



State of Utah

GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

Department of  
Environmental Quality

Alan Matheson  
*Acting Executive Director*

DIVISION OF SOLID AND  
HAZARDOUS WASTE  
Scott T. Anderson  
*Director*

**Solid and Hazardous Waste Control Board**

Kevin Murray, *Chair*  
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Jeff Coombs, *MPH, LEHS*  
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Dwayne Woolley  
Scott T. Anderson  
*Executive Secretary*

June 15, 2015

Greg Jensen, Landfill Manager  
Uintah County  
152 East 100 North  
Vernal, UT 84078

RE: Uintah County Class I and IVa Municipal Landfill Permit

Dear Mr. Jensen:

The 30-day public comment period for the Uintah County Class I and IVa municipal landfill permit ended on June 4, 2015. No comments were received.

Enclosed is Permit #9516R1, which is effective June 15, 2015 and expires on June 15, 2025. A public notice of the permit issuance will appear in the local newspaper.

If you have any questions, please call Doug Taylor at (801) 536-0240.

Sincerely,

Scott T. Anderson, Director  
Division of Solid and Hazardous Waste

STA/DT/kl

Enclosure: Permit (DSHW-2015-004989), Attachments 1-9 (DSHW-2015-004232,  
DSHW-2015-003764, DSHW-2015-003765, DSHW-2015-003766)

c: Chet Hovey, P.E., Advanced Environmental Engineering  
Jordan Mathis, Health Officer, Tri-County Health Department  
Darrin Brown, LEHS, Environmental Health Director, Tri-County Health Department  
Scott Hacking, P.E., DEQ District Engineer

DSHW-2015-006348

**DIVISION OF SOLID AND HAZARDOUS WASTE  
CLASS I / IVa SOLID WASTE PERMIT**

**Uintah County Class I and IVa Municipal Landfill**

Pursuant to the provisions of the *Utah Solid and Hazardous Waste Act*, Title 19, Chapter 6, Part 1, Utah Code Annotated (Utah Code Ann.) (the Act) and the *Utah Solid Waste Permitting and Management Rules*, Utah Administrative Code R315-301 through 320 adopted thereunder, this Permit is issued to

Uintah County as owner and as operator  
(Permittee)

to own, construct and operate the Uintah County Class I and IVa Municipal Landfill located in the southeast quarter of the southwest quarter of Section 17, Township 4 south, Range 22 east, Salt Lake Base and Meridian, Uintah County, Utah as shown in the Permit Renewal Application that was determined complete on January 15, 2015; tracking numbers DSHW-2014-010759; DSHW-2015-001144, and DSHW-2015-001677.

The Permittee is subject to the requirements of R315-301 through 320 of the Utah Administrative Code and the requirements set forth herein.

All references to R315-301 through 320 of the Utah Administrative Code are to regulations that are in effect on the date that this permit becomes effective.

This Permit shall become effective June 15, 2015.

This Permit shall expire at midnight June 15, 2025.

Closure Cost Revision Date: June 15, 2020.

Signed this 15<sup>th</sup> day of June, 2015.



Scott T. Anderson, Director  
Division of Solid and Hazardous Waste

## FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME: Uintah County Class I and IVa Municipal Landfill

OWNER NAME: Uintah County

OWNER ADDRESS: 2801 East 500 North, Vernal, Utah 84078

OWNER PHONE NO.: (435) 789-6018

OPERATOR NAME: Uintah County

OPERATOR ADDRESS: 152 East 100 North, Vernal, Utah 84078

OPERATOR PHONE NO.: (435) 789-6018

TYPE OF PERMIT: Class I and IVa Municipal Landfill

PERMIT NUMBER: 9516R1

LOCATION: The landfill is located in Township 4 south, Range 22 east, Section 17, SLMB Uintah County, Lat. 40° 27' 54", Long. 109° 28' 20". The address of the facility is 2801 East 500 North, Vernal, Utah.

PERMIT HISTORY Permit renewal signed June 15, 2015

The term "Permit" as used in this document is defined in R315-301-2(55) of the Utah Administrative Code. The term "Director" as used throughout this permit means the Director of the Division of Solid and Hazardous Waste.

The renewal application for the Uintah County Landfill Class I / IVa Municipal Landfill Permit dated August 2014, Document # DSHW-2014-010759, was deemed complete on the date shown on the signature page of this Permit. All representations made in the attachments are part of this Permit and are enforceable under R315-301-5(2) of the Utah Administrative Code. Where differences in wording exist between this Permit and the Attachments, the wording of this Permit supersedes that of the Attachments.

This Permit consists of the signature page, Facility Owner/Operator Information Section, Sections I through V and all attachments to this Permit.

The landfill facility described in this Permit consists of Class I disposal cells, Class IVa disposal cells and dead animal disposal cells.

Compliance with this Permit does not constitute a defense to actions brought under any other local, state or federal laws. This Permit does not exempt the Permittee from obtaining any other local, state or federal permits or approvals required for operation of the landfill.

The issuance of this Permit does not convey any property rights, other than the rights inherent in this Permit, in either real or personal property or any exclusive privileges other than those inherent in this Permit. This Permit does not authorize any injury to private property or any invasion of personal rights, or any infringement of federal, state or local laws or regulations, including zoning ordinances.

The provisions of this Permit are severable. If any provision of this Permit is held invalid for any reason, the remaining provisions shall remain in full force and effect. If the application of any provision of this Permit to any circumstance is held invalid, its application to other circumstances shall not be affected.

By this Permit, the Permittee is subject to the following conditions.

I. GENERAL COMPLIANCE RESPONSIBILITIES

A. General Operation

The Permittee shall operate the landfill in accordance with all applicable requirements of R315-301 through 320 of the Utah Administrative Code for a Class I and IVa Landfill that are in effect as of the date of this Permit unless otherwise noted in this Permit. Any permit noncompliance or noncompliance with any applicable portions of Utah Code Ann. § 19-6-101 through 125 and applicable portions of R315-301 through 320 of the Utah Administrative Code constitutes a violation of the Permit or applicable statute or rule and is grounds for appropriate enforcement action, permit revocation, modification or denial of a permit renewal application.

B. Acceptable Waste

The Permittee may dispose of the following wastes:

1. Municipal solid waste as defined by R315-301-2(47) of the Utah Administrative Code;
2. Commercial waste as defined by R315-302-2(14) of the Utah Administrative Code;
3. Industrial waste as defined by R315-302-2(35) of the Utah Administrative Code;
4. Construction/demolition waste as defined by R315-302-2(17) of the Utah Administrative Code;
5. Dead animals as defined by R315-315-6 of the Utah Administrative Code;
6. Special waste as allowed by R315-315 of the Utah Administrative Code and authorized in Section III-I of this Permit and limited by this section;
7. Conditionally exempt small quantity generator hazardous waste as specified in R315-303-4(7)(a)(i)(B) of the Utah Administrative Code; and
8. PCBs as specified in R315-315-7(2) of the Utah Administrative Code.
9. Asbestos-containing material in compliance with R315-315-2 of the Utah Administrative Code.

C. Prohibited Waste

The Permittee is prohibited from accepting the following wastes:

1. Except as allowed in Condition I-B.6 above, all hazardous waste as defined by R315-1 and R315-2 of the Utah Administrative Code including the following:
  - a. hazardous waste;
  - b. toxic waste and pathological/infectious waste;
  - c. liquid waste (including paints, septage and sump wastes);
  - d. chemical wastes;
  - e. white goods containing chlorofluorocarbons (CFCs);
  - f. gas cylinders;
  - g. batteries; and
  - h. tires.
2. Containers larger than household size (five gallons) holding any liquid; non-containerized material containing free liquids; or any waste containing free liquids in containers larger than five gallons; or
3. PCBs as defined by R315-301-2 of the Utah Administrative Code, except as allowed in Section I-B (Acceptable Waste) of this Permit.

Any prohibited waste received and accepted for treatment, storage or disposal at the facility shall constitute a violation of this Permit, of Utah Code Ann. § 19-6-101 through 125 and of R315-301 through 320 of the Utah Administrative Code.

D. Inspections and Inspection Access

The Permittee shall allow the Director or an authorized representative of the Director or representatives from the TriCounty Health Department, to enter at reasonable times and:

1. Inspect the landfill or other premises, practices or operations regulated or required under the terms and conditions of this Permit or R315-301 through 320 of the Utah Administrative Code;
2. Have access to and copy any records required to be kept under the terms and conditions of this Permit or R315-301 through 320 of the Utah Administrative Code;
3. Inspect incoming waste loads as outlined in Attachment 6; and
4. Create a record of any inspection by photographic, video, electronic, or any other reasonable means.

