

## PERMIT ATTACHMENT O

### CLOSURE PLAN

#### Modified from the Permit Application, Volume I, Sections 8.0, 8.1, 8.3, 8.5, and 8.6

## 8.0 CLOSURE OF PERMITTED UNITS

This closure plan describes specific activities required for closure of the drum handling unit, roll-off storage area, stabilization unit and associated liquid waste receiving and storage unit, evaporation pond, and landfill, in compliance with RCRA closure requirements. It is currently planned that all of these units will be cleaned closed with the exception of the landfill. The closure activities are designed to minimize the need for further maintenance and any potential impacts to human health and the environment. Closure activities are described in Section 8.1. Section 8.3 presents the closure performance standard; and Permit Attachment O1, *Compliance Schedules for Closure*, discusses the closure schedule. Closure certification and modifications are discussed in Sections 8.5 and 8.6, respectively. Closure cost estimates are discussed and compliance with financial assurance requirements are discussed in Permit Attachments O2, *Financial Assurance for Closure*, and P1, *Financial Assurance for Post-Closure Care*.

### 8.1 CLOSURE ACTIVITIES

At the end of the active life of the Facility, all units and structures of the Facility will be closed and dismantled in compliance with 40 CFR 264, Subpart G. Any solid hazardous waste and debris will be placed in the landfill, and non-hazardous waste will be sent off site for reuse, recycle, or disposal in compliance with 40 CFR 264, Subpart G. Liquids generated during closure (decontamination solutions, leachates, and evaporation pond liquid) will be treated onsite (stabilization unit) unless it is determined that shipment offsite for treatment is more cost effective. The landfill will be capped with a final cover, and post-closure care will be initiated for the landfill. These closure activities are described in detail in the following sections. The unit-specific closure descriptions are presented in the order in which the units are anticipated to be closed.

An off site laboratory will be used for analysis of hazardous waste and soil samples at closure. The off site laboratory will be an EPA approved laboratory with an internal QA/QC program and specific procedures for each analytical method. All laboratory samples will be analyzed for the hazardous constituents specified in 40 CFR Part 261, Appendix VIII and all other constituents considered by NMED to be a threat to human health and the environment.

Prior to the commencement of closure activities, GMI will notify the Secretary of NMED at least 60 days prior to the date GMI expects to begin closure of the units. The schedule for closure is described in more detail in Permit Attachment O1, *Compliance Schedules for Closure*, Section 8.4, *Closure Schedule*.

#### 8.1.1 Drum Handling Unit

The following steps will be necessary to complete closure of the drum handling unit:

- removal of remaining waste and other material in the storage area;
- decontamination of equipment in the area;

- sampling of any areas or equipment suspected, based on visual observations, of being contaminated;
- dismantling of the building structure;
- dismantling of the concrete floor and secondary containment; and,
- sampling of soil beneath the floor to determine if contamination is present.

#### **8.1.1.1 Removal of Inventory**

Closure of the drum handling unit will commence with removal of any inventory or other materials stored in the area according to standard procedures. Remaining inventory will be removed within 90 days after receipt of the final volume of hazardous wastes at the unit. For the purposes of this plan, GMI will arrange for all waste remaining in inventory to either be disposed of directly in the landfill, treated at the onsite treatment unit prior to disposal in the landfill, or returned to the generator if either of the previous two options are not available. If required, the hazardous materials could be returned to the generator utilizing the same method of transportation that was used to deliver the material to the site (e.g., end dump trucks).

Closure cost estimates and waste volumes for disposal are based on the worst-case scenario of all wastes requiring stabilization at the onsite treatment unit prior to landfilling. In the case of the drum handling unit, it is assumed that all 1,120 drums contain sludge that must be stabilized. For these calculations, the maximum inventory of the drum handling unit at the time of closure is assumed to be the maximum permitted capacity of the unit.

#### **8.1.1.2 Decontamination of Equipment and Dismantling of Building Structure**

Equipment in the area, such as drum-moving equipment, that may have contacted hazardous waste will either be decontaminated or disposed of as hazardous waste. Large equipment, such as the fork trucks, will be decontaminated. Disposal as waste will be the preferred option only for items, such as wood pallets, that are difficult to decontaminate.

