

**REVISED TECHNICAL SUMMARY
of the
Pescadito Environmental Resource Center
MSW Permit Application
No. 2374**

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

**Applicant:
Rancho Viejo Waste Management, LLC**

Date Prepared: January 23, 2018

**By the
Municipal Solid Waste (MSW) Permits Section
Office of Waste, Waste Permits Division
Texas Commission on Environmental Quality (TCEQ)**

This summary was prepared in accordance with Title 30 Texas Administrative Code (30 TAC) 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: Rancho Viejo Waste Management, LLC
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Laredo, Texas 78041

Name of Facility: Pescadito Environmental Resource Center

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1.0 GENERAL

1.1 Purpose

The applicant has submitted this application requesting authorization to construct and operate a new Type I landfill in Webb County, Texas for disposal of authorized waste. The facility will include one Type I MSW disposal unit with nonhazardous Class I industrial solid waste cells, a liquid waste solidification area, a large item/white goods, recycling and scrap tire storage area, a leachate storage facility, and a citizens' convenience center. The total permitted facility will include 953 acres of which approximately 72.33 acres will be used for the landfill disposal unit. The final elevation of the waste fill and final cover material will be 705 feet above mean sea level (msl).

1.2 Wastes to be Accepted

Solid waste to be disposed will consist of municipal solid waste resulting from, or incidental to, municipal, community, commercial, institutional, recreational and industrial activities, including garbage, putrescible wastes, rubbish, ashes, brush, street cleanings, dead animals, abandoned automobiles, construction-demolition waste, yard waste, Class 1, 2, or 3 non-hazardous industrial solid wastes, special wastes and other waste as approved by the executive director. Non-hazardous liquid from municipal and industrial sources will be solidified prior to disposal.

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 solid wastes will be accepted at an initial rate of approximately 2,740 tons-per-day (tpd) and may increase to a maximum of 10,000 tpd. The estimated site life is approximately 7 years. Non-hazardous liquid from municipal sources will be accepted for solidification processing at a rate of approximately 50,000 gallons per day.

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, and the application has been declared technically complete.

3.0 LOCATION AND SIZE

3.1 Location

Pescadito Environmental Resource Center is located at 2864 Jordan Road in Webb County, Texas approximately 20 miles east of the City of Laredo midway between US 59 and SH 359 and approximately 4 miles southeast of the community of Ranchitos Las Lomas.

3.2 Elevation and Coordinates of Permanent Benchmark

Latitude: N 27° 34' 33.15"
Longitude: W 99° 09' 51.59"
Elevation: 564.7 feet above msl

3.3 Size

The total area within the permit boundary under the proposed permit is approximately 953 acres.

4.0 FACILITY DESIGN, CONSTRUCTION, AND OPERATIONS

4.1 Facilities Authorized

The permit will authorize the operation of a Type I MSW landfill with a total net disposal volume (waste and daily cover) of approximately 14.31 million cubic yards, support structures, and processing and recycling areas 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, gatehouse, scales, internal all-weather access road to the landfill, landfill gas monitoring and collection systems, leachate collection system, groundwater monitoring system, liquid waste solidification units, large items and white goods storage area, tire storage area, and citizens' convenience center, and the solid waste disposal area. Structures for surface drainage and stormwater run-on/runoff control include a perimeter drainage system consisting of berms, ditches, detention pond, and detention pond discharge structures. Portions of the site lie within the 100-year floodplain as depicted on the most recent FEMA floodplain map. No waste management units are located within the designated 100-year floodplain.

4.2 Landfill Waste Placement

The landfill unit will have a maximum elevation of waste placement of 701 feet above msl, a minimum elevation of waste placement 453 feet above msl, and the deepest excavation elevation for the liner and sumps is 446 feet above msl.

4.3 Landfill Liner System

A composite 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 of liner system):

Option 1:

- 24-inch protective soil layer
- 200-mil double sided geocomposite drainage layer
- Bentonite enhanced 60-mil textured HDPE geomembrane
- 24-inch recompacted soil layer with a hydraulic conductivity of $\leq 1 \times 10^{-7}$ cm/s (36-inch recompacted soil layer with hydraulic conductivity of $\leq 1 \times 10^{-7}$ cm/s for designated Class 1 waste cells)

Option 2:

- 24-inch protective soil layer
- 200-mil double sided geocomposite drainage layer
- 60-mil textured HDPE geomembrane
- 24-inch recompacted soil layer with a hydraulic conductivity of $\leq 1 \times 10^{-7}$ cm/s (36-inch recompacted soil layer with hydraulic conductivity of $\leq 1 \times 10^{-7}$ cm/s for designated Class 1 waste cells)

4.4 Landfill Final Cover System

An alternative final cover system designed to meet the requirements of 30 TAC Chapter 330 Subchapter K will be placed on the above-grade waste. The final cover system consists of the following components (listed in order from top to bottom):

Class 1 Nonhazardous waste disposal cells:

- 7-inch soil erosion layer capable of sustaining native plant growth
- 30-inch soil infiltration layer with hydraulic conductivity of $\leq 1 \times 10^{-5}$ cm/s
- 150-mil geocomposite drainage layer
- 40-mil LLDPE geomembrane
- 12-inch soil intermediate cover layer

Non-Class 1 Nonhazardous waste disposal cells:

- 7-inch soil erosion layer capable of sustaining native plant growth
- 30-inch soil infiltration layer with hydraulic conductivity of $\leq 1 \times 10^{-5}$ cm/s
- 12-inch soil intermediate cover layer

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 will be recirculated and will be applied to waste at the working face areas. Leachate will be stored in either leachate storage tanks or leachate evaporation pond. Excess leachate will 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.