E. Noncompliance

If monitoring, inspection or testing indicates that any permit condition or any applicable rule under R315-301 through 320 of the Utah Administrative Code may be or is being violated, the Permittee shall promptly make corrections to the operation or other activities to bring the facility into compliance with all permit conditions or rules.

In the event of noncompliance with any permit condition or violation of an applicable rule, the Permittee shall promptly take all action reasonably necessary to correct the noncompliance or violation and mitigate any risk to the human health or the environment. Actions may include eliminating the activity causing the noncompliance or violation and containment of any waste or contamination using barriers or access restrictions, placing of warning signs or permanently closing areas of the facility.

The Permittee shall:

1. Document the noncompliance or violation in the daily operating record on the day the event occurred or the day it was discovered;
2. Notify the Director by telephone within 24 hours or the next business day following documentation of the event; and
3. Provide written notice of the noncompliance or violation and a description of measures taken to protect human health and the environment within seven days after notification of the Director.

Within 30 days after documenting the event, the Permittee shall submit to the Director a written report describing the nature and extent of the noncompliance or violation and a complete description of all of the remedial measures taken or to be taken to protect human health and the environment and to eliminate the noncompliance or violation. Upon receipt and review of the assessment report, the Director may order the Permittee to perform additional appropriate remedial measures including development of a site remediation plan for approval by the Director.

In an enforcement action, the Permittee may not claim as a defense that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with R315-301 through 320 of the Utah Administrative Code and this Permit.

F. Revocation

This Permit is subject to revocation if the Permittee fails to comply with any condition of the Permit. The Director shall notify the Permittee in writing prior to any proposed revocation action and such action shall be subject to all applicable hearing procedures established under R305-7 of the Utah Administrative Code and the Utah Administrative Procedures Act.

G. Attachment Incorporation

Attachments to this Permit are incorporated by reference into this Permit and are enforceable conditions of this Permit, as are documents incorporated by reference into the attachments. Language in this Permit supersedes any conflicting language in the attachments or documents incorporated into the attachments.

II. DESIGN AND CONSTRUCTION

A. Design and Construction

The Permittee shall construct any landfill cell, sub-cell, run-on diversion system, runoff containment system, waste treatment facility, leachate handling system or final cover in accordance with the design submitted in accordance with the R315-301 thru 320 of the Utah Administrative Code and Attachment 1.

B. Run-On and Run-Off Control

The Permittee shall construct drainage channels and diversions as specified in the Permit Application and shall maintain them at all times to effectively prevent run-off from the surrounding area from entering the landfill.

C. Alternative Design

The Permittee has demonstrated through geologic, hydrogeologic, climatic, waste stream information and other factors that the landfill will not contaminate ground water and is approved for the alternative design as outlined in the Permit Application. Any contamination of ground water resulting from operation of the landfill may result in the revocation of this alternative design approval.

III. LANDFILL OPERATION

A. Operations Plan

The Permittee shall keep the Operations Plan included in the Attachment 2 on site at the landfill or at the location designated in Section III-H of this Permit. The Permittee shall operate the landfill in accordance with the Operations Plan. If necessary, the Permittee may modify the Operations Plan, provided that the modification meets all of the requirements of R315-301 through 320 of the Utah Administrative Code and is as protective of human health and the environment as the Operations Plan approved as part of this Permit and is approved by the Director as a minor modification under R315-311-2(1)(a) of the Utah Administrative Code. The Permittee shall note any modification to the Operations Plan in the daily operating record.

B. Security

The Permittee shall operate the Landfill so that unauthorized entry to the facility is restricted. The Permittee shall:

1. Lock all facility gates and other access routes during the time the landfill is closed;

2. Have at least one person employed by the Permittee at the landfill during all hours that the landfill is open; and
3. Construct all fencing and any other access controls as shown in Attachment 3 to prevent access by persons or livestock by other routes.

C. Training

The Permittee shall provide training for all onsite personnel in landfill operation, including waste load inspection, hazardous waste identification and personal safety and protection. Training shall be conducted as outlined in the Section 5 of the Operations Plan in Attachment 2.

D. Burning of Waste

Intentional burning of solid waste is prohibited and is a violation of R315-303-4(2)(b) of the Utah Administrative Code.

The Permittee shall extinguish all accidental fires as soon as possible and immediately take all necessary steps to ensure protection of human health and the environment.

E. Daily Cover

The Permittee shall completely cover the solid waste received at the landfill at the end of each working day with a minimum of six inches of earthen material. The Permittee may use an alternative daily cover material when the material and the application of the alternative daily cover meets the requirements of R315-303-4(4)(b) through (e) of the Utah Administrative Code.

F. Ground Water Monitoring

The ground water monitoring requirement for the Uintah County Class I and IVa Landfill has been waived in accordance with R315-308-1(3) of the Utah Administrative Code as included in Attachment 4.

G. Gas Monitoring

The Permittee shall monitor explosive gases at the landfill in accordance with the Gas Monitoring Plan contained in Attachment 5 and shall otherwise meet the requirements of R315-303-3(5) of the Utah Administrative Code.

If the concentrations of explosive gases at any of the facility structures, at the property boundary or beyond the property boundary exceed the standards set in R315-303-2(2)(a) of the Utah Administrative Code, the Permittee shall:

1. Immediately take all necessary steps to ensure protection of human health and notify the Director;



2. Within seven days of detection, place in the daily operating record the explosive gas levels detected and a description of the immediate steps taken to protect human health;
3. Implement a remediation plan that meets the requirements of R315-303-3(5)(b) of the Utah Administrative Code; and
4. Submit the plan to, and receive approval from, the Director prior to implementation.

#### H. Waste Inspections

The Permittee shall visually inspect incoming waste loads to verify that no wastes other than those allowed by this Permit are disposed in the landfill as outlined in Attachment 6. The Permittee shall conduct a complete waste inspection at a minimum frequency of 1 % of incoming loads, but no less than one complete inspection per day. Loads to be inspected shall be selected on a random basis.

The Permittee shall inspect all loads suspected or known to have one or more containers capable of holding more than five gallons of liquid to ensure that each container is empty.

The Permittee shall inspect all loads suspected to contain a waste not allowed for disposal at the landfill.

The Permittee shall conduct the daily complete random inspections as follows:

1. The Permittee shall conduct the random waste inspection at the working face or an at an area designated by the Permittee for load inspections;
2. The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;
3. Loads shall be spread by equipment or by hand tools;
4. Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste;
5. The personnel conducting the inspection shall record the results of the inspection on the waste inspection form in Attachment 6. The Permittee shall place the form in the daily operating record at the end of the operating day; and
6. The Permittee shall properly dispose of any waste not acceptable at the facility at an approved disposal site for the waste type and handle the waste according to the rules covering the waste type.

#### I. Disposal of Special Wastes

If a load of incinerator ash is accepted for disposal, the Permittee shall transport it to the place of disposal in such a manner as to prevent leakage or the release of fugitive dust. The Permittee shall completely cover the ash with a minimum of six inches of material or use other methods or material, as necessary, to control fugitive dust. The Permittee may

use ash for daily cover when its use does not create a human health or environmental hazard.

The Permittee may dispose of animal carcasses at the landfill working face and shall cover them with other solid waste or earth by the end of each operating day. Alternatively, the Permittee may dispose of animal carcasses in a special trench or pit prepared for the acceptance of dead animals. If a special trench is used, the Permittee shall cover animals placed in the trench with six inches of earth by the end of each operating day.

The Permittee shall handle and dispose of asbestos waste in accordance with R315-315-2 of the Utah Administrative Code.

**J. Self Inspections**

The Permittee shall inspect the facility to prevent malfunctions and deterioration, operator errors and discharges that may cause or lead to the release of wastes or contaminated materials to the environment or create a threat to human health or the environment. The Permittee shall complete these general inspections no less than quarterly and shall cover the following areas: Waste placement, compaction, cover, cell liner; leachate systems, fences and access controls, roads, run-on/run-off controls, ground water monitoring wells, final and intermediate cover; litter controls and records.

The Permittee shall place a record of the inspections in the daily operating record on the day of the inspection. The Permittee shall correct the problems identified in the inspections in a timely manner and document the corrective actions in the daily operating record.

