

**Technical Summary
of the
Edinburg Regional Disposal Facility
MSW Permit Amendment Application
No. 956C**

**Type I
Municipal Solid Waste Facility
Hidalgo County, Texas**

**Applicant:
City of Edinburg**

Date Prepared: February 6, 2018

By the
Municipal Solid Waste (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.

Name of Applicant: City of Edinburg
P.O. Box 1079
Edinburg, Texas 78540

Name of Facility: Edinburg Regional Disposal Facility

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1.0 GENERAL

1.1 Purpose:

The application is for an amendment to an existing permit for an MSW landfill. The changes proposed in the permit amendment application include lateral expansion and vertical expansion of the existing landfill operated under MSW Permit No. 956B. The total permitted facility will include 602.5 acres of which approximately 406 acres will be used for waste disposal. The final elevation of the waste-fill final cover material will be 398 feet above mean sea level (msl).

1.2 Wastes to be Accepted:

Solid waste to be disposed of will consist of municipal solid waste resulting from, or incidental to municipal, community, commercial, institutional, and recreational activities, including garbage, rubbish/trash, brush, white goods, and construction-demolition waste; Class 2 nonhazardous industrial solid waste; Class 3 nonhazardous industrial solid waste; regulated asbestos containing material; and other special wastes in accordance with the permit conditions. The landfill will not be authorized to accept wastes other than the wastes mentioned above, and the facility will not accept those waste streams that are expressly prohibited by 30 Texas Administrative Code (TAC) Chapter 330.

1.3 Waste Acceptance Rate and Site Life:

Authorized wastes may be accepted at an initial rate of approximately 1,649 tons per day and may increase to approximately 4,792 tons per day. The estimated site life is approximately 62.8 years.

2.0 TECHNICAL REVIEW

The application has been technically reviewed by the Municipal Solid Waste 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 municipal solid waste facilities. It has been determined that the information in the permit application, along with the draft permit, demonstrates compliance with these regulatory requirements. A draft permit has been prepared, the application has been determined to be technically complete.

3.0 LOCATION AND SIZE

3.1 Location

The facility is located at 8601 North Jasman Road, Edinburg, Texas 78541 in Hidalgo County, Texas. The Edinburg Regional Disposal Facility is located in Hidalgo County, Texas, within Edinburg City limits, and can be accessed by exiting US 281 onto eastbound FM 2812, turn left at Jasman Road.

3.2 Elevation and Coordinates of Permanent Benchmark

Latitude: N 26° 23' 53.66"

Longitude: W 98° 07' 48.22"

Elevation: 84.85 feet above mean sea level (msl)

3.3 Size

The total area within the permit boundary under the proposed permit is approximately 602.5 acres.

4.0 FACILITY DESIGN, CONSTRUCTION, AND OPERATION

4.1 Facilities Authorized

The permit will authorize the operation of a Type I municipal solid waste landfill with a total disposal volume of approximately 86 million 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 and collection system, leachate collection system, groundwater monitoring system, the solid waste disposal area, and liquid waste solidification facility. Structures for surface drainage and stormwater run-on/runoff control include a perimeter drainage system to convey stormwater runoff around the site, berms, ditches, retention ponds and associated drainage structures.

4.2 Waste Placement

The maximum elevation of waste placement will be approximately 396 feet above msl. The minimum elevation of waste placement will be approximately 74 feet above msl. The deepest excavation elevation for the liner and sumps is approximately 70 feet above msl.

4.3 Liner

An alternative liner system meeting the requirements of 30 TAC Chapter 330 Subchapter H (relating to Liner System Design and Operation) will be constructed following a liner quality control plan. It will consist of the following components (listed in order from top to bottom of liner system):

- 60 mil HDPE geomembrane (60 mil LLDPE in overliner system)
- Geosynthetic clay liner (GCL)

The liner system will be overlain by 2 feet of protective cover.

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):

- 24 inches of erosion layer with the top 6 inch layer capable of sustaining native plant growth
- Double sided geocomposite (geotextile/geonet/geotextile) drainage layer
- 40 mil LLDPE geomembrane
- (conventional composite system option) Infiltration layer consisting of 18 inches of clay-rich earthen material with a hydraulic conductivity of no more than 1×10^{-5} cm/sec
- (alternative composite system option): Infiltration layer consisting of a geosynthetic clay liner (GCL)

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. Leachate re-circulation is not proposed for this facility. Leachate must 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).

