

## PERMIT ATTACHMENT P

### POST-CLOSURE CARE Modified from the Permit Application, Volume I, Section 8.2

#### 8.2 POST-CLOSURE ACTIVITIES

Post-closure care involves long-term maintenance, monitoring, and reporting of activities that are carried out after closure is completed. Post-closure care is anticipated to be needed only for the landfill after closure. However, if clean closure cannot be certified for any unit components or secondary containment areas associated with the drum handling unit, liquid waste storage area, stabilization unit, evaporation pond, or roll-off storage area, then those closure activities that have been completed will be certified and a permit modification request will be submitted to NMED to include post-closure activities for those portions of the units that do not meet the closure performance standard.

The post-closure care period for the landfill will begin after completion of closure activities and continue for an anticipated 30 years. Inspection, maintenance, and repair activities to be conducted during post-closure are described in the following sections. The schedule for performing inspections is shown in Table 8-2, *Post-Closure Inspection Schedule*

##### 8.2.1 Security Systems

As shown in Permit Attachment L1, *Engineering Drawings*, Facility Drawing Number 4, the Facility perimeter fence encloses the entire 480-acres of the Facility. The fence and warning signs mounted on the fence will be inspected and maintained throughout the post-closure period. Monthly inspections will include checking the condition of fencing, locks, gates, and warning signs. Any signs of unauthorized entry will be reported to the local sheriff's office and NMED. Routine maintenance will be performed based on inspection findings to repair or replace damaged or deteriorating items.

##### 8.2.2 Landfill Final Cover

The integrity and effectiveness of the landfill final cover will be maintained, including making necessary repairs to correct the effects of settling, erosion, water damage, animal damage, or other events. The landfill cover will be inspected quarterly. Inspections will include checking for signs of cracking, subsidence, ponding water, erosion, burrowing animals, or deep-rooted vegetation. Repairs will be scheduled in a timely manner upon noting deficiencies in order to ensure that the final cover maintains its effectiveness.

General maintenance will include the following activities:

- fertilizing the vegetation periodically;
- re-establishing damaged or sparse vegetative cover, including seeding and fertilizing;

<b>TABLE 8-2 POST-CLOSURE INSPECTION SCHEDULE</b>	
<b>INSPECTION ITEM – PROBLEM OR PROBLEM AREA</b>	<b>INSPECTION TIME</b>
<b>Facility</b>	
Fence	monthly
Locks and gates	monthly
Warning signs	monthly
<b>Landfill Cover</b>	
Cracking, subsidence, ponding water, erosion, Burrowing animals, deep-rooted vegetation	quarterly
<b>Perimeter Diversion Ditch</b>	
Sediment and debris accumulation,	quarterly
<b>Leachate Collection System</b>	
Sump	quarterly until the sump remains dry for 6 months, then semi-annually
Pumps	quarterly
Riser pipes, grout seals, other visible portions of the system	quarterly
<b>Leak Detection System</b>	
	quarterly until the sump remains dry for 6 months, then semi-annually
<b>Vadose Zone Monitoring System</b>	
	semi-annually

- conducting erosion damage repair, including soil excavation, transport and placement, seeding and fertilizing;
- regrading as needed to overcome the effects of subsidence or to repair areas where ponding is occurring; and,
- providing rodent control as needed, including trapping and relocating animals and repairing damage caused by burrowing.

Soil for erosion repair and regrading will be excavated from unused areas onsite and transported to the cap area for use in maintenance activities.

### 8.2.3 Perimeter Diversion Ditch

The perimeter diversion ditch (as shown in Permit Attachment L1 on Drawings 22 and 25) will be inspected and maintained throughout the post-closure period to ensure its designed functions to divert precipitation and run-on from the landfill area are met. Inspections will be conducted quarterly and will include checking for accumulated sediments and debris, and signs of erosion. Repairs will be scheduled in a timely manner, upon deficiencies being noted, to ensure that the diversion ditch maintains its effectiveness.

General maintenance activities will include diversion ditch cleaning to remove accumulated sediments and debris, and regrading, as needed, to repair the effects of erosion.

## **8.2.4 Leachate Management System**

### **8.2.4.1 Leachate Collection System**

The leachate collection system will be operated when necessary to ensure leachate depth over the liner does not exceed 30 cm (1 foot) until the completion of post-closure care. Leachate pumps will be operated at least quarterly. The site log will be kept on-site or at a location approved by the Secretary. The volume of leachate pumped will be recorded in a site log. After records indicate that the sump has remained dry for six months, the frequency of inspection and operation of the sump pumps will be changed to semi-annually. Any leachate collected will be pumped to an above-ground storage tank.

