

**OPERATIONS PLAN  
COFFIN BUTTE LANDFILL**

**BENTON COUNTY, OREGON**

---

**APRIL 2013**

**PROJECT NO. 2013.A029**

**PREPARED FOR:**

**Valley Landfill, Inc.  
28972 Coffin Butte Road  
Corvallis, OR 97330  
541-745-5792**

**PREPARED BY:**

**Geo-Logic Associates  
143E Spring Hill Drive  
Grass Valley, CA 95945  
530-272-2448**



*Permit # 306  
proj 6363  
Salem (Shelf Copy  
(no disc included))*

**RECEIVED**

**AUG 12 2013**

**DEQ-SALEM OFFICE**

**TABLE OF CONTENTS**

**1.0 INTRODUCTION .....1**

1.1 PURPOSE AND SCOPE ..... 1

**2.0 GENERAL OPERATIONS .....1**

2.1 FACILITY OPERATIONS..... 1

2.2 CAPACITY AND PROJECTED LIFE ..... 1

2.3 WASTE STREAM TYPES..... 2

2.4 OPERATING HOURS..... 2

2.5 PERSONNEL ..... 2

2.6 EQUIPMENT ..... 2

2.7 SECURITY ..... 3

2.8 HANDLING AND REMOVAL OF UNAUTHORIZED WASTES DISCOVERED AT THE FACILITY..... 3

2.9 LANDFILL GAS MANAGEMENT ..... 4

2.10 LEACHATE MANAGEMENT ..... 5

2.10.1 Leachate Volumes ..... 5

2.10.2 Leachate Collection and Removal System ..... 5

2.10.3 Leachate Storage..... 5

2.10.4 Leachate Management ..... 6

2.10.5 Future Leachate Management Plans ..... 6

2.10.6 Leachate Minimization..... 6

2.11 EROSION CONTROL AND SURFACE WATER MANAGEMENT ..... 6

2.12 ENVIRONMENTAL MONITORING ..... 7

2.13 SPILLS ..... 7

2.14 NON-COMPLIANCE RESPONSE..... 7

**3.0 DISPOSAL OPERATIONS.....7**

3.1 GENERAL WASTE UNLOADING AND FILLING OPERATIONS ..... 7

3.2 COVER MATERIAL PLACEMENT..... 9

3.2.1 Daily Cover ..... 9

3.2.2 Interim Cover ..... 10

3.2.3 Final Cover ..... 10

3.3 DETECTING AND PREVENTING THE DISPOSAL OF HAZARDOUS OR OTHER UNACCEPTABLE WASTES ..... 10

3.4 DISPOSAL OF CONCENTRATED PUTRESCIBLE WASTE LOADS..... 11

3.5 DISPOSAL OF CLEANUP MATERIALS CONTAMINATED WITH HAZARDOUS SUBSTANCES ..... 11

3.6	FILL PROGRESSION AND PHASING .....	11
<b>4.0</b>	<b>SPECIAL WASTE MANAGEMENT .....</b>	<b>12</b>
4.1	IDENTIFYING AND CHARACTERIZING WASTES WHICH REQUIRE SPECIAL MANAGEMENT.....	12
4.2	IDENTIFYING THE SOURCES OF SPECIAL WASTES.....	12
4.3	HANDLING PROCEDURES FOR SPECIAL WASTES .....	12
4.3.1	Asbestos .....	12
4.3.2	PCS .....	13
4.3.3	Solidified Concentrate .....	13
4.3.4	Cleanup Materials Contaminated by Hazardous Substances.....	13
4.3.5	Treated Infectious Waste.....	14
4.3.6	Large Animal Carcasses.....	14
4.3.7	Electronic Waste .....	14
4.3.8	Other Special Wastes.....	17
4.4	DOCUMENTATION OF SPECIAL WASTE CHARACTERIZATION AND MANAGEMENT .....	17
4.4.1	Asbestos.....	17
4.4.2	PCS .....	18
4.4.3	Solidified Concentrate .....	18
4.4.4	Other Special Wastes.....	18
<b>5.0</b>	<b>ANCILLARY OPERATIONS.....</b>	<b>18</b>
5.1	HANDLING AND REMOVAL OF WASTE TIRES.....	18
5.2	MANAGEMENT OF TRANSFER CONTAINERS .....	18
5.3	RECYCLABLES COLLECTION .....	18
<b>6.0</b>	<b>INSPECTION AND MAINTENANCE.....</b>	<b>19</b>
6.1	TRUCK WASHING EQUIPMENT TRUCK-WASHING IS NOT PERFORMED AT THE SITE.....	19
6.2	LFG SYSTEM.....	19
6.3	LEACHATE MANAGEMENT SYSTEM .....	19
6.4	SURFACE WATER CONTROL SYSTEM .....	19
6.5	ENVIRONMENTAL MONITORING .....	20
6.6	FACILITIES.....	20
6.7	EQUIPMENT .....	20
<b>7.0</b>	<b>OPERATING RECORD .....</b>	<b>20</b>
<b>8.0</b>	<b>CONTINGENCY .....</b>	<b>21</b>
8.1	FIRE PROTECTION.....	21

8.2 NOTIFICATION OF EMERGENCIES TO THE DEPARTMENT OF ENVIRONMENTAL  
QUALITY ..... 21

8.3 SPILL RESPONSE ..... 21

**9.0 REFERENCES ..... 22**

**APPENDICES**

Appendix A Site Plan

Appendix B Example Generator Waste Profile Form

Appendix C Alternative Daily Cover Program



## 1.0 INTRODUCTION

### 1.1 PURPOSE AND SCOPE

This Operations Plan (Plan) has been prepared for the Coffin Butte Landfill in Benton County, Oregon. The landfill is owned and operated by Valley Landfills, Inc. (VLI). This Plan, which updates the previous operations plan for this site prepared by BLES (2006), is in accordance with the Oregon Department of Environmental Quality (DEQ) Solid Waste Permit No. 306. The outline of this plan generally follows Section 9 of DEQ's 1996 Solid Waste Landfill Guidance Document (Guidance Document) and covers the topics specifically required in Section 7.0 Operation Plan, *Solid Waste Disposal Site Permit No. 306* (DEQ 2010).

## 2.0 GENERAL OPERATIONS

### 2.1 FACILITY OPERATIONS

This Plan describes the general operation of the landfill in accordance with regulatory and permit requirements and includes references to several additional permit required plans, manuals, and documents that provide more specific operation procedures. Varying levels of detail are presented as appropriate for each topic. Some of the topics are covered in much greater detail in other documents previously prepared for this site. In such cases, appropriate references are given. The contents of this plan attempt to minimize duplication of operation, maintenance, inspection, and monitoring procedures presented in other permit required documents. Therefore, this Operations Plan shall be used in conjunction with the *Operation and Maintenance Manual* (Ausenco Vector 2011) and other plans, manuals, and documents referenced herein. These documents combined guide the operation and maintenance of the landfill.

For general reference, a site plan of the landfill is included in Appendix A.

### 2.2 CAPACITY AND PROJECTED LIFE

The updated capacity and life projections for the Coffin Butte Landfill are presented in the *Year 2011 Site Development Plan* (Ausenco Vector 2011) and development plan amendments. In summary, there were approximately 27.3 million cubic yards of airspace remaining from the time of the last aerial photograph (February 2011) in Cells 1-6. Using an effective waste density of 0.8 tons/cubic yard and a disposal rate of 500,000 tons per year<sup>2</sup>, results in an estimated life of 27 years from February 2011. The actual remaining capacity and projected life is a function of actual waste volumes, types, and density and will likely change.

### 2.3 WASTE STREAM TYPES

Waste types and volumes change annually. Therefore, the estimated types and quantities of waste received for the most recent year (2010) are presented in Table 2-1.

- <sup>1</sup> An effective waste density of 0.8 tons per cubic yard has been documented as lower bound over the past 10 years. The actual average may be closer to 0.9 tons per cubic yard, but the lower value of 0.8 tons per cubic yard is used for conservatism in planning. The density is measured in successive years by means of measuring landfill volume changes using photogrammetry from annual aerial flyovers, and measuring incoming tonnages at the entrance scale-house.
- <sup>2</sup> Approximate waste tonnage received in the 2010 calendar year.