- 5.1 Zoning - The proposed facility would be located within the territorial limits of the City of Edinburg (Part II, Section 2.3.2 of the application). The map and the text in Section 2.3.2 indicate that the facility is located in areas zoned for industrial use.
- 5.2 Surrounding land uses - Surrounding land uses within one mile of the facility are open land (52.4%), industrial (29.3%), residential (14.7%), commercial (1.6%), industrial (1.6%), recreational (0.4%).
- 5.3 Residences and Businesses - There are one licensed day care, one cemetery, one recreational area, 972 residences, and approximately 60 businesses located within one mile of the permit boundary. The nearest residence is about 1,230 feet west of the site.
- 5.4 Schools, Churches, and Historical Sites - There are one school and four churches within one mile of the permit boundary. There are no known historical sites located within one mile of the permit boundary.
- 5.5 Growth Trends - Projected growth trends are an increase in industrial activity on properties around the facility, an increase in commercial business along the U.S. Hwy 281 corridor to the west, and an increase in residential and commercial development along FM 2812 to the east.

6.0 LOCATION RESTRICTIONS

Location restrictions for municipal solid waste landfills are set forth in 30 TAC Chapter 330 Subchapter M.

6.1 Airport Safety

The application indicates that there are two airports within six miles of the facility at 2.3 and 2.4 miles, respectively. The applicant filed a notification of the proposed landfill expansion to the Federal Aviation Administration (FAA); and the FAA responded that an aeronautical study was conducted and a determination of no hazard to air navigation was issued. The notification of the proposed landfill expansion was also sent to the two airports. The facility is considered to be in compliance with 30 TAC §330.545.

6.2 **Floodplains**

Sections 2.8.3 and 2.8.4 of Part II of the permit amendment application demonstrate that the landfill has authorizations from Federal Emergency Management Agency (FEMA) and the county government through a LOMR and a CLOMR-F for development in the 100-year floodplain in the project area. The permit boundary is not located within a 100-year floodplain. The facility is considered to be in compliance with 30 TAC §330.547.

6.3 **Wetlands**

There are no jurisdictional wetland areas within the permit boundary. The facility is considered to be in compliance with 30 TAC §330.553.

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**

No known unstable areas as defined in 30 TAC §330.559 were found at the site. The facility is considered to be in compliance with 30 TAC §330.559.

6.6 **Protection of Endangered Species**

As a result of correspondence with the United States Fish and Wildlife Service, and the Texas Parks and Wildlife Department, the applicant will establish a 200-feet wide corridor along the eastern boundary and take certain prescribed actions during development for protection of the listed species.

7.0 **TRANSPORTATION AND ACCESS**

Direct access to the facility is from Jasman Road, an asphaltic-concrete paved road, owned, operated and maintained by the City of Edinburg. Vehicles using this facility travel on FM 2812 then turn north on to Jasman Road.

The application contains a letter documenting the applicant's coordination with the Texas Department of Transportation (TXDOT) for traffic and location restrictions/design of site entrance roadway improvements. A response from the Texas Department of Transportation indicates that TXDOT is in general agreement with the permit amendment.

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 not be placed in or on the landfill. Contaminated water will be transported to an authorized facility for treatment and disposal.

Surface runoff from the site will be intercepted by perimeter drainages systems and managed in the retention ponds without offsite discharge.

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:**

The groundwater monitoring system which will provide for detection of potential releases from the facility will consist of 38 monitoring wells, including 12 existing wells and 26 newly proposed wells. Groundwater from the monitoring network will be sampled, analyzed, and monitored in accordance with the procedures in the Groundwater Sampling and Analysis Plan (Attachment 5 of the Permit Amendment Application), which is part of the facility permit.

10.0 LANDFILL GAS MANAGEMENT

Landfill gas migration will be monitored around the perimeter of the facility utilizing permanent landfill gas monitoring probes. TCEQ regulations require that gas monitoring be conducted quarterly to detect any possible migration of methane gas beyond 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.
- 13.2 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" 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 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 public hearing.
- 13.5 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 public hearing.
- 13.6 A public 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.
- 13.7 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.

14.0 ADDITIONAL INFORMATION

For information concerning the regulations covering this application, contact the Municipal Solid Waste Permits Section:

Mr. Frank Zeng
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Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711
(512) 239-1132

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.

The application can be viewed on the internet at
http://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_posted_apps.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.