



State of Utah

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*Lieutenant Governor*

Department of  
Environmental Quality

L. Scott Baird  
*Executive Director*

DIVISION OF WASTE MANAGEMENT  
AND RADIATION CONTROL  
Ty L. Howard  
*Director*

January 13, 2020

David Coombs, Mayor  
Town of Manila  
PO Box 189  
Manila, UT 84046

RE: Draft Permit for Manila Class II Landfill

Dear Mayor Coombs:

The Division of Waste Management and Radiation Control has completed its review of the permit renewal request for the Manila Class II Landfill Permit. The permit renewal application has been determined complete.

The required public comment period will begin January 15, 2020 and will end on February 15, 2020. Notice of the public comment period will be published in UB Media on January 15, 2020. Following the public comment period and resolution of any comments, final action will be taken on the draft permit.

Enclosed is a copy of the draft permit and associated attachments for your review.

If you have any questions, please call Roy Van Os at (801) 536-0245.

Sincerely,

T. Allan Moore, Solid Waste Program Manager  
Division of Waste Management and Radiation Control

TAM/RVO/al

Enclosures: Draft Permit (DSHW-2019-016724)  
Attachments (DSHW-2019-016726)

c: Jordan Mathis, Health Officer, Tri-County Health Department  
Darrin Brown, LEHS, Environmental Health Director, Tri-County Health Department  
Nathan Hall, DEQ District Engineer

DSHW-2019-016722

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DIVISION OF WASTE MANAGEMENT  
AND RADIATION CONTROL  
SOLID WASTE LANDFILL PERMIT

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**Manila**  
**CLASS II LANDFILL**

Pursuant to the provision 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, R315-301 through 320 of the Utah Administrative Code adopted thereunder, a Permit is issued to:

Town of Manila  
as owner and operator,

to own, construct, and operate the Class II Manila Landfill located in Daggett County, Utah.

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 \_\_\_\_\_ 2020.

This Permit shall expire at midnight \_\_\_\_\_ 2030.

Closure Cost Revision Date: \_\_\_\_\_ 2025.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

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Ty L. Howard, Director  
Division of Waste Management and Radiation Control

**FACILITY OWNER/OPERATOR INFORMATION**

LANDFILL NAME: Manila Class II Landfill

OWNER NAME: Town of Manila

OWNER ADDRESS: Town of Manila  
PO Box 189  
Manila, UT 84046

OWNER PHONE NO.: (435) 784-3143

TYPE OF PERMIT: Class II Landfill

PERMIT NUMBER: 0804R2

LOCATION: Landfill site is located in NE ¼ NE ¼, N ½ SE ¼ NE ¼ NW ¼, E ½ SW ¼ NE ¼ NW ¼, Section 5, Township 2 North, Range 20 East, Salt Lake Base and Meridian, Lat. 40° 56' 31.39", Long. 109° 41' 52.56", Daggett County, Utah Added August 2, 2015 the following: **BEGINNING** at the north 1/4 section corner of said Section 5 only, monumented with a 1923 GLO brass cap/iron post monument and running thence along the north boundary of said township, N. 89°38'11" E., 201.07 feet to the south 1/4 section corner of Section 32 only of T. 3 N., R. 20 E., Salt Lake Meridian; thence continuing along said north township boundary S. 89°58'36" E., 815.67 feet to a 2015 Forest Service aluminum cap and pipe monument; thence leaving said north township boundary and running S. 56°38'27" W., a distance of 1,216.99 feet to a 2015 Forest Service aluminum cap and pipe monument on the north-south centerline of said Section 5; thence N. 0°01'23" W., 668.26 feet to the **POINT OF BEGINNING**.

PERMIT HISTORY Permit renewed **INSERT DATE SIGNED**

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The term, "Permit," as used in this document is defined in R315-301-2(55) of the Utah Administrative Code. Director as used throughout this permit refers to the Director of the Division of Waste Management and Radiation Control.

The renewal application for the Manila Class II Landfill was submitted on October 1, 2018 which included the original 2003 Permit Application. The Closure and Post-Closure Quality Assurance Plan was dated February, 2017. All representations made in the attachments of this permit are enforceable under R315-301-5(2) of the Utah Administrative Code.

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

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 the facility operation.

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. Nor does this Permit authorize any injury to private property or any invasion of personal rights, nor 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.

## PERMIT REQUIREMENTS

### I. GENERAL COMPLIANCE RESPONSIBILITIES

#### I.A. General Operation

I.A.1. 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 II 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 126 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 termination, modification, or denial of a permit renewal application.

#### I.B. Acceptable Waste

I.B.1. This Permit is for the disposal of non-hazardous solid waste that may include:

I.B.1.a Municipal solid waste as defined by UAC R315-301-2(47) of the Utah Administrative Code;

I.B.1.b Commercial waste as defined by UAC R315-302-2(14) of the Utah Administrative Code;

I.B.1.c Industrial waste as defined by UAC R315-302-2(35) of the Utah Administrative Code;

I.B.1.d Construction/demolition waste as defined by 19-6-102(4), Utah Code Annotated;

I.B.1.e Special waste as allowed by R315-315 of the Utah Administrative Code, and as outlined in Section II-I.

I.B.1.f Conditionally exempt small quantity generator hazardous waste as specified in R315-303-4(7)(a)(i)(B) of the Utah Administrative Code.

I.B.2. The Permittee is limited to an average of 20 tons per day of municipal waste or a service area population of 8900. The daily average shall be determined by dividing the total tons, for facilities with scales, of municipal waste received in a calendar year by 365. For facilities that do not have scales the population served shall be used. If the 20 tons per day average is exceeded or the maximum population served is exceeded, the Permittee shall notify the Director and apply for a new permit for a Class I landfill.