The building structure is not anticipated to be contaminated with hazardous waste; however, it will be cleaned and rinsed prior to, or during, dismantling. The dismantled building structure will either be reused elsewhere or recycled as scrap metal.

A high-pressure detergent wash and water rinse will be used to clean off all visible residues. Cleaning will continue until sampling and analysis of the wash water indicates that contaminants have been removed. The use of wash water will be limited to minimize the amount of waste generated. Wash water use will be limited by using only the necessary amount to decontaminate the facility and equipment. All decontamination solutions will be collected in containers or portable tanks. The decontamination solutions will either be treated onsite or trucked to an approved off site facility for treatment. The expected volume of decontamination solutions that will be generated during closure of the drum handling unit is included in the liquid waste amounts shown in Table 8-1.

TABLE 8-1 CLOSURE GENERATED WASTE QUANTITIES			
Facility Unit	Inventory	Waste (tons)	Waste for Disposal <sup>2</sup> (tons)
Drum Handling Unit	1,120 drums	309	803
Evaporation Pond Unit	78,300 ft <sup>3</sup>	2,936	7,634
Liquid Waste Receiving and Storage Unit	36,000 gal	162	1,692
Stabilization Unit	3,600 ft <sup>3</sup>	180	468
Roll-Off Storage Unit	142,560 ft <sup>3</sup>	7,128	18,533
Landfill <sup>1</sup>	NA	NA	NA
Notes			
1) No waste will be moved from the landfill at closure time.			
2) Waste for disposal include waste and reagents quantities added together.			

Clean closure of the building will be ensured by the development and implementation of a sampling and analysis plan (SAP). The plan will be provided to the New Mexico Environment Department for approval 90 days prior to implementation. At a minimum, it will specify the following aspects of the sampling and analysis activities:

- 1.0 *Sampling Program*
  - 1.1 *Sampling Locations*
  - 1.2 *Sample Matrix*
  - 1.3 *Sample Containers, Type and Size*
  - 1.4 *Sampling Tools*
  - 1.5 *Sample Management*
  - 1.6 *Field Screening Methods*
- 2.0 *Analytical Methods*
  - 2.1 *Analytes for Analysis*
  - 2.2 *Analysis Procedures (Specified SW-846 Methods)*
- 3.0 *Quality Assurance*
  - 3.1 *Organization*
  - 3.2 *Sample Management*
  - 3.3 *Analytical System*
    - 3.3.1 *Instrument Maintenance*
    - 3.3.2 *Instrument Calibration*
    - 3.3.3 *Personnel Training*
    - 3.3.4 *Reagents and Standards*
    - 3.3.5 *Corrective Actions*
  - 3.4 *Data Quality Objectives*
  - 3.5 *Performance and System Audits*
- 4.0 *Data Management*
  - 4.1 *Data Collection*
  - 4.2 *Data Reduction*
  - 4.3 *Data Reporting*

The sampling and analysis plan will specify the use of equipment, methods, and techniques current at the time the plan is prepared. Applicable provisions of the then-current version of SW-846 (or other applicable standard reference then in effect) will be specified. Applicable reporting requirements will also be specified, as appropriate.

### **8.1.1.3 Dismantling of Concrete Floor and Secondary Containment**

Secondary containment for the drum handling unit will be provided by a geomembrane lined trench and collection sump system. Drums will be stored on a coated concrete floor that drains to the trench and sump system. Because the concrete will be coated, decontamination at closure is proposed so that the concrete will be broken up and disposed of as non-hazardous debris. The liner and collection sump system will be removed at closure but will not be decontaminated. Since this material will be considered a hazardous waste, upon certification of compliance with LDR requirements, it will be disposed of in the landfill. The expected volume of solid hazardous waste that will be generated during closure is provided in Table 8-1.

