, and 330.173. The proposed landfill will not be authorized to accept wastes other than the wastes mentioned above, and those waste streams that are expressly prohibited by 30 TAC Chapter 330.

#### 1.3 Waste Acceptance Rate and Site Life:

Authorized wastes will be accepted at an initial rate of approximately 486 tons per day and may increase to a maximum of 568 tons per day. The estimated site life is approximately 40 years.

#### 2.0 TECHNICAL REVIEW

The application has been technically reviewed by the MSW Permits Section to determine its compliance with the applicable requirements in 30 TAC Chapters 305 and 330. Chapter 330 contains the minimum regulatory criteria for MSW facilities. It has been determined that the information in the permit application demonstrates compliance

with these regulatory requirements. A draft permit has been prepared, the application has been declared technically complete.

#### 3.0 LOCATION AND SIZE

3.1 Location

The New Boston Landfill is located in Bowie County, Texas at 1030 West US Highway 82, New Boston, Texas 75570.

3.2 Elevation and Coordinates of Permanent Benchmark

Latitude:

N 33° 28' 17.5"

Longitude:

`W 94° 26' 45"

Elevation:

382.03 ft-msl

3.3 Size

The total area within the permit boundary of the proposed permit is approximately 331.9 acres.

#### 4.0 FACILITY DESIGN, CONSTRUCTION, AND OPERATION

4.1 Facilities Authorized

The permit will authorize the operation of a Type I MSW landfill facility with a total net disposal volume (waste and daily cover) of approximately 16,834,000 cubic yards in addition to support structures and facilities as described in the permit application and subject to the limitations contained in the permit and commission rules.

The facility consists of a site entrance with security fencing, a gatehouse, scales, a paved entrance road to the site, all-weather access roads, soil stockpiles, landfill gas monitoring system, leachate collection system, groundwater monitoring system, and the solid waste disposal area. Structures for surface drainage and stormwater run-on/runoff control include a perimeter drainage system to convey stormwater runoff around the site, berms, ditches, detention ponds, and associated drainage structures.

4.2 Waste Placement

The maximum elevation of waste placement will be approximately 520.5 ft-msl. The minimum elevation of waste placement will be approximately 337 ft-msl. The elevation of deepest excavation for the liner and sumps is approximately 330 ft-msl and occurs at the leachate sump in Sector 3 of the North Disposal Area.

4.3 Liner

A liner system meeting the requirements of 30 TAC Chapter 330, Subchapter H will be constructed. It will consist of the following components (listed in order from top to bottom):

- a. North and West Disposal Areas (Type I Disposal Units)
  - 24-inch thick soil protective cover
  - 0.25-inch thick single sided geocomposite (floor) and 0.20-inch thick double sided geocomposite (side slopes)

- 60-mil smooth High Density Polyethylene (HDPE) geomembrane (floor) and 60-mil textured HDPE geomembrane (side slopes)
- 24-inch thick layer of re-compacted clay (permeability  $\leq 1 \times 10^{-7} \text{ cm/s}$ )
- b. South Disposal Area (Type IV Disposal Unit)
  - 12-inch thick protective cover soil layer
  - 36-inch thick layer of re-compacted soil (permeability  $\leq 1 \times 10^{-7}$  cm/s)

#### 4.4 Final Cover System

The final cover system is designed to meet the requirements of 30 TAC Chapter 330, Subchapter K and will be placed on the above-grade waste. Each cell or phase will be covered with a composite final cover consisting of the following components (listed in order from top to bottom):

a. West and North Disposal Areas (Type I Disposal Units)

#### **Top Slopes**

- 24-inch thick soil erosion layer with the top 6 inches capable of sustaining native plant growth
- 8 oz. geotextile
- 40-mil smooth Linear Low Density Polyethylene (LLDPE) geomembrane
- 18-inch thick soil infiltration layer (permeability  $\leq 1 \times 10^{-5}$  cm/s)