**K. Recordkeeping**

The Permittee shall maintain and keep on file at Uintah County offices, a daily operating record and other general records of landfill operation as required by R315-302-2(3) of the Utah Administrative Code. The landfill operator or other designated personnel shall date and sign the daily operating record at the end of each operating day. Each record shall contain the signature of the appropriate operator or personnel and the date signed. The daily operating record shall consist of the following two types of documents:

1. Records related to the daily landfill operations or periodic events including:
  - a. The number of loads of waste and the weight or estimates of weights or volume of waste received and recorded at the end of each operating day;
  - b. Major deviations from the approved plan of operation, recorded the day the deviation occurred;
  - c. Results of monitoring required by this Permit, recorded in the daily operating record on the day of the event or the day the information is received; and
  - d. Records of all inspections conducted by the Permittee including the results of the inspections and any corrective actions required or taken.

2. Records of a general nature including:
  - a. A copy of this Permit, including all attachments;
  - b. Results of inspections conducted by representatives of the Director or representatives of the local Health Department, when forwarded to the Permittee;
  - c. Closure and post-closure care plans; and
  - d. Records of employee training.

L. Reporting

The Permittee shall prepare and submit to the Director an Annual Report as required by R315-302-2(4) of the Utah Administrative Code. The Annual Report shall include the period covered by the report, the annual quantity of waste received, an annual update of the financial assurance mechanism, a re-application for approval of the financial assurance mechanism, any leachate analysis results, all ground water monitoring results, the statistical analysis of ground water monitoring results, the results of gas monitoring, the quantity of leachate pumped and all training programs completed.

M. Roads

The Permittee shall improve and maintain all access roads within the landfill boundary that are used for transporting waste to the landfill for disposal. The roads shall be improved and maintained as necessary to ensure safe and reliable all-weather access to the disposal area.

N. Litter Control

Litter resulting from all operations of the landfill shall be minimized. The Permittee shall implement the following procedures when high wind conditions are present in addition to the litter control plans found in Attachment 8:

1. Reduce the size of the tipping face;
2. Reduce the number of vehicles allowed to discharge at the tipping face at one time;
3. Orient vehicles to reduce wind effects on unloading and waste compaction;
4. Reconfigure tipping face to reduce wind effect;
5. Use portable and permanent wind fencing as needed; and
6. Should high winds present a situation in which the windblown litter cannot be controlled, cease operations of the landfill until the winds diminish.

IV. CLOSURE REQUIREMENTS

A. Closure

The Permittee shall install final cover of the landfill as shown in the Attachment 9. The final cover shall meet, at a minimum, the standard design for closure as specified in the R315-303-3(4) of the Utah Administrative Code plus sufficient cover soil or equivalent material to protect the low permeability layer from the effects of frost, desiccation, and root penetration. The Permittee shall submit to the Director a quality assurance plan for construction of the final landfill cover and approval of the plan shall be received from the Director prior to construction of any part of the final cover at the landfill. A qualified person not affiliated with the Permittee or the construction contractor shall perform permeability testing on the recompacted clay placed as part of the final cover.

B. Title Recording

The Permittee shall meet the requirements of R315-302-2(6) of the Utah Administrative Code by recording a notice with the Uintah County Recorder as part of the record of title that the property has been used as a landfill. The notice shall include waste disposal locations and types of waste disposed. The Permittee shall provide the Director with a copy of the recorded notice.

C. Post-Closure Care

The Permittee shall perform post-closure care at the closed landfill in accordance with the Post-Closure Care Plan in Attachment 9. Post-closure care shall continue until all waste disposal sites at the landfill have been stabilized and the finding of R315-302-3(7)(c) of the Utah Administrative Code has been made.

D. Financial Assurance

The Permittee shall adequately fund and maintain the currently approved financial assurance mechanism(s) to provide for the cost of closure and post-closure at anytime during the life of the landfill. The Permittee shall keep the approved financial assurance mechanism funded unless an alternative mechanism is approved or the Permittee is released from financial assurance requirements in accordance with the provisions of R315-309-11 of the Utah Administrative Code.

The Permittee shall notify the Director of the establishment of the approved financial assurance mechanism and shall receive acknowledgment from the Director that the established mechanism complies with the approved method.

E. Financial Assurance Annual Update

The Permittee shall submit an annual revision of closure and post-closure costs for inflation and financial assurance funding to the Director as part of the annual report as required by R315-309-2(2) of the Utah Administrative Code.

F. Closure Cost and Post-Closure Cost Revision

The Permittee shall submit a complete revision of the closure and post-closure cost estimates by the Closure Cost Revision Date listed on the signature page of this Permit and any time the facility is expanded, any time a new cell is constructed or any time a cell is expanded.

## V. ADMINISTRATIVE REQUIREMENTS

### A. Permit Modification

Modifications to this Permit may be made upon application by the Permittee or by the Director. The Permittee shall be given written notice of any permit modification initiated by the Director.

### B. Permit Transfer

This Permit may be transferred to a new permittee or new permittees by complying with the permit transfer provisions specified in R315-310-11 of the Utah Administrative Code.

### C. Expansion

This Permit is for a Class I and IVa Landfill. The permitted landfill shall operate according to the design and Operation Plan described and explained in this Permit. Any expansion of the current footprint designated in the description contained in Attachment 1, but within the property boundaries designated in Attachment 1, shall require submittal of plans and specifications to the Director. The plans and specifications shall be approved by the Director prior to construction.

Any expansion of the landfill facility beyond the property boundaries designated in the description contained in Attachment 1 shall require submittal of a new permit application in accordance with the requirements of R315-311-2 and R315-310 of the Utah Administrative Code.

Any addition to the acceptable wastes described in Section I-B shall require submittal of all necessary information to the Director and the approval of the Director.

### D. Expiration

If the Permittee desires to continue operating this landfill after the expiration date of this Permit, the Permittee shall submit an application for permit renewal at least six months prior to the expiration date as shown on the signature (cover) page of this Permit. If the Permittee submits a timely permit renewal application and the permit renewal is not complete by the expiration date, this Permit shall continue in force until renewal is completed or denied.

## **Applicable Attachments**

**Attachment 1 - Landfill Design and Construction Plans**

**Attachment 2 - Operations Plan**

**Attachment 3 - Security**

**Attachment 4 - Groundwater Monitoring**

**Attachment 5 - Gas Monitoring**

**Attachment 6 - Inspections**

**Attachment 7 - Recordkeeping**

**Attachment 8 - Litter Control**

**Attachment 9 - Closure and Post-Closure**

## **Attachment 1.0 - Landfill Design and Construction Plans**

# **1. Landfill Design and Construction Plans including all expansion plans.**

## **4.5 DESIGN APPROACH AND OBJECTIVES**

The landfill expansion was designed to utilize an existing draw and an “area method” of operation. Figure 4.1 shows the location of the closed portions of the landfill, the cells as designed by The Engineering Group, and the other active area on the site.

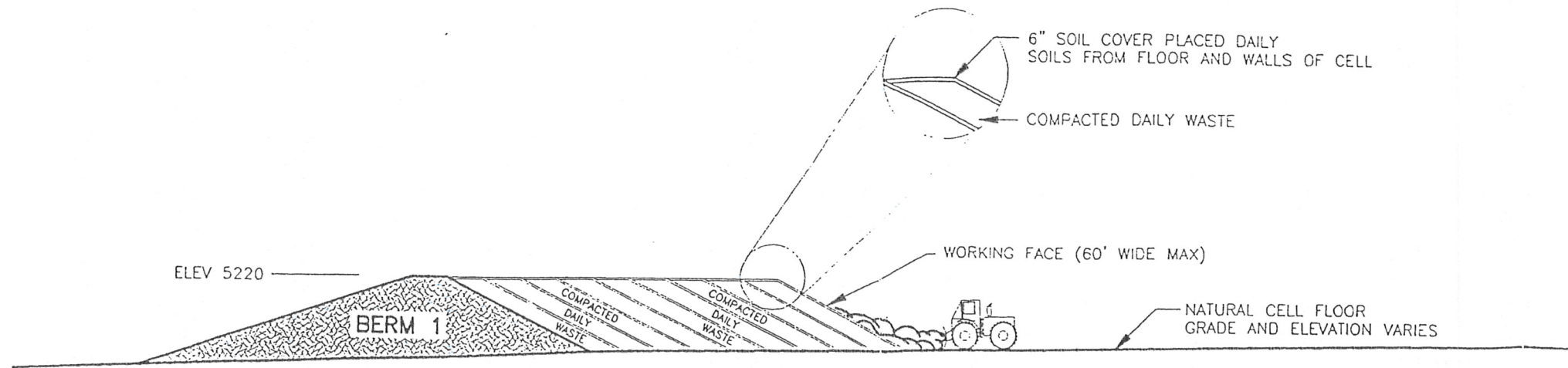
### **4.5.1 General Cell Design**

The original development plan called for four “cells” to be constructed; each atop the proceeding cell as the filling operation proceeded up the draw as shown in Figure 4.1. Each cell would be formed by the floor and walls of the draw and a 20’ high earthen berm between the walls of the draw. The engineering report in Appendix C summarizes the “level” volume, top and floor elevations, berm volume, surface area at full level, and closure surface area of each cell.

