

Dugway Permit Renewal - Attachment #1

Plan of Operation

3.0 PLAN OF OPERATION

3.0.1 Introduction

The UAC regulations require each landfill owner and operator to develop, keep on file, and abide by a plan of operation approved by the Executive Secretary of the Waste Management and Radiation Control Board. The plan must describe facility operations and convey to site operators the concept of operation intended by the designer. The facility must be operated according to its plan of operation.

3.0.2 Organization

The Landfill plan of operation presents requirements and procedures. The requirements summarize the UAC regulations and are designed to facilitate the regulatory agency's completeness review of the permit application. The procedures are designed to show the regulatory agency how the requirements will be implemented by the Landfill. When an entity's name appears in **bold type**, it indicates that they are the party responsible for performing the listed tasks. The major entities responsible for implementing Landfill procedures are described below in the Terminology and Conventions section. The Landfill Plan of Operation consists of the following sections:

- Maintenance of plan of operation
- Hours of operation
- Landfill design and operation
- On-site waste handling procedures
- Inspections
- Monitoring
- Record keeping and reporting
- Emergency and contingency plans
- Equipment and facility maintenance
- Disease vector control
- Training and safety plan
- Recycling program

3.0.3 Terminology and Conventions

The Landfill plan of operation uses the following terminology and conventions:

Area of Operation - The unloading/workface area of the Landfill.

Class II landfill - A municipal landfill receiving, on a yearly average, 20 tons, or less, of solid waste per day.

Central Hazardous Waste Storage Facility (CHWSF) – Dugway's Part B hazardous waste storage facility located on Stark Road between English Village and Ditto Technical Area. The CHWSF is permitted to receive hazardous wastes and PCBs, and manages universal wastes like fluorescent lights and batteries.

Closure and post-closure plans - Part of the Landfill Operating Record maintained by the Landfill operator, Directorate of Public Works (DPW), and the Environmental Programs Branch (EP) which describes the closure performance standards, closure schedule, closure design, site capacity, and final inspection for when the Landfill is permanently closed and the Landfill post-closure care requirements.

The Landfill closure plan is contained in Section 6.0 of this permit application and the Landfill post-closure plan is contained in Section 7.0 of this permit application.

Commercial solid waste - All types of waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding household waste and industrial wastes.

Controlled situation - Controlled situations are emergencies which can be controlled at the time of occurrence by employees in the immediate area.

Directorate of Public Works (DPW) - The DPW office is located in English Village. DPG Administration is responsible for the Landfill operator. When DPW appears in bold type it indicates that DPW personnel are responsible for performing the listed tasks.

Environmental Programs Branch (EP) - The EP office is located in English Village. EP personnel are responsible for managing Dugway Proving Ground's environmental compliance efforts. When EP appears in bold type it indicates that EP personnel are responsible for performing the listed tasks.

Household waste - Any solid waste, including garbage, trash, and sanitary waste in septic tanks, derived from households including single and multiple residences, hotels, motels, crew quarters, and picnic grounds.

Industrial waste - Any solid waste generated at a manufacturing or other industrial facility that is not a hazardous waste. Industrial solid waste includes wastes resulting from a variety of manufacturing processes and associated activities, including water treatment.

Inspection Log - Part of the Landfill Operating Record maintained by the Landfill operator, DPW, and EP which contains:

- Quarterly Landfill inspection reports
- Periodic Landfill inspection reports

Landfill Inspector - The EP personnel (or designee) responsible for conducting quarterly inspections at the Landfill.

Landfill map - The map used by Site Operators to record trench location.

Landfill office - The Landfill operator administrative office located in English Village.

Landfill operator - Base Operations and Support Services (BOSS) contractor responsible for operational and administrative activities at the Landfill. When this term appears in bold type, it indicates that the Landfill operator is responsible for performing the listed tasks.

Landfill Report - The annual report on Landfill activities conducted during the previous year which is submitted to the Executive Secretary of the Waste Management and Radiation Control Board by March 1 of the following year.

Logbook - The Landfill logbook used by the site operators to record information on contractor and civilian waste deliveries, including the number of vehicles entering the landfill each day and the estimated types and volumes of wastes received.

Municipal solid waste - Household waste, commercial solid waste, and non-hazardous sludge.

On-site Landfill Office - The Landfill operator office located at the Landfill.

Operation log - Part of the Landfill Operating Record maintained by the Landfill operator, DPW, and EP which contains:

- Landfill logbook
- Deviations from the approved Plan of Operation
- Training procedures
- Notification procedures
- Recycling program records
- Results of groundwater and gas monitoring

Operating Record - The Landfill file maintained by the Landfill operator, DPW, and EP containing information on Landfill operations including an operation log, inspection log, and closure and post-closure plans.

Plan of Operation - The Landfill plan of operation.

Qualified Recycling Program (QRP) – The organized program to minimize waste disposal, enhance recycling as far as practicable, and maximize commodity sales. All sale revenue use is in accordance with (IAW) 10 USC 2577.

Site operator - The Landfill operator personnel responsible for day-to-day operations at the Landfill. When this term appears in bold type, it indicates the site operator is responsible for performing the listed tasks.

Significant incident - The Executive Secretary of the Waste Management and Radiation Control Board has required DPG to notify them when significant incidents occur at the Landfill. Examples of a significant incident are fire and explosion, hazardous or toxic materials release, gas release, run-on/-off control failure, and contaminated groundwater. There are two types of notifications for DPG Landfill operations:

- Those notification requirements presented in the SWPMR for specific incidents such as a gas release or contaminated groundwater
- Those notifications presented in the State's final permit for the Landfill for other types of incidents for which the SWPMR do not clearly define specific notification requirements. These Landfill permit notification requirements are presented where applicable in this permit application.

Uncontrolled situation - Uncontrolled situations are emergencies which cannot be controlled at the time of occurrence by employees in the immediate area. An uncontrolled situation would be considered a significant incident by the Executive Secretary of the Waste Management and Radiation Control Board and needs to be reported.

3.1 MAINTENANCE OF PLAN OF OPERATION

3.1.1 Requirement

The UAC requires that a landfill owner keep on file a plan of operation for the facility.

The Landfill Plan of Operation is maintained in a central location at the EP office. In addition, copies are maintained by the Landfill operator in the Landfill office and the on-site trailer. EP office personnel are responsible for review of the Plan of Operation with assistance from the Landfill operator, to determine if any updates are necessary. The following procedures for plan maintenance provide guidance to comply with the requirement.

3.1.2 Procedure

To maintain the Landfill Plan of Operation, the **Landfill operator** performs the following tasks:

- Obtains the most current version of the Plan of Operation from EP.
- Maintains the Plan of Operation at the Landfill office and onsite trailer.
- Conducts periodic reviews of the Plan of Operation with EP to:
 - Ensure proper procedures are being implemented.
 - Identify whether any modifications are necessary.

To maintain the Plan of Operation for the Landfill, **EP** performs the following tasks:

- Maintains most current version of the Plan of Operation in EP office.
- Conducts periodic reviews of the Plan of Operation with the Landfill operator to:
 - Ensure proper procedures are being implemented.
 - Identify whether any modifications are necessary.
 - Update the Plan of Operation as necessary.

3.2 HOURS OF OPERATION

3.2.1 Requirement

Landfills are required to post a sign listing hours of operation and ensure that personnel are on-site when the landfill is open.

3.2.2 Explanation

The Landfill is currently open during the following times:

- Monday through Thursday - 7:00 a.m. to 6:00 p.m.
- Friday - 10:00 a.m. to 3:00 p.m.
- Saturday, Sunday, and Holidays – Closed

Dugway Proving Ground may alter this schedule as necessary. A site operator is always on duty during hours of operation. The following procedures for implementing hours of operation at the Landfill provide guidance to comply with the requirement.

3.2.3 Procedure

To implement hours of operation at the Landfill, the **Landfill operator** performs the following tasks:

- Ensures sign posted at the Landfill reflects current hours of operation.
- Ensures at least one site operator is present at the Landfill during hours of operation.
- Ensures entry gate is locked when no site operator is present.

3.3 LANDFILL DESIGN AND OPERATION

3.3.1 Requirement

The UAC requires that a facility's plan of operation address the following design and operation procedures:

- Schedule of construction
- Below-grade construction
- Above-grade construction
- Waste placement
- Compaction
- Final grading
- Cover
- Run-on/run-off control
- Unloading area/work face
- On-site reclamation

3.3.2 Explanation

The 150-acre Landfill is divided into the following three phases based on size and location:

- Phase I - eastern 30 acre portion of Landfill
- Phase II - middle 60 acre portion of Landfill
- Phase III - western 60 acre portion of Landfill

These three phases are depicted in Figure 2.1-3, Landfill Phases of Operation and Figure 5.2-1, Landfill Disposal Sites. Waste disposal methods that may be used at these three phases involve either the trench method or the area method of disposal. As indicated by its name, the trench method of disposal involves a process where a portion of a trench is excavated, wastes are then deposited in the excavated area, compacted and covered. This process continues until the desired length of the trench is reached. Once the entire trench length has been reached, a new trench is initiated, usually parallel to the filled trench. Sufficient space is left between the filled and new trench to ensure stability of the excavated trench walls.

The area method of disposal involves a laterally continuous excavation procedure, where soil is excavated in all directions ahead of the previously deposited wastes. This process allows the entire area to be filled, since individual disposal cells are placed directly next to each other and no spacing barrier is required.

Historically, the Landfill has used the trench method of waste disposal. Phase I and Phase II were excavated and filled prior to the submittal of this permit renewal application using the trench disposal method. To maximize operational flexibility and optimize capacity, the Landfill Plan of Operation also includes the area method of waste disposal. The trench and area disposal methods are referred to as Scenarios I and II, respectively. The Landfill may use either scenario during daily operations as described in Section 5.2, Landfill Design. However, the trench method is typically used in the below-grade operations.