#### I.C. Prohibited Waste

I.C.1. Hazardous waste as defined by R315-1 and R315-2 of the Utah Administrative Code except as allowed in permit condition I-B (Acceptable Waste) above;

- I.C.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;
- I.C.3. PCB's as defined by R315-301-2 of the Utah Administrative Code;
- I.C.4. Incinerator ash from incineration as defined R315-301-2(34); and
- I.C.5. Regulated asbestos-containing material.
- I.C.6. 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 126 and of R315-301 through 320 of the Utah Administrative Code.
- I.D. Inspections and Inspection Access
- I.D.1. The Permittee shall allow the Director or an authorized representative, or representatives from the TriCounty Health Department, to enter at reasonable times and:
  - I.D.1.a 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;
  - I.D.1.b 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;
  - I.D.1.c Inspect any loads of waste, treatment facilities or processes, pollution management facilities or processes, or control facilities or processes required under this Permit or regulated under R315-301 through 320 of the Utah Administrative Code; and
  - I.D.1.d Create a record of any inspection by photographic, video, electronic, or any other reasonable means.
- I.E. Noncompliance
- I.E.1. 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.
- I.E.2. In the event of noncompliance with any permit condition or violation of an applicable rule, the Permittee shall promptly take any 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.
- I.E.3. The Permittee shall:

- I.E.3.a Document the noncompliance or violation in the daily operating record, on the day the event occurred or the day it was discovered;
- I.E.3.b Notify the Director by telephone within 24 hours, or the next business day following documentation of the event; and
- I.E.3.c Give written notice of the noncompliance or violation and measures taken to protect human health and the environment within seven days after notification to the Director.
- I.E.4. Within thirty days after the documentation of the event, the Permittee shall submit a written report to the Director describing the nature and extent of the noncompliance or violation and 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 appropriate remedial measures including development of a site remediation plan for approval by the Director.
- I.E.5. 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.
- I.F. Revocation
- I.F.1. This Permit is subject to revocation if the Permittee fails to comply with any condition of the Permit. The Director will 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.
- I.G. Attachment Incorporation
- I.G.1. Attachments to the Permit Application 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.
- I.H. DESIGN AND CONSTRUCTION
- I.H.1. Design and Construction
- I.H.1.a The Permittee shall construct landfill cells, run-on diversion systems, runoff containment systems, and final cover in accordance with R315-301 thru 320 of the Utah Administrative Code.
- I.H.2. Run-On Control

- I.H.2.a The Permittee shall construct drainage channels and diversions and shall maintain them at all times to effectively prevent runoff from the surrounding area from entering the landfill.

## **II. LANDFILL OPERATION**

### **II.A. Operations Plan**

- II.A.1. The Permittee shall keep the Operations Plan included in Attachment 1 at the Town of Manila office. The Permittee shall operate the landfill in accordance with the operations plan. The Permittee may modify the Operations Plan in accordance with R315-311-2 of the Utah Administrative Code. The Permittee shall note any modification to the Operations Plan in the daily operating record.

### **II.B. Security**

- II.B.1. The Permittee shall operate the Landfill so that unauthorized entry to the facility is restricted. The Permittee shall:
  - II.B.1.a Lock all facility gates and other access routes during the time the landfill is closed.
- II.B.2. Have at least one person employed by the Permittee present at the landfill during all hours that the landfill is open.
- II.B.3. Construct all fencing and any other access controls as shown in the Permit Application to prevent access by persons or livestock by other routes.

### **II.C. Training**

- II.C.1. The Permittee shall provide training for on-site personnel in landfill operation, including waste load inspection, hazardous waste identification, and personal safety and protection.

### **II.D. Burning of Waste**

- II.D.1. Except as provided in this paragraph, intentional burning of solid waste is prohibited and is a violation of R315-303-4(2)(b) of the Utah Administrative Code. The Permittee is allowed to burn material by complying with the requirements of R307-202-5 of the Utah Administrative Code. The Permittee shall perform such burning in a segregated area within the landfill site. The Permittee's non-compliance with R307-202-5 of the Utah Administrative Code, as determined by the Director of the Division of Waste Management and Radiation Control, also constitutes non-compliance with this Permit.
- II.D.2. The Permittee shall extinguish all accidental fires as soon as reasonably possible.

### **II.E. Daily Cover**

- II.E.1. 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.



- II.E.2. 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.
- II.E.2.a The Permittee shall apply standard daily cover (min. 6 inches of soil) at least once per week.
- II.E.2.b The Permittee shall apply standard daily cover any time the daily cover will be exposed for greater than 24 hours.
- II.E.2.c The Permittee shall apply standard daily cover when weather conditions (e.g., wind, rain, etc.) prevent proper use of alternate daily cover.
- II.E.2.d The Permittee shall record alternative daily cover use dates in the facility daily operating log.
- II.E.2.e The Director may rescind or amend the alternative daily cover approval if the requirements to prevent blowing debris, to minimize access to the waste by vectors, to minimize the threat of fires at the open face, to minimize odors, or to shed precipitation are not met, or if necessary to prevent nuisance conditions or adverse impacts to human health or the environment.
- II.F. Ground Water Monitoring
- II.F.1. This facility is not required to monitor ground water (R315-303-3(3)(e)(iv) of the Utah Administrative Code).
- II.G. Gas Monitoring
- II.G.1. The Director has determined through groundwater modeling, climatic conditions and waste acceptance rates that the Manila Class II Landfill meets the requirements of R315-303-3(5)(d) of the Utah Administrative Code and is exempt from gas monitoring.
- II.G.2. If the concentrations of explosive gases at any of the facility structures, at the property boundary, or beyond the property boundary ever exceed the standards set in R315-303-2(2)(a) of the Utah Administrative Code, the Permittee shall:
- II.G.2.a Immediately take all necessary steps to ensure protection of human health and notify the Director;
- II.G.2.b 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;
- II.G.2.c Implement a remediation plan that meets the requirements of R315-303-3(5)(b) of the Utah Administrative Code; and
- II.G.2.d Submit the plan to, and receive approval from, the Director prior to implementation.