4.6 Landfill Buffer

Buffer zones have been determined for this facility in accordance with §330.543. In order to protect adjacent properties, a buffer zone with a minimum width of 125 feet from the limits of waste will be maintained.

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 facility will be located in Webb County, Texas approximately 20 miles east of the City of Laredo and 5 miles southeast of U.S. Highway 59 and the community of Ranchitos Las Lomas and outside of the incorporated limits of any city, and is not subject to city zoning ordinances.

5.2 Surrounding land uses

The site is located within the 12,194-acre Yugo Ranch. The property has historically been used for cattle ranching, game management, and oil and gas production. The surrounding land is used for game (wildlife) management, cattle ranching, and production of natural gas.

The site is about two miles north of the north end of Jordan Road. The access road into the site from Jordan Road is privately owned.

5.3 Residences and Businesses

Structures located within 1 mile of the site boundary include three residences consisting of two houses and one mobile home, and an occasional travel trailer. The residences house employees of Yugo Ranch.

5.4 Schools, Churches, and Historical Sites

There are no known schools, licensed day-care facilities, cemeteries, or churches within one mile of the permit boundary. There are no recorded archeological, historical or aesthetic sites within one mile of the facility.

5.5 Growth Trends

The population of Webb County (2000 Census) was 193,117, and the population estimate for 2009 is 241,438, an increase of about 33 percent. Within a one-mile radius of the facility, the long-term population is estimated to be fewer than 10 persons, and this population has no

documented growth or growth trend. Historic population data indicates the population of Ranchitos Las Lomas has been about 300 to 350 persons for a number of years.

5.6 Land Use Compatibility

The South Texas Development Council (STDC) reviewed Parts I and II of the application and determined the proposed facility conforms to the regional plan, and is compatible with land use in the area.

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 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. The Laredo International Airport, the nearest known airport, is more than 20 miles from the site. The Federal Aviation Administration was contacted and did not object to the location of the landfill site.

6.2 Floodplains

Portions of the site are within the 100-year floodplain as designated on the Federal Emergency Management Agency floodplain map. None of the waste management units or operations are located within the floodplain. The facility is considered to be in compliance with 30 TAC §330.547.

6.3 Wetlands

The U.S. Army Corps of Engineers approved the Jurisdictional Determination and the U.S. Environmental Protection Agency concurred that the site contains only "intra-state, isolated, non-navigable waters" under 33 CFR 328.3 (a)(3). Correspondence was received from the U.S. Army Corps of Engineers stating that this project will not involve activities subject to the requirements of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899. 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

The site area is geologically stable, with no evidence of faults and a historical earthquake incidence rate significantly below the Texas state

average. 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

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 as a result of the proposed operation of this facility.

7.0 TRANSPORTATION AND ACCESS

The main public roadway providing access to the site is State Highway 359 connecting with Jordan Road. State Highway 359 is a two-lane, asphalt-paved road with paved shoulders. Jordan Road is a two-lane all-weather surfaced public road. A private road on the Yugo Ranch connects Jordan Road with the landfill facility entrance. The private road is an all-weather surfaced road. The estimated number of vehicles travelling to and from the landfill initially is 130 per day, and this number is anticipated to increase to 260 vehicles per day.

The nearest traffic count that was available to the applicant was obtained from the Texas Department of Transportation (TxDOT) for traffic on State Highway 359, three miles east of Loop 20. Loop 20 intersects State Highway 359 near the City of Laredo. The facility is approximately 20 miles east of the City of Laredo. For the five-year period from 1995 through 1999, the average daily traffic count was 6,080 vehicles per day. The average daily traffic count at this location in 2009 was 8,800 vehicles per day. Based on this increase, the traffic projection for the year 2021 is anticipated to be 12,760 vehicles and 18,500 vehicles for the year 2033. The landfill related traffic is not anticipated to significantly impact the estimated future traffic conditions on State Highway 359.

This information is contained in the application and indicates that State Highway 359 and Jordan Road can sufficiently handle the current and anticipated future traffic volumes associated with this facility. TxDOT reviewed the proposed access and traffic and concluded that the project does not conflict with any traffic or location restrictions, and that it has been planned in a manner that does not appear to negatively impact traffic operations on the state highway system.

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 directly in or on the landfill. Contaminated water will either be transported to an offsite authorized facility for treatment and disposal or processed onsite by liquid solidification prior to placement in the landfill.

9.0 GROUNDWATER PROTECTION

9.1 Liner and Leachate Collection System

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 landfill, will consist of a total of 11 downgradient wells with a maximum spacing of 600 feet and three upgradient wells. The groundwater monitoring system for the leachate evaporation pond will consist of two downgradient wells and one upgradient well. The groundwater monitoring systems will be sampled, analyzed, and monitored in accordance with procedures in the Groundwater Sampling and Analysis Plan (Attachment III-F of the Permit 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 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 management and daily operation of the facility to maintain the facility in compliance with the Site Development Plan 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. Appendix III-J.1 of the application contains information supporting requests for financial assurance of \$8,279,148.00 for facility closure and \$4,211,400.00 for facility post-closure maintenance.

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 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 comments about the application and 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 contested case 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 whether 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 the 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:

Ms. Eun Ju Lee, P.E.
Municipal Solid Waste Permits Section, MC 124
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087
(512) 239-5282

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 or at the Laredo Public Library, 1120 East Calton Road, Laredo, Texas 78041.

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.