**TABLE 2.1 - ESTIMATED ANNUAL QUANTITIES AND TYPES OF WASTE RECEIVED**

WASTE STREAM TYPE	ANNUAL QUANTITY (TONS) (FROM 2010)
Municipal Solid Waste	304,800
Commercial and industrial waste <sup>1</sup>	103,300
C&D waste	11,800
Petroleum contaminated soils	36,000
Asbestos	2,100
Total	458,000

### 2.4 OPERATING HOURS

Waste is delivered to the site by both commercial haulers and the general public. Commercial haulers are allowed 24 hours per day, 7 days per week. Waste from the general public is accepted between the hours of 8 a.m. to 5 p.m. Monday through Saturday and noon to 5 p.m. on Sunday. The landfill is closed to the public on posted major holidays.

### 2.5 PERSONNEL

Landfill management determines the staffing and training needed to ensure the operation of the landfill is efficient and complaint. Landfill personnel include, but are not limited to, general manager; operations manager; equipment operators; mechanic; spotters; cashiers; load checkers; laborers; and special waste, environmental, and compliance support personnel. Personnel training records are maintained at the landfill operations office.

### 2.6 EQUIPMENT

Equipment used to operate and maintain the landfill generally include trash compactors,

<sup>1</sup> Waste haulers and packer trucks make up most of the commercial waste stream. Most of the waste delivered by these commercial haulers is derived from residential waste.



dozers, transfer trailer/container tipper, motor grader, air compressor, daily cover hauling equipment, light plants, pickups, and other miscellaneous support equipment and tools. The type, size, and quantity of equipment needed will vary based upon the type and quantity of waste received. Landfill management will determine equipment requirements and schedule equipment to be available as needed to operate the landfill in accordance with permit requirements. Some landfill activities, such as hauling cover soil, may be performed by a contractor. Equipment maintenance is covered in the *Operation and Maintenance Manual* (Ausenco Vector 2011).

## 2.7 SECURITY

Access controls and signs are used to secure and prevent unauthorized waste disposal and access. Access to the site is controlled by a combination of fencing, locked gates, staffed entrance facilities (scales), signs, and physical barriers such as ditches, berms, and difficult terrain. During public operating hours, scale house personnel monitor and control public access to the landfill. Scale personnel have radio contact with other landfill personnel to report any unauthorized activities. Public access to the leachate storage ponds is controlled by perimeter fences, with a gate.

Signs at the landfill entrance state the name of the facility, emergency telephone number, days and hours of operation, and authorized or prohibited waste. Signs within the landfill direct landfill users to the unloading areas, control traffic, and state unloading rules.

## 2.8 HANDLING AND REMOVAL OF UNAUTHORIZED WASTES DISCOVERED AT THE FACILITY

The Solid Waste Disposal Site Permit prohibits the disposal of the following waste categories:

- Hazardous wastes as defined in ORS 466.005 and OAR 340 Division 101
- Liquid waste
- Vehicles
- Used oil
- Batteries • Whole tires
- Electronic waste
- Source separated recyclable material (unless it is in a condition that makes the material unusable or not recyclable)

If prohibited wastes are discovered, but cannot be attributed to a particular hauler who would take them away, they are managed in accordance with the requirements listed in the landfill's

Solid Waste Disposal Site Permit, Section 9.2.

- Transport non-hazardous prohibited waste to a disposal site authorized to accept such waste within 48 hours, unless approved otherwise by DEQ
- Notify DEQ within 7 days in the event hazardous wastes are discovered. Remove hazardous waste within 90 days, unless approved otherwise by DEQ

If the waste could potentially damage the liner because it is bulky and within the first five feet of fill, the operator will push the bulky waste aside until there is at least five feet of waste in that area.

If tires are observed, they are removed and placed in the tire drop box. If tires are seen before they are dumped, the customer is requested not to dump them at the site.

## **2.9 LANDFILL GAS MANAGEMENT**

The Coffin Butte site utilizes an active landfill gas (LFG) control system that collects and delivers LFG to a gas-to-energy (GTE) plant that produces electricity and a landfill gas flare. The GTE plant is the primary control system and the flare combusts collected LFG not utilized by the GTE plant. The current capacity of the GTE plant is approximately 2.4 megawatts of electricity, produced with three internal combustion engines. The GTE plant is operated by a third party under facility specific permits issued by DEQ.

Following is an overview of the landfill gas management system:

### **Cell 1**

Active LFG control was initiated at the site in 1994 when a series of vertical LFG wells were installed in the inactive Cell 1. The GTE plant was constructed at the same time by a third party. The system originally consisted of the following elements:

- Vertical gas extraction wells
- Lateral pipes and control valves from the wells to a header pipe
- LFG header pipe from Cell 1 to the GTE plant
- A blower at the GTE plant to provide vacuum to the LFG collection piping
- A series of condensate traps before the blower; the condensate is pumped back to the leachate storage ponds
- GTE plant comprised of three internal combustion (IC) engines that run on the LFG which turn generators to produce electricity



- Flare to burn surplus LFG

### **Cells 2 and 3**

Vertical and horizontal wells are used to extract landfill gas from the waste. Each new LFG well is connected to a perimeter header main or sub-main by lateral pipes. The vacuum to each well can be controlled by a valve on its lateral pipe. The *Year 2011 Site Development Plan* (Ausenco Vector 2011) shows the key elements of the LFG main system, valves, condensate traps, and GTE plant.

Many of the LFG wells are routinely fitted with pumps that extract leachate that has accumulated into the wells in an effort to maintain and extend the operation of the wells.

### **Future Plans**

Vertical and horizontal wells installed in the cell bottoms and in the waste mass will continue to be the primary method of LFG extraction. Additional engines at the GTE plant or additional flare capacity will be added as/if needed.

## **2.10 LEACHATE MANAGEMENT**

### **2.10.1 Leachate Volumes**

Leachate generation insignificantly influenced by precipitation and therefore, varies from year to year. Roughly 25 million gallons/year of leachate is managed. Actual annual leachate generation rates and management methods are documented in the *Annual Leachate Report*, submitted annually to DEQ. Copies of the annual reports are maintained at the landfill operations office.

### **2.10.2 Leachate Collection and Removal System**

The leachate collection and removal system (LCRS) is designed to control the maximum buildup of head on the lining system to less than 12 inches. This is accomplished by bottom grades that drain to a sump, a drainage layer, an interbedded pipe network, and pump stations at the sumps. Pumps in the sumps run automatically to maintain the leachate head below a maximum established level in the sumps. As-built construction documents are maintained at the landfill operations office.

### **2.10.3 Leachate Storage**

There are currently two leachate storage ponds at the site:

- West Leachate Pond - a 4-million gallon leachate holding pond located on the south side of Coffin Butte Road, west of the leachate treatment facility
- East Leachate Pond - a 5-million gallon holding pond located on the south side of Coffin Butte Road, southeast of the leachate treatment facility.

Both ponds are covered and are double-lined with leak detection systems. As-built construction documents are maintained at the landfill operations office.

#### **2.10.4 Leachate Management**

At the present time, leachate collected from the landfill is temporarily stored in the leachate storage ponds until disposed of by irrigation onto the waste mass, hauling to waste water treatment plants, and/or on-site treatment in tire direct/reverse osmosis treatment plant.

#### **2.10.5 Future Leachate Management Plans**

VLI intends to continue managing leachate utilizing the current methods described in Section 2.10.4, as well as, evaluate additional methods and/or technologies that may be feasible in the future. VLI also intends to continue aggressive leachate minimization.

#### **2.10.6 Leachate Minimization**

Minimization of precipitation infiltration, prevention of storm water run-on, and maximizing storm water runoff are used to minimize leachate generation. The following practices are used, but limited to, to minimize leachate generation:

- Creation of positive slopes for runoff areas to avoid ponding within the landfill footprint and direct runoff to outside of the landfill footprint
- Extensive use of temporary plastic cover and replacement of old panels
- Perimeter ditches and berets to prevent run-on from entering the landfill footprint

### **2.11 EROSION CONTROL AND SURFACE WATER MANAGEMENT**

Surface water runoff from the landfill is permitted under a NPDES Storm Water Discharge Permit for the landfill. The NPDES permit and the *Storm Water Pollution Control Plan* (TC 2006) describe the monitoring requirements, reporting requirements, site controls, inspections, and best management practices used at the landfill to manage storm water runoff.

