PERMIT ATTACHMENT B

PROCEDURES TO PREVENT HAZARDS
Modified from the Permit Application, Volume I,
Sections 5.0 through 5.1.2 and 5.3 through 5.5.3

5.0 PROCEDURES TO PREVENT HAZARDS

This section provides information on the prevention of hazards to both the public and the environment. Specific procedures for implementing those safeguards will be developed during the construction phase of the project and prior to Facility operations.

The engineered barriers for the mitigation of hazards discussed in this section are shown in design drawings contained in Volume III.

5.1 SECURITY PROCEDURES TO PREVENT HAZARDS

Security at the Facility will be provided by security guards, fences surrounding the Facility and warning signs. Each of these is described in the following sections.

5.1.1 Barrier and Means to Control Entrance

The Facility will be bounded by a barbed-wire fence. The active portion of the Facility (i.e. the processing area) will be bounded by an additional fence with two access gates located in the northern portion of the Facility. The northwest gate will remain locked at all times and will serve as a secondary or emergency entrance/exit. Access into the Facility will be controlled by means of the primary gate, located in the northeast corner of the Facility. The gate will be fitted with a cattle guard to prevent livestock from entering the Facility. A security guard post will be located at this entrance gate and will be attended 24 hours a day. The fence, gates, and guard will provide adequate access control and will prevent unwitting entry of persons or livestock to the active portion of the Facility.

Visitors will be required to sign a visitors log prior to movement in or around the Facility. Each visitor will be issued a security badge, which will be worn while the visitor is onsite. The badge will be worn on the visitor's outermost garment in a clearly visible location above the waist. The security guard will be responsible for ensuring that all visitors comply with these requirements. Visitors will be escorted unless other arrangements are made with Facility personnel.

5.1.2 Warning Signs

Warning signs stating "Danger - Unauthorized Personnel Keep Out" will be posted at the site entrance and every 50 feet along the perimeter fence. The signs will be posted in English and Spanish and will be legible from a distance of at least 25 feet. If ignitable wastes are stored or treated in the area, a "No Smoking" sign will also be posted.

5.2 INSPECTION PROCEDURES

This section of the permit application provides written inspection guidelines and an inspection schedule for the Facility in accordance with 20 NMAC 4.1.

5.2.1 General Inspection Procedures

Facility personnel will conduct inspections of all equipment and structures as frequently as necessary to prevent, detect, or respond to environmental or human health hazards. Inspection records describing malfunctions, deteriorations, operator errors, and discharges that may cause or contribute to a release of hazardous waste constituents to the environment or that may be a threat to human health will be kept at the Facility administration building for three years from the date of the inspection. Specific inspection procedures are outlined in Sections 5.2.2 through 5.2.10.

Personnel will receive general training about hazardous waste inspections as part of the Facility hazardous waste training program. Personnel responsible for inspecting particular equipment or areas of the Facility will receive classroom and/or on-the-job training in inspection procedures. Inspection procedures will be described in the operating manual, which will be located in the EC's office.

Facility guards will make rounds of the Facility at least once daily to detect any unauthorized entry to the Facility or any other abnormalities. The guards will not use inspection checklists, but they will notify the Emergency Coordinator (EC) and/or emergency response personnel of any spills or other emergencies. Requirements for the EC and/or emergency response personnel, subsequent to an inspection notification, are outlined in the Contingency Plan in Section 6.0.

5.2.1.1 Inspection Checklist

Inspection checklists and an inspection schedule have been developed to ensure that inspections occur at appropriate frequencies. An inspection schedule matrix is provided in Table 5-1. This matrix will be expanded, as necessary, to reflect new equipment or changes to existing equipment inspection frequencies.

Inspection frequencies will vary according to the type and age of the equipment, the frequency of its use, and its importance in preventing environmental incidents. The inspection frequencies provided in Table 5-1 show that inspections will occur frequently so that problems can be identified in time to correct them before harm is done to human health or the environment.

The inspection checklists will identify the name of the inspector, date and time of the inspection, frequency of inspection, specific items to be checked, any notations or observations of abnormalities, and the nature and date of any corrective actions taken. Checklists are provided in Appendix I, Volume II. The inspection schedules will be kept in the EC's office.

When new or modified equipment is installed or used at the Facility, the inspection procedures, forms, and schedule will be revised to reflect these changes and submitted to NMED.