II.H. Waste Inspections

- II.H.1. 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. The Permittee shall conduct a complete waste inspection at a minimum frequency of 1 % of incoming loads. The Permittee shall select the loads to be inspected on a random basis.
- II.H.2. 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.
- II.H.3. The Permittee shall inspect all loads that the Permittee suspects may contain a waste not allowed for disposal at the landfill.
- II.H.4. The Permittee shall conduct complete random inspections as follows:
- II.H.4.a The Permittee shall conduct the random waste inspection at the working face or an area designated by the Permittee.
- II.H.4.b The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;
- II.H.4.c Loads shall be spread by equipment or by hand tools;
- II.H.4.d Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and
- II.H.4.e The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Attachment 2 of this Permit. The Permittee shall place the form in the daily operating record at the end of the operating day.
- II.H.4.f The Permittee or the waste transporter shall properly dispose of any waste found that is 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.

II.I. Disposal of Special Wastes

- II.I.1. The Permittee may dispose of animal carcasses in the landfill working face and shall cover them with two feet of soil by the end of the operating day in which the carcasses are received. 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.

II.J. Self Inspections

II.J.1. 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; fences and access controls; roads; run-on/run-off controls; 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.

II.K. Recordkeeping

II.K.1. The Permittee shall maintain and keep on file at the Town of Manila office, 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 operating record at the end of each operating day. Each record to be kept shall contain the signature of the appropriate operator or personnel and the date signed. The operating record shall consist of the following two types of documents:

II.K.1.a Records related to the landfill operation or periodic events including:

II.K.1.a.(i) The number of loads of waste and the weights or estimates of weights or volume of waste received each day of operation and recorded at the end of each operating day;

II.K.1.a.(ii) Major deviations from the approved plan of operation, recorded at the end of the operating day the deviation occurred;

II.K.1.a.(iii) Results of monitoring required by this Permit, recorded in the operating record on the day of the event or the day the information is received;

II.K.1.a.(iv) Records of all inspections conducted by the Permittee, results of the inspections, and corrective actions taken, recorded in the record on the day of the event.

II.K.1.b Records of a general nature including:

II.K.1.b.(i) A copy of this Permit, including the Permit Application;

II.K.1.b.(ii) Results of inspections conducted by representatives of the Director, and of representatives of the local Health Department, when forwarded to the Permittee;

II.K.1.b.(iii) Closure and Post-closure care plans; and

II.K.1.b.(iv) Records of employee training.

II.L. Reporting

II.L.1. 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, and all training programs completed.

II.M. Roads

II.M.1. The Permittee shall improve and maintain all access roads within the landfill boundary that are used for transporting waste to the landfill for disposal shall be improved and maintained as necessary to assure safe and reliable all-weather access to the disposal area.

II.N. Litter Control

II.N.1. Litter resulting from operations of the landfill shall be minimized. In addition to the litter control plans found in Attachment 1 of the Operations Plan, the Permittee shall implement the following procedures when high wind conditions are present:

II.N.1.a Reduce the size of the tipping face;

II.N.1.b Reduce the number of vehicles allowed to discharge at the tipping face at one time;

II.N.1.c Orient vehicles to reduce wind effects on unloading and waste compaction;

II.N.1.d Reconfigure tipping face to reduce wind effect;

II.N.1.e Use portable and permanent wind fencing as needed; and

II.N.1.f Should high winds present a situation that the windblown litter cannot be controlled, the Permittee shall cease operations of the landfill until the winds diminish.

**III. CLOSURE REQUIREMENTS**

III.A. Closure

III.A.1. The updated Closure Plan and Post-Closure Plan with the associated Quality Assurance Plan are included in Attachment 3.

III.A.2. The Permittee shall install final cover of the landfill as shown in the Attachment 3. 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.

III.A.3. Title Recording

III.A.3.a The Permittee shall meet the requirements of R315-302-2(6) of the Utah Administrative Code by recording a notice with the Daggett 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 the notice as recorded.

III.B. Post-Closure Care

III.B.1. The Permittee shall perform post-closure care at the closed landfill in accordance with the Post-Closure Care Plan contained in the Attachment 3. Post-closure care shall continue until all waste disposal sites at the landfill have stabilized and the finding of R315-302-3(7)(c) of the Utah Administrative Code is made.

III.C. Financial Assurance

III.C.1. The Permittee shall keep in effect and active the currently approved financial assurance mechanism or another approved mechanism that meets the requirements of R315-309 of the Utah Administrative Code and is approved by the Director to cover the costs of closure and post-closure care at the landfill. The Permittee shall adequately fund and maintain the financial assurance mechanism to provide for the cost of closure at any stage or phase or anytime during the life of the landfill or the permit life, including the post-closure period, whichever is shorter.

III.D. Financial Assurance Annual Update

III.D.1. The Permittee shall submit an annual revision of closure and post-closure costs for inflation and financial assurance funding as required by R315-309-2(2) of the Utah Administrative Code, to the Director as part of the annual report

III.E. Closure Cost and Post-Closure Cost Revision

III.E.1. 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.

**IV. ADMINISTRATIVE REQUIREMENTS**

IV.A. Permit Modification

IV.A.1. 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.

IV.B. Permit Transfer

IV.B.1. 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.

IV.C. Expansion

IV.C.1. This Permit is for a Class II 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 the Permit Application, but within the property boundaries designated in the Permit Application, shall require submittal of plans and specifications to the Director. The plans and specifications shall be approved by the Director prior to construction.

IV.C.2. Any expansion of the landfill facility beyond the property boundaries designated in the description contained in the Permit Application shall require submittal of a new permit application in accordance with the requirements of R315-310 of the Utah Administrative Code.

IV.D. Addition of Acceptable Wastes

IV.D.1. 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. Acceptance for PCB bulk product waste under R315-315-7(3)(b) of the Utah Administrative Code can only be done after submittal of the required information to the Director and modification of Section I-C of this Permit.

IV.E. Expiration

IV.E.1. 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 timely submits a 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.

**Attachments to this Permit**

Attachment #1 – Plan of Operation

Attachment #2 – Waste Inspection Forms

Attachment #3 – Closure and Post-Closure Plan

# ATTACHMENT 1

## PLAN OF OPERATION

### **Proof Of Ownership**

Copies of United States Forest Service Permit for 5 acre expansion and Quit-Claim Deed showing joint County/Town ownership accompany this application.