The *Year 2011 Site Development Plan* (Ausenco Vector 2011) presents a master storm water control plan drawing, a summary of the major infrastructure requirements for storm water



management, and the storm water controls that will be in place at final closure of the facility. Most of the controls will be developed incrementally throughout the life of the landfill and include perimeter drainage ditches, sedimentation basins, and incremental construction of final cover ditches and downdrains. All storm water drainage structures are designed for a 25-year stone event.

## **2.12 ENVIRONMENTAL MONITORING**

The environmental monitoring program for the landfill is described in the *Environmental Monitoring Plan* (TC 2005). The environmental monitoring plan is maintained at the landfill operations office.

## **2.13 SPILLS**

Spill prevention and response procedures are described in the *Spill Prevention Control and Countermeasure (SPCC) Plan* (Golder 2006) and Section 8.3. The SPCC plan is maintained in the landfill operations office.

## **2.14 NON-COMPLIANCE RESPONSE**

In the event any condition of the solid waste permit or any state rules are violated, site personnel will take action to correct the unauthorized condition and notify the DEQ.

# **3.0 DISPOSAL OPERATIONS**

## **3.1 GENERAL WASTE UNLOADING AND FILLING OPERATIONS**

The following points give a general description of the site landfilling operation:

- All waste loads are weighed on scales at the entrance to the landfill prior to dumping. The cashier records the type and amount of waste and its origin. Waste haul vehicles return to the scales after dumping to obtain the net waste weight.
- Signs are posted on the access roads that direct commercial and public haulers to the appropriate tipping area. Commercial haulers are directed to the landfill tipping face to unload. To minimize general public traffic on landfill waste, the public is directed to the public convenience area to unload waste into transfer trailers.
- The following types of waste generated within the METRO boundary will not be accepted: putrescible waste (EXCEPT putrescible waste delivered by Willamette Resources, Inc. (WRI) under a METRO non-system license), putrescible source-separated recyclable material/non-putrescible waste that has not undergone material recovery, source-separated recyclable material, and any other material prohibited by the DEQ solid waste

permit. Unacceptable waste streams are detected by the scale operators, spotters and through random load inspections. If prohibited waste is being delivered to Coffin Butte Landfill, the waste will not be accepted until waste requirements can be met.

- Scale house staff will ask person delivering non-putrescible waste if the waste was processed by a METRO franchised or licensed material recovery facility (MRF) before delivery to landfill.
  - Non-Putrescible waste processed through a METRO franchised or licensed MRF prior to delivery to landfill is acceptable. Scale house staff will ask the person for the name of the MRF to verify the facility is a METRO franchised or licensed MRF approved to process non-putrescible waste. The name of MRF will be recorded on the register recording the transaction for reporting to METRO.
  - The load will not be accepted for disposal in the landfill if the person: states the waste was not processed at a MRF, is unable to identify the MRF where material was processed, or identifies a processing facility not on METRO's list of franchised or licensed MRFs.
- Signs direct customers to unload white goods and metals at separate drop boxes at the public convenience area.
- The opportunity to recycle paper, plastics, oil, and metals is provided at a marked recycling area.
- Waste hauled by commercial haulers is tipped by the hauler off an all-weather, rock pad onto the working face. Spotters are provided to check for unacceptable waste and to assist with waste unloading. The unloaded waste is pushed away to the active disposal area by a dozer or a compactor and spread into lifts and compacted.
- Roads are maintained to provide reasonable all-weather access to the commercial tipping area and the public convenience area.
- To prevent landfill equipment from damaging the bottom liner, the initial layer of waste is placed in a five-foot thick lift. The first five-foot lift consists of residential compactor material free of construction debris. The waste is not pushed or moved for any significant distance unless five feet of waste are already in place.
- To encourage leachate to drain to collection sumps, low permeability waste fill should not be placed within 50 feet of the leachate collection sump or in the first five feet of waste.
- To prevent sideslope leachate seeps, waste is not landfilled on old tipping pads or other low-permeability layers near side slopes. These areas are ripped open, and regraded to promote the percolation of leachate down into the waste mass and the leachate collection system.
- Waste is spread and compacted in approximately two-foot thick lifts by trash compactors. The compactors are directed to make at least four passes over every two-foot thick lift.
- Experience has shown that permanent slopes designed to receive final cover at a slope



inclination of 3(H):1(V) maybe placed at least as steep as 2.5(H):1(V). Waste settlement will ultimately cause these slopes to be flatter than 3(H):1(V).

### **3.2 COVER MATERIAL PLACEMENT**

#### **3.2.1 Daily Cover**

OAR 340-94-040 and CFR, Part 258, Subpart C of the United States Federal Regulations for municipal waste landfills define the daily cover requirements for municipal solid waste landfills. The regulations state that daily cover will consist of six (6) inches of soil material and/or approved alternate daily cover (ADC) materials that are placed daily over compacted waste to reduce windblown litter, fire hazards, vector problems, and promote precipitation runoff. Due to the lack of soil at the Coffin Butte Landfill, ADC materials are extensively used for daily cover. The on-site soil is used as interim cover on outside permanent slopes (see Section 3.2.2).

Ash derived from the Marion County Cogeneration Facility is primarily used to cover the working face area from day-to-day (estimated to be about 200 feet by 200 feet). They are also used to cover waste areas that have not reached final grade and that will not be immediately covered with another lift of waste. Tarps are used to cover the waste if there is not a sufficient amount of ash imported that day.

The ash is imported at a normalized rate such that it is used daily and not stockpiled as much as practical. Due to its non-cohesive nature, the ash sifts down into the voids of the waste. The unevenness of the waste also creates thicker zones of ADC ash. Based on these conditions, the total volume of ash used is significantly higher than would be otherwise calculated for a 6-inch thick layer. Due to these conditions the ash, the ADC usage exceeds the minimum State guidelines of 10% of "Total Tons Received" or 15% of "Counting Waste" as defined by Addendum No. 1 to the site Permit No. 306. Sites wanting to claim quantities in excess of these amounts must provide detail within the Operating Plan describing the methodology and usage of ADC at the site. The ADC cover program requirements for the Coffin Butte Landfill are described in Appendix C.

Shaker fines from the WRI MRF and petroleum contaminated soil (PCS) are also used as ADC when available. Other ADCs, such as treated auto shredder waste, processed green and wood waste material, sludge and sludge-derived materials, spent refractory, spray applied foam, shredded roofing materials and other processed construction and demolition waste materials have been approved throughout the State by DEQ. These other materials may be used in the future as ADC.

### **3.2.2 Interim Cover**

Interim cover, consisting of a minimum one foot of soil, is placed over areas of waste that are at final grade or which will not receive additional waste for three months. The interim cover is sloped to shed storm water runoff away from the active area and to the landfill perimeter ditches. Portions of the interim cover areas may be covered with plastic tarps to reduce leachate generation.

### **3.2.3 Final Cover**

The final cover system design and placement are described in the *Year 2011 Site Development Plan* (Ausenco Vector 2011). The *Year 2011 Site Development Plan* (Ausenco Vector 2011) is maintained at the landfill operations office.

## **3.3 DETECTING AND PREVENTING THE DISPOSAL OF HAZARDOUS OR OTHER UNACCEPTABLE WASTES**

The detection and prevention of unacceptable waste (defined in Section 2.8) is accomplished by several methods, as described below.

### **1. Prescreening prior to delivery**

A pre-screening and waste inspection program is used to ensure unacceptable wastes (defined in Section 2.8) are not placed in the landfill and to identify wastes requiring special handling or management (Section 4.0). Solid wastes, except municipal solid waste (MSW) and construction, demolition and land clearing (CDL) waste, are classified as special waste and are pre-screened prior to acceptance. Special waste generators are required to complete and submit a waste profile (Appendix B contains an example copy of a profile form) for approval prior to delivery of the waste to the landfill. The waste profile includes the following information:

- Generator's name, address, and contact information
- Transporter's name, address, and contact information
- Description of the waste stream including name, type, source, method of shipment, estimated volume, and special handling instructions
- Physical characteristics of the waste and questions to determine if the waste is hazardous
- Generator certifications that any samples tested are representative of the waste stream and that the waste is not hazardous

### **2. Screening**

- The scale attendant assesses each incoming load by asking the hauler what is being dumped and by observation. Unauthorized wastes are not accepted for disposal.