5.2.1.2 Remedial Action

Facility personnel or contract personnel will remedy any deterioration or malfunction of equipment or structures encountered during inspections. The remedy will be completed in sufficient time to ensure that the problem does not result in an environmental or human health hazard.

All repairs to permitted portions of the Facility will be made in accordance with the original construction specifications and Construction Quality Assurance (CQA) plan.

If a hazardous or potentially hazardous condition is identified, the EC, as specified in the Contingency Plan (Section 6.0), will be notified immediately to assess the situation and determine how to correct the situation and whether the Contingency Plan should be implemented.

5.2.2 Landfill Inspection Procedures

Landfill liners and the cover will be inspected during and immediately after installation in accordance with the CQA Plan, which is discussed in Section 2.5.2.3.

The landfill and associated equipment will be inspected weekly and after storms unless otherwise specified. Records of the inspections will be maintained in the operating record, which will be kept in the administration building.

If deterioration or any other abnormalities are noted during inspection of the landfill or associated components, the inspector's supervisor will be notified and will determine the appropriate course of action for correction. If the supervisor is not available, the EC will be summoned to make the determination.

The landfill will be inspected by properly-trained personnel weekly and after storms for such items as spills, leaks, odors, wind-blown particulate matter, any evidence of deterioration of the landfill itself, and any malfunction or improper operation of the run-on/run-off control systems. All inspections will be documented on the landfill inspection checklist, described in Section 5.2.1.1 and found in Appendix I (Volume II) of the application. Inspection checklists will be kept for at least 3 years, in accordance with 40 CFR 264.15(d).

During the active life and during closure of the landfill, the LCRS and LDRS will be checked daily for the presence of liquid. The amount of water in the system can be used to determine if the system is functioning properly. The system will either be inspected through the cleanout pipe, which is connected to the primary collection pipe and the sump riser pipe, or with magnehelic gages or other liquid detection devices, if they are installed. The leachate collection tank will be inspected in accordance with the procedures outlined in Section 5.2.5.

During the operational phase of the landfill, periodic checks will be made within the landfill to detect the presence of hazardous gases and volatile organics. Surveys of the active landfill surface area and the riser pipes with an Organic Vapor Meter (OVM) or comparable device will be performed quarterly to detect the presence of organic compounds.

If it is evident that particulate matter from the landfill is subject to dispersal by the wind, the active portion of the landfill will either be covered or managed to control the dispersal (see Section 2.5.1.7). Adding water to prevent wind erosion will be limited so that ponding in the landfill does not occur. If the dispersion is noted during an inspection, the landfill supervisor will notify the sprayer truck operator to rectify the situation.

The stormwater collection and holding unit associated with the run-off/run-on control systems will be inspected to ensure that liquid has not accidentally accumulated. The collection system will be emptied as quickly as possible to ensure that the design capacity of the system is not exceeded.

5.2.3 Evaporation Pond Inspection Procedures

Evaporation pond liners will be inspected during and immediately after construction and installation in accordance with the CQA Plan, which is discussed in Section 2.5.2.3.

While the evaporation pond is in operation, it will be inspected daily to detect any sudden drops in the level of the pond's contents and to measure the volume of and remove any liquid that has accumulated in the leachate collection and leak detection sumps. The daily inspections will also serve

to ensure that there is no potential for overtopping by wind or wave action. Since all discharges into the pond will be monitored, visual inspections will be adequate.

Other inspection items, such as condition of berms, warning signs, and surrounding area, will be checked weekly and after storms. Weekly visual inspections will also be conducted to verify the integrity of the liners and associated systems. Visible portions of the leachate collection pipes and pump will be visually inspected weekly for deterioration. The concrete pad for tanker discharge will be visually inspected weekly for accumulation of liquids. The area around the pond will be inspected weekly for any signs of deterioration, leaks, erosion, etc. The evaporation pond berms will be inspected for any sign of abnormal deterioration, which may include excessive sloughing or the development of significant cracks. All of the above inspections will be used to assess the integrity of the surface impoundments.

An inspection checklist for the evaporation pond is provided in Appendix I, Volume II.