Only the Asbestos Pit area is operational in Phase II, using the trench disposal method. Phase II will be completed to the grades shown in Figure 6.3-1, Landfill Conceptual Final Grading Plan.

Phase III is now open to receive wastes using the trench method.

Above-grade waste disposal operations could be conducted at Phase II if more landfill space is required. However, the current Landfill schedule of construction depicted in Table 3.3-1, Intended Schedule of Construction, does not plan for this.

This approach to landfill development will result in an estimated 37 years of waste disposal capacity. See Section 6.4, Site Capacity, for more information on Landfill life.

3.3.3 Procedure

Tasks to perform procedures for Landfill design and operation follow.

3.3.3.1 Schedule of Construction

To perform the planned schedule of construction procedures, the **Landfill operator** performs the following tasks:

- Adheres to the construction schedule in Table 3.3-1.
- At the direction of the Directorate of Public Works, modifies the construction activities in the intended construction schedule as necessary.
- Notifies the Environmental Programs Branch of any Landfill modifications which would affect the intended schedule of construction.

To perform the planned schedule of construction procedures, the site operator follows the intended schedule of construction as directed by the Landfill operator.

As various phases of the Landfill reach final elevation, DPG may elect to initiate partial closure in accordance with Section 6.2, Closure Schedule.

3.3.3.2 Below-Grade Construction

To perform below-grade construction procedures, the **site operator** with oversight from the **Landfill operator**, performs the following tasks:

- Excavates soil so slopes are no steeper than a 1.5-foot horizontal to 1-foot vertical.
- Ensures the following if trench walls are not sloped as required:
 - No personnel (employees, contractors, civilians) enter the trench if it is greater than 5 feet deep without an approved Occupational Safety and Health Administration (OSHA) protective system.
 - No large operating equipment enters the trench if the equipment does not meet OSHA trenching safety requirements.
 - If personnel or operating equipment enter a trench, ensures that:
 - ◆ A competent person, as defined by OSHA, inspects the trench for possible cave-ins or other hazardous conditions. These inspections must be conducted prior to the start of work, as needed throughout the shift, and after every hazard increasing event such as a rainstorm.
 - ◆ An appropriate OSHA approved egress is provided at a depth of 4 feet such as a stairway, ramp, or ladder.
- Removes majority of excavated soil to stockpile area.
- Uses remaining soil for future cell cover operations.
- Minimizes soil handling.

3.3.3.3 Above-Grade Construction

To perform above-grade construction procedures, the **Landfill operator** works with a registered engineer to perform the following tasks:

- Ensures prior to the commencement of above-grade disposal operations that survey controls are in place that follow the Landfill Closure Plan Design discussed in Section 6.3, Closure Design.
- Ensures that above-grade operations follow the Landfill Closure Plan Design discussed in Section 6.3.

To perform above-grade construction procedures, the **site operator** with oversight from the **Landfill operator**, performs the following tasks:

- Excavates existing interim cover soil in the limited active area.
- Uses excavated interim cover soil for other cover purposes (e.g., daily or final).
- Compacts base where interim cover has been removed with a tracked dozer to ensure a reasonably sound base exists.
- Places new wastes using the area fill method as follows:
 - Deposits wastes in 2-foot thick lifts on the limited active face.
 - Compacts the wastes using a tracked dozer.
 - Separates large or bulky items to prevent bridging of the surrounding refuse.
 - Ensures large or bulky items are not placed within 4 feet of the final grades.
 - Spreads and compacts wastes in 2-foot lifts until the final design grade is reached.
- Ensures any work face area slopes are no steeper than a 1.5-foot horizontal to 1-foot vertical.

3.3.3.4 Waste Placement

To perform waste placement procedures, the **site operator** performs the following tasks:

- Determines from driver which of the following groups the accepted waste load belongs:
 - Sanitary
 - Construction/demolition
 - Asbestos
- Follows the waste handling procedures as discussed in Section 3.4, On-site Waste Handling Procedures.
- Places wastes into the current working area designated for sanitary, construction/demolition, or asbestos wastes.
- Follows any specific waste placement procedures discussed above for below- or above-grade construction operations.

3.3.3.5 Compaction

To perform compaction procedures, the **site operator** performs the following tasks:

- Only performs compaction procedures on sanitary and construction/demolition wastes, not on asbestos wastes.
- Spreads received wastes for purposes of compaction:
 - When volume dictates, during the day or at the end of the day for sanitary waste area.
 - To cover construction/demolition area at least once a month or as necessary to avoid fire or vector hazards.
- Uses heavy operating equipment to make three to five passes over the sanitary and construction/demolition wastes to achieve maximum compaction.

- Follows any specific waste compaction procedures discussed above for below- or above-grade construction operations.

3.3.3.6 Final Grading

To perform final grading procedures, the **site operator** with oversight from the **Landfill operator**, performs the following tasks:

- Constructs interim soil cover with a minimum 2 percent grade.
- Performs rough contouring of the interim soil cover as necessary.
- Follows grading specifications identified in Section 6.3 for the final soil cover.

3.3.3.7 Cover

To perform cover procedures, the **site operator** applies the following covers to wastes at the Landfill at different stages of operation.

- Cell - Cell cover is placed over wastes daily in the sanitary waste area. This cover is approximately 6 inches thick and should be applied by the end of each working day.
- Interim - Interim cover is placed over still active disposal areas which already contain wastes but will be inactive for more than 30 days. Interim cover is approximately 1 foot thick and may include the top layer of cell cover or may become part of the final cover.
- Final - Final cover is applied to completed disposal areas when below-grade and above-grade waste disposal operations are complete. Final cover for the Landfill consists of a foundation layer, a GCL layer, and a vegetated soil layer as described in Section 6.3.

Note: In addition to soil, alternative daily covers (ADCs) can be used at the Landfill. ADCs currently utilized by DPG include bio-remediated petroleum contaminated soils, asphalt, or and yard waste/mulch. The State approved the use of ADC at the Landfill in a letter dated January 20, 2005 (Appendix G).

3.3.3.7.1 Cell

To perform cell cover procedures, the **site operator** performs the following tasks:

- Uses stockpiled soil derived from trench or area excavation or an approved ADC as cover material.
- Ensures putrescible wastes and dead animals are immediately covered with at least 6 inches of cover material.
- Ensures approximately 6 inches or more of cover material is used daily to cover any newly received wastes in the sanitary waste area.
- Ensures approximately 6 inches or more of cover material is used to cover wastes in the construction/demolition area at least once a month or when necessary, to avoid fire or vector hazards.
- Ensures approximately 6 inches or more of cover material is used to cover newly received wastes in the asbestos area within 18 hours of receipt.

3.3.3.7.2 Interim

To perform interim cover procedures, the **site operator** performs the following tasks:

- Identifies as necessary whether any adjoining cells will be exposed for over 30 days.
- Uses excavated soil, stockpiled soil, or an approved ADC as material to form an approximately 1-foot thick cover over areas which will be inactive for over 30 days.

3.3.3.7.3 Final

To perform final cover procedures, the **site operator** with oversight from a **registered engineer**, performs the following tasks:

- Uses excavated or stockpiled soil as cover material.
- Applies cover material in accordance with the Landfill Closure Plan Design discussed in Section 6.3.

3.3.3.8 Run-On/-Off Control

To perform run-on/-off control procedures the **site operator** performs the following tasks:

- Constructs a diversion ditch along the northern boundary of the Landfill to convey a 25-year, 24-hour storm event of 243 cubic feet per second (cfs) and to prevent run-on from entering the site. See Appendix C for design parameters on diversion ditch sizing.
- Constructs berm with the following specifications around above-grade waste disposal activities to contain run-off within the Landfill:
 - 1 foot high on all open sides of the operating face
 - 2:1 slope on the side facing the open operating face
 - ≥ 2 percent gradient on the side opposite the open operating face

3.3.3.9 Unloading Area/Work Face

To perform unloading area/work face procedures, the **site operator** performs the following tasks:

- Attempts to minimize the size of the unloading area/work face.
- Reduces fugitive litter by compacting and applying cover as necessary.

3.3.3.10 On-Site Reclamation

To perform on-site reclamation procedures the site operator performs the following tasks:

- Ensures recycling operations follow appropriate record keeping and management requirements as described in Section 3.12, Recycling Program.
- Ensures all future on-site reclamation efforts follow appropriate SWPMR for record keeping and management.

3.4 ON-SITE WASTE HANDLING PROCEDURES

3.4.1 Requirement

The UAC requires that a landfill's plan of operation contain a description of on-site solid waste handling procedures and procedures for excluding hazardous, PCB, and bulk and free liquid wastes.

3.4.2 Explanation

Waste handling procedures are conducted at the Landfill for the following wastes:

- Municipal
- Commercial
- Industrial
- Construction/demolition
- Industrial
- Special
- Non-hazardous wastes from Solid Waste Management Units (SWMUs) and Hazardous Waste Management Units (HWMUs)

In accordance with UAC, R315-303-3(l)(b) and R315-303-4(7) the following wastes are excluded from being disposed of in the Landfill:

- Hazardous (except as allowed from small quantity generators of hazardous wastes IAW UAC R315-303-4(7)(a)(1)(B))
- PCB (except as allowed by UAC R315-315-7(2))
- Bulk liquids and free liquids

As a result of closure activities for various SWMUs and HWMUs, Dugway Proving Ground's IRP and the State Hazardous Waste Branch may consider transfer of certain SWMU/HWMU wastes to the Landfill for disposal. These wastes would not be considered RCRA hazardous wastes, but could possibly be considered toxic according to human/ecological risk assessment analysis.

A description of Landfill accepted and excluded wastes and the regulations that apply to applicable handling, transport, and disposal procedures are listed in Table 3.4-1, Description of Accepted and Excluded Waste Types.