### **8.1.1.4 Soil Sampling**

After removal of the building, any contaminated soils will be removed for disposal and the area resampled until the sampling and analyses indicate that the area meets the performance standard provided in Section 8.3. Sampling will be performed in the vicinity of the loading dock and in open areas. Individual samples will be collected at a frequency equivalent to one per every 2,000 square feet (i.e. one sample to be taken at the center of each 2,000 square foot grid).

Contaminated soils will be disposed of in accordance with the regulations applicable to the contaminant of concern. If the landfill portion of the Facility is still operational and the contaminated soil meets the waste acceptance criteria for the landfill it will be landfilled at GMI. If the GMI landfill cannot accept the waste it will be manifested and shipped to an appropriately licensed disposal facility.

In addition, seven samples will be collected from specific locations that correspond to all of the floor drain sumps (see Permit Attachment L1, *Engineering Drawings*, Drawings 37, 38 and 39). Eight additional samples will be collected in the dock area and samples will be collected at 20-foot intervals beneath the drainage trenches. Sample results will be compared against the closure performance standard presented in Section 8.3.

Any contaminated soils will be removed for disposal and the area resampled until the sampling and analyses indicate that the area meets the performance standard provided in Section 8.3. Contaminated soils will be disposed of in accordance with the regulations applicable to the contaminant of concern. If the landfill portion of the Facility is still operational and the contaminated soil meets the waste acceptance criteria for the landfill it will be landfilled at GMI. If the GMI landfill cannot accept the waste it will be manifested and shipped to an appropriately licensed disposal facility.

### **8.1.2 Evaporation Pond**

Clean closure of the evaporation pond will be ensured by the development of a sampling and analysis plan. The plan will be provided to the New Mexico Environment Department for approval 90 days prior to implementation. The plan will follow the outline contained in Section 8.1.1.2.

The primary steps required to complete closure of the evaporation pond are the following:

- removal of remaining liquid waste;
- removal and solidification of sludge;
- removal and disposal of liner and leachate collection system;
- sampling of soil beneath the unit to determine if contamination is present; and

- filling and revegetating the area.

### **8.1.2.1 Removal of Liquid Waste**

The liquid in the evaporation pond will be allowed to evaporate naturally. At the beginning of closure of the evaporation pond, no further waste will be accepted into the pond. The water balance for the site indicates that there is a net loss of approximately 80 inches of water per year (90 inches of evaporation minus 10 inches of precipitation). The liquid in the evaporation pond has an approximate depth of 9 feet, and it is assumed that at closure there will be 2 feet of sludge in the bottom of the pond, leaving 7 feet of liquid (84 inches). Therefore, approximately 1 year is projected to be adequate time to evaporate all the liquid in the pond, assuming it is full to capacity at the time closure is initiated.

### **8.1.2.2 Removal and Solidification of Sludge**

Following evaporation of the pond liquid, the sludge will be removed from the bottom with trash pumps or hand excavation equipment. Removal operations will continue until visual examination shows that all sludge has been removed. The removed sludge will be solidified in the treatment unit. The stabilized waste will be placed in roll-off containers and cured in accordance with the provisions of Permit Attachment F, *Waste Analysis Plan*, prior to disposal in the landfill. The expected volume of sludge that will be removed and disposed in the landfill is shown in Table 8-1. This information is based on an estimated sludge depth of 2 feet at the sump.

### **8.1.2.3 Removal and Disposal of Liner and Leachate Collection System**

The pond liner and leachate collection system will be dismantled and removed as hazardous debris. Prior to removal, the liner will be washed to remove the visible contaminants. The method of treatment is consistent with debris treatment technologies as defined in 40 CFR 268.7(d). Upon certification of compliance with the LDR debris treatment requirements, as required by 20 NMAC 4.1.800 incorporating 40 CFR 268.45, the waste will be disposed in the landfill. The expected volume of solid hazardous waste and debris that will be generated during closure is provided in Table 8-1. The vadose zone monitoring wells associated with the evaporation pond will be left functional to continue monitoring the landfill, as specified in Section 3.0.