Solid waste would be initially placed at the base of the berm and then spread and compacted on the face of the berm as shown in Figure 4.2. At the close of each day, soil cover would be spread over the waste forming the working face for the next day. As filling proceeds, the top elevation of the waste would be held constant to form the floor of the next cell. When a cell is filled, the berm for the next cell would be constructed and the process repeated. Figure 4.3 shows the method used for excavating and covering at the dead animal sites.

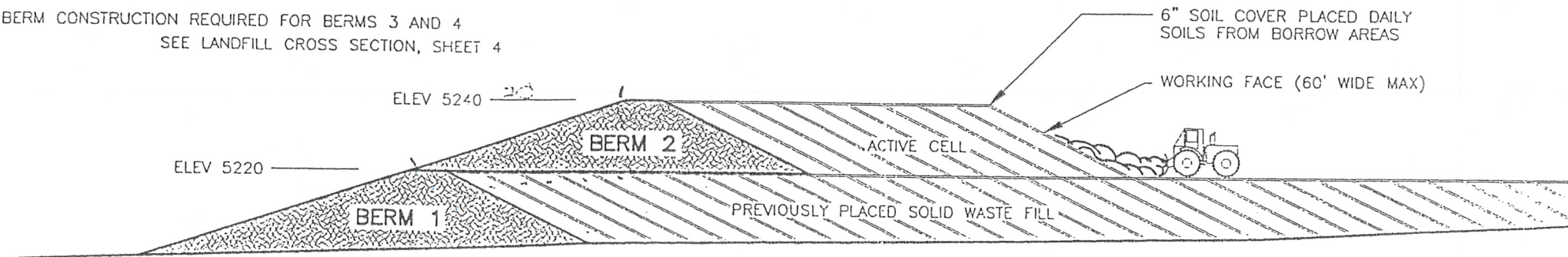




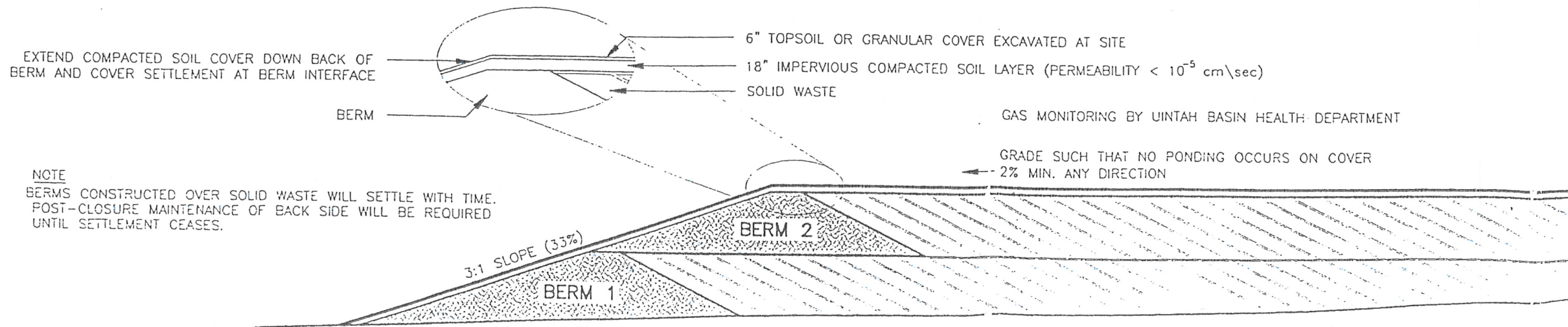


### INITIAL CELL DEVELOPMENT AREA METHOD

SIMILAR BERM CONSTRUCTION REQUIRED FOR BERMS 3 AND 4  
SEE LANDFILL CROSS SECTION, SHEET 4



### SUBSEQUENT CELL DEVELOPMENT AREA METHOD



**NOTE**  
BERMS CONSTRUCTED OVER SOLID WASTE WILL SETTLE WITH TIME.  
POST-CLOSURE MAINTENANCE OF BACK SIDE WILL BE REQUIRED  
UNTIL SETTLEMENT CEASES.

### FINAL CLOSURE

Source: Uintah County Solid Waste  
Landfill Development Plan 1995, Freston,  
Ostler, Vernon & Associates, Inc.

NO.	DATE	REVISION

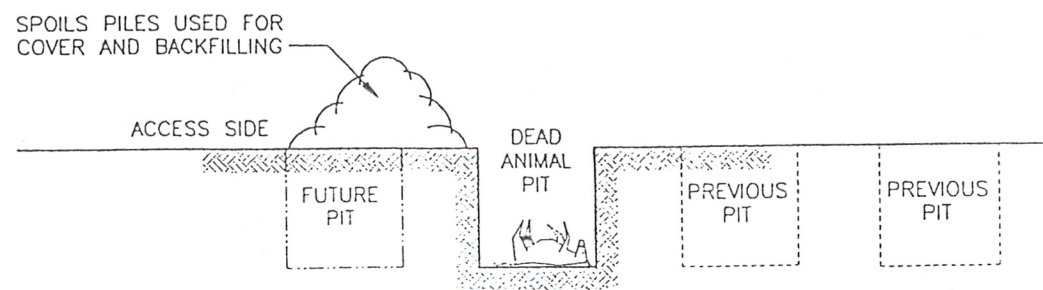
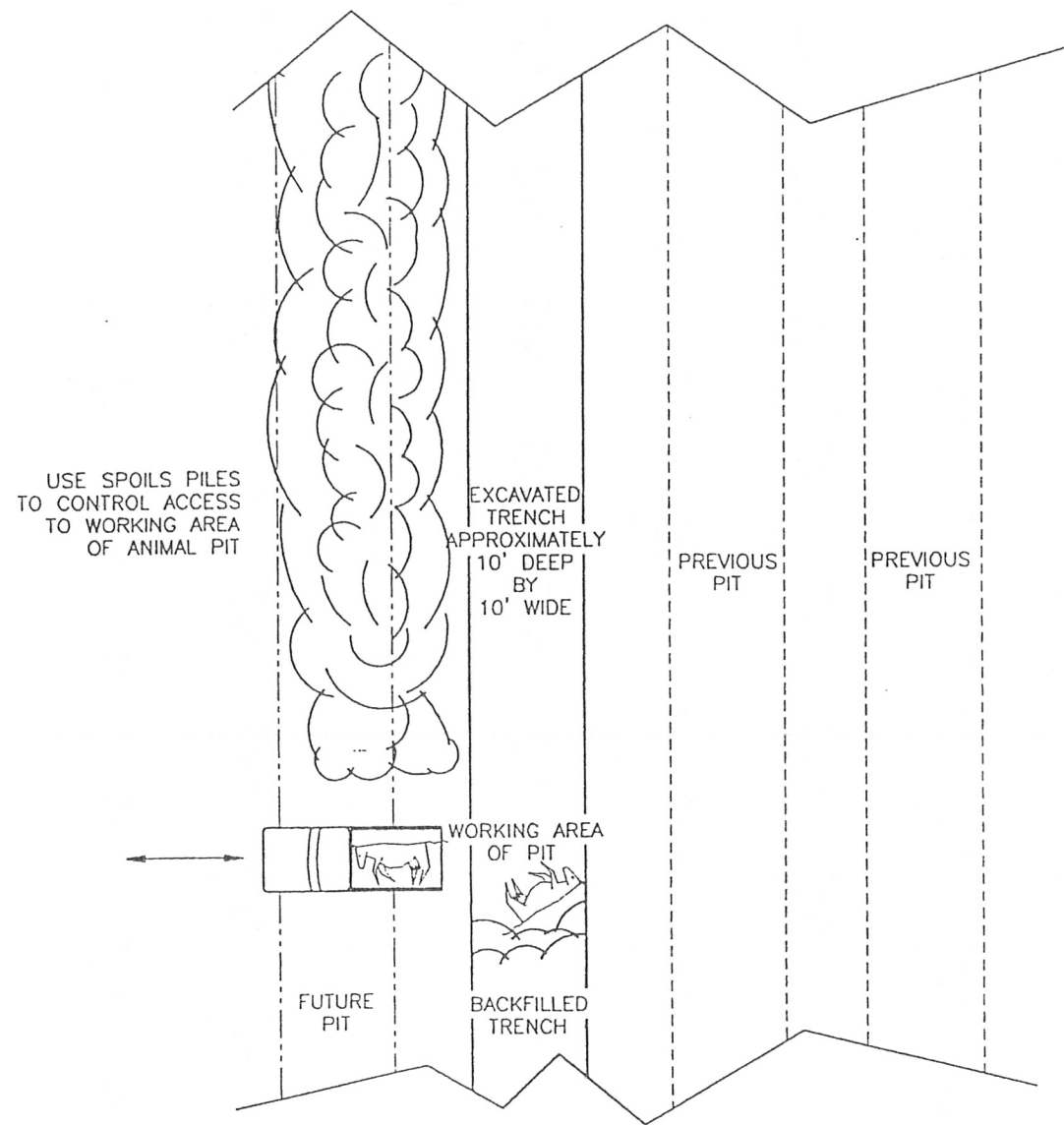
DRAWING IS NOT TO SCALE IF BAR  
DOES NOT MEASURE 1 INCH