5.2.4 Container Storage Area Inspection Procedures

Weekly visual inspections of container storage areas (drum storage area and roll off storage area) will be performed to identify the status of warning signs, condition of containers and labels, availability and accessibility of spill control and PPE, and the adequacy of aisle space and access/egress routes. Containers will be inspected for any signs of excessive corrosion, buckles, dents, holes, other structural defects or deterioration, and over-pressurization. An inspection checklist for container areas is provided in Appendix I in Volume II.

If a container is found to be in poor condition, the inspector's supervisor will be notified, who will either arrange to transfer the hazardous waste to a new container, repair the existing container as specified by the manufacturer, or place the container in an overpack drum.

Containers used for storing liquids will be stored in a secondary containment area described in Section 2.2. These areas will be inspected weekly during the container storage area inspections. The inspections will focus on (1) the condition of sump pits and trenches to ensure that they are free of cracks or gaps and are sufficiently impervious to contain leaks, spills, and accumulated liquids until the collected material is detected and removed; (2) pump operation; and, (3) placement of containers to ensure that designed liquid flow paths are not obstructed. A record of the inspection will be maintained in the operating record, which will be kept in the administration building.

Spilled or leaked waste or accumulated precipitation that requires removal to prevent overflow of collection systems that is identified during inspection will be removed in a timely manner.

5.2.5 Tank Inspection Procedures

Tanks containing or treating waste will be inspected daily. Tanks containing waste include the liquid waste storage tanks and the leachate storage tanks for the landfill. These inspections will focus on the status of warning signs, the adequacy and availability of spill control and PPE, the adequacy of access routes, and the condition of the tanks, ancillary equipment, and monitoring and leak detection systems. The inspection will focus on (1) overfill control; (2) equipment condition to detect any signs of corrosion or releases of waste from the tanks or ancillary equipment; (3) data gathered from monitoring and leak detection equipment to ensure that the tank system is being operated in accordance with design specifications; and, (4) the Cathodic Protection Systems, as installed.

Secondary containment areas in which tanks are located will be inspected daily during the tank inspections. These inspections will focus on the condition of the containment surface to ensure that it is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, or accumulated liquids until the collected material is detected and removed. Inspection records will be maintained in the Facility operating record, which will be kept in the administration building. An inspection checklist for tanks is provided in Appendix I in Volume II.

5.2.6 Stabilization Unit Inspection Procedures

Inspection of the stabilization unit will be conducted according to the procedures specified in Section 5.2.5. The inspections will be conducted on days when the unit is operating and daily when waste is in storage. Additional inspection requirements are described in Section 2.4.6. Inspection records will be maintained in the administration building. The concrete vault area will be inspected monthly. If liquids are found they will be removed with a portable pump and transported to the liquid waste unit.

5.2.7 Security Equipment Inspection Procedures

Security inspections will be conducted daily and will include the following elements:

- visual inspection of the warning signs at all approaches to the Facility to ensure that the signs are present, legible, and securely attached to the fence;
- inspection of the Facility perimeter to ensure the integrity of the fence and gate by looking for signs of erosion of soil at the fence posts and corrosion or vandalism to the fence, fence posts, or locks;
- inspection and replacement, as necessary, of lights for the purpose of illuminating the Facility at night;
- inspection of structures for signs of erosion, tampering, or vandalism; and,
- records of inspections will be maintained in the administration building.

5.2.8 Safety and Emergency Response Equipment Inspection Procedures

Safety and emergency response equipment inspections will occur monthly. This category of equipment includes first aid supplies; respiratory protection equipment (other than personally issued respirators, which will be each employee's responsibility); protective clothing, including hard hats, gloves, and suits; fire extinguishers; eye wash stations; safety showers; empty 55-gallon drums; shovels; and spill cleanup and decontamination kits.

A monthly inventory of safety-related supplies and equipment will be performed to ensure that the items are available, in good condition, and at designated locations. Inadequate or missing items will be replaced or repaired.

Fire protection equipment, including fire extinguishers and fire hoses, will be inspected monthly and after each use to ensure that the equipment is capable of functioning properly and that access to the equipment is not blocked. Each fire extinguisher will be inspected to ensure that the seal around the handle is intact, that the pressure gauge indicates that the unit is adequately charged, and that an Underwriter's Laboratory listing label is attached to each unit. Building sprinkler systems will be

inspected according to manufacturer specifications. Chemical fire-suppression systems will be checked to ensure that adequate quantities of the chemical and water exist. The fire-suppression vehicles will also be tuned up at least annually and inspected monthly. Records of inspections will be maintained in the administration building for each unit.