3. Visual inspections

- Landfill employees visually inspect commercial waste loads as they are dumped and spread to look for evidence of prohibited waste.

4. Random load inspections

- Landfill personnel randomly select loads for inspection. Waste is spread by bulldozers, and visually examined. Then the waste is compacted into the active cell.

If any suspected prohibited wastes are found, it is segregated and managed as specified in Section 2.8.

### **3.4 DISPOSAL OF CONCENTRATED PUTRESCIBLE WASTE LOADS**

Occasionally large loads of putrescible waste may arrive at the site for disposal. These loads could create excessive odors and attract vectors. Customers bringing these types of loads are encouraged to come after 4:00 p.m. because there is generally less traffic at that time. Landfill management procedures for these types of loads are to spread the materials into an area that can be covered with waste. If the consistency of the material is difficult to work with, it may be mixed with more standard MSW materials to allow it to be efficiently controlled and placed in the desired location.

Customers with large dead animals are generally requested to bury them on their own premises or are referred to a rendering plant. If the customer is not able to choose either of those options, the dead animals are accepted for disposal. The customer is directed where to dump the load and it is landfilled so that it is covered with standard MSW and soil cover by the end of the day.

### **3.5 DISPOSAL OF CLEANUP MATERIALS CONTAMINATED WITH HAZARDOUS SUBSTANCES**

Except for certain petroleum-contaminated soils described in Section 4.0, materials contaminated with hazardous waste are not accepted for disposal at the site.

### **3.6 FILL PROGRESSION AND PHASING**

The *Year 2011 Site Development Plan* (Ausenco 2011) and associated updates describe the general fill progression concept and show the fill progression grading plans. The *Year 2011 Site Development Plan* (Ausenco 2011) is maintained at the landfill operations office.

## 4.0 SPECIAL WASTE MANAGEMENT

### 4.1 IDENTIFYING AND CHARACTERIZING WASTES WHICH REQUIRE SPECIAL MANAGEMENT

The pre-screening program specified in Section 3.3 used to characterize waste prior to delivery also identifies wastes requiring special handling or management. As required by the Solid Waste Disposal Site Permit No. 306 (DEQ 2010), the following non-hazardous, solid wastes require special handling:

- Asbestos
- Cleanup Materials Contaminated by Hazardous Substances
- Construction, Demolition, and Land-Clearing Debris (CDL)
- Electronic waste
- Household Hazardous Waste
- Industrial Waste Dust
- Paper Mill Sludge
- Treated Infectious Waste
- Large Animal Carcasses
- Tires
- Petroleum-contaminated soil (PCS)
- Solidified leachate concentrate - Concentrated leachate from the on-site leachate treatment plant is mixed with ash, cement, or other materials so that it passes the paint filter test before disposal into the landfill. Refer to the *Special Waste Report, Leachate Concentration Solidification* (Thiel 1997a) maintained at the landfill operations office for a description of the process.

### 4.2 IDENTIFYING THE SOURCES OF SPECIAL WASTES

Generators of special wastes are required to complete and submit a waste profile for approval prior to delivery of the waste in accordance with the pre-screening program in Section 3.3. Waste profiles identify the source of the special waste and are maintained at the landfill operations office. An example copy of the waste profile form is in Appendix B.

### 4.3 HANDLING PROCEDURES FOR SPECIAL WASTES

#### 4.3.1 Asbestos

Friable asbestos is accepted at the landfill only if it is properly contained and labeled in accordance with U.S. EPA guidelines. Prior to delivery of friable asbestos, the generator notifies landfill personnel that regulated (friable) asbestos is being delivered for disposal and completes



the pre-screening approval process specified in Section 3.3.

Non-friable asbestos is not regulated and can be disposed with other solid waste directly. Non-friable means asbestos-containing material that, when dry, cannot be crumbled, disintegrated, or reduced to powder by hand pressure or by the forces expected to act on the material in the course of disposal.

Friable asbestos containment must be in a leak-tight container or leak-tight wrapping. Each container must have the following or similar label:

DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD

Friable asbestos is disposed of in a dedicated asbestos area approved by DEQ September 22, 2004. The DEQ approved asbestos disposal area plans have been added to the *Year 2011 Site Development Plan* (Ausenco Vector 2011). Off-loading and disposal of friable asbestos must be performed under the direction and supervision of landfill personnel in a manner that prevents rupture of the asbestos containers. The asbestos is covered with twelve inches of soil within 24 hours; except for burrito wrapped asbestos which DEQ has approved covering once per week. DEQ's approval is maintained at the landfill operations office.

#### **4.3.2 PCS**

PCS is unloaded in the commercial area of the tipping pad. There are no special handling procedures for PCS. The PCS material is often used for daily cover.

#### **4.3.3 Solidified Concentrate**

The concentrated leachate from the treatment plant is thickened to pass the paint filter test in a cement truck and delivered to the landfill as a slurry. Operating procedures are described in the *Special Waste Report, Leachate Concentration Solidification* (Thiel 1997a).

#### **4.3.4 Cleanup Materials Contaminated by Hazardous Substances**

Non-hazardous waste from contaminated sites, approved in accordance with Section 3.3, is managed in accordance with OAR 340-093-170 and is unloaded in the commercial area.

#### **4.3.5 Treated Infectious Waste**

Treated infectious waste categorized by ORS 459.386 as biological waste; cultures and stocks; and sharps may be accepted for disposal in the landfill if it is not otherwise classified as a hazardous waste. Treatment may include incineration, autoclaving, or other means of sterilization approved by the Oregon Health Division.

Treated infectious waste and sharps are special wastes requiring pre-screening and approval prior to delivery as specified in Section 3.3. Pre-screening shall also include generator certification that the infectious waste has been properly treated in accordance with Oregon Health Division requirements.

Sharps accepted for disposal shall be in intact, non-compacted rigid, leak proof, puncture resistant red containers that are tightly lidded to prevent loss of the contents. ORS 459.395(4) requires sharps containers, as described above, to be disposed of in a segregated area of the landfill. Sharps are placed, without compaction, in a segregated area of the landfill and covered with waste or soil to ensure the sharps are contained and to minimize potential worker exposure. Sharps disposal area locations are documented in the landfill operating record. Disturbance of the sharps disposal areas shall be minimized and be performed under planned procedures using appropriate worker protection to control the disturbed waste and potential worker exposure.

Treated infectious waste and sharps containers are covered with sufficient waste or soil to minimize potential worker exposure.

#### **4.3.6 Large Animal Carcasses**

Handling and disposal of dead animals are described in Section 3.4.

#### **4.3.7 Electronic Waste**

Oregon's 2007 Electronics Recycling Law prohibits any person from disposing of computers, monitors and televisions (collectively known as "covered electronic devices" or CEDs) after January 1, 2010. It also prohibits solid waste disposal facility operators from knowingly accepting these devices for disposal after that date, and requires disposal site operators to implement a program to prevent acceptance of these devices for disposal. The following elements make up the program for this company's disposal site.



### **Gate Operations**

The following measures will be taken to discourage delivery of CEDs to the facility for disposal and to identify CEDs that arrive for disposal.

1. Signage:
  - a. Signs are posted at the entrance of the landfill alerting all customers of the disposal ban and/or modifications will be made to existing signs for already existing banned items. The sign(s) indicate that the following CEDs are prohibited from disposal:
    - i. A computer monitor of any type having a viewable area greater than four inches measured diagonally;
    - ii. A desktop computer or portable computer; or
    - iii. A television of any type having a viewable area greater than four inches measure diagonally.
2. Inspection of Incoming Loads:
  - a. The scale house staff will:
    - i. Ask the customer if there are any prohibited materials, including CEDs, in the load;
    - ii. Enumerate the entire list of excluded materials for anyone appearing to be unsure or careless in responding;
    - iii. Observe the load for indications of prohibited wastes; and
    - iv. Notify an equipment operator or other designated employee if suspicious of customer or load.
  - b. If e-waste is found in a load destined for disposal, the following measures will be implemented to determine where the e-waste originated:
    - i. Question the driver about the material, if available, and direct the driver to the nearest e-waste drop off location for recycle or reuse.
    - ii. If customer is not available but source of e-waste can be determined, contact customer if there are repeated violations to inform the customer of the disposal ban in order to prevent e-waste in future loads.
    - iii. If no ownership can be established, segregate the waste and haul to the designated e-waste drop off location for recycle or reuse.