UINTAH COUNTY LANDFILL  
 UINTAH COUNTY, UTAH  
 UINTAH COUNTY LANDFILL  
 LANDFILL METHOD DAILY / FINAL COVER

ADVANCED ENVIRONMENTAL ENGINEERING  
 1975 N. MAIN, SUITE #3, LAYTON UTAH 84041  
 PHONE: 801.773.3155 FAX: 801.773.3156

DESIGN:	LV
DRAWN:	RP
CHECKED:	LV
DATE:	2009-02-24

FIGURE:  
**4.2**



NO.	DATE	REVISION

DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1 INCH

**UINTAH COUNTY LANDFILL**  
 UINTAH COUNTY, UTAH  
 LANDFILL METHOD DEAD ANIMAL PIT

**ADVANCED ENVIRONMENTAL ENGINEERING**  
 1975 N. MAIN, SUITE #3, LAYTON UTAH 84041  
 PHONE: 801.773.3155 FAX: 801.773.3156

DESIGN:	LV
DRAWN:	RP
CHECKED:	LV
DATE:	2009-02-24

FIGURE:  
**4.3**

Source: Uintah County Solid Waste Landfill Development Plan 1995, Freston, Ostler, Vernon & Associates, Inc.

## **Attachment 2 - Operations Plan**

## **2. Operations Plan**

### **5.1 PURPOSE**

The purpose of the Plan of Operation (OP) is to provide a written description of the daily operation of the Uintah County Landfill. The wastes accepted at the Uintah County Landfill include any non-hazardous waste as outlined below:

- municipal solid waste
- commercial waste
- industrial waste
- construction/demolition waste
- dead animals
- grease pit and animal waste by products
- special wastes as allowed by UAC R315-315
- conditionally exempt small quantity generator hazardous waste as specified in UAC R315-303-4(7)(a)(i)(B)
- PCB's as specified by UAC R315-315-7(2)

Uintah County Landfill currently receives about 51,000 tons of waste per year. The service area of Uintah County Landfill includes all of Uintah County. Uintah County Landfill is a solid waste management facility incorporating the following operations:

- Municipal solid waste disposal in an area fill method
- Construction, demolition, and similar debris in a separate fill area using trench or area fill methods

A landfill is a dynamic system that undergoes continual development. Changes may occur in quantities of disposed materials, topography of the landfill, demographics of the service area, and administrative or regulatory requirements. These changes would be accomplished to conserve landfill space and protect human health and the environment. The intent of this OP is to provide an accurate description of the daily operations and procedures while allowing for modifications, which may be required to compensate for operational changes.

### **5.2 RESPONSIBILITY AND LOCATION**

The Landfill is owned by Uintah County and Vernal City and is operated and administered by Uintah County. It is located in portions of Section 17, T4S, R22E, SLM, approximately 3 miles East of Vernal. The County Commission has assigned Greg Jensen as Landfill Supervisor. Daily operations of the Landfill are under the management of Mr. Jensen. When he is absent, David Alexander, Assistant Supervisor, may be designated in charge of the landfill.

At the beginning of each working day, the Landfill Supervisor is responsible for informing his operators where to direct the various types of waste for disposal. The operators and/or the Landfill Supervisor are responsible for directing each customer to the proper location for disposal of their waste. The Landfill is attended by an operator or the Landfill Supervisor at all times the Landfill is open.

#### **5.2.1 Equipment**

The Owner is responsible for maintaining the necessary equipment to off-load, spread, compact waste, control dust, and perform other facility operations. In the event that one unit of equipment cannot operate due to maintenance or repair, the other units will be utilized at capacity to push refuse to the working face and to place cover material. In reserve through the County's road department, equipment resources are also available. The landfill currently owns and operates the following equipment:

Compactor - 2008 Bomeg 772  
Loader – 1994 Caterpillar 938F

Loader – 2006 Caterpillar 938G  
Scraper – 1992 Caterpillar 623E  
Dozer – 2006 Caterpillar D7H  
Dozer – 1990 Caterpillar D7  
Grader – 1995 Caterpillar 140G  
Water Truck

### **5.3 ON-SITE SOLID WASTE HANDLING PROCEDURES**

The landfill uses a truck scale for weighing waste loads for commercial compacted loads. For all other loads, the operator at the gate will perform load counts on a daily basis, making a record of the number, type, and maximum volume of each delivery vehicle arriving at the site. This record will identify pick-ups, commercial trucks, and private vehicles.

The Landfill site road is a two-way road. At the entrance gate, the operator in the gatehouse directs vehicles to the appropriate disposal area. The operator at the working face of the cell assists in directing traffic for unloading as necessary. Once dumping is completed each vehicle proceeds out of the site along the two-way road.

The site is operated as an area fill method, with waste being placed at the base of a berm and then spread and compacted on the face of the berm. Waste is then covered with soil.

Incoming waste is deposited at the working face under the direction of the Landfill Supervisor or a designated operator. Refuse is spread in thin layers approximately 1 to 2 feet thick across the working face. At the end of the working day, the operator spreads cover material over the refuse until a layer of soil is achieved to a depth of approximately 6 inches.

### **5.4 MONITORING SCHEDULE**

Appendix F contains the current monitoring Plan. A summary of this plan is listed here. The local health department has agreed to contract with Uintah County and will be responsible for periodic monitoring of landfill gases. If any gas is generated it will be expected to accumulate under areas of the trench which have been filled and covered, and may extend to the sides of the trench. However, due to the size, remote location, and arid nature of the site, high levels of landfill gas is neither expected to be generated nor to migrate off site. The Landfill Supervisor will coordinate activities with the health department to perform gas monitoring on a quarterly basis using a methane detection meter capable of measuring methane at levels below the Lower Explosive Limit for methane. Gas monitoring is to be done near the boundary of the landfill to determine if migration of methane is occurring. Direct readings shall be recorded in a log book.

The landfill does not monitor for leachate. A monitoring sump was previously shown in Figure 4.4. If future conditions would warrant, the sump could be used for monitoring or for leachate collection and an evaporation “treatment” system could be built adjacent to the sump on the cover of Cell 2.

### **5.5 Stormwater Control**

Stormwater run-on will be prevented from entering the active portion of the site due to the strategic placement of a diversion channel designed to redirect the flow of stormwater run-on

### **5.6 ACCESS CONTROL**

The Landfill is open Monday thru Saturday, from 8 am to 5 pm and is closed on Sundays and seven (7) holidays. Fencing and gates will restrict access to the site at all times; the gate is locked when the Landfill is closed. All vehicles must pass through the entry gate which is manned by a Landfill Operator.

## **5.7 SIGNS**

The entrance to the landfill has a sign posted which identifies the landfill, the owner/operator, hours of service, fees, and restrictions. Other signs are or will be posted at the landfill directing traffic flow, providing safety information, and demarcating boundaries of the active sites.

## **5.9 EMERGENCY OPERATIONS PLAN**

A copy of the Emergency Operations Plan is contained in Appendix F. A summary of the plan is listed here. The landfill site currently comprises a total of approximately 200 acres, and in the instance there is an unforeseen event or if on-site roads become impassable, the two cells adjacent to the entrance will be used as emergency disposal cells or the Landfill Supervisor may elect to temporarily close the site. The Class I site may be utilized temporarily in the event the Class IV site becomes inaccessible.

In emergency situations such as a fire or failure of run-off containment system, emergency response teams will be deployed by central dispatch by phoning 911. All personnel at the landfill will receive first aid training. It is expected that approximate response time is 10 minutes from the placement of an emergency call to central dispatch and arrival at the landfill.