Guidance to comply with the on-site waste handling and waste exclusion requirements are presented in the following sections:

- Receiving all Solid Wastes
- Conducting Periodic Load Inspections
- Disposing of Sanitary Waste
- Disposing of Construction/Demolition Waste
- Handling Asbestos Waste
- Handling Petroleum Contaminated Soils
- Handling Sludge Waste
- Handling SWMU/HWMU Wastes
- Handling Identified Excluded Wastes

A waste handling procedure overview is illustrated in Figure 3.4-1, Waste Handling Procedure Overview.

3.4.3 Procedure

Tasks to perform procedures for on-site waste handling follow.

3.4.3.1 Receiving All Solid Wastes

To receive all solid wastes at the Landfill, the **site operator** stops each contractor or civilian transport vehicle at the Landfill entrance and performs the following tasks:

- Verifies with driver if the waste type(s) includes:
 - Municipal waste
 - Commercial
 - Industrial
 - Construction/demolition waste
 - Special
 - SWMU/HWMU waste
 - Unacceptable Wastes
- Identifies the driver's name and organization
- Inquires whether the load contains any bulk liquids, free liquids, or any wastes which may be hazardous or contain PCBs. If the driver says yes, follows procedures in this Section for conducting periodic load inspections.
- Quickly observes if any apparent or obvious bulk liquids, free liquids, or wastes which may be hazardous or contain PCBs are contained in the load. If these wastes are observed, follows procedures in this Section for conducting periodic load inspections.
- If a transport vehicle is suspected to contain bulk liquids, free liquids, or wastes which may be hazardous or contain PCBs, follows procedures in this Section for conducting periodic load inspections. A possible suspect vehicle could be a new contractor's vehicle.
- If it is time to conduct a periodic load inspection, follows procedures in this Section for conducting periodic load inspections.
- Requests driver to drive transport vehicle onto scale and takes weight measurement.
- Records the waste type, quantity, driver name and organization, date, and time in the Landfill Logbook.
- Follows the waste disposal and/or handling procedures in this Section for:
 - Municipal waste
 - Commercial
 - Industrial
 - Construction/demolition waste
 - Special
 - Sludge waste
 - SWMU/HWMU waste

3.4.3.2 Conducting Periodic Load Inspections

To conduct periodic load inspections at the Landfill, the site operator performs the following procedures:

- Inspects 5 percent of all vehicles and any suspect vehicles such as new contractors for containers which may hold bulk liquids, free liquids, and/or any waste which may be hazardous or contain PCBs by:
 - Visually inspecting contractor and civilian loads upon entrance into the Landfill.
 - Visually inspecting garbage truck loads as they are emptied into the trench.

- If any suspect items are detected:
 - Initiates disposal procedures for small liquid container(s) similar to those normally used for household waste, with a capacity of 5 gallons or less, and designed to hold liquids for uses other than storage.
 - Rejects entire load if bulk liquids, free liquids, or any waste which may be hazardous or contain PCBs are identified.
 - Notes actions taken and final decision to accept or reject a load in the Logbook.
 - Notifies Landfill operator of any incident involving a positive identification of an excluded waste type
- Completes the record of periodic inspection form, Exhibit 3.5-1, located in Section 3.5, Inspections.
- Forwards the periodic inspection form to the **Landfill operator**.
- Follows the procedures for waste disposal and/or handling in the following sections:
 - Disposing of Municipal Waste
 - Disposing of Commercial Waste
 - Disposing of Industrial Waste
 - Disposing of Construction/Demolition Waste
 - Handling and Disposing of Special Wastes
 - Handling Identified Excluded Wastes

To conduct periodic load inspections at the Landfill, the **Landfill operator**:

- Files the periodic load inspection form appropriately as described in Section 3.7, Record Keeping and Reporting.
- Performs the following procedures if any suspect items are detected:
 - Determines whether the contractor or civilian responsible for the load containing the excluded waste needs to be contacted to educate them on appropriate disposal measures for the excluded waste.
 - Determines whether the situation warrants contacting the **EP** to inform them that a contractor or civilian was attempting to dispose of an excluded waste at the Landfill.
 - Records a written account of the incident into the Operating Record as described in Section 3.7, Record Keeping and Reporting.

3.4.3.3 Disposing of Municipal Waste

To dispose of municipal waste, the **site operator** performs the following procedures:

- Verifies that the waste received contains municipal wastes (e.g., household, commercial, industrial).
- If the waste load also contains construction/demolition waste, performs the following tasks:
 - Follows construction/demolition waste disposal procedures for the construction/demolition wastes if they can be easily separated.
 - Follows municipal waste disposal procedures for both the municipal and construction/demolition wastes, if these wastes cannot be easily separated.
- If the waste load also contains asbestos waste, performs the following tasks:
 - Follows asbestos waste disposal procedures for the asbestos wastes if they can be easily separated.
 - Follows asbestos waste disposal procedures for both the municipal and asbestos wastes, if these wastes cannot be easily separated. Ensures that although these wastes are disposed of in the asbestos waste trench, they are covered IAW whichever procedure mandates the earliest cover.

- If the waste load received contains only municipal, commercial, or industrial wastes or once construction/demolition and asbestos wastes have been separated from the load, performs the following tasks:
 - Directs the driver to dump the waste at the active face of the municipal waste trench.
 - Spreads the discharged waste in layers as necessary.
 - Visually inspects spread and discharged wastes for bulk liquids, free liquids, and wastes which may be hazardous or contain PCBs.
 - If potential bulk liquids, free liquids, or wastes which may be hazardous or contain PCBs are detected, follows procedures for handling identified excluded wastes, in this section.
 - Compacts the waste using multiple passes of a steel-wheeled compactor.
- If the waste received contains special wastes as defined in UAC R315-315, performs tasks as follows:
 - For asbestos, follows specific instructions detailed in section 3.4.3.5 below.
 - For ash (UAC R315-315-3),
 - Unloads the transport vehicles at the bottom of the working face of the household/commercial waste trench.
 - If necessary, keeps the ash wetted to prevent fugitive emissions prior to covering.
 - For bulky wastes (UAC R315-315-4) such as automobile bodies, furniture, and appliances,
 - Crush materials
 - Push materials on the working face near the bottom of the trench or into a separate disposal area.
 - For sludge, follows specific instructions detailed in section 3.4.3.7 below.
 - For dead animals, places the animals at or near the bottom of the working face of the household/commercial waste trench and covers immediately with a minimum of 12 inches of soil IAW UAC R315-315-6.
 - For PCB wastes allowed under UAC R315-315-7 receives wastes that are:
 - Certified to be below 50 ppm concentration,
 - PCB household waste as defined by 40 CFR 761.3, and
 - Are 10 or less intact, non-leaking, small PCB capacitors including those from fluorescent lights, x-ray machines, or other machines and test equipment.
 - Operator then directs that the wastes are placed in the either the municipal or construction/demolition waste trenches.
 - For Petroleum Contaminated soils, follows specific instructions detailed in section 3.4.3.6 below.
 -
- By the end of each work day, covers all wastes located in the municipal waste trench with a minimum 6 inches of soil cover.
- As necessary, documents any expansion of the municipal waste trench.

3.4.3.4 Disposing of Construction/Demolition Waste

To dispose of construction/demolition waste, the **site operator** performs the following procedures:

- Verifies that the waste received contains only construction/demolition waste.
 - Note: a small amount of contractor refuse may be disposed of with the construction/demolition waste.
- If the waste received also contains household, commercial, yard, dead animal or noninfectious medical waste, performs the following tasks:

- Follows sanitary waste disposal procedures for the sanitary wastes if they can be easily separated.
 - Follows sanitary waste disposal procedures for both the Construction/demolition and sanitary wastes, if these wastes cannot be easily separated.
- If the waste received also contains asbestos waste, performs the following tasks:
 - Follows asbestos waste disposal procedures for the asbestos wastes if they can be easily separated.
 - Follows asbestos waste disposal procedures for both the construction/demolition and asbestos wastes, if these wastes cannot be easily separated
- If the waste type received contains only construction/demolition waste or once sanitary and asbestos wastes have been separated from the load, performs the following tasks:
 - Directs the driver to dump the waste at the active face of the construction/demolition trench.
 - If the construction/demolition wastes are bulky solids, such as appliances or furniture, pushes these bulky solid wastes near the bottom of the working face of the trench.
 - Spreads the discharged waste in layers as necessary.
 - Visually inspects spread and discharged wastes for bulk liquids, free liquids, and wastes which may be hazardous or contain PCBs.
 - If potential bulk liquids, free liquids, or hazardous or PCB-containing wastes are detected, follows the receipt of an excluded waste procedures, in this section.
 - Compacts the spread waste using multiple passes of a steel-wheeled compactor as necessary.
 - After refuse has accumulated, covers waste at least once a month or when necessary with a minimum 6 inches or more of soil to avoid fire or vector hazards.
 - As necessary, documents any expansion of the construction/demolition waste trench.

3.4.3.5 Handling Asbestos Waste

To handle asbestos waste at the Landfill, the **site operator** performs the activities described in the following sections:

- Maintaining Safety
- Inspecting Asbestos Waste Loads
- Disposing of Asbestos Waste

Procedures for each of these activities follow.

3.4.3.5.1 Maintaining Safety

To maintain safety, the **site operator** performs the following procedures.