#### Side Slopes (Option A)

- 24-inch thick soil erosion layer with the top 6 inches capable of sustaining native plant growth
- 0.2-inch thick double sided geocomposite drainage layer
- 40-mil textured LLDPE geomembrane
- 18-inch thick soil infiltration layer (permeability  $\leq 1 \times 10^{-5}$  cm/s)

#### Side Slopes (Option B)

- 24-inch thick soil erosion layer with the top 6 inches capable of sustaining native plant growth
- 8 oz. geotextile
- 40-mil textured LLDPE geomembrane with studs on top
- 18-inch thick soil infiltration layer (permeability  $\leq 1 \times 10^{-5}$  cm/s)

#### b. South Disposal Area (Type IV Disposal Unit)

- 24-inch thick soil erosion layer with the top 6 inches capable of sustaining native plant growth
- 18-inch thick soil infiltration layer (permeability  $\leq 1 \times 10^{-7}$  cm/s)

#### 4.5 Leachate Collection System

The leachate collection system consists of a leachate collection layer (geocomposite drainage layer), leachate collection trenches, pipes, sumps, risers, and pumps. The facility may recirculate leachate, gas condensate, and contaminated water in Type I units that have a leachate collection system and a composite liner system. Leachate and contaminated water may also be transported off-site for treatment and disposal. The leachate collection system is designed to meet the requirements of 30 TAC §330.333 and will be placed on top of the liner system.

#### 5.0 LAND USE

Land use in the vicinity of the site was evaluated in accordance with 30 TAC §330.61(h).

- Zoning The proposed facility will be located at 1030 West US Highway 82, New Boston, Texas 75570. The facility is located outside the city limits of New Boston and is partially located within its extraterritorial jurisdiction (ETJ). The facility does not have any zoning designations because Bowie County does not have any zoning ordinances and New Boston does not place zoning requirements for properties within its ETJ.
- 5.2 Surrounding land uses The surrounding land is used for residential, commercial, light industrial, and undeveloped property.
- Residences and Businesses There are an estimated 1,254 residences within one mile of the permit boundary. The closest residence is approximately 198 feet west of the permit boundary. There are an estimated 51 industrial and commercial businesses within one mile of the property boundary. The closest business is located approximately 46 feet north of the permit boundary.
- 5.4 Schools, Churches, and Historical Sites There is one school, eight churches, and three historical sites within one mile of the permit boundary. The Texas State Historical Commission lists three historical markers within one mile of the permit boundary: one is for the City of New Boston located in downtown New Boston; one is for the Hubbard Home located at 108 Magnolia Street, approximately 5,040 feet southeast of the permit boundary; and one is for the Jones-Tyson House located at 211 Magnolia Street, approximately 3,800 feet southeast of the permit boundary.
- Growth Trends The application states that the population growth for Bowie County indicates a slight growth while the City of New Boston population indicates a slight declining trend. The only anticipated growth within one mile of the permit boundary is rural type single family residences and no anticipated major developments within one mile of the permit boundary within the City of New Boston are anticipated to occur. In addition, no major growth trends are anticipated within five miles of the facility.

#### 6.0 LOCATION RESTRICTIONS

Location restrictions for MSW landfills are set forth in 30 TAC Chapter 330, Subchapter M.

6.1 Airport Safety

The landfill is not located within 10,000 feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used by only piston-type aircraft. The facility is considered to be in compliance with 30 TAC §330.545.

6.2 Floodplains

The currently permitted facility (MSW Permit No. 576B) includes a Conditional Letter of Map Revision, dated July 26, 2001, from the Federal Emergency Management Administration (FEMA) authorizing the facility to revise the 100-year floodplain by modifying the location of Rice Creek. The relocation of Rice Creek and construction of required detention facilities associated with MSW Permit No. 576B that redefine the limits of the 100-year floodplain within the

proposed permit boundary of MSW Permit No. 576C are now complete. Although the 100-year floodplain is located within the permit boundary, it is not located within any existing or proposed MSW management units. Since construction of the revised 100-year floodplain is complete, the facility has submitted a Letter of Map Revision (LOMR) to FEMA, which requests FEMA to officially redefine the limits of the 100-year floodplain within the vicinity of the landfill. It is noted that the facility may not begin construction activities and operations of the proposed MSW management units until it receives concurrence from FEMA regarding the applicant's June 2013 request for a LOMR. The facility is considered to be in compliance with 30 TAC §330.547 regarding Floodplains.