### **8.1.2.4 Soil Sampling**

After removal of all waste, the evaporation pond liners, and the leachate collection system, soil samples will be collected and analyzed for a facility proposed subset of the constituents defined in Section 8.1 of the permit application and approved by NMED. Individual samples will be collected at a frequency equivalent to one per 2,000 square feet over the entire Surface Impoundment area (i.e. one sample to be taken at the center of each 2,000 square foot grid). In addition, a sample will be obtained from each leachate collection sump and beneath the tanker pad fill lines at the influent location and at 10-foot intervals beneath the transfer piping. Samples also will be collected adjacent to each side of the concrete containment pad. Sample results will be compared against the closure performance standard presented in Section 8.3.

Contaminated soils will be removed for disposal and the area resampled until the sampling and analyses indicate that the area meets the performance standard provided in Section 8.3. Contaminated soils will be disposed of in accordance with the regulations applicable to the contaminant of concern. If the landfill portion of the Facility is still operational and the contaminated soil meets the waste acceptance criteria for the landfill it will be landfilled at GMI. If the GMI landfill cannot accept the waste it will be manifested and shipped to an appropriately licensed disposal facility.

### **8.1.2.5 Filling and Revegetating**

The final step in closing the Surface Impoundment will be filling the depression with clean soil to the approximate original grade and revegetating the disturbed areas. The Surface Impoundment will be graded to ensure that the direction of surface water runoff is not towards the landfill units. A seed mixture appropriate for the area will be applied and the site will be watered as necessary to promote germination.

### **8.1.3 Liquid Waste Receiving and Storage Unit**

Clean closure of the liquid waste receiving and storage unit will be ensured by the development of a sampling and analysis plan. The plan will be provided to the New Mexico Environment Department for approval 90 days prior to implementation. The plan will follow the outline contained in Section 8.1.1.2.

The following steps will occur during closure of the liquid waste receiving and storage unit associated with the stabilization unit:

- removal and treatment of tank contents;
- dismantling and removal of tanks, ancillary equipment, and concrete containment area; and,
- sampling of soil beneath the unit to determine if contamination is present.

#### **8.1.3.1 Removal of Inventory**

Closure of the liquid waste receiving and storage unit will commence with removal of any inventory in the tanks according to standard procedures. The major steps of inventory removal, equipment decontamination, primary and secondary containment removal, and soil sampling will be identical to those described in Section 8.1.1.1. Remaining inventory will be removed within 90 days after receipt of the final volume of hazardous wastes in the tanks. All wastes remaining in inventory can be treated at the onsite stabilization unit prior to disposal in the landfill. Closure cost estimates and waste volumes for disposal were based on the worst-case scenario of all four tanks being full to capacity at the start of closure. The maximum possible inventory for each tank at the time closure is initiated is equal to the permitted capacity of the tanks.

#### **8.1.3.2 Dismantling of Tanks, Equipment, and Concrete Secondary Containment Area**

The tanks and ancillary equipment will be dismantled and disposed in the landfill after certification of compliance with LDR debris treatment requirements under 40 CFR 268.45, as required by 20 NMAC 4.1.800 incorporating 40 CFR 268.7 d). The piping system used to transfer waste from the tanks to tankers will be considered part of the tanks and will be drained and dismantled as part of the tank closure. After removal of the tanks, the concrete containment will be washed and broken up for disposal as hazardous debris. Upon certification of compliance with the LDR debris treatment requirements, as required by 40 CFR 268.7(d), any hazardous materials will be disposed in the landfill. The expected volume of solid hazardous waste that will be generated during closure is provided in Table 8-1.

#### **8.1.3.3 Soil Sampling**

After removal of the tanks and containment, soil samples will be collected and analyzed for a facility proposed subset of the constituents defined in Section 8.1 of the permit application and approved by NMED. Due to the limited footprint area of the liquid waste storage area, sampling will not be based on a per area basis. Rather, it is proposed that one sample be obtained beneath each sump in the concrete base for

the liquid waste storage units, beneath each tank after demolition, and adjacent to each side of each tank pad. In addition, samples will be obtained at locations where visual or field screening evidence of contamination is present. Sample results will be compared against the closure performance standard presented in Section 8.3.