### **Plan of Operation**

#### **Construction Schedule**

Improvements include a future storage/attendant shed, refurbished fencing around landfill, enhanced security gate, and improved access roads. These improvements will be in place by end of 1998.

#### **On-Site Solid Waste handling Procedures**

Incoming loads will be evaluated by the on-site attendant on days of operation and documented using included "Landfill Log." An example of this log is included with this application. Waste depositors will be then directed to the appropriate area for dumping. As needed, the waste will be spread and compacted in the cell. A contracted Caterpillar will be utilized for this purpose and to additionally cover the spread, compacted, waste with the prescribed inches of suitable covering material. Final coverage of the filled cells will be accomplished with the prescribed inches of suitable covering material.

#### **Acceptable Types of Wastes**

The following types of waste will be accepted at the Daggett County Landfill.

household Wastes: Vegetable wastes, trash, discarded animals, and household waste generated from single, multiple residences, hotel, motels, campgrounds, and day use recreation areas.

Commercial Wastes: All types of wastes generated by stores, offices, restaurants, storage facilities, and other non-manufacturing activities.

Waste Tires: Tires will be separated as accepted and placed into a segregated area. When significant volume exists, efforts will be made to dispose of the tires with a commercial outlet.

Common household Hazardous Wastes: Acceptance of this type of wastes will be minimized at the Daggett County Landfill.

Appliances: Appliances will be separated from the landfill cells, properly stored, and disposed of with a commercial outlet in the business to accept such appliances.



## Procedures for the Exclusion of Unacceptable Types of Wastes.

All incoming landfill users will be asked to identify the types of wastes included in their load and to specify waste, to their knowledge, may require special handling. In addition, inspections of incoming loads of waste will be made at time of unloading. The purpose of this inspection will be to determine the presence of hazardous types of waste or suspicious containers. Identification of potentially hazardous materials could initiate the immediate closure of the landfill and notification of proper officials.

## Monitoring and Self Inspection

No ground water monitoring facility is proposed at this landfill site due to low potential for ground water contamination.

Routine inspections will be made by Town of Manila personnel on-site for such things as litter control, unauthorized burning, and improper waste disposal. Assessments will be made periodically for cover material integrity, erosion impact, and determination of other adverse conditions. These inspections will be documented on the form labeled "Landfill Inspection Form". The results of this inspection will be submitted yearly to the Utah Solid and Hazardous Waste department.

## Contingency Plans

The following actions will be taken in case of ground water contamination, fire, explosion, or presence of hazardous materials.

### Ground Water Contamination

No ground water monitoring facility will be present at the landfill due to low potential for water contamination. However, if significant levels of ground water contamination are detected in down gradient locations and the problem can be directly linked to landfill operations, corrective action as deemed necessary to correct the problem will be taken.

### Fire Control

Due to the method of landfill operation and site land composition, fire hazard does not pose a significant threat. On-site landfill attendants will be on hand to discourage waste and debris fires started on purpose or accidentally. Proper officials will be notified in the event of a landfill fire and the fires will be extinguished. If necessary, landfill operations will be altered to allow for the proper handling of the fire. On-site posting will prohibit fires.

## Explosion

An explosion at the landfill will cause the site to be secured and proper officials to be notified. Landfill operations will discontinue until safe to do so.

## Alternative Waste Handling Procedures

In the event it should become necessary to discontinue using an open cell, another will be readied to accept waste and to act as a backup cell. Necessary use discontinuance of the landfill would require temporary negotiation with a landfill operator close enough and able to handle Daggett County Waste.

## Maintenance of Installed Equipment

Required maintenance at the landfill would be limited to site machinery.

## Disease Vector Control

The remoteness of the landfill should not contribute to problems with disease vectors. However, if problems were to arise, remedial action would be taken in the form of rodent trapping or other measures of extermination. Covering of waste and dead animals should inhibit problems with scavenging vermin.

## Recycling Program

Daggett County Landfill management intends to accept, separate, and dispense to a commercial outlet, all waste tires brought to the landfill. Only an amount deemed to be reasonable will be stored prior to release to the outlet. Appliances, automobiles, and other metals brought to the landfill will be released to an appropriate commercial business. No other recycling programs are currently proposed at the Daggett County Landfill.

## Training

Landfill attendants and operators will be required to review the contents of this operation plan. Additional training will be required with emphasis on hazardous waste identification and appropriate handling. Appendix attachments include materials for the identification of hazardous wastes. Landfill attendants and operators will be required to be familiar with identification of hazardous wastes. Appropriate out of agency training will be obtained.

## Landfill Access Control

Daggett County Landfill staff will be present during times when the landfill is open for acceptance of public waste. Town of Manila, Daggett County, and the United States Forest Service collection vehicles will be allowed access to the landfill for waste deposit purposes during non-public access hours.

The purposed times the landfill is open to the public are Mondays, 0900-1200, and the first Saturday of each month, 0900-1200 during the winter months. Summer hours begin May 1st and end the last day of October. These hours include landfill opening each Saturday, 0900-1200 hours. Hours of operation for public waste deposits are posted within the county.

## Methods of Access Control

When not open to the public, the landfill will be secured behind fencing and a locked gate at the access road. The position of locked gates preventing access will enhance discouragement of illegal dumping due to potential detection by passing motorists.

## Closure Plan

### Ongoing Activities

The Daggett County Landfill closure plan is intended to provide the ability to minimize need for extensive maintenance and the threat to human health and the environment.

Landfilling operations on the jointly owned 20 acre site have consisted of developing open cells, filling with waste, and properly covering. Efforts have been made to ensure that closure covering does not provide for excessive mounding not consistent with natural terrain.