The public address (PA) system will be tested daily to ensure proper operation. In lieu of daily testing, the Facility may opt to broadcast music 24 hours a day, which ensures proper operation of the unit at all times.

Hand-held radios will be tested prior to use each day and periodically throughout the day. The units will be recharged after each shift to ensure that they are operating properly.

5.2.9 Loading and Unloading Area Inspection Procedures

Waste loading and unloading areas will be inspected daily when in use. The inspections will focus on integrity of the containment structure and safety-related issues that could lead to hazards or waste spills. Signs will be located at each loading and unloading area indicating that equipment or materials should not be left unattended as they could be obstructions for the loading and unloading operation.

Onsite roadways and vehicle traffic areas will be inspected on a preventive maintenance order (PMO) schedule to ensure that potential safety hazards, such as road surface deterioration, are minimized or avoided. Records of inspections will be maintained in the administration building for each unit.

5.2.10 Truck Wash Area Inspection Procedures

The sump and sediment bins will be inspected weekly for the accumulation of sediment and liquids in the sump and will be removed to the wash water storage tank. The wash water collected at the truck wash area will be sampled according to the Waste Analysis Plan, Section 4.6 and analyzed according to the Waste Analysis Plan, Section 4.5.6.

5.3 PREPAREDNESS AND PREVENTION PROCEDURES

Preparedness and prevention encompass a wide range of procedures, from communication to equipment to arrangements with local authorities. These procedures are discussed in the following sections.

5.3.1 Internal Communications

Internal communication will be established to meet the needs for each building and area at the Facility. Three forms of internal communication systems will be implemented; (1) a PA system will be used in the main buildings to alert employees of potential or actual emergencies; (2) in noisy, temporary buildings or remote areas of the Facility, hand-held two-way radios will be used to communicate emergencies; (3) an audible fire alarm will be located in the permanent buildings. The alarm will be used to alert employees of fires but may also be used for alerting them to other emergencies in the event that the two other systems described above are malfunctioning. Equipment tests will be conducted to assure that internal communication systems are functioning properly according to manufacturers specifications.

5.3.2 External Communications

A telephone will be available for operations that occur inside the main buildings. For outdoor processing areas without a telephone nearby, hand-held two-way radios capable of summoning emergency assistance from local police departments, fire departments, and state or local emergency response teams will be available.

A map identifying the location of telephones at the Facility will be provided to the NMED prior to acceptance of waste at the Facility.

5.3.3 Emergency Equipment

Emergency response equipment at the Facility includes fire extinguishers and other fire control equipment, spill cleanup kits, and decontamination kits. Each processing area regulated storage unit will be equipped with fire control and spill response equipment. Equipment in the stabilization unit will be used for the tank storage area and roll-off storage area because of their close proximity. A detailed description of this equipment, including the content and type, is included in Appendix M in Volume II and is discussed in the Contingency Plan contained in Section 6.0.

A complete list of the contents and location of the various types of kits will be maintained in the EC's office at the Facility.

5.3.4 Water for Fire Control

Permanent buildings at the Facility will be equipped with automatic sprinkler systems and fire extinguishers, as required by the National Fire Protection Association (NFPA) code. The sprinkler systems will be designed according to NFPA guidelines. Water storage to fight fires outside of buildings and the landfill will meet minimum requirements of the New Mexico State Fire Marshal's Office and be transported by water truck(s). It is expected that landfill fires, in the unlikely event that they occur, will be extinguished with a dirt cover. A ready supply of dirt will be available at the excavation stockpile and landfill and general facility equipment (dozers, loaders and scrapers) will be available to load, haul and place dirt.

5.3.5 Required Aisle Space

The aisle between double rows of containers in the drum handling unit will be 30 inches wide, and roll-off containers will be placed 4 feet apart and 4 feet from the edge of the berm. Such spacing will allow for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment in the event of an emergency. Drums will only be stacked one high.

5.3.6 Arrangements with Local Authorities

The Facility will make arrangements with local authorities as described in the Contingency Plan (see Section 6.0).

5.4 PREVENTIVE PROCEDURES, STRUCTURES, AND EQUIPMENT

To prevent accidents at the Facility, all individuals responsible for material and waste handling will receive classroom and on-the-job instruction in safety awareness, recognition of potential hazards in the work place, environmental procedures and policies, and fire prevention and control procedures.