#### **8.1.4 Stabilization Unit**

Clean closure of the stabilization unit will be ensured by the development of a sampling and analysis plan. The plan will be provided to the New Mexico Environment Department for approval 90 days prior to implementation. The plan will follow the outline contained in Section 8.1.1.2.

The primary steps required to complete closure of the stabilization unit are the following:

- removal of remaining waste inventory;
- decontamination and removal of equipment and building structure;
- dismantling of the tanks and secondary containment area; and,
- sampling of soil beneath the floor to determine if contamination is present.

##### **8.1.4.1 Removal of Inventory**

Closure of the stabilization unit will commence with removal of any inventory remaining in the tanks according to standard procedures. The major steps of inventory removal equipment primary and secondary containment removal, and soil sampling will be identical to those described in Section 8.1.1.1. Remaining inventory will be stabilized and removed within 90 days after receipt of the final volume of hazardous wastes at the unit. The stabilized waste will be placed in roll-off containers and cured in accordance with the provisions of Permit Attachment F prior to disposal in the landfill. The maximum possible inventory for the tanks, at the time closure is initiated, is equal to the working capacity of the unit (approximately one-third full) because adequate space must remain for addition of reagents and for mixing.

##### **8.1.4.2 Decontamination of Equipment and Dismantling of Building Structure**

Equipment in the area, such as waste mixing equipment or other ancillary equipment that may have contacted hazardous waste, will either be decontaminated and certified as clean or disposed of as hazardous debris. The building structure (roof and walls) is not expected to be contaminated with hazardous waste; however, the building will be decontaminated prior to dismantling. The building structure will be dismantled after cleaning and will either be reused or recycled as scrap metal. Building components and associated reagent silos that did not contact hazardous waste will be dismantled and removed from the site. The equipment and building will be subject to the requirements of the closure sampling and analysis plan.

A high-pressure detergent wash and water rinse will be used to clean off all visible residue. The use of wash water will be limited to minimize the amount of waste generated. All decontamination solutions will be collected in containers or portable tanks. The decontamination solutions will be trucked to an approved off site facility for treatment. The expected volume of decontamination solutions that may be generated during closure of the stabilization unit is included in the liquid waste amounts shown in Table 8-1.

### **8.1.4.3 Dismantling of Tanks, Ancillary Equipment, Piping and Secondary Containment Area**

The tanks, ancillary equipment, piping concrete, and secondary containment system will be dismantled and removed as hazardous debris. Upon certification of compliance with the LDR requirements, the waste will be disposed in the landfill. The expected volume of solid hazardous waste that will be generated during closure is provided in Table 8-1.

### **8.1.4.4 Soil Sampling**

After removal of the stabilization unit structure, tanks, piping, the bag house, and the containment system, soil samples will be collected and analyzed for RCRA characteristic properties and the constituents defined in Section 8.1 paragraph 2 of this permit application. Individual samples will be collected at locations specified by NMED at closure and at a frequency of one sample per 2,000 square feet in the entire stabilization unit area (i.e. one sample to be taken at the center of each 2,000 square foot grid). Sample results will be compared against the closure performance standard presented in Section 8.3.

### **8.1.5 Roll-off Storage Area**

Clean closure of the roll-off storage area will be ensured by the development of a sampling and analysis plan. The plan will be provided to the New Mexico Environment Department for approval 90 days prior to implementation. The plan will follow the outline contained in Section 8.1.1.2.

Closure of the roll-off storage area will be identical to closure of the drum handling unit, except that the roll-off storage area does not have a structure associated with it. The major steps of inventory removal, equipment decontamination, primary and secondary containment removal, and soil sampling will be identical to those described for the drum handling unit in Section 8.1. Details of the sampling and analysis program will be specified in a sampling and analysis plan providing information similar to that to be developed for the drum handling unit (see Sections 8.1.1.2 and 8.1.1.4). Sample results will be compared against the closure performance standard presented in Section 8.3.

Estimated waste volumes for closure of the roll-off storage area are included in Table 8-1.

### **8.1.6 Landfill**

Appropriate closure of the landfill will be ensured by the development of a sampling and analysis plan. The plan will be provided to the New Mexico Environment Department for approval 90 days prior to implementation. The plan will follow the outline contained in Section 8.1.1.2.

