

**Part III  
Attachment III-H**

**CLOSURE PLAN**

**Pescadito Environmental Resource Center  
MSW No. 2374  
Webb County, TX**

**PESCADITO**  
ENVIRONMENTAL RESOURCE CENTER

**Initial Submittal March 2015  
Revised September 2015  
Revised August 2016**

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

**Prepared by  
CB&I Environmental and  
Infrastructure, Inc.**



**12005 Ford Rd., Suite 600  
Dallas, TX 75234**

This document is released for the purpose of permitting only under the authority of David R. Friels, P.E. #51700. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650

## Table of Contents

1.0	CLOSURE PLAN.....	1
1.1	General.....	1
1.2	Estimate of Maximum Inventory of Waste on Site.....	1
1.3	Estimate of Largest Area Requiring Final Cover.....	2
2.0	LANDFILL FINAL COVER SYSTEM.....	4
2.1	Landfill Final Cover System Design.....	4
2.2	Installation Methods and Procedures.....	5
2.3	Construction Procedures.....	5
3.0	CLOSURE PROCEDURES.....	6
3.1	Landfill Final Cover/Closure Sequence.....	6
3.2	Landfill Closure During Active Life.....	6
3.3	Liquid Waste Solidification Unit Closure.....	7
3.4	Citizens Convenience Center Closure.....	8
3.5	Leachate and Contaminated Water Storage.....	8
4.0	CLOSURE SCHEDULE.....	9
4.1	Final Cover Construction.....	9
4.2.1	Closure Plan Implementation.....	9
4.3	Provisions for Extending Closure Period.....	11
5.0	CLOSURE COST ESTIMATE.....	12

This document is released for the purpose of permitting only under the authority of David R. Friels, P.E. #51700. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650.

## 2.0 LANDFILL FINAL COVER SYSTEM

### 2.1 Landfill Final Cover System Design

The final cover system design for the site is provided in Part III, Attachment III-D, Appendix III-D.8 of this Site Development Plan (SDP). Webb County is within the arid region of Texas with an average annual rainfall of approximately 20 inches. The final cover contour map and final cover details are provided in Appendix III-D.3 for reference. PERC will utilize ~~a~~ an alternate water balance (WB) final cover system that consists of the following (from the top down):

<u>Final Cover Layer</u>	<u>Class 1 Cells</u>	<u>Non-Class 1 Cells</u>
<u>Topsoil/vegetation</u>	<u>7 inches</u>	<u>7 inches</u>
<u>Soil evapotranspiration (storage)</u>	<u>30 inches</u>	<u>30 inches</u>
<u>Geosynthetic drain</u>	<u>Required</u>	<u>Not required</u>
<u>40 mil LLDPE geomembrane</u>	<u>Required</u>	<u>Not required</u>
<u>Intermediate cover soil</u>	<u>12 inches</u>	<u>12 inches</u>

- ~~7 inches of topsoil/vegetation layer~~
- ~~30 inches of soil evapotranspiration (storage layer)~~
- ~~12 inches of intermediate cover soil~~

The erosion layer for the final cover will consist of a minimum of 7 inches of on-site native soil that is capable of sustaining native plant growth. The infiltration layer will consist of on-site soil that is classified as CL or CH and complies with the requirements stated in Appendix III-D.8 and also in Appendix III-D.9, Final Cover Quality Control Plan (FCQCP). The final cover will have a maximum final top slope of 6 percent and a side slope of 4H:1V (25 percent) and has been designed to provide sufficient slope to preclude ponding of surface water after taking into consideration expected subsidence.

The erosion layer will be covered with: (1) vegetation consisting of native grasses, (2) wood chips, or (3) stone to provide erosion protection from wind and surface water. The final cover system will be maintained until closure and through the post-closure period.