## **5.10 CONTINGENCY PLAN**

The Contingency Plan is designed to minimize hazards to human health or the environment from any unplanned sudden or non-sudden discharge to air, soil, surface, or groundwater. The provisions of this plan would be carried out immediately upon an emergency situation or release, which could threaten human health or the environment. Emergency evacuation of the site could be necessary given the nature of the waste materials stored and processed at the site. Incidents at the landfill could be caused by fire, explosion, or toxic vapor generation.

### **5.10.1 Fire or Explosion**

A landfill fire is particularly hazardous due to the presence of discarded household chemicals, paints, fuels, etc. No open fire burning will be intentionally allowed at the site. A fire may be started by spontaneous combustion in refuse containers, but is usually the result of vandalism or disposal of hot coals and ashes. Daily cover effectively prevents fires from spreading throughout the landfill.

If a fire is observed during operation hours, the burning material will be separated from other material and covered with soil. Small fires may be extinguished with fire extinguishers provided in the site vehicles or by using a water truck, if available.

Fires which occur during times that the landfill is closed are more difficult to control due to the time available for the fire to spread. If a fire is reported after hours, the Landfill Supervisor may utilize site equipment to segregate the burning portion and bury the fire with soil. Otherwise, the fire may be allowed to burn itself out, or the local fire department may be called to assist in controlling the blaze.

### **5.10.2 Vehicle Fires**

In the event that a disposal vehicle carrying a burning or smoldering load of waste enters the landfill site:

1. The vehicle should be directed to the designated fire suppression.
2. Once burning waste is removed from the vehicle, the application of cover material by landfill equipment or the application of water by the on-site water truck will be used to extinguish the fire. Suffocation with cover material will be the primary method used to extinguish fire.
3. Vehicles and any equipment in the "fire zone" will be inspected and sprayed with water while working to quench the fire.
4. Precautions should be taken throughout the entire fire-fighting operation including using a hot-spot observer.

5. If, at any time, additional assistance is required, local fire-fighting units will be contacted.

### **5.10.3 Ground Fire / Below Cover Fire**

In the event that waste placed on the ground or waste that was previously covered erupts into fire:

1. It will be isolated from previously deposited waste immediately. This will be done by either moving burning waste to the designated fire suppression area or by concentrating the burning waste in one spot using landfill equipment.
2. Once burning waste is separated from other exposed waste, the fire will be extinguished by the application of cover material by landfill earth moving equipment or the application of water by the on-site water truck. Suffocation using cover material will be the primary method used to extinguish fire.
3. Vehicles and any equipment in the "fire zone" would be inspected and sprayed with water while working to quell the fire.
4. Precautions should be taken throughout the fire-fighting operation, including using a hot-spot observer.
5. If, at any time, additional assistance is required, local fire-fighting units will be contacted.

### **5.10.4 Explosion**

In the event that an explosion should occur at the landfill or in any structure associated with the landfill site:

1. All personnel and equipment in the area, including those in surrounding buildings will be evacuated immediately.
2. All landfill personnel will be accounted for.
3. Local emergency personnel will be contacted.
4. The Landfill Supervisor will be informed of the situation if he/she is not already at the site.
5. The explosion area will be restricted to all personnel until cleared for reentry by local emergency personnel.
6. Precautions should be taken throughout the entire emergency response operations.
7. The Landfill Supervisor will be the only person authorized to make statements to the media.

### **5.10.5 Explosive Gas Release**

Methane gas release would be detected using a methane detection meter capable of measuring methane levels below the 25% Lower Explosion Limit. Gas monitoring would be conducted around the disposal area and in any of the facility structures. Upon detection of explosive gases equal to or above the lower explosion limit, the Owner or Operator would take the following steps:

1. Immediately upon detection, steps would be taken to protect human health. These steps would include accounting for all landfill personnel and moving all equipment and personnel away from the release area, shutdown of any electrical devices that could cause ignition, notify emergency personnel (fire, police) and advise them of the situation, monitor the release area and surrounding areas with a combustible gas indicator and document reading for placement into the operating record, determination of the cause of explosive gas, and keep the area closed until corrective actions are taken.
2. Within 24 hours the Executive Secretary would be notified.
3. Within seven days of detection, the explosive gas levels would be recorded in the operating record along with a description of the steps taken to protect human health.
4. Within 60 days of detection, a remediation plan that had been approved by the Director would be implemented and a copy of the plan placed in the operating record. Upon implementation, the Director would be notified.



### **5.10.6 Failure of Drainage Containment System**

If the containment system were to fail, the following actions would be taken:

1. Construct berms and ditches to divert water around the containment failure area using site soils or readily available materials.
2. Analyze and evaluate the extent of damage to the containment system.
3. Identify the mechanism of failure.
4. If warranted call a qualified professional to discuss possible solutions.
5. Develop and implement corrective actions.

### **5.10.7 Temporary Equipment Breakdown / Extreme Weather Events**

Uintah County owns numerous pieces of equipment that could be promptly mobilized if warranted. If this equipment were not available, rental equipment will be investigated. Should an extreme weather event occur, waste entering the facility would be temporarily stored in the two cells adjacent to the landfill entrance. Haulers would be notified to temporarily stop shipping waste and would be given directions to other nearby landfills. Waste would then be briefly stored in the open cells until the event passed. The open cells near the gate house were designed for adequate storage for temporary extreme events like this.

## **5.11 ALTERNATIVE WASTE HANDLING AND DISPOSAL PLAN**

The Landfill site currently comprises a total of approximately 200 acres, and in the instance there is an unforeseen event or if on-site roads become impassable, the two cells adjacent to the entrance will be used as emergency disposal cells or the Landfill Supervisor may elect to temporarily close the site. The Class I site may be utilized temporarily in the event the Class IV site becomes inaccessible and vice versa.

## **5.12 PROCEDURES FOR CONTROLLING DISEASE VECTORS**

The use of daily cover and the exclusion of specific types of solid waste are necessary to control vectors and the subsequent spread of disease. Special waste such as infectious waste, liquid waste and tires, which may directly carry disease or lead to the propagation of disease vectors, would be immediately covered at the working face. Landfill personnel to the extent possible would inspect the site for signs and indications of disease vectors. If observations were made the Landfill Supervisor would be contacted immediately. If disease vectors were to become a problem, pest control specialists would be contacted to reduce the spread of disease.

## **5.13 PROCEDURES FOR EXCLUDING THE RECEIPT OF HAZARDOUS WASTE**

A “Prohibited Waste” control program designed to detect and deter attempts to dispose of hazardous and other unacceptable waste has been implemented at the Uintah County Landfill Facility. The program is designed to protect the health and safety of employees, customers, and the general public, as well as protect against contamination of the environment. The Landfill Supervisor would be in charge of hazardous waste activities.

The Landfill specifically excludes the following types of waste:

- hazardous waste
- toxic waste and pathological/infectious waste
- liquid waste (including paints, septage and sump wastes)
- chemical wastes
- white goods containing chlorofluorocarbons (CFC's)
- gas cylinders
- batteries
- tires

The person at the gate and the person at the working face is responsible for identification and prohibition of excluded wastes. All employees are trained in methods and techniques for spotting liquid waste, drums, waste in sealed containers, infectious waste, and waste which exhibit unusual odors or markings. All such waste will be refused access to the Landfill; if such waste is discovered on the working face it will be segregated from the other waste pending alternative disposition or disposal as directed by the Landfill Supervisor.

Policies and procedures in place at the landfill include random inspection of loads coming onto the site. Daily inspection sheets include a "red sheet" that indicates which loads will be subject to random inspection. The Landfill Supervisor has the ultimate authority to decide on whether to accept or reject a waste material.

White goods are redirected from the disposal area to a storage area for unloading. These materials may be removed from the site on a periodic basis for recycling or alternative disposal. Construction/demolition and similar debris is directed to the Class IV Landfill for disposal. Dead animal carcasses are directed to a separate pit designated for disposal of such waste and this pit is covered regularly on a daily basis.