Future closure efforts will include proper closure of each cell upon reaching waste capacity. A new cell will be opened at this time for continued landfill operation. Closure activities will include:

- 1) As each cell has reached waste capacity, landfill operators will grade excess cover material to form an earthen mound over the cell. The graded mound should provide for effective surface drainage to prevent water infiltration.

- 2) Cover material derived from cell excavation will be used to cover the expended cell at a cover material depth of 18 inches or more.

After each phase of cell completion, review for proper closure will be made by the landfill operator.

# ATTACHMENT 2

# WASTE INSPECTION FORMS



## LANDFILL INSPECTION FORM

**On-site landfill inspections must be completed on a quarterly basis.** Inspectors should consider each of the factors listed and record the findings in narrative on this form. As well, the location of any problem areas should be marked on a landfill site map and referred to in the narrative.

Inspector's Name \_\_\_\_\_ Title \_\_\_\_\_

Inspection Date \_\_\_\_\_ Inspection Time \_\_\_\_\_

### Inspection Categories

**Conformity with Landfill Design Scheme & Methods:** Make note of any variation from design guidelines or landfilling methods.

**Integrity of Run-on Control Berms and Ditches:** Note any undue erosion or failures of current systems and specify any needed expansion or upgrades. •

**Evaluate the Adequacy of Daily Cover for Active Cells:** Inspect to insure daily cover conforms to operating plan.

**Inspect the Integrity of Cells that have Already Received Final Cover:** Note the status of vegetative cover that has established, any erosional impacts, and any evidence of subsidence.

**Inspect for Litter, Disease Vectors, Evidence of Burning, and also the adequacy of the access gate, fencing and signage.**

**Update with a describe of any remedial action taken to rectify or repair any problems encountered in the inspection and indicate the date the corrective action was taken.**

Inspector's Signature: \_\_\_\_\_

## WASTE INSPECTION FORM

**To be completed on a random basis (about every 20th load) or when a suspicious load is encountered.**

Inspected by \_\_\_\_\_ Date \_\_\_\_\_

Vehicle License Number \_\_\_\_\_ Drivers Name \_\_\_\_\_

Drivers Address:

\_\_\_\_\_ Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

### Drivers Description of the Types of Waste Contained in the Load

Source of the waste (according to driver) \_\_\_\_\_

Types of waste (according to driver) \_\_\_\_\_

### Inspectors Analysis of Waste Material

Segregate and break-down the load in the presence of the landfill user and indicate existence and relative volume of the following types of waste contained in the load:

Infectious Waste \_\_\_\_\_ Asbestos \_\_\_\_\_ Liquids \_\_\_\_\_

Radio Active \_\_\_\_\_ Animals \_\_\_\_\_ Furniture \_\_\_\_\_

Automobiles \_\_\_\_\_ Ag. waste \_\_\_\_\_ Sludge \_\_\_\_\_

Ash \_\_\_\_\_ Tires \_\_\_\_\_

Other Types of Hazardous Wastes (describe) \_\_\_\_\_

Action Taken \_\_\_\_\_



# ATTACHMENT 3

## CLOSURE AND POST-CLOSURE PLAN



# **CLOSURE, POST-CLOSURE, AND QUALITY ASSURANCE PLAN**

## **FOR THE MANILA LANDFILL**

**February, 2017**

*Prepared for:*

The City of Manila  
PO Box 189  
Manila, Utah 84046

*Prepared by:*

SUNRISE ENGINEERING, INC.  
363 East Main Street Suite 201  
Vernal, Utah, 84078

Phone: (435) 789-7364



---

**Aaron Averett, P.E.**  
State of Utah, No. 5561922

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## APPENDICES

Appendix A – PLAN SET DRAWINGS

## **1.0 INTRODUCTION**

### **1.1 GENERAL INFORMATION**

This report, the landfill Closure, Post-Closure, and Quality Assurance Plan shall be kept at the Manila Town Hall and followed throughout the closure and post-closure periods. Upon approval by the Director or the Division of Waste Management and Radiation Control, this report will be considered part of the permit.

The Manila Landfill has been given a Class II designation. As part of this designation, the landfill is exempt from certain restrictions. These exemptions include the liner, leachate collection system, and groundwater monitoring requirements. In order to receive the Class II designation, a landfill must:

1. Have no sign of groundwater contamination.
2. Serve a community with no practicable alternative.
3. Receive less than 25 inches of annual precipitation.
4. Receive less than 20 tons of waste per day.
5. Meet other rules applicable to Class II landfills in UAC sections R315-301 to -320.

The Town of Manila Solid Waste Management Plan estimates that the service life of the current landfill site is adequate for a 50-year planning period. The landfill is being operated in cells using the area-fill method in order to prolong its useful life.

Procedures for the closure plan are described in the Quality Assurance Plan.

Post-Closure activities shall end at the approval by the Director.

## **2.0 CLOSURE PLAN**

### **2.1 FINANCIAL ASSURANCE**

The financial assurance requirement, as it relates to the closure and post-closure plans, has not been performed by Sunrise and is not included in this portion of the closure plan. The Town of Manila will complete this requirement along with their financial council. Budgetary numbers related to the closure activities are found in sections 2.5 and 3.4 of this report.

### **2.2 CLOSURE STRATEGY**

Closure Operations at the Manila Landfill site will be performed on an ongoing basis. The landfill as it exists today has enough capacity to operate for many years. A final closing date cannot be determined at this time. Ongoing closure operations will generally be performed from April through November, the normal frost free construction period, or as weather permits. No area larger than 2 acres that has achieved final elevation will remain open longer than 6 months.

#### **2.2.1 Closure Timetable**

The Utah Administrative Code outlines the time table in the landfill closure process. The Director or the Division of Waste Management and Radiation Control shall be notified, in writing, at least 60 days prior to the last acceptance of waste, that the landfill is approaching closure. The closure process will start within 30 days after the last acceptance of waste, and shall be completed within, and no longer than, 180 days from its commencement. Within 90 days of the completion of the closure process, the owner shall submit to the Director four items. These four items are:

1. Design drawings of the final site grading stamped and signed by a professional engineer registered in the state of Utah.
2. Second, As-Built drawings, stamped and signed by a professional engineer registered in the state of Utah.
3. Certification by the owner or operator that the site has been closed according to the approved Closure Plan.
4. Fourth, certification by a professional engineer registered in the state of Utah that the site has been closed in accordance with the approved Closure Plan, and the Quality Assurance Plan.