- Requires contractor vehicles that have transported asbestos waste to post warning signs during unloading operations that meet the following specifications:

Wording on Sign	Type Specification
Danger	1-inch Gothic or Block
Asbestos Dust Hazard	1-inch Gothic or Block
Cancer and Lung Disease	0.75-inch Gothic or Block
Authorized Personnel Only	14 point Gothic

- Ensures that any potentially friable asbestos waste has been adequately wetted. The asbestos is adequately wetted when the moisture content prevents fiber release.
- Ensures that the asbestos waste is properly containerized in double plastic bags of 6-mil or thicker and that the containers have a leak-proof and air-tight seal minimizing the air space in the bag.
- Ensures that asbestos waste slurries are packaged in leak-proof and air-tight rigid containers if such slurries are too heavy for the plastic bag containers, or that a proper method approved by the Executive Secretary of the Waste Management and Radiation Control Board is used.
- Limits public access to the asbestos management site to no more than two entrances by gates that can be locked when left unattended and by adequate fencing.
- Posts warning signs at the landfill entrances and at intervals no greater than 200 feet along the perimeter of the sections where asbestos waste is deposited. Warning signs meet the following specifications:

Wording on Sign	Type Specification
Asbestos Waste Disposal Site	1-inch Gothic or Block
Do Not Create Dust	0.75-inch Gothic or Block
Breathing Asbestos is Hazardous to Your Health	14 point Gothic
Authorized Personnel Only	14 point Gothic

3.4.3.5.2 Inspecting Asbestos Waste Loads

- To inspect an asbestos waste load, the **site operator** performs the following procedures:
- Verifies that all asbestos waste is containerized appropriately.
- Verifies that all asbestos containers are labeled with the name of the waste generator and the location where the waste was generated, and tagged with a warning label indicating that the containers hold asbestos.
- Rejects any improperly containerized or labeled asbestos waste.
- Verifies the quantities of waste received, signs the asbestos waste shipment record, and sends a copy of the asbestos record to the generator within 30 days.
- Files asbestos waste shipment documentation appropriately as required by Section 3.7, Record Keeping and Reporting.

3.4.3.5.3 Disposing of Asbestos Waste

To dispose of asbestos waste, the **site operator** performs the following procedures

- Prepares a separate trench or area of the landfill to receive only asbestos waste.
- Directs the driver to dump the waste at the active face of the asbestos trench.
- During asbestos waste disposal, ensures contractor avoids breaking the asbestos waste containers when unloading.
- Ensures asbestos waste is covered with 6 inches of soil within 18 hours of receipt or immediately if containers break during unloading.
- Does not compact the asbestos waste until they are completely covered with a minimum of 6 inches of soil.
- If necessary, notes any expansion of the asbestos waste trench on the Landfill map.

3.4.3.6 Handling Petroleum-Contaminated Soils

To handle petroleum-contaminated soils, the **site operator** performs the following procedures:

- With assistance from **Landfill operator**, determines the most appropriate alternative for handling the petroleum-contaminated soils:
 - Stockpiling the petroleum-contaminated soils for eventual treatment at the petroleum-contaminated soil bioremediation treatment facility.
 - Disposing of the petroleum-contaminated soils in the construction/demolition trench or stockpiling for use as ADC.
- If the decision is made to stockpile the petroleum-contaminated soils for eventual treatment at the petroleum-contaminated soil bioremediation treatment facility, performs the following tasks:
 - Documents why this decision was made and files this information appropriately.
 - Directs the driver where to place the petroleum-contaminated soils for stockpiling purposes.
- If the decision is made to dispose of the petroleum-contaminated soils in the construction/demolition trench or stockpile for use as ADC, performs the following tasks:
 - Documents why this decision was made.
 - Requests appropriate documentation that verifies that the petroleum-contaminated soils are not a hazardous waste, including toxicity characteristic leaching procedure results.
 - Files documentation appropriately as required by Section 3.7, Record Keeping and Reporting.
 - Directs the driver to place the petroleum-contaminated soil at or near the bottom of the working face of the construction/demolition trench or in the stockpile to be used for ADC.

3.4.3.7 Handling Sludge Waste

To handle sludge waste, the **site operator** performs the following procedures:

- Requests appropriate documentation that verifies that the sludge:
 - Is not a hazardous waste, including the specific toxicity characteristic leaching procedure results for this sludge waste load.
 - Is free of liquids, including verification that it passed EPA test method 9095 (Paint Filter Liquids Test - as provided in EPA Report SW-846 “Test Methods for Evaluating Solid Waste” as revised December 1996.)
- Files documentation appropriately as required by Section 3.7, Record Keeping and Reporting.
- Inspects the load to ensure that no bulk liquids or free liquids are contained in the load.
- If the sludge is verified to be nonhazardous and free of liquids:
 - Directs the driver to place the sludge at or near the bottom of the working face of the municipal waste trench.
 - Covers the sludge with municipal waste or other suitable cover material.
 - Follows all other appropriate municipal waste disposal procedures.

3.4.3.8 Handling SWMU/HWMU Wastes

To handle SWMU/HWMU wastes, the **site operator** performs the following procedures:

- Requests appropriate documentation that verifies that the SWMU/HWMU waste:

- Is not a hazardous waste, such as the toxicity characteristic leaching procedure results for the specific load or loads.
- Has been approved for disposal at the Landfill by the State Division of Waste Management and Radiation Control
- Has been approved for disposal at the Landfill by the **Landfill operator** and **EP**.
- Files documentation appropriately as required by Section 3.7, Record Keeping and Reporting.
- Inspects the load to ensure that no bulk liquids or free liquids are contained in the load.
- If all documentation is in place and no excluded wastes are identified, follows all other construction/demolition waste disposal procedures, as appropriate.

3.4.3.9 Handling Identified Excluded Wastes

Handling of an excluded waste, which has already been received by the Landfill and is identified, is described in the following sections:

- Handling Identified Bulk Liquid or Free Liquid Wastes
- Handling identified Hazardous or PCB Wastes

3.4.3.9.1 Handling Identified Bulk Liquid or Free Liquid Wastes

To handle bulk liquid or free liquid wastes which have already been received by the Landfill and are identified, the **site operator** performs the following tasks:

- Removes these liquid wastes from the disposal area.
- Contacts the **Landfill operator** to arrange for appropriate disposal and to inform **EP** that bulk liquid or free liquid wastes have been identified.
- Notes in the logbook that bulk liquid or free liquid wastes were received and identified.

To handle bulk liquid or free liquid wastes which have already been received by the Landfill and are identified, the **Landfill operator** performs the following tasks:

- Contacts **EP** to inform them that bulk liquids or free liquid wastes had been received and to receive proper disposal instructions.
- Places a written account of the incident into the Operating Record maintained by the DPW/. See Section 3.7, Record Keeping and Reporting.

3.4.3.9.2 Handling Identified Hazardous or PCB Wastes

To handle a potentially hazardous or PCB waste which has already been received by the Landfill and is identified, the **site operator** (discoverer) must determine whether it is a controlled or uncontrolled situation.

Controlled situations are incidents which can be controlled at the time of occurrence by employees in the immediate area. Uncontrolled situations are incidents which cannot be controlled at the time of occurrence by employees in the immediate area.

Controlled

To handle controlled situations where potentially hazardous or PCB waste has already been received by the Landfill and is identified, the **site operator** (discoverer) performs the following tasks:

- Contacts the Landfill operator to arrange for appropriate removal and disposal and to inform EP that hazardous or PCB wastes have been identified.

- Notes in the logbook that hazardous or PCB wastes were received and identified.

To handle controlled situations where potentially hazardous or PCB waste has already been received by the Landfill and is identified, the **Landfill operator** performs the following tasks:

- Contacts EP to inform them that hazardous or PCB wastes had been received and to receive proper disposal instructions.
- If responsible party can be identified, determines whether they need to be contacted to educate them on appropriate disposal measures for the excluded waste.
- Places a written account of the incident into the Operating Record maintained by DPW. See Section 3.7, Record Keeping and Reporting.

Uncontrolled

To handle uncontrolled situations where a potentially hazardous or PCB waste has already been received by the Landfill and is identified, the **site operator** performs the following tasks:

- Restricts the Landfill area from public access by locking the gate.
- Does not disturb waste area where potential hazardous or PCB-containing waste is located until approval is received from the installation response team personnel.
- Immediately contacts the Landfill operator to arrange for the verification/characterization of the potential hazardous or PCB-containing wastes by the installation response team and to immediately notify EP that potential hazardous or PCB-containing wastes have been detected.
- Follows EP direction regarding site access restriction, cleanup, transport, disposal, and state notification procedures.

To handle uncontrolled situations where a potentially hazardous or PCB waste has already been received by the Landfill and is identified, the **Landfill operator** performs the following tasks:

- Contacts the installation response team to respond to the incident.
- Contacts EP to notify them of the incident and to receive instructions regarding site access restriction, clean-up, transport, and disposal procedures.
- Places a written account of the incident into the Operating Record maintained by the DPW. See Section 3.7, Record Keeping and Reporting.

To handle uncontrolled situations where a potentially hazardous or PCB waste has already been received by the Landfill and is identified, **EP** performs the following tasks:

- Notifies the Executive Secretary of the Waste Management and Radiation Control Board, the hauler, and the generator within 24 hours.
- Provides written notice to the Executive Secretary of the Waste Management and Radiation Control Board within seven days of the incident and includes the measures taken to protect human health and the environment.

3.5 INSPECTIONS

3.5.1 Requirement

The UAC requires landfill personnel to conduct periodic load inspections of vehicles entering the site to prevent excluded wastes from being deposited in the landfill. These inspections are required to occur at a set frequency or in situations where excluded wastes are suspected in a load. Suspect loads may include wastes being delivered by contractors new to Dugway Proving Ground's landfill operation and procedures. The UAC also requires inspections of landfill operations be conducted at least quarterly. These scheduled inspections are conducted to identify potential landfill operation problems and correct them before they lead to a release of waste from the facility which could result in harm to human health and the environment.

3.5.2 Explanation

The following two types of inspections occur at the Landfill:

- Periodic load inspections
- Quarterly Landfill inspections

Periodic load inspections occur at the Landfill entrance when contractors and civilians check in at the onsite trailer. These inspections are conducted periodically by site operators who have been trained to identify bulk and free liquid wastes and regulated hazardous or PCB wastes as described in Section 3.1-1,

Training and Safety Plan. Periodic load inspections are conducted on 5 percent of the loads and if the site operator suspects excluded wastes to be present in a load. Periodic load inspections are conducted as described in Section 3.4, On-site Waste Handling Procedures and information is recorded on an inspection form, Exhibit 3.5-1.

