

**Changed Pages**

**Part III, Appendix III-D.4**

**Landfill Operation and Site Life**

**Part III  
Attachment III-D  
Appendix III-D.4**

**LANDFILL OPERATION AND SITE LIFE**

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

**PESCADITO**  
ENVIRONMENTAL RESOURCE CENTER

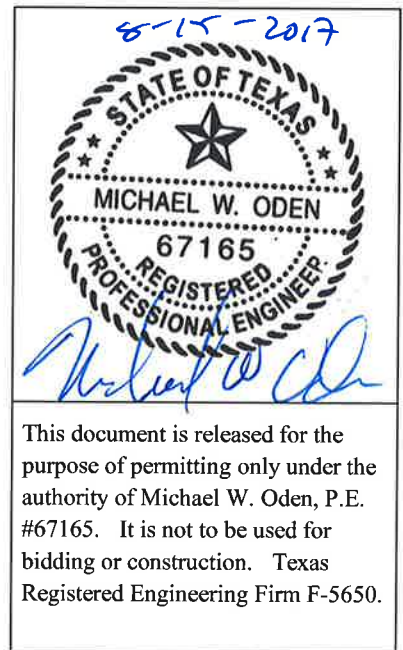
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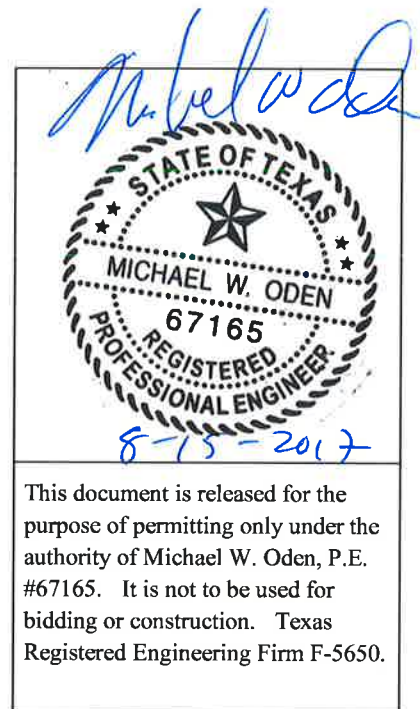


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## **1.0 SITE LIFE**

The PERC Landfill will accept waste generated in Webb County, Texas, adjacent counties and surrounding areas and even remote locations delivered by transfer vehicles or rail. The PERC Landfill has been designed to provide efficient disposal capacity for waste generated from practically any area, including Mexico. The facility will have the ability to accept waste 24 hours per day, 7 days per week. It is projected that the landfill waste acceptance rate will begin at approximately 1,000,000 tons per year (2,740 tons per day) and increase to approximately 3,650,000 tons per year (10,000 tons per day) in seven years before leveling off to an annual increase of 1.0 percent per year for the remaining life of the facility. Based on this assumption, the life has been calculated at approximately 7 years. See Table III-D.4-1.

## **2.0 LANDFILL CAPACITY**

Currently there is a single waste disposal unit within the PERC facility. It is termed the Northeast unit. The most northern cell in the unit (NE-1) is planned to open first with disposal operations proceeding generally in a southerly direction. Utilizing AutoCAD Civil 3D<sup>®</sup> software, the disposal capacity for the Northeast unit is 14,306,484 cubic yard. This volume was generated from surfaces representing the top of the liner protective cover and the bottom of the final cover surface (top of waste grades) and represents the volume available for waste and daily cover.

## **3.0 AIRSPACE UTILIZATION**

For planning purposes, an airspace utilization factor (AUF) of 0.8775 tons per cubic yard (65 pounds per cubic foot) has been used to project site life. The AUF is defined as the tons of waste received for disposal divided by the actual volume used for the waste and daily cover.

**Pescadito Environmental Resource Center**  
**Landfill Life Calculations**  
**Table III-D.4-1**

Northeast Unit Capacity =		14,306,484	Cubic Yards of Solid Waste and Daily Cover (Airspace)			
		—————				
		14,306,484	Total Cubic Yards Airspace			
Airspace Utilization Factor =		0.8775	Tons Solid Waste per Cubic Yard Airspace			
Northeast Unit Capacity =		12,553,940	Tons Solid Waste			
Annual Increase after year 7 =		1.00%				
Operating Days per year =		365				
Year	Tons per day	Tons per year	Airspace Consumed per year (CY)	Cumulative Airspace Consumed (CY)	Airspace Remaining (CY)	Remaining Life based on current year waste acceptance (Years)
1	2,740	1,000,000	1,139,601	1,139,601	13,166,883	12
2	3,288	1,200,000	1,367,521	2,507,123	11,799,361	9
3	3,836	1,400,000	1,595,442	4,102,564	10,203,920	6
4	4,384	1,600,000	1,823,362	5,925,926	8,380,558	5
5	4,932	1,800,000	2,051,282	7,977,208	6,329,276	3
6	5,479	2,000,000	2,279,202	10,256,410	4,050,074	2
7	10,000	3,650,000	4,159,544	14,415,954	(109,470)	(0)