

PART III, ATTACHMENT 8

POST-CLOSURE PLAN

Hawthorn Park Recycling and Disposal Facility

Houston, Harris County, Texas

TCEQ Permit MSW-2185A

Owner/Site Operator/Permittee:



USA Waste of Texas Landfills, Inc.
24275 Katy Freeway, Suite 450
Katy, Texas 77494



Submitted By:



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Professional Engineering Firm
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**INTENDED FOR PERMITTING
PURPOSES ONLY**

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1.0 REQUIREMENTS

Post-closure care maintenance will begin at the Hawthorn Park Recycling and Disposal Facility (hereinafter referred to as "Hawthorn Park RDF," or "facility," "landfill," or "site") immediately upon the date of final closure, as approved by the Executive Director (ED) of the Texas Commission on Environmental Quality (TCEQ).

This Post-Closure Plan was prepared in compliance with the requirements of 30 Texas Administrative Code (TAC) §§330.63(i) and 330.463(a) for a municipal solid waste (MSW) Type IV facility.

This Post-Closure Plan incorporates plans for final cover system monitoring and maintenance, surface water management, site access, gas management, and groundwater sampling and analysis for the long-term post-closure care of the facility. These plans describe the monitoring and maintenance activities specific to each management area that will be performed throughout the post-closure period. Any modifications to this plan or other related plans will require prior approval by the TCEQ ED.

Following the date of written confirmation by the TCEQ ED that the landfill or a portion of the landfill has been closed in accordance with the approved Closure Plan (Part III, Attachment 7), the minimum length of the post-closure period will be five (5) years. During this period, the final cover will be maintained and monitoring activities will be performed to ensure that the closed facility will continue to retain its integrity and will not pose a threat to human health or the environment. Once approved by the TCEQ ED, this Post-Closure Plan will be kept in the Site Operating Record at the Hawthorn Park Landfill. The ED may release the post-closure period for a landfill unit if all wastes and waste residues have been removed from the unit during closure.

USA Waste of Texas Landfills, Inc. (USA Waste) will retain the right of entry to the closed site and shall maintain all rights-of-way throughout the post-closure period. The integrity and effectiveness of the final cover, vegetation, and drainage control systems will be maintained. During the post-closure maintenance period of the site, USA Waste will conduct maintenance and/or remediation activities required to correct the effects of excessive settlement, subsidence, ponded water, erosion, lack of vegetative growth, leachate or methane migration, and other events or failures detrimental to the integrity of the facility control systems and the final cover system. If any of these problems occur after the end of the five-year post-closure period or persist for longer than the first five years of post-closure care, USA Waste will be responsible for their correction until TCEQ determines that all problems have been adequately resolved.

The name, address, and telephone number of the office responsible for overseeing and conducting the post-closure care maintenance activities at the Hawthorn Park RDF is given below:

Area Office
USA Waste of Texas Landfills, Inc.
24275 Katy Freeway, Suite 450
Katy, Texas 77494
(713) 647-5454

2.0 INSPECTION, MAINTENANCE, AND MONITORING ACTIVITIES

2.1 Introduction

This section describes the facility inspection, maintenance, and monitoring activities to be conducted during the post-closure care period. During the post-closure monitoring and maintenance period of the site, the final cover will be inspected annually.

2.2 Final Cover System

Monitoring and maintenance activities will be performed to maintain the integrity and effectiveness of the final cover system. Inspection of the final cover will include, but not be limited to, assessment of vegetation, erosion, settlement, subsidence, and ponding. Maintenance activities for the final cover will include the following:

- Ensuring final cover vegetation is healthy by:
 - Mowing the vegetation
 - Identifying areas with stressed or dead vegetation and taking appropriate recourse, which can include re-seeding
 - Removing woody-stemmed plants
- Filling areas of erosion cuts and depressions along final cover to provide positive drainage

Erosion, cuts, and depressions in the final cover will be noted. At a minimum, recommended maintenance will be performed as needed prior to the next scheduled inspection. Mowing of the final cover system and other vegetated areas at the facility will be conducted, at minimum, annually.

2.3 Surface-Water Management System

During the inspection events, damage or debris and sediment build-up in the drainage system will be noted. Drainage systems will be re-graded as necessary and cleared of debris and sediment, as needed, to facilitate continued performance and to provide positive drainage.