Landfill inspections are conducted by the EP (or designee) at least quarterly. These inspections observe Landfill operations, whether equipment/monitoring systems are functioning appropriately, if vector concentrations are a concern, and if records are maintained appropriately.

The following procedures for inspections provide guidance to comply with the requirement.

3.5.3 Procedure

Tasks to perform procedures for Landfill inspections follow.

3.5.3.1 Periodic Load Inspections

To perform periodic load inspections, the **site operator** performs the following tasks:

- Follows the liquid, hazardous, and PCB waste exclusion procedures discussed in Section 3.4, On-site Waste Handling Procedures. These procedures describe how a periodic load inspection should be conducted.
- Records the following information onto the record of periodic inspection form, Exhibit 3.5-1.
 - Date
 - Time
 - Name
 - Inspected vehicles
 - Company name
 - Vehicle license

- Driver's name
- Load description
- Rationale for rejection
- Actions taken

To perform periodic load inspections, the Landfill operator follows procedures discussed in Section 3.4, On-site Waste Handling Procedures. These procedures include recording a written account of any incident involving a positive identification of an excluded waste type into the Operating Record as described in Section 3.7, Record Keeping and Reporting.

3.5.3.2 Quarterly Landfill Inspections

To perform the Landfill inspection, the **Landfill Inspector** performs the following tasks:

- Provides the following information on the Quarterly Inspection Form, Exhibit 3.5-2:
 - Date and time of inspection
 - Notation of the observations made
 - Nature of any repairs or corrective actions and date completed
 - Name and handwritten signature
- Completes the checklists in the Quarterly Inspection Form, Exhibit 3.5-2, while inspecting the following areas of operation:
 - Operations
 - Equipment/monitoring systems
 - Vectors
 - Records
- Maintains a file of the inspection forms at the EP office and a copy in the DPW office for at least three years from the date of inspection.

To inspect Landfill operations, the **Landfill Inspector** performs the following tasks:

- Reviews Landfill operations discussed in Sections 3.2, Hours of Operation, 3.3, Landfill Design and Operations, and 3.4, On-site Waste Handling Procedures
- Inspects the reseeded (used) and active portions of the Landfill.
- Looks for malfunctions, deteriorations, and operator errors.
- Identifies situations which could lead to the release or discharge of waste to the environment or a threat to human health.
- Observes whether the following checklist items are being implemented:
 - Wastes are sufficiently compacted
 - A minimum of 6 inches of soil cover or ADC is applied (can be more than 6 inches)
 - Interim cover is being applied and graded appropriately
 - Trench walls are constructed in accordance with OSHA standards
 - Fences and signs (e.g., entrance signs, asbestos signs) are maintained in functional and clean condition
 - Landfill area is free of wind-blown debris
 - Suspect vehicles and periodic loads are checked to ensure no hazardous waste is placed in the Landfill
 - Appropriate waste handling procedures are followed according to Section 3.4
 - Dust control activities are performed as appropriate (watering, reseeded, and soil amendments)

- Roads are constructed and maintained for use during all types of weather
- Run-on/-off control prevents water from entering or leaving active trench areas
- Site operations minimize the size of the unloading area
- Fire-break is maintained around active portion of the Landfill
- No evidence of open burning or scavenging exists
- Boundary posts are clearly visible
- Landfill sign provides correct hours of operation, a list of materials that are not accepted at the Landfill, and a current emergency phone number

To inspect Landfill equipment and monitoring systems, the **Landfill Inspector** performs the following tasks:

- Reviews the types of equipment/monitoring systems required at the Landfill as described in Section 3.9, Equipment and Facility Maintenance.
- Observes the following checklist items to inspect equipment/monitoring system condition, functionality, and/or availability (as applicable):
 - Portable fire extinguisher (in the on-site landfill office)
 - Solid waste and earth moving equipment (e.g., bulldozer)
 - Groundwater monitoring wells
 - Appropriate Personal Protective Equipment
 - First aid kit

To inspect the Landfill for the presence of vectors, the **Landfill Inspector** performs the following tasks:

- Reviews required procedures for vector control discussed in Section 3.10, Disease Vector Control.
- Observes whether the stated conditions are being met for the following checklist items:
 - No standing water exists
 - No uncovered putrescible waste or dead animals exists
 - No evidence of disease carrying vectors exists (e.g., visual surveys, droppings, tracks, gnawing, and nesting)
 - No bulk or free liquid waste exists

To inspect Landfill records, the **Landfill Inspector** performs the following tasks:

- Reviews required procedures for record maintenance discussed in Section 3.7, Record Keeping and Reporting.
- Observes whether the following checklist items are being appropriately maintained:
 - Current copy of the Plan of Operation is available at the on-site trailer and the Landfill office
 - File maintained by Landfill operator contains waste shipment records for all asbestos waste accepted
 - File maintained by Landfill operator contains completed Freon-free forms (for waste refrigerators/freezers)
 - File maintained by Landfill operator and appropriate information provided for any salvageable material or recycling related storage pile programs that are being conducted at the Landfill as described in Section 3.12, Recycling Program
- The following information is provided by site operators in Logbook of contractor/civilian deliveries:
 - Type of waste
 - Organization

- Customer name
 - Date and time
 - Quantity
- Site operators record trench locations and types of waste deposited in the trenches
- All appropriate information as described in Section 3.7, Record Keeping and Reporting, is maintained in the Landfill Operating Record maintained by DPW, including groundwater and gas monitoring results, annual reports, incident reports, and training records.

3.6 MONITORING

3.6.1 Requirement

The UAC regulations require that landfill permit applications provide a schedule for monitoring actions which occur at the facility.

3.6.2 Explanation

Only the following two types of monitoring are required to be conducted at the Landfill:

- Groundwater monitoring
- Landfill gas monitoring

Leachate collection monitoring is not required since the Landfill is an existing facility which was in operation prior to the July 15, 1993 cutoff date requiring such monitoring practices. Since there are no surface waters in the vicinity of the Landfill, surface water monitoring is not a requirement. Since the design capacity of the Landfill does not exceed 2.5 million megagrams, gas control and subsurface gas movement monitoring is not required. Site capacity information is discussed in Section 6.4, Site Capacity. The following monitoring procedures provide guidance for complying with the requirement.

3.6.3 Procedure

Tasks to perform procedures for monitoring at the Landfill follow.

3.6.3.1 Groundwater Monitoring

To perform groundwater monitoring at the Landfill, the **Contractor** hired by EP performs the following tasks:

- Follows the detailed procedures for groundwater monitoring as covered in the Groundwater Monitoring Plan for the English Village Landfill in Appendix D.
- Established initial background concentrations during the first year of monitoring by collecting eight independent samples from each upgradient well and four independent samples from each downgradient well.
- Conducts detection monitoring semiannually.

To conduct groundwater monitoring at the Landfill, the **Landfill operator** performs the following tasks:

- Ensures groundwater monitoring occurs on schedule.
- Ensures that groundwater monitoring results are entered into the Operation Log.

To conduct groundwater monitoring at the Landfill, **DEP** performs the following tasks:

- Ensures groundwater monitoring occurs on schedule.
- Arranges for a subcontractor to conduct the semiannual detection groundwater monitoring.
- Implements emergency actions in Section 3.8, Emergency and Contingency Plans, if groundwater contamination is detected.
- Includes the groundwater monitoring results in the annual Landfill Report, as follows:
 - A summary of the sample collection and quality control/quality assurance (QA/QC) procedures
 - Field-measured parameter results (e.g., pH, water temperature, water conductivity, groundwater elevations, etc.)

- A summary of the chain-of-custody and laboratory QA/QC procedures
- Analytical sampling results for the required constituents by name and CAS number
- List of analytical detection limits and test methods used
- Statistical analysis results

3.6.3.2 Landfill Gas Monitoring

To conduct quarterly gas monitoring of the Landfill, the **Landfill operator** performs the following tasks:

- Obtains a Combustible Gas Indicator (CGI) and gas monitoring form from Landfill office or on-site trailer.
- Follows CGI measurement device calibration instructions.
- Takes one lower explosive limit (LEL) measurement at each Landfill boundary post and one measurement within the onsite trailer.
- Records measurements onto the Gas Monitoring Form, Exhibit 3.6-1.
- Implements emergency actions in Section 3.8 when the CGI measurement is:
 - Greater than LEL for explosive gases at Landfill boundary
 - Greater than 25 percent LEL within the on-site landfill office

3.7 RECORD KEEPING AND REPORTING

3.7.1 Requirement

The UAC regulations require that a landfill owner or operator maintain an Operating Record which includes the following:

- An operation log
- An inspection log
- Closure and post-closure care plans

UAC regulations also require the following reports to be submitted by the landfill owner or operator to the Executive Secretary of the Waste Management and Radiation Control Board:

- Annual Report
- Significant Incident Reports

Effective July 1, 2003, a modification to Utah Code Annotated (UCA) 19-6-1 19 requires municipal waste landfills to pay an Annual Facility Fee (UDEQ, 2003).

3.7.2 Explanation

The Landfill is exempt from certain record keeping and reporting requirements. Inapplicable record keeping and reporting requirements specific to the Landfill are discussed in this subsection.

3.7.2.1 Inapplicable Record Keeping and Reporting Requirements

Because the Landfill satisfies all necessary location standards, it is not required to construct leachate or gas condensate recirculation systems. The Landfill does not have to provide financial assurance information since it is an agency of the federal government. Therefore, the following record keeping and reporting requirements do not apply to the Landfill:

- Documentation of any demonstration made with respect to any location standard or exemption
- Leachate and gas condensate recirculation design documentation
- Financial assurance cost estimate documentation
- Annual update report on financial assurance mechanisms

The following record keeping and reporting procedures provide guidance for complying with required Landfill record keeping and reporting requirements.

