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Part III, Attachment III-B

General Facility Design

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Attachment III-B

GENERAL FACILITY DESIGN

Pescadito Environmental Resource Center
MSW No. 2374
Webb County, Texas

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

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Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041

Prepared by:
APTIM Environmental and
Infrastructure, Inc.
(f/k/a) CB&I Environmental &and
Infrastructure, Inc.



12005 Ford Rd, Suite 600
Dallas, TX 75234

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1.0 FACILITY ACCESS

Public access to the Pescadito Environmental Resource Center (PERC) will be controlled through a means of existing fences, natural barriers and constructed fences around the perimeter of the facility approximately as shown on Figure III-B.1-2 in Appendix III-B.1. On the north and east, access is controlled by a natural barrier of 1,350 feet of land owned by Rancho Viejo Cattle Company followed by an existing 8-foot tall game fence. Should the natural barrier of 1,350-feet or existing 8-foot tall game fence prove to not be sufficient or if other uses or development occur in that area, a fence, as discussed below, will be constructed along the northern and eastern permit boundaries. Along the southern boundary, access is controlled by ~~the detention pond and~~ an existing 8-foot tall game fence which will remain in place. Along the western and southwestern boundaries, a fence, as discussed below, will be constructed and maintained for access control. Locations of gates are also shown on Figure III-B.1-2. If needed, the fence may be offset from the permit boundary in areas of dense vegetation or in areas that are difficult to access.

The fence and gates will prevent the entry of livestock, protect the public from exposure to potential health and safety hazards by discouraging unauthorized public access to the disposal and processing operations, and discourage unauthorized entry or uncontrolled disposal of solid waste or prohibited materials. Perimeter fencing consisting of barbed wire, woven wire, wooden fencing, plastic fencing, pipe fencing, or other suitable material will be provided at least four-feet tall.

An entrance gate constructed of suitable fencing materials will be located on the entrance road to the site. The entrance gate will be locked when the landfill is not accepting waste and all other gates will be locked when not in use. The perimeter fence and gates will be inspected monthly and maintenance will be performed as necessary. Should a breach be detected during inspection or at any other time, every reasonable effort will be made to make repairs within 24 hours of detection. Should repairs require more than 24 hours; temporary repairs will be performed within the time specified during notification to the TCEQ region office in Laredo. The TCEO region office will be notified of the breach within 24 hours of detection unless permanent repairs are made within eight hours of detection.

Public access to the PERC site is provided from State Highway 359 and is limited to the entrance road through the scale house area. Access control to the facility is provided by the perimeter fencing and gated site entrance. Entrance to the site is monitored by the scale house attendant during site operating hours. Outside waste acceptance hours, the entrance gate to the site will be locked.

Entry to the active portion of the site will be restricted to designated personnel, approved waste haulers, properly identified persons whose entry is authorized by site management, and regulatory (e.g., TCEQ, Webb County officials) personnel. Visitors may be allowed on the

2.0 WASTE MOVEMENT

The major classifications of solid waste to be accepted at the PERC Landfill include municipal solid waste, special waste, liquid waste and Class 1, 2 and 3 non-hazardous industrial wastes, both liquid and solid. Special wastes accepted at the facility authorized by §330.171(c) include dead animals and slaughter house waste, regulated asbestos containing materials (RACM), non-regulated asbestos-containing materials (non-RACM), empty containers and hazardous waste from Conditionally Exempt Small Quantity Generators (CESQG), provided the material is managed in accordance with the regulations and approved permit. In addition, other special wastes may be accepted based on a waste-specific approval as authorized by §330.171 (b) and facility management.

Used oil filters may be accepted for disposal only if they meet the requirements of 330.171(d). Class 1 wastes will be accepted as allowed and in accordance with 30 TAC 330.173 and the facility's approved Site Operating Plan (Part IV).

Waste disposal facilities include the municipal solid waste disposal areas (~~northeast and south~~ units), RACM disposal area and Class 1 waste cells. Waste processing facilities include the liquid waste solidification area, large item/white goods and tire storage area, reusable materials staging area, citizen's convenience center and leachate storage facility. Appendix III-B.1 includes schematic drawings and details that depict disposal, waste processing, and storage activities that are part of the facility.

Waste hauling vehicles enter the facility via the site entrance road. (See Figure III-B.1-2 in Appendix III-B.1) The scale house attendant observes the incoming waste at the scale house, conducts waste screening, weighs or measures the load, and documents the incoming materials. The scale house attendant is familiar with the rules and regulations governing the various types of waste that can or cannot be accepted into this facility and will direct the waste hauler to the appropriate waste disposal, storage, or processing area. These scale house personnel will also have the authority to reject prohibited wastes and have the rejected waste removed by the transporter immediately upon discovery.

Trained personnel will observe waste unloading at the active working face, processing area(s), large item storage area and citizen's convenience area, and will have the authority and

Appendix III-D.3 – Landfill Design and Details.

A leachate collection system (LCS) has been designed with a geocomposite drainage layer, leachate collection trenches, and collection sumps and pumps to remove leachate from the landfill. The LCS design, layout and details are shown in Part III, Appendix III-D.3 and information regarding the design is included in Appendix III-D.6 - Leachate and Contaminated Water Management Plan.

The landfill development method for the facility is a combination of area excavation and fill followed by aerial fill to the landfill completion height. Landfill development will generally follow the sequence of development as shown on Figure III-B.1.2 in Appendix III-B.1, which will be generally in the order the cells are numbered, starting with the north disposal unit. Individual cells may be developed in multiple phases depending on the amount of solid waste anticipated to be received.

Waste accepted for disposal will be directed to the active working face. Waste will be unloaded at the active working face, spread in layers and thoroughly compacted. Daily cover of waste will be applied to control disease vectors, windblown waste, odors, fires, scavenging, and to promote runoff from the fill area. Daily cover consisting of a minimum of 6 inches of soil will be placed over wastes at the end of each working day for odor control. Alternate daily covers (ADC), such as tarps, foams and slurry mixtures or contaminated soil will also be used if specifically approved by the TCEQ. Details regarding the use of ADC are included in Part IV – Site Operating Plan.

The final cover side slopes will not be steeper than 4H:1V, and the aerial fill top slope will be approximately 6 percent. A water balance (or evapotranspiration cover) final cover will be constructed over the entire landfill. As shown in Part III, Appendix III-D.8 – Water Balance Alternate Final Cover Design, the final cover is generally described below with layers from top to bottom. [For cells that contain Class 1 waste, a flexible membrane component will be included in the final cover system. See Part III, Attachment III-H; Closure Plan.](#)

Vegetative layer	7 – inches of soil capable of sustaining vegetation
Infiltration layer	30 – inches of soil per the requirements of Appendix III-D.8
Intermediate cover	12-inches of on-site soils