The waste disposed at the proposed landfill would be visually inspected prior to final placement. The waste would be inspected at off-site transfer stations and on-site. Further information about each of these inspection locations are listed below:

- The proposed landfill only accepts waste from any transfer stations that have a waste inspection plan approved by the Director. Operators at the transfer stations would visually inspect waste for hazardous materials before loading for transit.
- On-site inspection would be conducted at the working face. Landfill Operators will be trained in the recognition of prohibited waste. A random testing program would be conducted of all waste that has not already been inspected at transfer stations. These inspections would be conducted on one percent of all loads not obtained from transfer stations with a waste inspection plan approved by the Director. A sample form for these inspections has been included in Appendix H. All waste would be visually inspected, as it is being placed, spread and compacted in the cell and upon finding any unacceptable waste the following steps would be taken:
  1. Using landfill equipment such as an excavator or a loader, separate the questionable waste from the other waste in the load. Move the questionable waste away from the operating area of the tipping floor or tipping face so that operations can continue.
  2. Notify the Landfill Supervisor immediately of the problem and the Generator of the waste and wait for direction
  3. Keep all other landfill personnel and equipment away from the questionable wastes until notified by the Landfill Supervisor or his/her designee to do otherwise.
  4. The Landfill Supervisor shall notify the generator of the problem and allow the Generator 24 hours to remove the material from the premises.
  5. If the Generator does not respond in a timely fashion, remove the waste from the Landfill and dispose of it in a facility appropriate for the type of waste. Note the details of all actions in the Operating Record.

#### **5.14 GENERAL TRAINING AND SAFETY PLAN**

Each employee at the landfill facility would be trained to have a working knowledge of the maintenance and operational techniques necessary to operate and maintain the landfill facility in a manner to preserve human health, safety, and the environment. Training would be accomplished through on-the-job training (OJT) and classroom training sessions. The Landfill Supervisor, or a designated professional trainer, would be in charge of directing the training programs. Initial training would be completed within three months of employment followed by an annual review of basic waste management skills.

### **5.14.1 Training Schedule**

The Landfill Supervisor is encouraged to pass the SWANA Manager of Landfill Operations (MOLO) course or equivalent. In addition, operators are encouraged to take one or both of the SWANA training courses: Landfill Operator Training, and Waste Screening or equivalent. Continuing education efforts include the following:

#### **Introductory Training**

##### **Synopsis of solid waste regulations, record keeping, and transporter requirements.**

- Requirement: All Personnel
- Method: OJT
- Review: Quarterly

##### **Policies and Procedures Security, inspections and emergency response.**

- Requirement: All Personnel
- Method: Lecture
- Video Course OJT
- Review: Quarterly

#### **Safety**

##### **Personal protection, hazardous waste recognition, hazardous material handling, emergency response, and first aid.**

- Requirement: All Personnel
- Method: Classroom/Video Course
- Review: Annual

A Safety Training meeting is held once a week taking a minimum of 15 minutes. Training documents would be kept with the Plan of Operation for a rolling five year period.

**Attachment 3 - Security**

### **3. Construction of access controls including fencing,**

#### **4.9 Perimeter Fencing**

A fence is presently installed around the boundary of the site which would impede entry by large animals or the public.

## **Attachment 4 - Groundwater Monitoring**

## **4. Groundwater Monitoring,**

### **4.4.5 Groundwater**

1. The bottom of the proposed landfill would be located approximately 3,000 feet above the highest level of groundwater at the site. The site would be located on the relatively impervious Mancos Formation.
2. The landfill is not located over a sole source aquifer.
3. The proposed landfill would not be located over groundwater classified as IB by the Utah Division of Water Quality.
4. The Total Dissolved Solids (TDS) content of the groundwater in the aquifer below the landfill is estimated to be greater than 10,000 mg/l. The aquifer is located approximately 3,000 feet below the landfill.
5. The landfill is not located in any designated water source protection area, nor within 250 days groundwater travel time to any public water supply source. Hydraulic conductance for the Mancos Formation is typically 10-4 cm/sec which translates to a distance of 7 feet in 250 days.
6. The landfill is located over an area where there is an extreme depth to groundwater, where there is a natural impermeable barrier above the groundwater, and where groundwater is relatively poor quality with high TDS. Exemption of groundwater quality monitoring is proposed.

## **Attachment 5 - Gas Monitoring**



## **5. Gas Monitoring**

### **5.3 SCHEDULE FOR CONDUCTING INSPECTIONS AND MONITORING**

Appendix E contains the current monitoring Plan. A summary of this plan is listed here. The local health department has agreed to contract with Uintah County and will be responsible for periodic monitoring of landfill gases. If any gas is generated it will be expected to accumulate under areas of the trench which have been filled and covered, and may extend to the sides of the trench. However, due to the size, remote location, and arid nature of the site, high levels of landfill gas is neither expected to be generated nor to migrate off site. The Landfill Supervisor will coordinate activities with the health department to perform gas monitoring on a quarterly basis using a methane detection meter capable of measuring methane at levels below the Lower Explosive Limit for methane. Gas monitoring is to be done near the boundary of the landfill to determine if migration of methane is occurring. Direct readings shall be recorded in a log book.

The landfill does not monitor for leachate. A monitoring sump was previously shown in Figure 4.4. If future conditions would warrant, the sump could be used for monitoring or for leachate collection and an evaporation “treatment” system could be built adjacent to the sump on the cover of Cell 2.

## APPENDIX E MONITORING PLAN

The purpose of this monitoring plan is to help prevent problems that may be preventable through identification and prompt remediation efforts. A sample schedule for monitoring and inspection of the landfill facilities to ensure proper operation and maintenance is provided in the Appendix H. Listed below are monitoring guidelines for groundwater monitoring, leachate monitoring and control system, and landfill gas monitoring system.

### 1. Groundwater Monitoring System

There is not a ground water monitoring system at the Uintah County Municipal Landfill because of site conditions listed in the current engineering report. The landfill is exempt from groundwater monitoring.

### 2. Leachate Monitoring and Control System

The Class I Landfill is equipped with a leachate monitoring sump. The station is comprised of a 40' drain providing gravity flow to a centrally located sump positioned at the lowest elevation of Cell 1 and down gradient from Cells 2, 3, and 4. The landfill does not currently monitor for leachate, however, this sump is available for future monitoring if necessary.

### 3. Landfill Gas Monitoring System

The Tri-County Health Department has agreed to contract with Uintah County and will be responsible for quarterly monitoring of landfill gases. If any gas is generated it will be expected to accumulate under areas of the trench which have been filled and covered, and may extend to the sides of the trench. The Landfill Supervisor will coordinate activities with the health department to perform gas monitoring on a quarterly basis using a methane detection meter capable of measuring methane at

levels below the Lower Explosive Limit for methane. Gas monitoring is to be done near the boundary of the landfill to determine if migration of methane is occurring. Gas will be measured by inserting a steel rod into the ground about 50 feet from the edge of the trench, removing the rod and inserting the gas probe. Direct readings shall be recorded in a log book.

## **Attachment 6 - Inspections**

## **6. Waste Inspections**

### **5.7 PROCEDURES FOR EXCLUDING THE RECEIPT OF HAZARDOUS WASTE**

The person at the gate and the person at the working face is responsible for identification and prohibition of excluded wastes. All employees are trained in methods and techniques for spotting liquid waste, drums, waste in sealed containers, infectious waste, and waste which exhibit unusual odors or markings. All such waste will be refused access to the Landfill; if such waste is discovered on the working face it will be segregated from the other waste pending alternative disposition or disposal as directed by the Landfill Supervisor.

Policies and procedures in place at the landfill include random inspection of loads coming onto the site. Daily inspection sheets include a "red sheet" that indicates which loads will be subject to random inspection. The Landfill Supervisor has the ultimate authority to decide on whether to accept or reject a waste material.

White goods are redirected from the disposal area to a storage area for unloading. These materials may be removed from the site on a periodic basis for recycling or alternative disposal. Construction/demolition and similar debris is directed to the Class IV Landfill for disposal. Dead animal carcasses are directed to a separate pit designated for disposal of such waste and this pit is covered regularly on a daily basis.

The waste disposed at the proposed landfill would be visually inspected prior to final placement. The waste would be inspected at off-site transfer stations and on-site. Further information about each of these inspection locations are listed below:

The proposed landfill only accepts waste from any transfer stations that have a waste inspection plan approved by the Director. Operators at the transfer stations would visually inspect waste for hazardous materials before loading for transit.