Any modification to this timeline must be approved by the Director. These deadlines are summarized in the chart below.

**Table 2.1**

Deadline	Description
By 60 days prior to Last Acceptance	Notify Director <sup>1</sup>
By 30 days after Last Acceptance	Start Closure Process
By 180 days from Process Start	Complete Closure Process
By 90 days from Process Completion	Notify Director <sup>1,2</sup>

<sup>1</sup> Notification is to be submitted in writing.

<sup>2</sup> Design and As-Built drawings, and both certifications shall also be submitted.

### **2.2.2 Inspections**

The landfill owner shall allow the Director or the Division of Waste Management and Radiation Control or an authorized representative, including representatives from the Tri-County Health Department, upon representation of credentials, to enter during operating hours and/or inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under this permit. A copy of the record of the inspection shall be made by reasonable means, and shall be provided to the owner or the operator.

### **2.2.3 Quantity of Waste**

According to the Town of Manila Solid Waste Management Plan (Section 2, page 7), the landfill accepts waste on a volume basis. The landfill had accepted approximately 3,500 cubic yards in 2004, or approximately 525 tons. On page 15 in Section 2 of the Plan, the amount of waste to be accepted in 2007 is 900 tons, and future projections were based on this number.

Current (2017) estimates by town employees of yearly volume added to the landfill are approximately 1,200 tons or 2,700 cubic yards.

The total quantity of waste to be deposited at this site can be estimated from the Final Grading Plan (**Appendix A**) completed in 2008. Phase 1 of the landfill, as shown, contains approximately 210,000 cubic yards of volume below the 2' thick final cover. Phase 2 consists of about 81,000 cubic yards. The total volume, as depicted in the drawings, is approximately 291,000 cubic yards. The tonnage represented by this number depends on the average density of the landfill. At 0.45 tons (900 lbs) per cubic yard, the existing active area of the site has a capacity of approximately 130,000 tons.

Based upon knowledge of the new parcel site (adjacent to the existing active area) and what portions can be excavated, an estimated depth of 40 feet and a 1:3.5 side slope was used for capacity evaluation. The new parcel contains approximately 172,000 cubic yards of volume below the 2' thick final cover. At 0.45 tons (900 lbs.) per cubic yards, the new parcel has a capacity of approximately 77,000 tons.

## **2.3 FINAL COVER AND VEGETATION**

According to the previous closure plan, closure operations will consist of leveling, contouring, placement of appropriate covers and seeding as necessary to reduce infiltration and preserve the integrity of the completed areas of the landfill. Areas of the landfill reaching final elevation will be closed within 180 days. Intermediate cover shall be used to reduce infiltration and ponding. Top surface slopes are to be graded at no less than 2%, and side surface slopes are to be graded at

no more than 33%. Excess material not meeting permeability requirements may be stripped and utilized in other operations or left in place.

**Appendix A** shows final site work for the landfill, including contours and details. As depicted, the total area requiring the final cover is approximately 12 acres. The volume of that cover is nearly 40,000 cubic yards. The top 6" of material similar to existing topsoil will be placed and seeded. The seed mixture shall be developed after consultation with local range specialists and verifying availability of local seed markets. Recently closed sections of the landfill will be evaluated as part of the quarterly inspection process during the first year and then placed on post-closure status.

Since the previous closure plan was completed in 2008, portions of the existing landfill has been used to various degrees. Approximately 5 acres are not usable, mainly due to solid rock in those areas. About 4.5 acres have been used and received the full 2' of cover, and therefore need no further action at this time. Another 4 acres have been used but have only received about 1' of cover, and therefore require 1' more. Approximately 1 acre of the existing landfill is currently in use and will require the full 2' of cover. Another 0.5 acre is to be used in the future and therefore also will need the full 2' of cover.

It is anticipated that the cover needed to close the sections that are open and will be open will come from the existing site, or adjacent lands (i.e. nearby shooting range improvements may create material that can be used). As the landfill expansion areas start to be utilized, excavated material will be used as cover for areas to be closed, this rotating usage schedule will minimize costs for current and future closure. Utilization of the existing use area will be dependent upon availability of cover and logistics of placement.

For the new parcel the total area requiring final cover is approximately 6.5 acres. The volume of compacted cover material is about 15,000 cubic yards. The volume of topsoil is approximately 5,000 cubic yards.

### **2.3.1 Run-On and Run-Off**

No active or technical devices are proposed to control run-on and runoff systems at the Manila Landfill. No surface waters exist in close proximity to the landfill. Run on is anticipated to be minimal due to the natural topography of the landfill site. Native soils, regional hydrology, and topography at the site minimize the run-on of all surface waters resulting from a minimum flow of a 25-year storm into the active area of the landfill. Best management practices will be implemented to minimize infiltration and assure the integrity of the run-on/run-off system. Evaluation of the system will be made during the quarterly and annual inspections. Corrective measures, if any, will be implemented. Run-on and run-off from events smaller than the 25-year storm will be controlled.

### **2.3.2 Verification**

Verification of thicknesses, permeability, elevations, slopes, compaction, and other requirements shall be completed as set forth in the Quality Assurance Plan. **Appendix A** is the plan set, included in these drawings are the final grading plan and the associated details.

## **2.4 ENVIRONMENTAL CONTROL SYSTEMS**

The State of Utah recognizes the Manila Landfill as a Class II landfill, and as such, it is exempt from liner, leachate collection system, and groundwater monitoring requirements. The landfill receives less than 20 tons of waste per day, the annual precipitation is less than 25 inches per year, and there is currently no sign of groundwater contamination.