2.4 Site Access

Site access and site access controls will be inspected during the inspection events. Access roads, on-site roads, gates and locks, perimeter fencing, etc., will be monitored and maintained as necessary to facilitate continued access for authorized activities and simultaneously restrict unauthorized access to the site.

2.5 Continuation of Monitoring System

Groundwater and gas monitoring programs in effect during the life of the unit shall be continued during the post-closure care period. If there is evidence of a release from a MSW unit, the TCEQ ED may require an investigation into the nature and extent of the release and an assessment of measures necessary to correct an impact to groundwater.

2.5.1 Groundwater Monitoring System

Groundwater monitoring activities will continue throughout the post-closure care period in accordance with 30 TAC §330.463(a)(2). All groundwater monitoring wells that are part of the groundwater monitoring network will be monitored annually and maintained in accordance with the Groundwater Sampling and Analysis Plan (GWSAP) in Part III, Attachment 5, Appendix III-5B, unless otherwise approved by the TCEQ ED.

Maintenance of the groundwater monitoring system will be performed as needed. The need for maintenance will be determined through well inspection during the annual groundwater monitoring event and will include inspection of items as discussed in the GWSAP. Maintenance will be performed as needed, based on the inspection results, prior to or during the next scheduled sampling event, depending on the extent of the repairs or maintenance required.

2.5.2 Landfill Gas Monitoring System

Landfill gas monitoring activities will continue throughout the post-closure care period, in accordance with the requirements of 30 TAC §330.463(a)(2), as conducted during active facility operations. All structures and permanent gas monitoring probes will be sampled quarterly in accordance with the Landfill Gas Management Plan in Part III, Attachment 6, unless otherwise approved by the TCEQ ED.

Maintenance and operations of the landfill gas monitoring system will be performed as needed. Particular attention will be paid to ensure that monitoring equipment is calibrated according to the manufacturers' recommendations. The need for maintenance will be determined through inspection of the system during the quarterly sampling event. Maintenance will be performed as needed, based on the inspection results, prior to or during the next scheduled sampling event, depending on the extent of the repairs or maintenance required.

3.0 SCHEDULE OF POST-CLOSURE INSPECTION ACTIVITIES

The frequency of inspection, maintenance, and monitoring and maintenance activities to be conducted during the post-closure care period is in Table III-8-1 below.

Table III-8-1: Schedule of Post-Closure Care Period Inspection Activities

Inspection Activity	Frequency
Facility Inspection (includes final cover system, surface water management system, site access)	Annually
Groundwater Monitoring	Annually, per Part III, Attachment 5, Appendix III-5B (Groundwater Sampling and Analysis Plan)
Landfill Gas Monitoring	Quarterly per Part III, Attachment 6 (Landfill Gas Management Plan)
Facility Maintenance (includes final cover system, surface water management system, site access and controls, groundwater monitoring system, and landfill gas monitoring system)	As needed, and with at least annual mowing of final cover

4.0 POST-CLOSURE LAND USE

In accordance with 30 TAC §330.461(c), USA Waste shall record a certified notation of the deed to the facility property, or on some other instrument that is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that the land has been used as a landfill facility and use of the land is restricted according to the provisions specified in §330.465 (relating to Certification of Completion of Post-Closure Care). USA Waste shall submit a certified copy of the modified deed to the TCEQ ED and place a copy of the modified deed in the operating record.

Currently, post-closure land use is anticipated to be open space in accordance with 30 TAC Chapter 330, Subchapter T, related to Use of Land Over Closed Municipal Solid Waste Landfills.

5.0 COMPLETION OF POST-CLOSURE CARE

Per 30 TAC §330.465, after the appropriate the appropriate post-closure care period has expired, USA Waste will submit to the TCEQ ED a documented certification signed by an independent registered professional engineer verifying that post-closure care maintenance is complete in accordance with the Post-Closure Plan for the facility.

Along with the post-closure certification, USA Waste will also submit to the ED a request for voluntary revocation of the facility's permit. Once approved, the certification and all applicable documentation will be included in the facility's Site Operating Record.

6.0 COST ESTIMATE FOR POST-CLOSURE CARE

A detailed estimate, in current dollars, of the cost of post-closure care maintenance and any corrective action as described in the Post-Closure Plan is included in Part III, Attachment 9, Appendix III-9B.