#### 6.3 Wetlands

There are several features within the currently authorized and proposed permit boundary which have been identified as waters of the United States (US) and/or wetlands. These features have been depicted in the drawing titled, Approved Jurisdictional Determination Map, located in Part II, Appendix IID, page IID-87 of the application. It is noted that the features identified as emergent wetland (EM)-3, forested wetland (FO)-5, open water feature (OW)-5, and OW-6 are located within the currently authorized permit boundary. The features identified as EM-1 and OW-2 are assumed to be waters of the US under a preliminary jurisdictional determination and are located within the proposed permit boundary. It is noted that the application states that all features within the proposed permit boundary that have been identified as waters of the US and/or wetlands will not be impacted due to the construction and operation of the facility. The facility is considered to be in compliance with 30 TAC §330.553 regarding Wetlands.

#### 6.4 Fault Areas and Seismic Impact Zones

There are no known faults within 200 feet of the site in accordance with 30 TAC §330.555. The facility is not located within a seismic impact zone as defined in 30 TAC §330.557. Therefore, the facility is considered to be in compliance with 30 TAC §330.555 and §330.557.

#### 6.5 Unstable Areas

The site is not located in a known unstable area as defined in 30 TAC §330.559. The facility is considered to be in compliance with 30 TAC §330.559.

#### 6.6 Protection of Endangered Species

Correspondence with the United States Fish and Wildlife Service and the Texas Parks and Wildlife Department indicates that no impacts to threatened or endangered plant or animal species are expected from the proposed operation of this facility.

#### 7.0 TRANSPORTATION AND ACCESS

The main public roadway providing access to the facility is US Highway 82 (US-82) located on the south side of the site. US-82 is a two lane roadway with paved shoulders. There are no load restrictions on this segment of highway and it is open to all vehicles. The main access roadway to US-82 is Interstate 30 (IH-30). IH-30 is a controlled access roadway and is functionally classified as a rural interstate highway. The application states that the 2010 average annual daily traffic count, obtained from the Texas Department of Transportation (TXDOT), for US-82 and IH-30 are 3,400 and

23,470 vehicles per day (vpd), respectively. These traffic volumes represent traffic in both directions. The application also states that based on TXDOT's annual average growth rate of 2%, the 2053 projected traffic volume for US-82 and IH-30 are 7,811 and 53,916 vpd, respectively. The application states that the existing and the 2053 projected traffic volumes throughout the life of the site are 92 and 109 vpd, respectively.

#### 8.0 SURFACE WATER PROTECTION

As defined in 30 TAC §330.3, contaminated water is water which has come into contact with waste, leachate, or gas condensate. Stormwater which comes into contact with solid waste will be considered contaminated water. Temporary berms will be constructed to minimize the amount of surface water that comes into contact with the waste. Contaminated stormwater at the working face will be contained by run-on/run-off berms. Contaminated surface water and groundwater will be discharged into a sanitary sewer system and conveyed to the City of New Boston's wastewater treatment plant or transferred to an authorized wastewater treatment plant for treatment and disposal. Contaminated water may also be recirculated into an on-site Type I landfill unit that is designed and constructed with a leachate collection system and a composite liner system in accordance with 30 TAC §330.177.

#### 9.0 GROUNDWATER PROTECTION

9.1 Groundwater Protection:

The liner system and leachate collection system will provide protection of groundwater from contamination.