Individuals who may come in contact with hazardous waste will receive Occupational Safety and Health Administration (OSHA) 40-hour training and annual 8-hour refresher courses. These individuals also will be trained in the operation of the equipment and vehicles they will be using to perform their duties.

Safety meetings will be conducted as necessary to discuss safety issues, fire prevention and control, good housekeeping and any problems relating to specific areas of the site.

5.4.1 Loading, Unloading, and Waste Transfer Operations

To prevent accidents during loading, unloading, and waste transfer, hazardous waste will be handled only by those individuals who have been properly trained in correct handling procedures and proper spill response procedures. The emergency brakes of transport vehicles will be engaged and the wheels chocked during all loading and unloading operations. Inspection of loading and unloading areas is discussed in Section 5.2.9.

Waste containers will always remain closed during storage, except when it is necessary to add or remove waste (e.g. for sampling). This practice will minimize the potential for accidental releases of waste. Waste containers will only be stacked one high, which will facilitate inspection, handling and storage.

Wastes will be transferred in approved vehicles over approved routes and the maximum capacity of the truck will not be exceeded. Ramps will be installed where necessary to enable fork lifts, dollies, or hand trucks to move into or out of secondary containment areas surrounded by berms or curbing.

Transferring waste from drums to tanks will be accomplished as expeditiously as possible to avoid having containers remain open for extended periods of time.

If ignitable wastes are handled, special precautions will be instituted, including the use of special non-sparking bung wrenches or other tools for opening drums or otherwise handling the waste containers, grounding waste containers during waste transfer, and other special handling requirements. These precautions, coupled with the procedures for management of ignitable waste contained in Section 2.0, will minimize the hazards associated with ignitable wastes.

5.4.2 Run-Off and Run-On

Run-off and run-on for the major units are described in the following sections.

5.4.2.1 Tank Storage, Container Storage, and Treatment Areas

Run-off and run-on will be prevented in container and tank storage areas and the stabilization unit through exterior drainage systems located at the perimeters of these areas, outside of the containment systems. The layout of the perimeter drainage ditches is shown on Drawing 25.

All containment areas associated with tanks or containers will be sloped to remove accumulated liquids caused by spills, leaks, or precipitation (for outdoor units). Liquids that accumulate in any secondary containment area will be sampled to determine if the liquid is hazardous waste. If the liquid is hazardous, the waste will be pumped to a drum or tank and handled accordingly. If the liquid is not contaminated, it will be discharged to the storm drainage system.

Inspection of the run-off and run-on ditches for the above facilities will be made during weekly site inspections and after storms.

5.4.2.2 The Landfill and Evaporation Pond

The landfill run-on control system will be capable of preventing flow onto the active portion of the landfill during peak discharge from at least a 24-hour, 25-year storm. The run-on control system will consist of unlined ditches for diverting run-on from off site around the landfill. Water from outside the landfill will be prevented from entering the active portion of the landfill by the waste processing corridor drainage ditch.

The run-off management system will be capable of collecting the water volume resulting from at least a 24-hour, 25-year storm. Run-off in the active portion of the landfill will be collected in the LCRS. The run-on and run-off control system for the landfill is described in greater detail in Section 2.5.1.6.

The area surrounding the evaporation pond will be graded to carry stormwater run-off towards the drainage ditch to the south of the evaporation pond area. This ditch will ultimately empty into the site stormwater detention pond. The perimeter of the evaporation pond is elevated to prevent stormwater run-on into the pond from surrounding areas.

Inspection of the run-off and run-on ditches for the landfill and evaporation pond will be made during weekly site inspections and after storms. Maintenance and repair of the ditches will be performed as necessary and in accordance with the Operations and Maintenance Manual (Volume II, Appendix O) and the Design Drawings (Volume III).

5.4.3 Wind Dispersal Control System

The active portion of the landfill will either be covered or managed to control the wind dispersal. In general, dust control will be accomplished by spraying water on the active portion of the landfill and any road or area subject to wind dispersal. Adding water to prevent wind erosion will be limited so that ponding in the landfill does not occur. Additional detail about wind dispersal procedures can be found in Section 2.5.1.7.