### **Management Practices**

The following procedures will be taken for safely managing CEDs received for disposal.

1. Whole or Intact CPDs:
  - a. Whole or intact CEDs found for disposal will be safely removed and transported,

where practical, to the on-site or off-site designated e-waste location and placed in sturdy, secure containers such as Gaylords or on pallets which will be periodically reloaded into trucks for transport to recycling facilities. The Gaylord containers and pallets will be secured to minimize damage during shipping.

- b. Containers which include any Cathode Ray Tubes (CRTs) not destined for reuse will be labeled ("CRTs for recycling"), stored and shipped according to the CRT regulations.
- c. A whole or intact CED destined for disposal will not be removed from the disposal site if the safety of any transfer station employee is jeopardized, as determined by the on-site supervisor.

## 2. Broken Cathode Ray Tubes (CRTs) CRTs and CRDs:

When broken CEDs or CRTs are found for disposal the following procedures will be implemented:

- a. Broken CRTs: A CRT is broken if the glass is broken or the vacuum seal has been released. These should be managed as used, broken CRTs and, if possible, the following procedures should be taken.
  - i. Segregate and remove the waste in a safe manner. For example, clean up of broken CRTs at transfer stations or material recovery facilities includes:
    - a. Using appropriate protective equipment to protect personnel, carefully scoop up the material using stiff paper and place into glass jar with a metal lid or in a double sealed plastic bag.
    - b. Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.
    - c. Wipe the area clean with damp paper towels or disposable wet wipes. Place towels in the glass jar or plastic bag.
  - ii. Store and prepare for shipment by placing CRTs in suitable containers to prevent release of hazardous constituents and label the container with the words "Broken CRTs for Recycling," as required by the CRT regulation.
  - iii. Ship in accordance with CRT regulation.
    - a. Broken CEDs (i.e. computer towers and other non-CRTs): The CED will be safely removed, where feasible, and placed in the designated onsite or off-site e-waste location for recycling or reuse.

## 3. Severely Damaged CEDs:

A CED is too severely damaged to be reused or recycled when either 1) it cannot be identified as a CED, 2) the CED is no longer "whole or intact", or 3) removal of the CED for reuse or recycling places the safety of the customer or transfer station employee at risk. Severely



damaged CEDs will be disposed of in a way that poses the least amount of risk to the transfer station customers and its employees.

### **Training**

The following is a description of the training program for employees who will/may come in contact with CEDs in the employee's normal course of operations. This training will be conducted with such employees annually and at the hiring of such employees.

1. **Recordkeeping:** Provide each employee with a copy of the "E-Waste Disposal Ban" Section of the Operations Plan. Have employees read, sign, and date a copy of the "E-Waste Disposal Ban" Section of the Operations at the end of employee training.
2. **Identification of CEDs:** Show employees, either with a picture or visual, a whole desktop, portable computer, television, and monitor, both flat-screen and cathode ray tube (CRT), with a viewable area greater than four inches measure diagonally.
3. **Inspection of Incoming Loads:** Tell employees what questions to ask of customers with incoming loads (refer them to the "Gate Operations" section of addendum).
4. **Handling incoming CEDs:** Tell employees how to handle CEDs that are found for disposal by reading the "Management Practices" section of this addendum and answering any questions employees may have about the procedures.
5. **Cleaning Up Broken CEDs:** Show employees how to properly clean up broken CEDs, as outlined in the "Management Practices" section of the operations plan.

#### **4.3.8 Other Special Wastes**

Procedures and methods respective of the potential hazards, characteristics, and delivery means of the special wastes are used to handle and dispose of the waste in accordance with the permit conditions.

### **4.4 DOCUMENTATION OF SPECIAL WASTE CHARACTERIZATION AND MANAGEMENT**

#### **4.4.1 Asbestos**

Asbestos is placed in the dedicated asbestos disposal areas approved by DEQ. The asbestos disposal areas, including the asbestos expansion area approved by DEQ in 2004, are included in the *Year 2011 Site Development Plan* (Ausenco Vector 2011).

Records of asbestos management are compiled and maintained at the landfill operations office. The quantities of asbestos received and the signed waste shipment record are maintained for at least three years. Within 30 days of asbestos receipt, a copy of the signed waste shipment record is sent to the generator by the operations office. Asbestos quantities are reported

annually to the DEQ.

#### **4.4.2 PCS**

Records of PCS shipment are maintained at the landfill operations office. PCS waste receipts are reported quarterly to the DEQ, including information on quantity, the generator identities, and types of contamination.

#### **4.4.3 Solidified Concentrate**

The operator records the number of loads of solidified concentrate delivered to the landfill. Records of solidified concentrate loads are maintained at the landfill operations office.

#### **4.4.4 Other Special Wastes**

Waste profiles and records of other special wastes accepted for disposal are maintained at the landfill operations office.

### **5.0 ANCILLARY OPERATIONS**

#### **5.1 HANDLING AND REMOVAL OF WASTE TIRES**

The Coffin Butte Landfill does not accept whole tires for disposal. Tires discovered in the fill are removed by the landfill operators, stored in drop boxes, and hauled to an approved facility.

#### **5.2 MANAGEMENT OF TRANSFER CONTAINERS**

Transfer containers are used for white (metal) goods, recyclables, and for waste unloaded at the public convenience area. When the white goods and recyclable containers are full, they are hauled off site, taken to the appropriate recycling facility, and replaced by empty containers. Containers/transfer trailers loaded with waste from the public convenience area are hauled to the landfill working face and unloaded by landfill personnel.

#### **5.3 RECYCLABLES COLLECTION**

Collection of recyclable materials is provided at the public drop-off recycling area located at the landfill entrance. Containers are provided for source separated recyclable materials.



## 6.0 INSPECTION AND MAINTENANCE

### 6.1 TRUCK WASHING EQUIPMENT TRUCK-WASHING IS NOT PERFORMED AT THE SITE.

### 6.2 LFG SYSTEM

The operation and maintenance of the LFG collection system is summarized in the *Operation and Maintenance Manual* (Ausenco Vector 2011) and described in detail in the *Operation and Maintenance Manual for the Landfill Gas System* (EMCON 1995).

Minimum monitoring requirements for the landfill gas collection system are stipulated in the *Oregon Title V Operating Permit No. 02-9502* (DEQ 2005) and the *Operation and Maintenance Manual for the Landfill Gas System* (EMCON 1995).

Landfill gas probes and landfill buildings are monitored for methane as described in the *Environmental Monitoring Plan* (TC 2005).

### 6.3 LEACHATE MANAGEMENT SYSTEM

The operation and maintenance of the Leachate management system is described in detail in the *Operation and Maintenance Manual* (Ausenco Vector 2011).

Monitoring and reporting requirements for the Leachate system are described in the *Solid Waste Disposal Site Permit No. 306* (DEQ 2010), Section 17.5. Additional monitoring requirements for the secondary leak detection system are described in the *Environmental Monitoring Plan* (TC 2005).

### 6.4 SURFACE WATER CONTROL SYSTEM

Storm water runoff from the landfill is permitted under a NPDES Storm Water Discharge Permit for the landfill. The NPDES permit and the associated *Storm Water Pollution Control Plan* (TC 2006) describe the monitoring requirements, reporting requirements, site controls, inspections, and best management practices used at the landfill to manage storm water runoff.

The *Year 2011 Site Development Plan* (Ausenco Vector 2011) presents a master storm water control plan drawing, a summary of the major infrastructure requirements for storm water management, and the storm water controls that will be in place at final closure of the facility. Most of the controls will be developed incrementally throughout the life of the landfill and include perimeter drainage ditches, sedimentation basins, and incremental construction of final cover ditches and downdrains.



## 6.5 ENVIRONMENTAL MONITORING

The environmental monitoring program for the landfill is described in the *Environmental Monitoring Plan* (TC 2005). The environmental monitoring plan is maintained at the landfill operations office.

## 6.6 FACILITIES

Site facilities not included in inspections in other documents shall be visually inspected to identify items needing cleanup, general maintenance, or repair. Requisite preventative and corrective maintenance will be completed as needed by manufacturer representatives, contractors, or qualified company personnel. Site facilities include:

- Fences and gates
- Roads
- Scale facility
- Landfill operations office
- Septic system
- Fuel tank
- Site lighting
- Signs

## 6.7 EQUIPMENT

Pre-operation inspections will be performed at the beginning of each day prior to use. No inspection is necessary if the equipment is not used. The inspections, necessary repair orders, and maintenance records will be documented maintained in the landfill operations office. Example forms are included in Appendix B of the *Operations and Maintenance Manual* (BLES April 2006). Repairs are made by manufacturer's representatives, contractors, or company personnel.