3.7.3 Procedure

Tasks to perform record keeping and reporting procedures follow.

3.7.3.1 Record Keeping

To perform record keeping, the **Landfill operator**, **DPW**, and **EP** maintain an Operating Record which contains the records discussed in the following sections:

- Operation Log
- Inspection Log
- Closure and Post-closure Plans

3.7.3.1.1 Operation Log

To maintain the Operation Log, the **Landfill operator** and **DPW** ensure the Operation Log contains the following information:

- The Landfill Logbook which contains information on the number of vehicles entering the Landfill each day and the types and quantities of wastes received at the Landfill each day
- Waste shipment records for asbestos wastes
- Completed Freon free forms for waste refrigerators, freezers, etc.
- Documentation required for receipt of petroleum-contaminated soils, sludge waste, and Solid Waste Management Unit/Hazardous Waste Management Unit waste as described in Section 3.4, On-site Waste Handling Procedures
- Deviations from the approved Plan of Operation (e.g., incident reports and emergency and corrective actions as described below under Reporting)
- Training and notification procedures as described in Section 3.11, Training and Safety Plan
- Recycling program records as described in Section 3.12, Recycling Program
- Results of groundwater and gas monitoring, as described in Section 3.6, Monitoring
- Annual Reports, as described below under Reporting

3.7.3.1.2 Inspection Log

To maintain the inspection log, **EP** and **DPW** ensure the inspection log contains information collected during the following activities:

- Quarterly Landfill inspections as described in Section 3.5, Inspections
- Periodic load inspections, including those which resulted in positive identification of an excluded waste type as described in Section 3.4, On-site Waste Handling Procedures

3.7.3.1.3 Closure and Post-Closure Plans

To maintain closure and post-closure plans, **EP** and **DPW** ensure these plans are on file in their offices as described in Section 6.0, Closure Plan, and 7.0, Post-Closure Plan.

3.7.3.2 Reporting

To perform reporting, **EP** with assistance from **DPW** and the **Landfill operator**, submits the reports and pays the fee discussed in the following sections:

- Annual Report
- Incident Reports
- Annual Facility Fee

3.7.3.2.1 Annual Report

To submit the annual Landfill Report (Exhibit 3.7-1), **EP** performs the following tasks:

- Submits the annual Landfill Report to the Executive Secretary of the Waste Management and Radiation Control Board, by March 1 of each year.
- Includes the following information in the annual Landfill Report:
 - Name and address of the facility
 - Calendar year covered by the report
 - Annual quantities received (in tons or volume during reporting period) for the Landfill and the tank recycling program
 - Estimated in place density of Landfill wastes during reporting period

- Certification that during the reporting period, any recycling programs are being operated according to the Plan of Operation as described in Section 3.12, Recycling Program
- Results of groundwater and gas monitoring during the reporting period
- Training programs or procedures completed during the reporting period

3.7.3.2.2 Incident Reports

Incident reports are required for the following situations:

- When excluded wastes are identified in a waste load prior to being accepted by Landfill personnel. This situation would occur while conducting procedures for receiving wastes and periodic load inspections. These procedures are presented in Section 3.4, On-site Waste Handling Procedures.
- When excluded wastes are identified by Landfill personnel after they have already been received. This situation could occur when wastes are being compacted and covered. Procedures for handling excluded wastes identified in the Landfill are presented in Section 3.4, On-site Waste Handling Procedures.
- When a situation occurs such as fire and explosion, hazardous or toxic materials release, gas release, run-on/-off control failure, and contaminated groundwater, as described in Section 3.8, Emergency and Contingency Plans.

To prepare an incident report, the **Landfill operator** performs the following tasks:

- Enters the following information into the report, as applicable:
 - Name
 - Date
 - Date of incident
 - Incident summary
 - People contacted
 - Corrective action
 - Follow-up actions
- Places the incident report into the Operation Log

The Executive Secretary of the Waste Management and Radiation Control Board has required DPG to notify them when significant incidents occur at the Landfill. Examples of a significant incident are fire and explosion, hazardous or toxic materials release, gas release, run-on/-off control failure, and contaminated groundwater. There are two types of notifications for DPG Landfill operations:

- Those notification requirements presented in the SWPMR for specific incidents such as a gas release or contaminated groundwater
- Those notifications presented in the State's final permit for the Landfill for other types of incidents for which the SWPMR do not clearly define specific notification requirements

To submit significant incident reports to the Executive Secretary of the Waste Management and Radiation Control Board, **EP** follows notification procedures as presented in applicable sections of this document. For applicable sections see Section 3.4, On-site Waste Handling Procedures and Section 3.8, Emergency and Contingency Plans for situations where notification procedures need to be implemented for significant incidents.

3.7.3.2.3 Annual Facility Fee

Effective July 1, 2003 (UDEQ, 2003), DPG is required to pay an Annual Facility Fee based on the tons of municipal waste received at the Landfill during the preceding year (UCA 19-6- 119(5)(a)). Construction/ demolition waste tonnage may be excluded from the waste total if construction/demolition waste is placed in a separate disposal area from the municipal waste. However, if construction/demolition and municipal wastes are placed in the same cell, all waste going into the cell should be counted toward the annual waste tonnage total.

To submit the Annual Facility Fee, **EP** performs the following tasks:

- Determines the tons of municipal waste received during the previous calendar year. Excludes construction/demolition waste in annual tonnage because it is used as ADC.
- Pays the fee associated with the corresponding waste tonnage category, by January 15th of each year:
 - No fee if the Landfill receives less than 5,000 tons of waste in a given calendar year.
 - \$800 if the Landfill receives 5,000 or more but fewer than 10,000 tons of waste in a given calendar year.
- Mails check to the Division of Waste Management and Radiation Control. The check should be made payable to the Utah Division of Waste Management and Radiation Control.

3.8 EMERGENCY AND CONTINGENCY PLANS

3.8.1 Requirement

The UAC regulations require a landfill permit application to contain contingency or emergency response plans for the following situations:

- Fire and explosions
- Hazardous or toxic material release
- Gas release
- Run-on/-off control system failure
- Reserve equipment
- Alternative waste handling
- Contaminated groundwater
- Other significant events

3.8.2 Explanation

If DPG requires additional assistance for any of the emergency situations listed in the Requirement section, the following local fire-fighting and medical organizations are available for support:

- Tooele County (fire protection)
- Utah Valley Regional Medical Center
- Jordan Valley Hospital
- LDS Hospital
- University Hospital
- Mountain West Medical Center
- U.S. Army Tooele Depot Health Clinic

The Executive Secretary of the Waste Management and Radiation Control Board has required that DPG notify it when significant incidents occur at the Landfill. Examples of a significant incident are fire and explosions, hazardous or toxic materials release, gas release, run-on/-off control failure, and contaminated groundwater. There are two types of notifications for DPG Landfill operations:

- Those notification requirements presented in the SWPMR for specific incidents such as a gas release or contaminated groundwater
- Those notifications presented in the State's final permit for the Landfill's other types of incidents for which the SWPMR do not clearly define specific notification requirements

The Executive Secretary of the Waste Management and Radiation Control Board notification procedures are presented where applicable in this permit application. The following contingency plan procedures provide guidance to comply with the requirement for each of the situations listed in this section.

3.8.3 Procedure

Tasks to perform contingency plan emergency procedures at the Landfill for each of the situations listed in the Requirement Section follows.

3.8.3.1 Fire and Explosions

Fire and explosion situations consist of the following incidents:

- Controlled
- Uncontrolled

Controlled situations are emergencies which can be controlled at the time of occurrence by employees in the immediate area. Uncontrolled situations are emergencies which cannot be controlled at the time of occurrence by employees in the immediate area.

Controlled

To perform controlled fire and explosion contingency plan emergency procedures, the **site operator** (discoverer) performs the following tasks:

- Notifies any on-site personnel and the Landfill office.
- Uses fire extinguishers or stockpiled soil to extinguish the fire.

To perform controlled fire and explosion contingency plan emergency procedures, the **Landfill operator** records a written account of the incident in the operating record.

Uncontrolled

To perform uncontrolled fire and explosion contingency plan emergency procedures, the **site operator** (discoverer) performs the following tasks:

- Alerts individuals at the Landfill.
- Contacts the DPG Fire and Emergency Response Team and the Landfill operator.
- Limits pedestrian and vehicle access to the Landfill.
- Evacuates if necessary.

To perform uncontrolled fire and explosion contingency plan emergency procedures, the **Fire and Emergency Response Team** performs the following tasks:

- Identifies the extent of fire or explosion and determines whether a smoldering underground fire exists.
- Implements control procedures such as:
 - Applying additional layer of heavily compacted impermeable soil cover to prevent oxygen from feeding fire.
 - Attempting to mitigate fire by:
 - ❖ Digging out area within fire range
 - ❖ Systematically rolling-out the smoldering contents
 - ❖ Thoroughly wetting the entire area
 - ❖ Rebuilding cell using ample soil cover
- Attempts to minimize any resulting run-on/-off
- Designates support group responsibilities
- Determines when the emergency situation has passed and no longer threatens human health or the environment.
- Cleans up the area as necessary along with support group personnel.

To perform uncontrolled fire and explosion contingency plan emergency procedures, the **Landfill operator** performs the following tasks:

- Immediately notifies the EP.
- Records a written account of the incident in the Operating Record.

To perform fire and explosion contingency plan emergency procedures, **EP** performs the following tasks:

- Notifies the Executive Secretary of the Waste Management and Radiation Control Board within 24 hours or the next business day.
- Gives written notice to the Executive Secretary of the Waste Management and Radiation Control Board within seven days and includes the measures taken to protect human health and environment.