5.4.4 Water Protection

There is an existing underground water line from a spring located approximately one mile east of the Facility in the Ogallala formation, which is used for domestic water supply. This water source, and any others in the Caprock area, will not be used for facility operations and will be protected through the following measures: (1) natural means because of its location; (2) the design of the landfill; (3) the type of waste that will be accepted at the Facility; and (4) the method of response to releases to soil. Each is discussed in more detail below.

Natural geologic and hydrologic conditions in the area include the following characteristics.

- the Upper Dockum unit is unsaturated beneath the selected site;
- the Lower Dockum consists of a 600-foot thickness of homogeneous, lacustrine mudstone. This sequence of unsaturated, low permeability mudstones represents a geologic barrier to potential downward migration of contaminants from the landfill (see Section 3.0); and,
- the nearest surface water is the Pecos River, approximately 30 miles to the west of the Facility.

The landfill design includes removal of the 10-feet deep layer of alluvial material on the surface of the disposal site prior to construction of the cells, thus eliminating the possibility of hazardous constituents entering the alluvium and migrating away from the Facility.

Free liquid hazardous waste will be placed in the landfill only in accordance with 40 CFR 264.314(d). In addition, no non-hazardous liquid waste will be placed in the landfill. These limitations on the introduction of liquids into the landfill will minimize the generation of leachates and the potential for the migration of any hazardous constituents from the Facility.

Finally, any releases to the soil will be immediately cleaned up to prevent the spread of contamination. The Contingency Plan in Section 6.0 describes the equipment and personnel available to ensure prompt clean up of any spill.

5.4.5 Mitigation of Effects of Equipment Failure and Power Outages

The Facility will use a Preventive Maintenance Order (PMO) schedule, based on manufacturer's recommendations for various pieces of equipment, to ensure proper operation of the equipment. In addition to the items replaced or changed as part of the PMO schedule, any item(s) found to be deficient during the PMO inspection will be replaced or repaired as soon as possible.

Spare parts critical to ensuring continuation of equipment and safety systems may be stored onsite to facilitate immediate repairs. Other items that require long ordering periods also may be stored onsite.

In the event of a power failure, at least one backup generator will be used for emergency backup power. The generator will be started within 30 minutes of a power failure.

On-the-job training will provide personnel with appropriate instruction in emergency response procedures so that proper actions will be taken in the event of equipment or power failure.

The emergency power system is described in Section 6.3.5.4 of the Contingency Plan.

5.4.6 Prevention of Undue Exposure of Personnel to Hazardous Waste

All employees will be trained in the safe operating practices to be used in handling hazardous wastes. All employees will wear steel-toed shoes and safety glasses while in processing or active areas of the landfill. In some cases, additional Personal Protective Equipment (PPE) will be required, such as hearing protection, respiratory protection, and protective clothing. Employees will be trained in, and responsible for, proper inspection and use of their respirator and proper use and care of PPE. If a defect is noted in any of the equipment, the employee will be responsible for replacing or repairing it prior to use, in accordance with the applicable training. As previously stated, PPE, other than respiratory protection, will be located at or near each permitted unit, along with spill response equipment.

Routine tasks will require some PPE, as outlined in the site Health and Safety (HAS) Plan. In many cases, these requirements will include safety glasses, steel-toed shoes, and hard hats. The site HAS plan will be prepared prior to commencement of hazardous waste operations. This plan will be kept at the Facility, but is not considered part of this permit application.

Out-of-the-ordinary hazardous waste activities will be evaluated by the site HAS officer or a member of an emergency response team prior to responding to the incident. After the type of contaminants

present has been determined, the HAS officer or the EC will specify the respiratory protection and/or PPE requirements necessary to safely handle the incident. All respiratory protection devices will be maintained in compliance with OSHA requirements and will be issued only to qualified personnel who have received medical approval and training for the proper use of respiratory protection devices.

For emergencies that are beyond the scope of the Facility personnel training program, areas of the Facility or the entire Facility may be evacuated, at the direction of the EC. In such cases, professional emergency response personnel will be notified to respond to the emergency (see Section 6.0).

5.4.7 Special Requirements for Bulk and Containerized Liquids Disposed in Landfills

As previously stated, bulk or non-containerized liquids will not be disposed in the landfill. Containers holding free liquids will be placed in the landfill only if (1) all free-standing liquid has been removed by decanting or other methods, mixed with non-biodegradable sorbent, solidified so that free-standing liquid is no longer observed, or otherwise eliminated; (2) the container is very small; (3) the container is designed to hold free liquids for use other than storage (e.g., a battery); or (4) the container is a lab pack disposed in accordance with 40 CFR 264.316.