On-site inspection would be conducted at the working face. Landfill Operators will be trained in the recognition of prohibited waste. A random testing program would be conducted of all waste that has not already been inspected at transfer stations. These inspections would be conducted on one percent of all loads not obtained from transfer stations with a waste inspection plan approved by the Director. A sample form for these inspections has been included in Appendix H. All waste would be visually inspected, as it is being placed, spread and compacted in the cell and upon finding any unacceptable waste the following steps would be taken:

1. Using landfill equipment such as an excavator or a loader, separate the questionable waste from the other waste in the load. Move the questionable waste away from the operating area of the tipping floor or tipping face so that operations can continue.
2. Notify the Landfill Supervisor immediately of the problem and the Generator of the waste and wait for direction
3. Keep all other landfill personnel and equipment away from the questionable wastes until notified by the Landfill Supervisor or his/her designee to do otherwise.
4. The Landfill Supervisor shall notify the generator of the problem and allow the Generator 24 hours to remove the material from the premises.
5. If the Generator does not respond in a timely fashion, remove the waste from the Landfill and dispose of it in a facility appropriate for the type of waste. Note the details of all actions in the Operating Record.

## **Attachment 7 - Recordkeeping**

## **7. Record Keeping**

### **5.15 RECORD KEEPING AND REPORTING**

The Landfill Supervisor shall maintain the following operating records for the landfill:

- Records of inspection and maintenance
- Records of training and notification procedures
- Records of groundwater monitoring
- Records of landfill gas monitoring
- Records of weights and volume of waste received, number of vehicles
- Deviations from the plan of operation
- Records of placement or recirculation of leachate
- Records of any gas condensate
- Prepare an annual report and place the report in the facility's operating record.
- A copy of the permit including the permit application
- Closure and Post-closure care plans
- Results of inspections conducted by representatives of the Utah Solid and Hazardous Waste Control Board and representatives of the Tri-County Health Department when forwarded to the permittee

Sample forms for maintenance and gas monitoring are provided in Appendix H.

## **Attachment 8 - Litter Control**



## **8. Litter Control**

### **5.8 DUST AND LITTER CONTROL**

Dust is controlled by watering of the roadways as necessary. The Landfill Supervisor will be responsible for determining when dust control is warranted.

Litter is caused by refuse being windblown at the working face during unloading and by improper transportation of waste in uncovered vehicles. To control litter at the working face, refuse is spread and compacted upon arrival. On windy days, refuse is to be dumped at or near the base of the working face. Blow fences will not be utilized or needed due to operational contingencies listed above.

Transporting refuse in an open truck without cover is not allowed. Signs located on the road leading to the landfill and at the main gate will indicate that all loads must be covered and a doubling of the fee is possible for not doing so. The operator at the entry gate will report repeat violators to the appropriate authorities.

Litter is not uncommon along the roadways leading to and/or in close proximity to a landfill, but proper operation and effective controls will effectively reduce such litter. Work-release parties from local correctional institutions are utilized for collecting litter in these areas.

## **Attachment 9 - Closure and Post-Closure**

## **9. CLOSURE AND POST-CLOSURE PLANS**

### **6.1 PURPOSE**

Closure activities would be implemented as each module within the disposal cell is completed. These closure activities would minimize the need for further maintenance, and minimize or eliminate the threat to human health and the environment from post-closure escape of solid waste constituents, leachate, contaminated run-off or waste decomposition products to the ground, ground water, surface water, or the atmosphere. A Monitoring Plan has been developed to prevent problems through careful monitoring and inspection. The plan provides details on groundwater monitoring, leachate monitoring, and landfill gas and is included in Appendix E.

### **6.2 FINAL COVER AND GRADING**

The final cover would commence no later than 30 days after the final volume of waste was received in each module and would be completed within 180 days after the beginning of the closure activities.

The waste surface would be prepared so as to be free of irregularities, protrusions, vegetation, excessive water, loose soil or abrupt changes in grade. Drainage channels would be constructed around the cell as indicated by the drawings to help prevent erosion and divert any run-on and run-off in a controlled manor. Berms would be placed and used as needed.

Final cell cover would consist of at least 24 inches of native clay soils which would be placed and compacted over the solid waste. Because of the lack of adequate precipitation for vegetation, a topsoil layer will not be provided on the final cover.

#### **6.2.1 REVEGETATION**

The native soils are cohesive, and once wetted, would dry to a hard crust on the surface. If left undisturbed, dust would not be produced from the crusted surface. Eventually sparse native vegetation, as now occurs on surrounding areas, would establish in the native soil cover.

### **6.3 FINAL INSPECTION**

The Owner or Operator shall notify the Executive Secretary of the Solid and Hazardous Waste Control Board (hereafter called Executive Secretary) of the intent to implement the closure plan 60 days prior to the projected final receipt of waste. The Owner or Operator would commence implementation of the closure plan within 30 days of final volume of waste and the cover would be completed within 180 days. The Owner or Operator then would have 90 days to submit the following items to the Executive Secretary: Closure plan sheets signed by a professional engineer registered in the State of Utah and a certificate from the engineer. The certificate would require a final inspection performed by the engineer to verify that the landfill was in compliance with all closure requirements as outlined in the permit and closure plans. Inspection would include cell cover design, run-on and run-off control, proper final grading to promote run-off, and restriction of access to the site by fencing. No later than 60 days after certification of closure, submit plats and a statement of fact concerning the location of any disposal site would be given to the county recorder

to be recorded as part of the record of title. Proof of record of title then would be submitted to the Executive Secretary.

#### **6.4 OPINION OF PROBABLE COSTS FOR CLOSURE**

The opinion of probable costs for the final closure and post-closure care of the Landfill Facility was prepared by Uintah County to comply with the Financial Assurance requirements, Rule R315-309-3(7)(d), and was submitted with the 2007 Solid Waste Landfill Annual Report. The opinion of probable costs for closure and post closure maintenance of the Landfill was estimated at \$187,532.

#### **6.5 POST-CLOSURE MAINTENANCE**

Contact information for the Post-Closure Care Provider is listed below:

Name: Greg Jensen  
 Address: 152 East 100 North  
 Vernal, Utah 84078  
 Phone: (435) 789-6018

Post-closure care would be conducted in accordance with this Post-Closure Plan. The schedule for post-closure activities would begin on the date of completion of closure of the disposal cell and continue for 30 years, or until the Executive Secretary determined that the disposal unit had become stabilized and human health and the environment were sufficiently protected. The Owner would initiate post-closure activities within six months following completion of closure. Table 6.2 lists a monitoring and inspection schedule for post-closure care.

TABLE 6.1 POST-CLOSURE MONITORING AND INSPECTION SCHEDULE

<b>Task</b>	<b>Schedule</b>
Landfill Gas	Quarterly
Run-on/Run-off	Quarterly
Leachate Collection System	Quarterly
Cover Erosion	Quarterly
Settlement	Quarterly
Fencing	Quarterly
Vegetation	Quarterly

In the event that significant settlement occurred within the closed landfill, the area would be surveyed and additional soil would be obtained from the site and placed in a manner to preserve the design finish grade. Any such soil placed on the unit would not be re-vegetated. Post-closure activities would be financed as outlined in the Financial Assurance Plan. Post-closure care and monitoring would be completed, as determined by the Executive Secretary, when either the 30 year post-closure period was complete, or the unit had stabilized. Upon completion of post-closure care, a post-closure period certificate would be submitted to the Executive Secretary signed by the Owner or Operator.

**APPENDIX H**  
**SAMPLE FORMS**



Landfill Gas Quarterly Monitoring Results  
 Uintah County Municipal Landfill  
 Year \_\_\_\_\_ Quarter \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Name of Gas Sample Collector \_\_\_\_\_

Temperature \_\_\_\_\_ Weather \_\_\_\_\_

Monitoring device should be calibrated prior to initiating sampling.

Accomplished? Yes \_\_\_ No \_\_\_

Methane Monitoring Location	Measured % LEL	<u>Regulatory Action Limit</u> (% LEL)
1. NW Corner Scale/Gate House		25
2. SW Emergency Cell		25
3. SW Cell 1 and Cell 2		25
4. SW Corner Active Cell		25
6. North Boundary		100
7. South Boundary		100

- Gas Sample Collector: If measured % LEL equals or exceeds internal action limit, contact the facility manager.
- Facility Manager: If measured %LEL equals or exceeds regulatory action limit, notify the State Director in compliance with 40 CFR 258.23(c).

Comments:

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QUARTERLY INPECTION LOG  
 Uintah County Municipal Landfill

Area of Inspection	Needs Repair	Date of Repair	Comments
Off-loading Area			
Scale House			
Run-on/Run-off			
Roads			
Harborage			
Leachate Sump			
Perimeter Fencing and Access Gates			
Fugitive Waste collection System			
Fugitive Waste			
Cell			
Date:	Inspector:		

Note: Annual Report due before March 1.



# RANDOM INSPECTION FORM

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Inspected by: \_\_\_\_\_

Load Origin: \_\_\_\_\_

How was the inspection conducted?

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What was found during inspection?

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Is corrective action necessary? If so what?

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