This Part B Permit Application only includes the Phase IA portion of the landfill. Therefore, this Closure Plan only addresses Phase IA. If future expansions are required, they will be addressed in future permit modifications and will include revised closure plans.

At closure of the landfill, a final cover will be constructed with a permeability that is less than or equal to the permeability of the bottom liner. The final cover will consist of a three-layer cap design consisting of a vegetative cover, a geocomposite drainage layer, and a geomembrane and GCL barrier layer over a prepared subgrade, as described in Permit Attachment L, *Engineering Report*, Section 3.1.5, *Final Cover*. The final cover will meet the following requirements:

- the vegetative cover will have a minimum thickness of 2.5 feet and final upper slopes of between 3 and 5 percent after settlement and subsidence of the waste. Native grasses will be planted;



- the drainage layer will have a transmissivity of greater than or equal to  $2.2 \times 10^{-4}$  meters squared per second and consist of a HDPE geonet sandwiched between two geotextile layers (generally referred to as a geocomposite) and will be designed to allow lateral flow and discharge of liquids;
- the bottom layer will consist of a 60 mil. HDPE geomembrane layer and GCL with permeability of less than or equal to  $5 \times 10^{-9}$  centimeters per second underlain by 6 inches of prepared subgrade and 1.5 feet of protective soil; and,
- the cover will be designed to function with minimum maintenance, including minimal erosion. The vegetative cover will be designed with a surface drainage system capable of conducting run-off across the cap without forming rills and gullies.

In addition, remaining water and sediments in the contaminated water basin (as shown in Drawing 10) will be removed, tested and disposed of appropriately. Then, the contaminated water basin will be filled with soil and the cover will be constructed across this area. This will ensure that all lined areas of the landfill will be covered.

Prior to closure of the landfill, an assessment will be made of the landfill waste gas generating potential. This will be made from the quarterly landfill gas monitoring data that will be collected over the life of the landfill. Following closure, if it is concluded that gas generation may result in gas build-ups beneath the barrier layer of the cover or releases that exceed regulatory air quality standards, then provisions will be made to collect and monitor gas generation and release during the post-closure period. If this occurs, the best available technology available will be implemented into the construction of the cover system. In this case, the NMED secretary will be informed and shall approve a monitoring plan and any changes in the construction of the cover system.

Any leachate from the landfill will be pumped from the primary and secondary collection systems and, if detected, from the vadose zone monitoring sumps throughout the closure period and will continue throughout post-closure care. The leachate will be collected, sampled, and managed as hazardous waste, as appropriate. The leachate will be collected at a frequency appropriate to the rate at which it collects in the sump. As indicated in Permit Attachment P, *Post-Closure Care*, Table 8-2, *Post-Closure Inspection Schedule*, the collection sump will be inspected monthly until the sump remains dry for six months. Thereafter, the sump will be inspected semi-annually. Details of the leachate sampling and analysis program will be specified in a sampling and analysis plan.

After the landfill cap is completed, soil samples will be collected from outside the perimeter of the landfill cap to determine if any soil contamination is present. The sampling locations will primarily correspond to the transportation corridor used by waste hauling trucks during the active life of the landfill. In addition, samples will be collected at the landfill stormwater retention basin and within ditches directing flow to the basin.

It is proposed that individual samples be obtained along the haul roads at 100-foot intervals and at locations where visible staining is observed. Because the stormwater detention basin (Drawing 25) is lined with geomembrane, individual samples will be collected from there and its associated drainage ditches at a frequency equivalent to one per 40,000 square feet over the entire area (i.e. one sample to be taken at the center of each 40,000 square foot grid). However, if the liner in the stormwater runoff basin is observed to be damaged, additional sampling may be required. Sample results will be compared against the closure performance standards presented in Section 8.3. If any contaminated materials are identified they will be excavated and removed to the landfill prior to placement of the final cover.