In the case of number (1) above, prior to placement in the landfill, the absence of free liquids will be verified using a paint filter test. In addition, this waste will be analyzed for other parameters based upon the characterization of the waste before solidification. These requirements are a part of the Waste Analysis Plan presented in Section 4.0.

5.4.8 Special Requirements to Limit Releases to the Atmosphere

Operations at the Facility will be conducted to minimize the potential for releases to the atmosphere as required by 40 CFR 270.14(b)(8)(vi). This objective will be achieved by using a wind dispersal control system to limit or eliminate the dispersal of particulate matter from the landfill, roadways, and other areas of the Facility and by providing control equipment for operations that may produce air emission, if necessary. The dispersal of particulate matter from soil surfaces will be reduced by restricting traffic and applying small amounts of water spray to moisten the soil surface. A structural containment building housing the stabilization unit will be equipped with pollution control systems to minimize the release of particulates to the atmosphere. The bins and stabilization building will be equipped with an exhausting ventilation system which will maintain a negative pressure inside the building. Slotted ducts located around the perimeter of each bin will provide supply and return air in a push-pull arrangement to remove dust during the waste receiving, mixing and load-out operations. During reagent delivery operations, the bin cover, which will also be connected to the exhaust system, will control dust. Dust will be removed from the exhaust air at the bag house located on the west side of the building. Collected dust will be processed in the stabilization unit. Procedures will be developed to ensure that the landfill and associated activities are managed to prevent particulate releases. The Contingency Plan will specify the methods to prevent and control spills and emissions related to spills.

5.5 PRECAUTIONS TO PREVENT IGNITION OR REACTION OF IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES

Hazardous wastes will be handled only by properly trained Facility personnel. The Facility training program is outlined in Section 7.0. Individuals will be instructed in identifying incompatible wastes, properly labeling them, and properly handling them. Proper handling includes segregation,

avoidance of mixing the wastes, and carefully checking compatibility codes prior to the storage or disposal of any wastes. Personnel also will be specifically trained in the proper handling of ignitable and reactive wastes.

This approach will ensure the proper handling of ignitable and reactive waste and will prevent mixing of incompatible waste. In addition, personnel training and Facility operational procedures will be developed to (1) ensure that wastes are properly identified; (2) ensure that general Facility requirements for the management of ignitable, reactive, and incompatible wastes are adequate; and (3) ensure that unit-specific requirements for the management of these wastes are compatible with operations. The procedures for identifying these wastes are provided in Section 4.5 of the Waste Analysis Plan.

The local fire department or a qualified organization will inspect all of the permitted units on an annual basis to assure continued compliance with all applicable NFPA codes.

Ignitable and reactive waste handling are generally described in Section 5.5.1. More specific requirements for the landfill and stabilization unit are described in Section 5.5.2. Handling of incompatible waste is described in Section 5.5.3.

5.5.1 General Requirements

Precautions will be taken to avoid (1) accidental ignition or reaction of ignitable or reactive wastes; (2) reactions that generate extreme heat or pressure, fire or explosions, or violent reactions; (3) reactions that produce uncontrolled toxic or flammable fumes, dusts or gases, in quantities large enough to threaten human health and the environment; (4) reactions that cause damage to the structural integrity of the container or the unit; and (5) any other reactions that threaten human health or the environment.

Ignitable or reactive wastes accepted at the Facility will be separated and protected from any sources of ignition or reaction, including open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks, spontaneous ignition, and radiant heat. All smoking will be confined to specifically designated areas when ignitable or reactive wastes are being handled. "No Smoking" signs will be conspicuously posted wherever there is a hazard from ignitable or reactive waste. Ignitable or reactive wastes will be located in the active portion of the Facility, which is more than 50 feet from the Facility property line.

5.5.2 Requirements for the Landfill

Ignitable or reactive wastes will not be placed in the landfill unless the waste has been treated and no longer meets the definition of ignitable or reactive waste under 40 CFR 261.21 or 261.23, or unless the general requirements outlined above for ignitable, reactive, or incompatible wastes are complied with. Additional information for the management of these wastes in the landfill is contained in Section 2.5.3.6.