3.8.3.2 Hazardous or Toxic Material Release

To perform hazardous or toxic material release contingency plan procedures, the **site operator** (discoverer) performs the following tasks:

- Immediately notifies EP
- Alerts individuals at the Landfill.
- Contacts the DPG Fire and Emergency Response Team and the Landfill operator.
- Ensures all Landfill operations are shut-down.
- Limits pedestrian and vehicle access to the Landfill.
- Evacuates if necessary.

To perform hazardous or toxic material release contingency plan emergency procedures, the **Fire and Emergency Response Team** performs the following tasks:

- Designates support group responsibilities.
- Contains spill/release in the smallest area possible using earth dams and berms.
- Attempts to minimize any resulting run-on/-off
- Collects spillage by pumping directly into approved containers.
- Spreads absorbing or neutralizing material into the spill area.
- Determines when the emergency situation has passed and no longer presents a threat to human health or the environment.
- Removes pollutant-soaked soil with shovels or other appropriate equipment and place in approved containers.
- Cleans up area in which the incident occurred and decontaminates all emergency or process equipment utilized or affected in the emergency.

To perform emergency hazardous or toxic material release contingency plan procedures, the **Landfill operator** performs the following tasks:

- Records a written account of the incident in the operating record.
- Ensures all resulting containerized wastes is transferred to the permitted on-site DPG Central Hazardous Waste Storage Facility.

To perform hazardous or toxic material release contingency plan emergency procedures, **EP** performs the following tasks:

- Notifies the Executive Secretary of the Waste Management and Radiation Control Board within 24 hours or the next business day.
- Gives written notice to the Executive Secretary of the Waste Management and Radiation Control Board within seven days and includes the measures taken to protect human health and the environment.

3.8.3.3 Gas Release

To perform gas release contingency plan procedures, the **Landfill operator** and **EP** perform the emergency tasks listed in Table 3.8-1 when quarterly LEL measurements are at the following levels:

- Exceeds LEL for explosive gases at the property boundary
- Exceeds 25 percent LEL in the on-site trailer

3.8.3.4 Run-On/-Off Control System Failure

To perform run-on/-off control system failure procedures, the **site operator** performs the following tasks:

- For significant failures, contacts the Landfill operator.
- Repairs the run-on diversion ditch and run-off prevention berm as necessary. See Appendix C for run-on design calculations and Section 3.3, Landfill Design and Operation, for berm construction specifications.

To perform run-on/-off control system failure procedures, the **Landfill operator** performs the following tasks:

- Immediately contacts EP for significant failures.
- Records a written account of the incident in the Operating Record.

To perform run-on/-off control system failure procedures, **EP** performs the following tasks for significant failures:

- Notifies the Executive Secretary of the Waste Management and Radiation Control Board within seven days or the next business day.
- Gives written notice to the Executive Secretary of the Waste Management and Radiation Control Board within seven days and includes the measures taken to protect human health and the environment.

3.8.3.5 Reserve Equipment

To perform reserve equipment contingency plan procedures, the **site operator** obtains reserve equipment from the BOSS Contractor, the Directorate of Public Works or any other DPG entity as required.

3.8.3.6 Alternative Waste Handling

To perform alternative waste handling contingency plan procedures, the **Landfill operator** performs the following tasks:

- In the unlikely event of an emergency which requires the short-term closure of the Landfill, temporarily discontinues trash collection.
- Stockpiles construction/demolition waste at another DPG location.
- Directs the refuse contractor to haul household/commercial wastes to the Tooele transfer station, 45 miles away.

3.8.3.7 Contaminated Groundwater

Contaminated groundwater emergency procedures are required for the following situations:

- Detection Monitoring
- Assessment Monitoring
- Corrective Action

3.8.3.7.1 Detection Monitoring

If groundwater detection monitoring at the Landfill indicates contamination at levels which are statistically significant, **EP** performs the following detection monitoring emergency procedures.

- Within 14 days of completing the statistical analysis and within 30 days of sample analysis results receipt, enters information in the Operating Record.
- Within 14 days of completing the statistical analysis and within 30 days of sample analysis results receipt, notifies the Executive Secretary of the Waste Management and Radiation Control Board in writing. The notification must indicate the parameters or constituents that have a statistically significant change.
- Immediately resamples all the groundwater monitoring wells or a subset of the wells, as specified by the Executive Secretary of the Waste Management and Radiation Control Board.
- Conducts all analysis and reporting requirements as required by UAC R315-308-2(10)(b) and (c).

Statistical significance will be determined as described in Appendix D, *Groundwater Monitoring Plan for the English Village Landfill*.

3.8.3.7.2 Assessment Monitoring

If after 90 days, groundwater detection monitoring emergency procedures do not successfully demonstrate that there is no groundwater contamination resulting from the Landfill, **EP** performs assessment monitoring emergency procedures as follows:

- Follows assessment monitoring requirements as required by UAC R315-308-2(11) and (12).
- Uses the *Groundwater Monitoring Plan for the English Village Landfill* in Appendix D for guidance on implementing assessment monitoring.
- Notifies the Executive Secretary of the Waste Management and Radiation Control Board as required by UAC R315- 308-2(11) and (12).

3.8.3.7.3 Corrective Action

If within 90 days groundwater assessment monitoring emergency procedures do not successfully demonstrate that there is no groundwater contamination resulting from the Landfill, **EP** performs corrective action emergency procedures as follows:

- Continues to monitor groundwater as specified under assessment monitoring.
- Develops a corrective action program in accordance with UAC R315-308-3.
- Uses the *Groundwater Monitoring Plan for the English Village Landfill* in Appendix D for guidance on implementation of corrective action.
- Notifies the Executive Secretary of the Waste Management and Radiation Control Board as required by UAC R315- 308-3.

3.8.3.8 Other Significant Events

To perform emergency procedures for other significant events, the following procedures are implemented:

- The **site operator** immediately notifies the Landfill operator of the significant event
- The **Landfill operator** performs the following actions for a significant event:
 - Immediately notifies EP

- Records a written account of the incident in the Operating Record as described in Section 3.7, Record Keeping and Reporting
- **EP** performs the following actions for a significant event:
 - Notifies the Executive Secretary of the Waste Management and Radiation Control Board within 24 hours or the next business day.
 - Gives written notice to the Executive Secretary of the Waste Management and Radiation Control Board within seven days and includes the measures taken to protect human health and the environment.

3.9 EQUIPMENT AND FACILITY MAINTENANCE

3.9.1 Requirement

The UAC requires each landfill owner or operator to provide a maintenance description for installed equipment (e.g., leachate/gas collection and groundwater monitoring systems) at the facility. The UAC also contains several landfill maintenance requirements.

3.9.2 Explanation

This Section explains the equipment and facility maintenance activities the Landfill is not required to conduct and those which it is required to conduct.

The Landfill is not required to conduct equipment and facility maintenance on the following systems:

- Leachate collection
- Gas collection system
- Gas control system

Leachate collection is not required since the Landfill is an existing facility which has been in operation since July 15, 1993. Gas collection and control is not required because the site capacity of the Landfill does not exceed 2.5 megagrams. Site capacity is discussed in Section 6.4.

The Landfill is required to maintain its groundwater monitoring system and perform general maintenance procedures. The procedures about equipment and facility maintenance provide guidance to comply with the requirement and are discussed in the following sections:

- Equipment and Facility Maintenance
- Sign, Boundary Post, Fence, and Surface Maintenance
- Fire Break Maintenance
- Road Maintenance
- Dust Control
- Litter Control
- Scavenger and Open Burn Prevention
- Communication System Maintenance

3.9.3 Procedure

Tasks to perform equipment and facility maintenance follow.

3.9.3.1 Equipment Maintenance

The **Landfill operator** is responsible for maintaining the following equipment:

- Groundwater monitoring system
- Heavy equipment
- Fire extinguishers
- Personal protective equipment (PPE) and first aid kit supplies

3.9.3.1.1 Groundwater Monitoring System

To maintain the Landfill groundwater monitoring system equipment, the **Landfill operator** performs the following tasks:

- Inspects Landfill monitoring well locks, including lubricating or replacing locks if necessary. Only lubricants that do not contain oils, solvents, or any materials likely to cause contamination may be used.
- Repairs and replaces the Landfill monitoring well protective casings, covers, hinges, and any other exposed parts, as necessary.
- If necessary, redevelops wells in accordance with instructions, in the *Groundwater Monitoring Plan for the English Village Landfill* found in Appendix D.

3.9.3.1.2 Heavy Equipment

To maintain the Landfill's heavy equipment, the **Landfill operator** performs the following tasks:

- Maintains operating instruction books for heavy equipment such as the front end loader in the on-site landfill office.
- Ensures standard equipment maintenance occurs for heavy operating machinery.
- In the event of equipment breakdown, takes the machinery to the DPG equipment maintenance shop for repair. Section 3.8 discusses contingency plan procedures if reserve equipment is required.

3.9.3.1.3 Fire Extinguishers

To maintain Landfill fire extinguishers at the on-site landfill office, the **Landfill operator** checks them quarterly to ensure they are charged.

3.9.3.1.4 Personal Protective Equipment (PPE) and First Aid Kit Supplies

To maintain Landfill PPE and first aid kit supplies, the **Landfill operator** performs the following tasks:

- Ensures PPE (e.g., hard hats, ear plugs, face masks, safety glasses) and the first aid kit supplies are checked quarterly to determine whether stocks need to be re-supplied.
- Replenishes any necessary supplies.

3.9.3.2 Sign, Boundary Post, Fence, and Surface Maintenance

To maintain the Landfill signs, boundary posts, fence, and surface the **Landfill operator** performs the following tasks:

- Ensures the sign(s) at the Landfill entrance provides the following information:
 - Landfill name
 - Hours of operation
 - List of materials not accepted by the Landfill
 - Emergency telephone number
- Ensures the Landfill boundary posts remain clearly visible.
- Ensures fences surrounding operating and temporarily closed areas of the Landfill are maintained in a functional and clean condition.
- Ensures the Landfill surface remains free of loose waste or debris.