No later than the submission of the certification of closure of the landfill in compliance with 40 CFR §264.115, the Facility will submit to the local zoning authority and to the NMED, a survey plat indicating the location and dimensions of the landfill with respect to permanently surveyed benchmarks in compliance with 40 CFR §264.116. This plat will be prepared and certified by a professional land surveyor. The survey plat will contain a prominent note that asserts the Facility's obligation to restrict disturbance of the hazardous waste disposal unit. The Facility will also record a notation on the deed to the Facility property in compliance with 40 CFR §264.119(b)(1), to notify any potential purchasers of the property that (1) the land has been used to manage hazardous wastes; (2) use of the land is restricted to activities that will not disturb integrity of the final cover system or monitoring system during the post-closure care period; and (3) the survey plat and record of waste disposal have been submitted to the local zoning authority and to the NMED.

A record of the type, location, and quantity of hazardous wastes disposed of within the disposal unit will be submitted to the local zoning authority and to the NMED no later than 60 days after certification of closure of the landfill in compliance with 40 CFR §264.119(a).

The vadose zone monitoring wells will be sampled and analyzed in accordance with the procedures that are presented in Permit Attachment I, *Vadose Zone Monitoring System Work Plan*. The frequency of sampling and parameters to be tested are outlined in Permit Attachment I.

### **8.1.7 CLOSURE OF NON-WASTE MANAGEMENT UNITS**

Other areas within the facility boundary which have the potential to become Solid Waste Management Units during the operational life of the facility will be closed in accordance with the requirements of the closure sampling and analysis plan. Those units having structures or liners, such as the truck wash and the storm water collection basin (Permit Attachment L1, Drawing 10) will be sampled to verify the absence of contamination prior to removal. If the structures or liners show contamination they will be managed in accordance with the requirements of this closure plan. If contamination is not present they will be disposed of as solid waste.

After removal of the structures, other appurtenances, and liner the areas will be contoured and revegetated as necessary.

### **8.3 CLOSURE PERFORMANCE STANDARD**

The RCRA closure performance standard (40 CFR 264.111) specifies that hazardous waste facilities are to be closed in such a way as to minimize the need for further maintenance at the Facility and protect human health and the environment by controlling, minimizing, or eliminating potential releases of hazardous waste to the environment. The Facility will meet a clean-closure performance standard for all units except the landfill and will not impact any environmental media in excess of agency-approved background levels or pose a threat to human health or the environment.

The Facility-specific clean-closure performance standard for the drum handling unit, roll-off storage area, tank storage area, stabilization unit, and evaporation pond is based on sampling soil from beneath the units. The landfill will not be clean-closed; therefore, the Facility-specific, clean-closure performance standard is not applicable.

Indicator parameters will be selected and approved by NMED for each unit at closure. These parameters will be representative of the wastes stored and/or treated in that unit during its operating life. The waste information used to make these selections will be based upon the Facility operating record. For soil, analytical results that show that these concentrations of contaminants of concern are within a statistically

significant range relative to clean background soil as determined by NMED will constitute demonstration of clean closure. Clean background samples will be obtained from the alluvium unit and from the Upper and Lower Dockum units from each of the vadose zone monitoring well borings for a total of six background samples per stratigraphic unit. If the alluvium is not present at a specific vadose zone monitoring well boring location, a surface sample from the southern portion of the site shall be substituted for the sample. Each sample will be submitted to analytical laboratory for chemical analysis of metals listed in 40 CFR 264, Appendix VIII, using EPA SW-846 analytical methods or equivalent methods approved by NMED.

## **8.5 CERTIFICATION OF CLOSURE**

Within 60 days of completion of closure of each unit, and within 60 days of completion of final Facility closure, the Facility will submit to NMED, a certification that each hazardous waste management unit has been closed in accordance with the approved closure plan in compliance with 40 CFR 264.115. The closure certification for each unit will be signed by the owner/operator and by an independent New Mexico registered professional engineer.

## **8.6 MODIFICATIONS TO THE CLOSURE PLAN**

After this closure plan is approved, it will be amended whenever it is affected by changes in operating plans or Facility design. While conducting partial or final closure activities, unexpected events may be identified that also require amendment of the approved closure plan. Requests for modification will be made within 30 days of identifying an event that justifies plan modification.