5.5.3 Incompatible Waste Handling

Generator waste profile forms (see Appendix H, Volume II) will provide Facility waste handlers with the necessary information to avoid mixing containers of incompatible wastes. Facility employees will be trained to recognize incompatible wastes and to prevent the mixing of such wastes. Incompatible wastes will not be placed in the same area of the landfill, but separated adequately to avoid all possibility of commingling in the landfill.

By the time any leachate generated from the landfill reaches the LCRS it will be sufficiently diluted, therefore, problems associated with incompatibles in the LCRS sump are not anticipated. Wastes will be solidified and stabilized prior to their placement into the landfill. These processes are performed to bind liquids and prevent leaching of any of the wastes' constituents. Therefore, any leachate generated within the landfill is not expected to contain significant levels of hazardous constituents. Due to the anticipated low concentrations of hazardous constituents in the leachate and the geographic separation of incompatible waste types, incompatibility problems within the landfill will be negligible.

Containers of incompatible wastes will be stored in separate containment areas to prevent the potential for mixing. Incompatible wastes will be separated by the walkways and sloping floors towards the sumps that separate each cell. The drum handling unit will utilize seven separate cells for waste placement. Each cell is separated by a concrete berm/walkway and each bay has a separate sump. All incompatible wastes in drums will be stored in separate cells. These physical barriers along with defined operational procedures, will ensure that incompatible wastes will remain segregated. In addition, the design and operational procedures will ensure that incompatible materials will not be placed in the same container, nor will hazardous waste be placed in an unwashed container that previously held an incompatible waste (see Section 2.2.12).

TABLE 5-1
TRIASSIC PARK WASTE DISPOSAL FACILITY INSPECTION SCHEDULE

INSPECTION ITEM - PROBLEM OR PROBLEM AREA	INSPECTION TIME
General Facility	
Security equipment – signs, perimeter fences, lights	Daily
Stormwater detention basin – liner	Weekly and after storms
Surface water diversion ditches to stormwater detention basin	Weekly and after storms
Landfill	
Liner and cover systems - uniformity, damage and imperfections	During construction and installation
Liners and cover deterioration and malfunction	During and immediately after construction
Spills, leaks, odors, windblown particulate	Weekly and after storms
Run-on/run-off control system - uniformity, damage and imperfections	Weekly and after storms
LCRS/LDRS presence of liquid and volume of liquid pumped	Daily and after storms
Leachate collection tank (while holding waste) for condition and proper function	Daily
Hazardous and organic gases	Quarterly
Ancillary equipment	Manufacturer recommended
Sump pumping and instrumentation	Annually
Evaporation Pond	
Liners and cover systems for uniformity, damage, and imperfections	During construction and installation
Pond freeboard for level for changes	Daily and after storms
Area surrounding pond	Weekly
Run-on/run-off control system - uniformity, damage and imperfections	Weekly and after storms
LCRS/LDRS for presence of liquid and volume of liquid pumped	Daily and after storms
Berms	Weekly
Integrity of liners and associated system	Weekly

TABLE 5-1 TRIASSIC PARK WASTE DISPOSAL FACILITY INSPECTION SCHEDULE	
INSPECTION ITEM - PROBLEM OR PROBLEM AREA	**INSPECTION TIME**
Concrete pad for tanker discharge	Weekly
Container Storage Areas - Drum Handling Unit and Roll-off Unit	
Condition of containers, signs, other safety equipment, aisle space	Weekly
Secondary containment condition, presence of liquid, and volume of liquid pumped	Weekly
Run-off/run-on ditches – uniformity, damage and imperfections	Weekly and after storms
Containers with > 500ppmw volatile organic compounds	Monthly
Ancillary equipment	Manufacturer recommended
Tanks	
Condition of tanks, signs, other safety equipment, access routes, overfill control	Daily (when storing)
Secondary containment condition	Daily
Run-off/run-on ditches – uniformity, damage and imperfections	Weekly and after storms
Leak test on ancillary equipment	Annually
Stabilization Unit	
Condition of unit when in operation – bins, ancillary equipment, monitoring systems	Daily
Condition of unit when empty	Monthly
Secondary containment condition, presence of liquid, and volume of liquid removed	Daily
Concrete vault area – remove liquids if present	Monthly
Run-off/run-on ditches – uniformity, damage and imperfections	Weekly and after storms
Sonic test to ensure thickness of tanks	Annually