Scheduled preventative maintenance activities are performed on the equipment in accordance with manufacturer and company recommendations.

## 7.0 OPERATING RECORD

Consistent with the requirements of 40 CFR, Part 258, the operating record for the landfill is kept in one place at the landfill operations office. It contains the following:

- Demonstration that the site meets location restrictions are contained in the *Year 2011 Site Development Plan, Coffin Butte Landfill* (Ausenco Vector 2011).
- Inspection records, training procedures, and notification procedures included in the waste-screening program
- LFG-monitoring results
- Documentation that the site meets the bottom-liner design requirements for a municipal solid waste landfill in the State of Oregon
- Annual water quality monitoring results
- Documentation related to closure and post-closure care of the site
- Financial assurance documentation
- All facility permits

## **8.0 CONTINGENCY**

### **8.1 FIRE PROTECTION**

In case of fire the following actions are taken:

- The landfill operations manager and site supervisor are notified.
- An assessment is made as to whether the landfill can expose and douse the fire using site equipment or whether fire department help is required.
- If it is decided that help is needed, the Fire Department is contacted.
- Appropriate actions are taken to divert traffic and customers away from fire fighting activities.
- The DEQ is notified of the event.

### **8.2 NOTIFICATION OF EMERGENCIES TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY**

Emergencies regarding fire or leachate excursions are reported to the DEQ. The DEQ contact number is (503)378-8240.

### **8.3 SPILL RESPONSE**

The Oregon Emergency Response System (OERS) shall be notified (1-800-452-0311) of reportable spills occurring on site. The OERS phone number shall be clearly posted around the facility. Reportable spills include:

- Any amount of oil to waters of the state;
- Oil spills on land in excess of 42 gallons;

- Hazardous materials equal to, or greater than, the quantity listed on 40 CFR Part 302.

When reporting a spill the following information will be needed:

- Type of oil or hazardous material • Quantity
- Location of spill (land or water)
- Names and phone numbers

Spills shall be cleaned up regardless of the quantity spilled. The following actions shall be taken:

- Move away or upwind from the spill if an odor is detected
- Avoid contact with liquid and fumes
- Keep non-emergency people out of the area
- Wear protective clothing
- Control and contain the spill
- Clean up what you can immediately, and then continue with long-term cleanup
- Document appropriate disposal of contaminated materials. DEQ may be contacted if disposal assistance is needed.
- A report shall be filed with DEQ for reportable spills. The reporting form is available on DEQ's web site.
- OAR 340-142 specifies oil and hazardous materials emergency response requirements.

## 9.0 REFERENCES

The following references were current at the time this document was prepared and may be updated/revised in the future. The latest versions are maintained at the landfill operations office.

Ausenco Vector. 2011. *Year 2011 Site Development Plan, Coffin Butte Landfill*, Prepared for Valley Landfills, Inc, by Ausenco Vector, Grass Valley, California, November 2011.

Ausenco Vector. 2011. *Operation and Maintenance Manual, Coffin Butte Landfill*, Benton County, Oregon. Prepared for Valley Landfills, Inc. by Ausenco Vector, Grass Valley, California, November 2011.

DEQ. 2010. *Solid Waste Disposal Site Permit No. 306, Coffin Butte Landfill*, Issued to Valley Landfills, Inc., Oregon Department of Environmental Quality, Salem, Oregon, November 24, 2010.

DEQ. 1999. *Solid Waste Disposal Site Permit No. 306, Coffin Butte Landfill*, Issued to Valley Landfills, Inc., Oregon Department of Environmental Quality, Salem, Oregon, March 9, 1999.



DEQ. 2005. Oregon Title V Operating Permit No. 02-9502, Issued to Valley Landfills, Inc., Oregon Department of Environmental Quality, Salem, Oregon, July 27, 2005.

EMCON. 1995. Operation and Maintenance Manual for the Landfill Gas System at the Coffin Butte Landfill Prepared for Valley Landfills, Inc. by EMCON, October 23, 1995.

Golder. 2006. Spill Prevention Control and Countermeasure (SPCC) Plan, Coffin Butte Landfill, Prepared for Valley Landfills by Golder Associates, Inc., Coeur'd Alene, Idaho, March 22, 2006.

LFG&E. 2003. Triton Light Candle Flare Package, Operation and Maintenance Manual, Coffin Butte Landfill Gas Flare, Model TLCF-2000, Prepared for Valley Landfills, Inc. by LFG&E International, El Cajon, CA, 2003.

TC. 2005. Environmental Monitoring Plan, Coffin Butte Landfill, Benton County, Oregon. Prepared for Valley Landfills, Inc. by Tuppan Consultants LLC, Lake Oswego, Oregon, December 16, 2005.

TC. 2006. Storm Water Pollution Control Plan, Coffin Butte Landfill Benton County, Oregon. Prepared for Valley Landfills, Inc. by Tuppan Consultants LLC, Lake Oswego, Oregon, April 2005.

Thiel. 1997a. Special Waste Report, Leachate Concentration Solidification, Coffin Butte Landfill. Report and design dated prepared for Valley Landfills, Inc. by Thiel Engineering, Oregon House, California, December 16, 1997.

Thiel. 1997b. Pilot Plan for Landfall Biodegradation Enhancement through Leachate Irrigation over Waste, Coffin Butte Landfill. Prepared for Valley Landfills, Inc. by Thiel Engineering, Oregon House, California, December 16, 1997.

Thiel. 2000. Year 2000 Site Development Plan, Coffin Butte Landfill, Prepared for Valley Landfills, Inc. by Thiel Engineering, Oregon House, California, February 29, 2000.

Thiel. 2004. Asbestos Fill Plan Expansion update to the Year 2000 Site Development Plan, Coffin Butte Landfill, Prepared for Valley Landfills, Inc. by Thiel Engineering, Oregon House, California, July 2, 2004.

VLI. 1998. Operations and Maintenance Manual, Leachate Treatment System. Report submitted to DEQ Water Quality Department dated August 11, 1998.

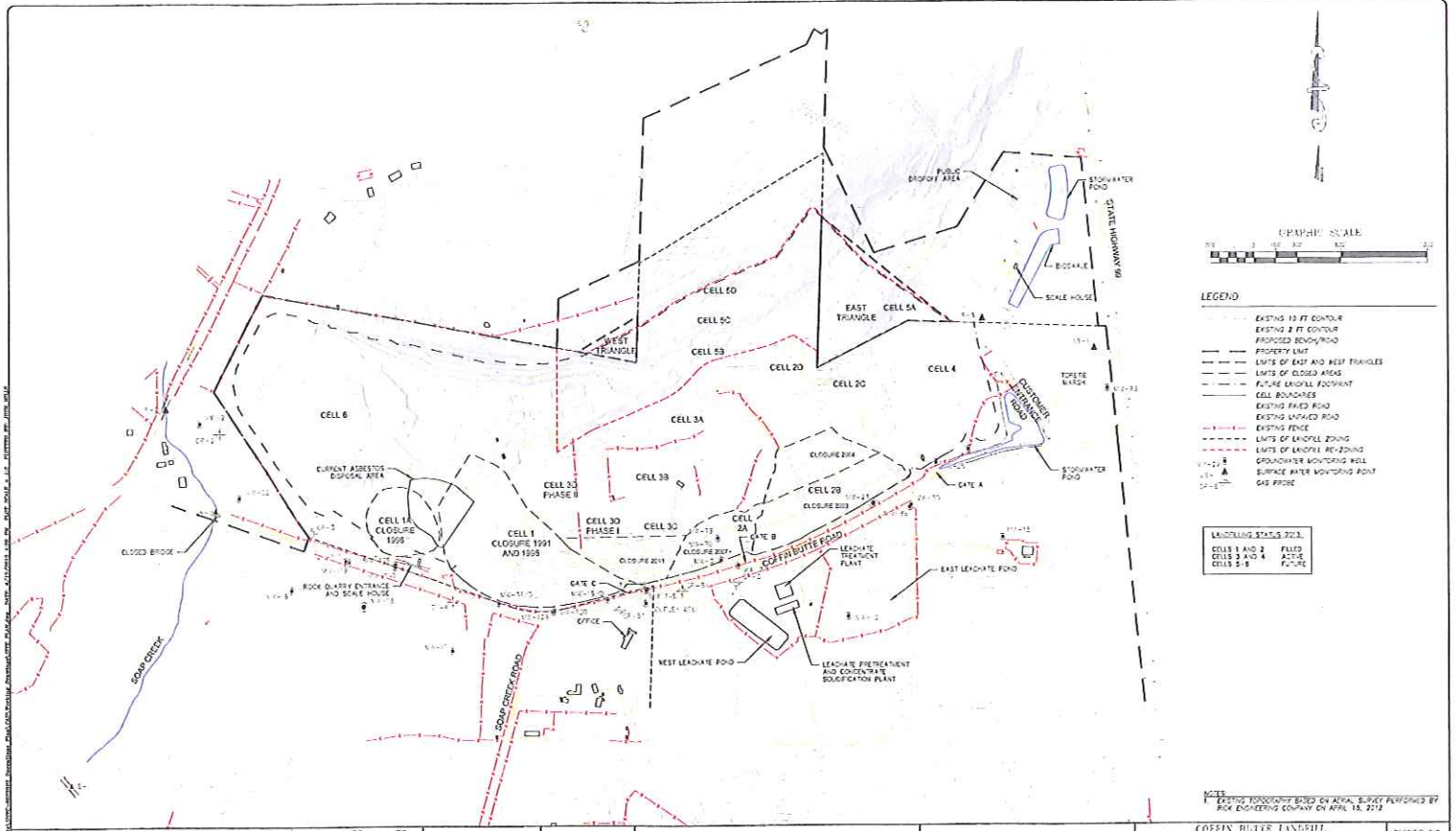
Annual Leachate Report, Submitted annually by Valley Landfills, Inc., Corvallis, Oregon to DEQ.