9.2 Monitoring Wells:

A groundwater monitoring system that will consist of 30 monitor wells when the facility is fully developed will allow detection of potential releases from the facility. The monitor wells will be sampled, analyzed, and monitored in accordance with the procedures in the Groundwater Sampling and Analysis Plans in Appendix F2 (for Type I units) and Appendix F3 (for Type IV unit), located in Part III, Attachment F of the application.

#### 10.0 LANDFILL GAS MANAGEMENT

A landfill gas monitoring system that will consist of 24 permanent gas monitoring probes along the perimeter of the facility when the facility is fully developed will allow for detection of landfill gas migration. Gas monitoring will be conducted no less frequently than quarterly to detect any possible migration of methane gas at the facility property boundary and in enclosed structures within the facility property boundary.

#### 11.0 SITE DEVELOPMENT PLAN AND SITE OPERATING PLAN

The Site Development Plan (SDP) is Part III of the permit application and sets forth the engineering design and other technical aspects of the facility. The Site Operating Plan (SOP) is Part IV of the permit application. The SOP provides operating procedures for the site management and the site operating personnel for the daily operation of the facility to maintain the facility in compliance with the engineering design and applicable regulatory requirements. These documents become part of the permit.

#### 12.0 FINANCIAL ASSURANCE

Authorization to operate this facility is contingent upon the maintenance of financial assurance in accordance with 30 TAC Chapter 330, Subchapter L and Chapter 37 (Financial Assurance) for closure and post-closure care.

#### 13.0 Public Participation Process.

The public can participate in the final decision on the issuance of a permit as follows:

- 13.1 The TCEQ will hold a public meeting if the executive director determines that there is substantial public interest in the application or if requested by a local legislator. During this meeting the commission accepts formal comments on the application. There is also an informal question and answer period.
- After technical review of the application is completed, a final draft permit is prepared, and the application is declared technically complete. Information for the application, the draft permit, the notice, and summaries are sent to the chief clerk's office for processing.
- 13.3 The "Notice of Application and Preliminary Decision" is sent to the applicant and published in the newspaper. This notice provides a 30-day period, from the date of publication, for the public to make comment(s) about the application or draft permit. The notice also allows the public to request a public meeting and/or a contested case hearing for the proposed facility.
- 13.4 After the 30-day comment period has ended, a "Response to Comments" (RTC) is prepared for all comments received through the mail and at a public meeting. The RTC is then sent to all persons who commented on the application. Persons who receive the comments have a 30-day period after the RTC is mailed in which to request a contested case hearing.
- After the 30-day period to request a hearing is complete, the matter is placed on an agenda meeting for the TCEQ commissioners to make a determination to grant any of the hearing requests and refer the matter to the State Office of Administrative Hearings for a contested case hearing.
- 13.6 A contested case hearing is a formal process in front of an Administrative Law Judge (ALJ) who conducts the hearing. The applicant and protestant party(ies) present witnesses and testimony to support or dispute information contained in the application. When all of this is complete, the ALJ will issue a Proposal for Decision (PFD). This PFD is placed on an agenda meeting of the TCEQ commissioners for consideration of issuance or denial of a permit.
- After the commission has approved or denied an application, a motion for rehearing may be made by a party that does not agree with the decision. Any motion for rehearing must be filed no later than 20 days after the party or the party's attorney of record is notified of the decision. The matter could be set on another agenda for consideration by the commission, or allowed to expire by operation of law.
- 13.8 Applications for which no one requests a contested case hearing are considered uncontested matters after the 30-day comment period. The application is placed on the executive director's signature docket and a permit is issued. Any motion to overturn the executive director's decision must be filed no later than 23 days after the agency mails notice of the signed permit.

Technical Summary New Boston Landfill - Permit No. 576C Page 9

#### 14.0 ADDITIONAL INFORMATION

For information concerning the regulations covering this application, contact the MSW Permits Section:

Mr. Ruben Meza, Jr., P.E. MSW Permits Section, MC 124 Texas Commission on Environmental Quality P.O. Box 13087 Austin, TX 78711 (512) 239-2580

For more detailed technical information concerning any aspect of this application or to request a copy of the Site Development Plan, please contact the consulting engineer or the applicant at the address provided at the beginning of this summary.