Due to the arid nature of the climate at the Manila Landfill and the nature of waste accepted at the facility, landfill gas concentrations are not anticipated to reach significant levels. The Director is requested to waive requirements to monitor landfill gas. Monitoring requirements inside buildings will be met by installing methane detectors in any building on the site.

The waiver is justified because characteristics at the landfill prohibit the generation of landfill gases in amounts that pose a threat to human health or the environment. As described above, the climate at the landfill is extremely arid. The largest storm events occur in the form of thunder showers, which result in a significant amount of the moisture running off the site prior to contacting the waste. These climatic conditions, coupled with relatively dry waste and soils which help absorb moisture, eliminate the production of significant amounts of landfill gases.

## **2.5 CLOSURE PROCEDURES AND RECORD KEEPING**

All records of the Manila Landfill shall be kept and maintained at the Manila Town Hall. These records will include inspection reports, annual reports, design drawings, as-built drawings, what maintenance has been performed, and what repairs have been made.

Upon approval of the Closure Plan by the Director, it shall be included as part of the permit. Any modification to the Closure Plan shall be only by the approval of the Director.

Closure costs are estimated in **Tables 2.2** and **2.3**, below. These tables have individual explanations based upon current conditions and anticipated conditions as indicated.

**Table 2.2** shows the closure costs associated with the areas of the landfill that are currently being utilized and the area shown on exhibit S-03 in the appendix needing 1' of additional cover.



**Table 2.2**

<b>Existing Landfill Closure Costs</b>				
	Quantity	Unit	Cost per Unit	Cost
Final Cover	4,400	CY	\$2.00	\$8,800
Final Grading	5.5	AC	\$500	\$2,750
Topsoil	6,700	CY	\$1.50	\$10,050
Revegetation	5.5	AC	\$1,000	\$5,500

TOTAL: \$27,100

**Table 2.3**

<b>Adjusted Landfill Closure Costs</b>				
	Quantity	Unit	Cost per Unit	Cost
Final Cover	1,100	CY	\$2.00	\$2,200
Final Grading	1.5	AC	\$500	\$750
Topsoil	3,400	CY	\$1.50	\$5,100
Revegetation	1.5	AC	\$1,000	\$1,500

TOTAL: \$9,550

Table 2.3 shows the closure costs associated with the areas of the landfill that are currently being utilized and not the areas shown as needing 1' of cover on exhibit S-03 in the appendix. At the time of this report the snow cover and muddy conditions prevent this area from being covered with additional material. It is anticipated that during the upcoming summer this area will be covered with additional material meeting closure requirements and the closure costs could be reduced to those shown in Table 2.3 and the cost in table 2.2 will become obsolete. The Town of Manila plans to submit a letter to the State of Utah indicating when this cover has been placed adequately and the costs shown in table 2.3 are an appropriate replacement to those shown in table 2.2.

## **3.0 POST CLOSURE PLAN**

### **3.1 POST-CLOSURE STRATEGY**

Post-closure activities will continue for 30 years, or until the site becomes stabilized, as determined by the Director. These post-closure activities shall be provided by the owner or operator of the landfill. The activities are to include monitoring, maintenance, repairs, and periodic inspections. Items to be included in these activities include gas monitoring and the status of the final cover.

### **3.2 POST-CLOSURE INSPECTIONS AND MAINTENANCE**

As a Class II landfill, this facility is exempt from leachate and groundwater monitoring requirements. Gas monitoring of the landfill may be required by the Director.

#### **3.2.1 Inspections**

Regular inspections are to be performed quarterly by landfill personnel, as indicated in the Quality Assurance Plan.

The landfill owner shall allow the Director or the Division of Waste Management and Radiation Control or an authorized representative, including representatives from the Tri-County Health Department, upon representation of credentials, to enter during operating hours and/or inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under this permit. A copy of the record of the inspection shall be made by reasonable means, and shall be provided to the owner or the operator.

#### **3.2.2 Run-On and Run-Off**

No active or technical devices are proposed to control run-on and runoff systems at the Manila Landfill. No surface waters exist in close proximity to the landfill. Run-on is anticipated to be minimal due to the topography of the landfill site. Native soils, regional hydrology, and topography near at the site minimize the run-on of all surface waters resulting from a minimum flow of a 25-year storm into the active area of the landfill. Best management practices will be implemented to minimize infiltration and assure the integrity of the run-on/run-off system. Run-on and run-off from events smaller than the 25-year storm will be controlled.

Monitoring will be limited to identifying situations which promote infiltration. Evaluation of the system will be made during the quarterly and annual inspections by landfill personnel, and corrective measures, if any, will be implemented. Erosion channels deeper than 10% of the total final cover thickness shall be repaired as soon as possible after discovery.

### 3.2.3 Gas Monitoring

The performance of gas monitoring of the actual landfill shall be at the discretion of the Director. Notwithstanding, gas monitoring in all on-site buildings shall be conducted continually by use of methane detectors in each structure which measures the concentration.

### 3.3 POST-CLOSURE LAND USE

Plats and a statement of fact concerning the location of any disposal site for the landfill will be recorded as part of the record of title with the county recorder no more than 60 days after the certification of closure. The landfill owner will comply with additional requirements established by the local zoning authority.

The property will continue to be fenced and will not be actively used after closure. The area will be returned to a natural setting, planted to native vegetation similar to the surrounding environment. Perimeter fencing will remain to discourage the use of the area and disruption of the final cap.

### 3.4 RECORD KEEPING AND REPORTING PROCEDURES

The contact person is:  
 Mayor, Town of Manila  
 1<sup>st</sup> East Highway 43  
 Manila, Utah 84046  
 (435) 784-3143

End of post closure documentation will be included in the records.

**Table 3.1**

<b>Post Closure Costs</b>				
	Quantity	Unit	Cost per Unit	Cost
Inspection/Reporting	200	HRS	\$80.00	\$16,000
Final Cover Repair	80	HRS	\$100.00	\$8,000
Vegetation Repair	1	EA	\$6,000.00	\$6,000

TOTAL: \$30,000

### 3.5 END OF POST-CLOSURE PROCEDURES

At the end of the post-closure period, as determined by the Director, the owner or operator shall submit to the Director a certification stating why the post-closure activities are no longer needed. This certification shall be signed by both the owner and a professional engineer registered in the state of Utah. The Director may then authorize the termination of part or all of the post-closure activities.