**APPENDIX A**

**SITE PLAN**





NO.	DATE	DESCRIPTION	DESIGN BY	CHECKED BY	APPROVED BY
1	12/13/12	ISSUED AS PER PERMIT UPDATE	JM	DR	FR
2					
3					
4					
5					
6					
7					
8					
9					
10					

DATE OF PERMITS RENEWED:  
 DESIGNED BY: J.P.B.  
 DRAWN BY: J.P.B.  
 CHECKED BY: J.P.B.  
 APPROVED BY: J.P.B.

**Geo-Logic ASSOCIATES**

**VALLEY LANDFILLS, INC.**

**COFFIN BUTTE LANDFILL**  
**OPERATION PLAN**  
 BENTON COUNTY, OREGON

**SITE PLAN & EXISTING CONDITIONS**

FIGURE NO. **1**  
 PROJECT NO. 2013-1224

ISSUED AS 2013 PERMIT UPDATE



**APPENDIX B**

**EXAMPLE GENERATOR WASTE PROFILE FORM**





Requested Disposal Facility: 4125 Coffin Butte LF OR

Waste Profile #
-----------------

Saveable fill-in form. Restricted printing until all required (yellow) fields are completed.

**I. Generator Information**

Sales Rep #:
--------------

Generator Name:			
Generator Site Address:			
City:	County:	State: -- Select a State --	Zip:
State ID/Reg No:	State Approval/Waste Code: (if applicable)		NAICS # :
Generator Mailing Address (if different):			
City:	County:	State: -- Select a State --	Zip:
Generator Contact Name:		Email:	
Phone Number:	Ext:	Fax Number:	

**IIa. Transporter Information**

Transporter Name:		Contact Name:	
Transporter Address:			
City:	County:	State:	Zip:
Phone:	Fax:	State Transportation Number:	

**IIb. Billing Information**

Bill To:		Contact Name:	
Billing Address:		Email:	
City:	State:	Zip:	Phone:

**III. Waste Stream Information**

Name of Waste:	
Process Generating Waste:	
Type of Waste: <input type="checkbox"/> INDUSTRIAL PROCESS WASTE <input type="checkbox"/> POLLUTION CONTROL WASTE	
Physical State: <input type="checkbox"/> SOLID <input type="checkbox"/> SEMI-SOLID <input type="checkbox"/> POWDER <input type="checkbox"/> LIQUID	
Method of Shipment: <input type="checkbox"/> BULK <input type="checkbox"/> DRUM <input type="checkbox"/> BAGGED <input type="checkbox"/> OTHER:	
Estimated Annual Volume:	-- Select Volume Type --
Frequency: <input type="checkbox"/> ONE TIME <input type="checkbox"/> ANNUAL	
Disposal Consideration: <input type="checkbox"/> LANDFILL <input type="checkbox"/> SOLIDIFICATION <input type="checkbox"/> BIOREMEDIATION	

**IV. Representative Sample Certification**

NO SAMPLE TAKEN

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent rules?		<input type="checkbox"/> YES or <input type="checkbox"/> NO
Sample Date:	Type of Sample: <input type="checkbox"/> COMPOSITE SAMPLE <input type="checkbox"/> GRAB SAMPLE	
Sample ID Numbers:		



Waste Profile #

**V. Physical Characteristics of Waste**

Characteristic Components	% by Weight (range)
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Color	Odor (describe)	Does Waste Contain Free Liquids? <input type="checkbox"/> YES or <input type="checkbox"/> NO	% Solids	pH:	Flash Point _____ °F
-------	-----------------	---	----------	-----	-------------------------

**Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Chain of Custody and Required Parameters Provided for this Profile**

Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and it epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm)[reference 40 CFR 261.23(a)(5)]?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Is this waste a reactive or heat generating waste?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Does the waste contain sulfur or sulfur by-products?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Is this waste generated at a Federal Superfund Clean Up Site?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Is this waste from a TSD facility, TSD like facility or consolidator?	<input type="checkbox"/> Yes or <input type="checkbox"/> No

**VI. Certification**

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services Inc.

<div style="border: 1px solid black; height: 20px; width: 100%; background-color: yellow; margin-bottom: 5px;"></div> <p style="text-align: center; margin: 0;">Authorized Representative Name And Title (Type or Print)</p>	<div style="border: 1px solid black; height: 20px; width: 100%; background-color: yellow; margin-bottom: 5px;"></div> <p style="text-align: center; margin: 0;">Company Name</p>
<div style="border: 1px solid black; height: 20px; width: 100%; background-color: yellow; margin-bottom: 5px;"></div> <p style="text-align: center; margin: 0;">Authorized Representative Signature</p>	<div style="border: 1px solid black; height: 20px; width: 100%; background-color: yellow; margin-bottom: 5px;"></div> <p style="text-align: center; margin: 0;">Date</p>



**APPENDIX C**

**ALTERNATIVE DAILY COVER PROGRAM**

**ALTERNATE DAILY COVER PROGRAM  
COFFIN BUTTE LANDFILL**

**BENTON COUNTY, OREGON**

---

**APRIL 2013**

**PROJECT NO. 2013.A029**

**PREPARED FOR:**

**Valley Landfill, Inc.  
28972 Coffin Butte Road  
Corvallis, OR 97330  
541-745-5792**

**PREPARED BY:**

**Geo-Logic Associates  
143E Spring Hill Drive  
Grass Valley, CA 95945  
530-272-2448**



**TABLE OF CONTENTS**

**1.0 BACKGROUND..... 2**

**2.0 ADC MATERIALS ..... 2**

**3.0 ADC USAGE ..... 3**

**3.1 ASH..... 3**

**3.2 MUNICIPAL RECOVER FACILITY (MRF) SHAKER FINES..... 4**

**3.3 PETROLEUM CONTAMINATED SOIL..... 4**

**3.4 SYNTHETIC TARPS ..... 5**

**4.0 REPORTING ..... 6**



## 1.0 BACKGROUND

The Coffin Butte Landfill is currently using alternate daily cover (ADC) to cover the active working face of the waste at the site due to a soil deficiency. This ADC program is being established to fulfill the requirements of Addendum No. 1 to the Solid Waste Disposal Permit No. 306 issued by DEQ to the operator and owner on November 29, 2012.

DEQ has promulgated regulations (OAR 340-83 through 98) that allow the use of ADC at solid waste landfills. More specifically OAR 340-94-040(8) provides the requirements related to the use of daily cover and demonstrated ADCs.