3.9.3.3 Fire Break Maintenance

To maintain the Landfill's fire break, the **Landfill operator** plows a 10-foot wide clearing to remove vegetation at least quarterly, or more frequently as necessary.

3.9.3.4 Road Maintenance

To maintain the Landfill's access and exit roads, the **Landfill operator** grades the gravel road off of Stark Road which leads to and from the Landfill as well as the traffic loop within the Landfill as necessary to prevent any large bumps or depressions.

3.9.3.5 Dust Control

To control dust at the Landfill, the **Landfill operator** performs the following tasks as practical:

- Waters surface to suppress any fugitive dust.
- Reseeds large non-active disturbed areas.
- Applies soil amendments.
- Minimizes vehicle speed

3.9.3.6 Litter Control

To control wind-blown litter at the Landfill, the **Landfill operator** performs the following tasks as practical:

- Ensures that all loads entering the Landfill are sufficiently covered.
- Minimizes vehicle speed on the Landfill property.
- Applies sufficient daily cover in a timely manner after depositing waste.
- Regularly maintains perimeter fencing and wind breaks as applicable.
- Periodically patrols the Landfill to collect wind-blown litter.

3.9.3.7 Scavenger and Open Burn Prevention

To prevent scavenging and open burning at the Landfill, the **Landfill operator** performs the following tasks:

- Ensures at least one attendant is on duty during hours of operation.
- Locks the Landfill gate when no attendant is present.
- Inspects Landfill to ensure it is scavenger free and that no open burning is occurring.

3.9.3.8 Communication System Maintenance

To maintain the communication system at the Landfill, the **Landfill operator** ensures the telephone system in the on-site landfill office is always functioning correctly.

3.10 DISEASE VECTOR CONTROL

3.10.1 Requirement

The UAC regulations require landfills to control for insects, rodents, and other disease carrying vectors and that landfills prevent harboring of rats, insects, birds, and burrowing animals. Various physical and chemical control procedures are used by the Landfill to control for common vectors such as mosquitoes, biting gnats, mice, gophers, and seagulls.

3.10.2 Explanation

The following procedures help ensure the Landfill will comply with the requirement and that disease vectors will not present a public health and safety risk at the Landfill:

- Landfill operations
- Physical control
- Inspections
- Treatment

3.10.3 Procedure

Tasks to perform procedures for disease vector control follow.

3.10.3.1 Landfill Operations

To operate the Landfill for disease vector control, the **site operator** follows the operating procedures for compaction, grading, and soil cover discussed in Section 3.3, Landfill Design and Operation.

These operations provide a deterrence to vectors seeking harborage since they reduce or eliminate voids in the waste which would otherwise provide vectors with entrance or nesting space. The application of a 6-inch minimum daily cover prevents vectors from being able to access any potential food sources.

3.10.3.2 Physical Control

To physically control the Landfill for disease vectors, the **site operator** performs the following tasks:

- Prevents water from collecting in bulky materials or trenches.
- Covers putrescible wastes immediately.
- Buries dead animals immediately.
- Follows liquid waste exclusion procedures discussed in Section 3.4, On-site Waste Handling Procedures.

3.10.3.3 Inspections

To inspect the Landfill to identify whether vectors are a concern, the **Landfill operator** performs the tasks listed in Table 3.10-1.

3.10.3.4 Treatment

To treat for vectors at the Landfill, the **Landfill operator** performs the following tasks:

- Implements treatment controls if vectors persist at the site. Only a State certified Pest Control Officer may apply pesticides.

- Contacts the BASOPs contractor who functions as the Installation Pest Controller for input regarding the best treatment or control techniques (e.g., traps, smoke devices, pesticides, sonar techniques).

3.11 TRAINING AND SAFETY PLAN

3.11.1 Requirement

The regulations require that a general training and safety plan be provided in the permit application for site operators. The Landfill operator at DPG provides its employees with necessary training and has its own Safety Program which is provided in Appendix E.

The following procedures provide guidance to comply with this requirement:

- Providing training
- Ensuring safety

3.11.2 Procedure

Tasks to perform procedures for training and safety follow.

3.11.2.1 Providing Training

To provide training, the **Landfill operator** must ensure site operators complete initial and continued training which enables them to perform job responsibilities safely and effectively. Training covers the following areas:

- Personal protective equipment (PPE)
- Hazard communications
- General landfill practices
- Heavy equipment operation
- Load inspection for unauthorized waste such as:
 - Identification of hazardous waste and waste containing PCBs
 - Identification of bulk liquid or free liquid wastes
- General site safety and emergency response
- Record keeping and reporting
- Inspections

This training is received through various Occupational Safety and Health Administration, BASOPs Contractor, or Solid Waste Association of North America courses and through on-the-job training.

Table 3.11-1 is provided to assist with site operator training regarding applicable sections of the Landfill permit.

3.11.2.2 Ensuring Safety

To ensure safety, the **Landfill operator** maintains the following equipment in the on-site landfill office:

- Telephone
- PPE (e.g., safety glasses or goggles, gloves, hard hats, earplugs, and face masks)
- Fire extinguishers
- First aid kit

To ensure safety, the **site operators**:

- Read their employee Safety Program manual (Appendix E) and implement the discussed procedures.
- Attend monthly safety meetings.

- Report accidents.
- Follow the Landfill operator Safety Program that covers lifting, falls, good housekeeping practices, hearing and eye protection, and a code of safe practices.
- Transport employees with injuries requiring medical treatment to the DPG Health Clinic in English Village.
- Contact the Landfill office to arrange for transport to hospital facilities in Tooele or Salt Lake City for employees with severe injuries.

3.12 RECYCLING PROGRAM

3.12.1 Requirement

The UAC requires landfill owners or operators to provide public recycling opportunities if a market exists.

3.12.2 Explanation

Dugway Proving Ground (DPG) has recycling programs for white paper, scrap metal, and tires (AGEISS, 2002). A continuing effort will be made by DPG to pursue additional recycling efforts when an economically feasible alternative arises.

When brought to the Landfill, the **site operator** attempts to divert the following salvageable materials from disposal at the Landfill:

- Bulk metals (such as aluminum, copper, brass, precious metals, etc.) - Drivers are encouraged to contact Dugway's Qualified Recycling Program (QRP) manager to coordinate processing the materials and transporting them to an approved recycling facility.
- Scrap metals (such as steel and iron) - Drivers are encouraged to dispose of these items in a bin at the Landfill entrance. This bin is then emptied and items are sent off-site to a metal recycler. This bin is the responsibility of another DPG entity, not the Landfill operator.

Storage piles are used at the Landfill for such items as petroleum-contaminated soils (PCSs) which will be bio-remediated and asphalt which will be recycled or used as ADC.

The following recycling procedures provide guidance to comply with requirements relevant to salvageable materials, future recycling efforts, and recycling-related storage piles.

3.12.3 Procedure

Tasks to perform recycling procedures at the Landfill follow.

3.12.3.1 Salvageable Materials

To recycle salvageable materials at the Landfill, the **Landfill operator** performs the following tasks:

- Schedules pickup of any potentially salvageable materials brought to the Landfill by DPG residents, employees, and contractors.
- Directs DPG contractors, employees, and residents dropping off potentially salvageable materials to contact the QRP manager at (435) 831-3369 for guidance on whether the materials can be recycled. Types of salvageable materials accepted by the DRMO are scrap metals, paper, cardboard, phone books, computers and monitors, refrigerators, washing machines, desks, and chairs.
- Ensures that the DPG party responsible for the scrap metal bin arranges for pickup every 90 days.

3.12.3.2 Future Recycling Efforts

To implement future recycling efforts at the Landfill, the **Landfill operator** and the **EP** ensure all future on-site reclamation efforts follow appropriate SWPMR for record keeping and management.

3.12.3.3 Recycling-Related Storage Piles

To store wastes in piles for recycling or composting purposes, the **Landfill operator** ensures the following:

- Materials are recorded into a specific logbook for the material when they arrive at the Landfill.
- Necessary measures are taken to store the materials appropriately so they will not interfere with Landfill operations.
- For storage piles that may be likely to produce leachate, the material will be placed on a surface to prevent potential subsurface soil and groundwater contamination.
- Over 50 percent of the material on hand at the beginning of the year is recycled by the year's end.
- No material is stored at the Landfill for more than two years.
- If the materials cannot be recycled or utilized within the required timeframe:
 - Contacts the State to see if a waiver can be granted to allow continued storage of the material at the Landfill.
 - Arranges for pickup of material for disposal or recycling purposes by an off-site location.
 - Arranges for disposal of the material at the Landfill if appropriate.
- Any stored materials are recorded into the specific material logbook if they leave the Landfill.
- Information from the material logbook is recorded in the Landfill Operating Record maintained by the Directorate of Public Works.

To store wastes in piles for recycling or composting purposes, **EP** certifies in the annual report to the Executive Secretary of the Waste Management and Radiation Control Board, as described in Section 3.7, Record Keeping and Reporting, that the recycling related storage piles are being operated according to the Landfill Plan of Operation.

Note: Different storage pile requirements apply if the Material/waste:

- Is not intended for recycling or composting purposes.
- Consists of a pile of solid waste containing garbage that has been in place for more than seven days.
- Consists of a pile of solid waste not containing garbage that has been in place for more than 90 days.

3.13 ADDITIONAL INFORMATION

3.13.1 Requirement

The UAC regulations require that a plan of operation include any other site specific information specifically requested by the Executive Secretary of the Waste Management and Radiation Control Board.

3.13.2 Explanation

The Executive Secretary of the Waste Management and Radiation Control Board has not requested U.S. Army Dugway Proving Ground to provide any other additional information than information clearly specified in the Utah Solid Waste Permitting and Management Rules.