The leachate collection system will be inspected quarterly or semi-annually as described in the preceding paragraph. Pumps will be inspected for proper operation. The riser pipes, grout seals, and other visible above-ground portions of the system will be inspected for integrity. The level of liquid in the sumps will be measured prior to pumping out accumulated leachate.

Routine maintenance will be conducted to ensure that the leachate collection system remains operable. Locking caps and standpipe grouting will be repaired or replaced as necessary. Accumulated sediments or sand in the standpipes will be removed as necessary to enable the system to function properly. Based on the amount of leachate collected over time, a determination will be made about the integrity of the collection system. If a system is suspected of being clogged, an assessment by a New Mexico registered professional engineer will be made. All repairs will be made according to the New Mexico registered professional engineer's assessment and upon approval by NMED.

### **8.2.4.2 Management of Leachate**

During the post-closure care period, leachate pumped from the collection system will be temporarily stored in an above-ground tank. The leachate will be sampled and managed at an off-site facility as hazardous waste, as appropriate. Details of the leachate sampling and analysis program will be specified in a sampling and analysis plan.

### **8.2.4.3 Leak Detection System**

During the post-closure care period, the leak detection system beneath the landfill primary liner will initially be monitored and inspected quarterly to ensure that it is operating correctly and that any leachate that has migrated through the primary liner is collected and removed. As with the primary leachate system, the volume of leachate pumped from the secondary leak detection system will be recorded in a site log. After records indicate that the sump has remained dry for six months, the frequency of inspection and operation of the leak detection system will be changed to semi-annually.

Inspections and maintenance will be equivalent to those described for the leachate collection system (see Section 8.2.4.1).

## **8.2.5 Vadose Zone Monitoring System**

The vadose zone monitoring system will be maintained and monitored throughout the post-closure care period. The following sections outline the post-closure monitoring plan for this system. The vadose zone monitoring system is described in Permit Attachment I, *Vadose Zone Monitoring System Work Plan*, and consists of vadose zone sump in the landfill and vadose zone wells along the eastside of the facility.

### **8.2.5.1 Sampling and Analysis**

Vadose zone monitoring will be conducted semi-annually to test for the presence of contaminants in the unsaturated sediments hosting the landfill. Sampling procedures and analytical parameters will be defined according to the Vadose Zone Monitoring System Work Plan (Volume II, Appendix N) and will follow the same guidelines used during the active life of the Facility.

### **8.2.5.2 Inspection and Maintenance**

The visible above-ground portions of the vadose zone monitoring system will be inspected semi-annually for integrity. Routine maintenance will be conducted to ensure that the vadose zone monitoring system remains in operable condition. System equipment will be repaired or replaced as necessary.

### **8.2.6 Recordkeeping**

A post-closure Facility record will be maintained. This record will include the dates and times of inspections, inspection findings, name of inspector, volumes of leachate pumped, disposition of leachate, sampling results of leachate and vadose zone samples, and dates and nature of any corrective actions taken.

### **8.2.7 Certification of Post-Closure**

Within 60 days after completion of the established post-closure care period for the Facility, the permittee will submit to NMED a certification that the post-closure operations were performed in accordance with the approved post-closure plan in compliance with 40 CFR 264.120. The certification will be signed by the permittee and an independent New Mexico registered professional engineer.

### **8.2.8 Amendment of Plan**

The permittee will submit a permit modification request for changes to the post-closure plan if changes in operating plans or Facility design, or events that occur during the active life of the Facility, affect the approved post-closure plan. The owner or operator may also request a modification to the post-closure plan at any time during the active life of the Facility or during the post-closure care period. Permit modification requests will be submitted at least 60 days prior to a proposed change in Facility design, or no later than 60 days after an unexpected event which affects the post-closure plan.

If clean closure cannot be certified for any unit components or secondary containment areas associated with the drum handling unit, tank storage area, stabilization unit, evaporation pond, or roll-off storage area, then the post-closure care permit will be amended to include those portions of the units that do not meet the closure performance standard. The post-closure care plan amendments will be submitted to NMED no later than 90 days after the owner or operator determines that the hazardous waste management unit must be closed as a landfill.

### **8.2.9 Facility Post-Closure Contact**

During the post-closure care period, the Facility contact organization will be the following:

*Gandy Marley, Inc.*  
1109 East Broadway  
Tatum, New Mexico 88267  
(505) 398-4960