A link to the application is available on the internet at http://www.tceq.texas.gov/permitting/waste\_permits/msw\_permits/msw\_posted\_app s.html.

For information concerning the legal aspects of the hearing process, agency rules, and submitting public comments, please contact the Texas Commission on Environmental Quality's Office of the Public Interest Counsel at (512) 239-6363.



# Compliance History Report

PUBLISHED Compliance History Report for CN603572132, RN102594892, Rating Year 2013 which includes Compliance History (CH) components from September 1, 2008, through August 31, 2013.

C	uston	ıer,	Res	pond	ent,
	_		_		

CN603572132, Waste Management of Texas, Inc.

Classification: SATISFACTORY

Rating: 0.39

or Owner/Operator: Regulated Entity:

RN102594892, NEW BOSTON LANDFILL

Classification: HIGH

Rating: 0.00

Complexity Points:

12

Repeat Violator:

CH Group:

07 - Solid Waste Landfills

Location:

1030 W US HIGHWAY 82 NEW BOSTON, TX 75570-2416, BOWIE COUNTY

TCEQ Region:

REGION 05 - TYLER

ID Number(s):

PETROLEUM STORAGE TANK REGISTRATION

REGISTRATION 65580

AIR NEW SOURCE PERMITS REGISTRATION 111820 MUNICIPAL SOLID WASTE DISPOSAL PERMIT 5768

**USED OIL REGISTRATION TYU00009** 

AIR OPERATING PERMITS ACCOUNT NUMBER BKC006V

AIR EMISSIONS INVENTORY ACCOUNT NUMBER BK0006V

AIR NEW SOURCE PERMITS ACCOUNT NUMBER BK0006V

AIR NEW SOURCE PERMITS AFS NUM 4803700036 MUNICIPAL SOLID WASTE DISPOSAL PERMIT 576C

**STORMWATER PERMIT TXR05U153** 

AIR OPERATING PERMITS PERMIT 2646

Compliance History Period: September 01, 2008 to August 31, 2013

Rating Year: 2013

Rating Date: 09/01/2013

Date Compliance History Report Prepared:

August 28, 2014

Agency Decision Requiring Compliance History:

Permit - Issuance, renewal, amendment, modification, denial, suspension, or

revocation of a permit.

Component Period Selected:

August 28, 2009 to August 28, 2014

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: Mr. Ruben Meza

Phone: (512) 239-2580

#### Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period?

YES

2) Has there been a (known) change in ownership/operator of the site during the compliance period?

3) If YES for #2, who is the current owner/operator?

N/A

4) If YES for #2, who was/were the prior

N/A

owner(s)/operator(s)?

If YES, when did the change(s) in owner or operator

occur?

#### Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

N/A

B. Criminal convictions:

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1

November 10, 2009

(781340)

December 18, 2013

(1134070)

#### E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

#### F. Environmental audits:

## G. Type of environmental management systems (EMSs):

IN/A

#### H. Voluntary on-site compliance assessment dates:

N/A

#### I. Participation in a voluntary pollution reduction program:

NIZA

#### J. Early compliance:

N/A

#### Sites Outside of Texas:

N/A

# **Texas Commission on Environmental Quality**

## **Executive Director's Preliminary Decision**

September 12, 2014

#### **DESCRIPTION OF APPLICATION**

Applicant: Waste Mana

Waste Management of Texas, Inc.

Facility:

New Boston Landfill

Municipal Solid Waste (MSW) Permit Application No. 576C

Type:

Type I MSW Landfill Facility

#### **EXECUTIVE DIRECTOR'S PRELIMINARY DECISION**

The executive director of the Texas Commission on Environmental Quality has made the preliminary decision that MSW Permit Application No. 576C, for Waste Management of Texas, Inc., if issued, meets all statutory and regulatory requirements.