Site specific demonstration projects at various landfills throughout Oregon and other western US states have shown that specific ADC materials can be used as a suitable daily cover (e.g. in lieu of soil) if used in accordance with ADC standards established in OAR 340-94-040 and CFR, Part 258, Subpart C of the United States Federal Regulations for municipal waste landfills.

Included within this program are:

- The descriptions of the ADC qualified material accepted,
- Typical daily disposal cell construction dimensions,
- Daily cover procedures, and
- Operational procedures for measuring and documenting ADC usage

## 2.0 ADC MATERIALS

For the purposes of this Program, site specific demonstration projects are no longer required for the following ADC Materials that are currently being used at the site:

- Recovered Incinerator Ash from the Marion County Cogeneration Facility
- Shaker Fines from the WRI Municipal Recover Facility (MRF)
- Petroleum Contaminated Soil (PCS)
- Geosynthetic Fabric or Panel Products (Blankets/Tarps)

In addition, the following ADC materials maybe used in the future at the site as approved by DEQ.

- Treated Auto Shredder Waste ,
- Sludge and Sludge-Derived Materials,
- Spent Refractory,

- Spray Applied Foam,
- Shredded Roofing Materials, and
- Other Processed Construction and Demolition Waste Materials.

Where applicable, these other ADC materials will be handled in a similar fashion to those materials currently in use. Some materials may require different storage, placement, and handling procedures which will be developed as needed and included as future revisions to this ADC Program.

### **3.0 ADC USAGE**

The above listed approved ADC materials may be used at the Coffin Butte Landfill in accordance with the site Permit #306 and subsequent addenda as approved by the DEQ. As other approved ADCs are used at the landfill, the standard operating procedures for those ADCs will be added to this ADC program and submitted to the regulatory agencies as an amendment.

ADC is used to cover the active working face. During daily operation, the size of the working face is maintained at a size that can be covered by the ADC that is provided. The active working face at the Coffin Butte Landfill is typically about 200 feet by 200 feet in area. The following text discusses of the standard operating procedures for those ADCs currently used at Coffin Butte Landfill.

#### **3.1 ASH**

Ash from the Marion County Cogeneration Facility is used as the primary ADC for daily operations. The hauler provides the landfill with bills of lading and other documents noting the source and type of materials transported when they arrive at the site.

This material is delivered to the landfill in end dumps, belly dumps, or active floor semi-trailers. Upon arrival the trucks are weighed and the quantity recorded within the landfill accounting system. The ash is then dumped near the active working face for ease of placement over the waste.

Once each day's waste has been graded and compacted, the ash is pushed onto the trash surface and compacted to a depth of not less than 6 inches. The area is back-dragged with the blade of the compactor, dozer or other suitable piece of equipment.

Due to its non-cohesive nature, the ash sifts down into the voids of the waste. The unevenness



of the waste also creates thicker zones of ADC ash. Based on these conditions, the total volume of ash used is significantly higher than would be otherwise calculated for a 6-inch thick layer.

Similar to soils at the site, the ash is monitored for windblown dust and other particulates. The surfaces of the piles are misted with the site water truck as necessary to minimize dust issues.

The ash is used as it comes in daily and is not stockpiled. The tonnage of ash used is documented in the operating record via the weigh tickets and accounting system such that it is properly logged in the operating record for calculating credits as a recycled material on the DEQ Solid Waste Disposal Report/Fee Calculation Sheet.

### **3.2 MUNICIPAL RECOVER FACILITY (MRF) SHAKER FINES**

MRF shaker fines are used for ADC when available. Upon delivery, the hauler will provide bills of lading or other documents noting the source and type of materials transported.

This material is delivered to the landfill in end dumps or active floor semi-trailers. Upon arrival the trucks are weighed and the quantity recorded within the landfill accounting system. The shaker fines will then be dumped near the active working face for ease of placement.

Once each day's waste has been graded and compacted, the shaker fines are pushed onto the trash surface and compacted to a depth of not less than 6 inches. The area is back-dragged with the blade of the compactor, dozer or other suitable piece of equipment to promote runoff and reduce infiltration of precipitation into the underlying waste.

Depending on the nature of the shaker fines, it may sift down into the voids of the waste. The unevenness of the waste also creates thicker zones of shaker fines. Based on these conditions, the total volume of shaker fines used maybe significantly higher than would be otherwise calculated for a 6-inch thick layer.

The shaker fines are used as they come in daily and are not stockpiled. The tonnage of shake fines used is documented in the operating record via the weigh tickets and accounting system such that it is properly logged in the operating record for calculating credits as a recycled material on the DEQ Solid Waste Disposal Report/Fee Calculation Sheet.

### **3.3 PETROLEUM CONTAMINATED SOIL**

Petroleum contaminated soil is an accepted waste for the site and is used for ADC when

available within the regional market. Prior to delivery, these materials are provided with appropriate data reports that include results of analyses (if applicable) proving the material meets the requirements for the site permits and Oregon ADC standards.

This material is delivered to the landfill in end dumps, belly dumps, or active floor semi-trailers. Upon arrival the trucks are weighed and the quantity recorded within the landfill accounting system. The ash will then be dumped near the active working face for ease of placement.

Once each day's waste has been graded and compacted, the PCS is pushed onto the trash surface and compacted to a depth of not less than 6 inches. The area is back-dragged with the blade of the compactor, dozer or other suitable piece of equipment to promote runoff and reduce infiltration of precipitation into the underlying waste.

Depending on the nature of the soil, the PCS may sift down into the voids of the waste. The unevenness of the waste also creates thicker zones of PCS. Based on these conditions, the total volume of PCS used maybe significantly higher than would be otherwise calculated for a 6-inch thick layer.

The PCS is monitored for windblown dust and other particulates. The surface of the piles will be misted with the site water truck as necessary to minimize dust issues.

The PCS is used as they come in daily and are not stockpiled. The tonnage of PCS used is documented in the operating record via the weigh tickets and accounting system such that it is properly logged in the operating record for calculating credits as a recycled material on the DEQ Solid Waste Disposal Report/Fee Calculation Sheet.

### **3.4 SYNTHETIC TARPS**

Currently synthetic tarps are used as an ADC only as needed and when there is insufficient other ADC or soil at the site. The ADC tarps are placed over the exposed refuse that has not been covered by other ADC. The tarp panels are placed on the exposed refuse face in the evening using landfill equipment and/or employees hand pulling the tarps. When more than one panel is utilized, tarps are placed and overlapped as necessary.

The ADC tarps are removed in the same manner and stored away from the active face. Laborers are instructed to take care removing the tarps so as to minimize dragging of waste off the working face. Any waste incidentally dragged by the tarp is picked up and placed back in the



working face. In the event that high winds are expected, the tarps are secured in place with used tires, soil ballast or equivalent to prevent wind uplift.

At the start of each operating day, the cover is inspected for signs of damage that might have occurred during the night. Damage or excessive wear is reported to the Site Manager and appropriate repairs made in accordance with standard procedures. Typically minor tears of less than 2 inches in length do not require repair. Tears larger than 2 inches in length having the potential for worsening are field repaired. Standard field repair procedures include sewing or "zip-tying" rips that may occur in the panels. Spare tarps are available on-site in the event the Site Manager deems a tarp un-repairable. If an ADC tarp shows extreme wear or is damaged beyond repair, it is disposed of, and replaced with a new tarp.

#### 4.0 REPORTING

The ADC usage (other than tarps) must be measured and documented in accordance with the DEQ-approved operations plan and Addendum No. 1 to the Solid Waste Disposal Permit #306. This information is required to accurately complete the Solid Waste Disposal Report/Fee Calculation Sheet (Fee Sheet) to be sent quarterly to DEQ.

Each load of ADC material is weighed and documented as it arrives at the site. A digital log is kept showing the date of arrival, material type, supplier, and weight of the load. The digital record keeps a running tally of each type of ADC material imported and used. At the end of each quarterly reporting period, the information is gathered and the DEQ Fee Sheet is completed.

As noted, imported ADC is typically used the day it arrives on site. In the event that there are any ADC materials not used at the end of the quarterly reporting period (from the previous day's import), the operator will measure the remaining amount of material, calculate the unused tonnage, and subtract it from the quarterly digital sum. The calculation of the subtracted amount will be documented and kept in the operating record of the landfill for future review as needed.