## **4.0 QUALITY ASSURANCE PLAN**

### **4.1 TESTING AT CLOSURE**

The contact person is:  
Mayor, Town of Manila  
1<sup>st</sup> East Highway 43  
Manila, Utah 84046  
(435) 784-3143

#### **4.1.1 Permeability**

Permeability testing, where required, shall be performed at the rate of one test per 3000 cubic yards, with the locations being randomly selected throughout the working area. Permeability tests may include in-field or laboratory tests, nuclear density extrapolations, or other industry wide procedures and practices. The permeability requirement is  $1 \times 10^{-5}$  cm/sec or less.

#### **4.1.2 Density**

Density testing shall be performed on the 18" clay liner at a rate of one test per 3000 square feet, with the location of the test being randomly selected. Required density is 90% of the modified proctor.

#### **4.1.3 Depth**

Depth tests for the 18" clay liner will utilize standard cross section survey methods and will be performed at a rate equal to or greater than tests performed for permeability.

Depth gauges shall be used for the topsoil layer and shall be lengths of 6" PVC pipe placed at 20' intervals, center to center. These pipes are to be placed on the top of the 18" clay liner, and within the 6" topsoil layer. The depth of the topsoil layer shall be verified by visual inspection of these pipes.

### **4.2 MONITORING**

The landfill site shall be monitored on a quarterly basis throughout the post-closure period. Items to be monitored include gas, soil, vegetation, infiltration, settlement, erosion, fencing, and gates. Problems shall be identified and resolutions proposed, and submitted to Director. Appendix B is the inspection form to be completed.

#### **4.2.1 Erosion**

The landfill shall be visually inspected for signs of erosion. Erosion channels deeper than 10% of the total final cover thickness shall be repaired as soon as possible after discovery.

## **REFERENCES**

Town of Manila, Utah, Solid Waste Management Plan. 2007. AZA Planning and Public Involvement.

Utah Annotated Code. February 1, 2007. State of Utah.

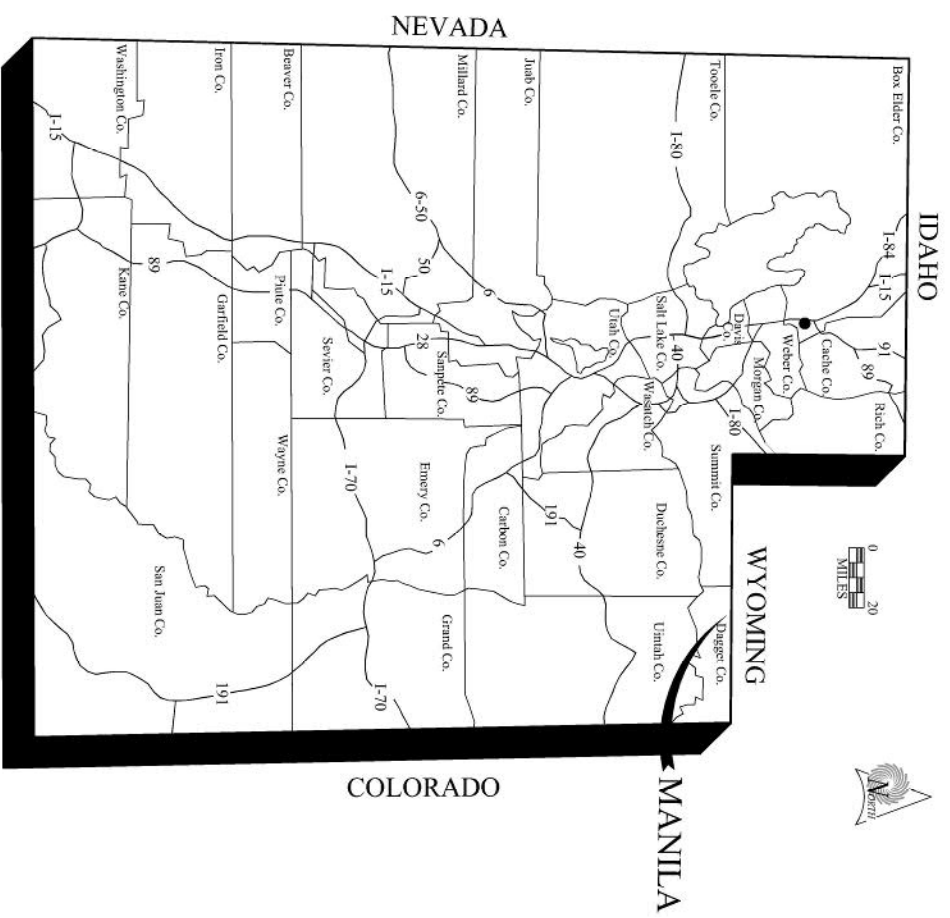
Utah Division of Waste Management and Radiation Control website:  
<https://deq.utah.gov/division-waste-management-radiation-control>

# **APPENDIX A**

## **Plan Set**

# MANILLA LANDFILL CLOSURE PLAN UPDATE 2017

## AREA MAP



## LOCATION MAP



## SHEET INDEX

DESCRIPTION	DWG. NO.	SHEET NO.
COVER SHEET	C-01	1
EXISTING SITE	S-01	2
GRADING PLAN	S-02	3
NEW SITE PLAN	S-03	4
DETAILS	T-01	5



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MANILA

LANDFILL CLOSURE PLAN  
 SITE PLAN  
 EXISTING SITE

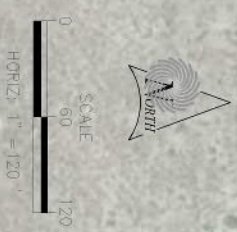
SEI NO. S05790	DESIGNED AKJ	DRAWN AKJ	CHECKED K'WB	SHEET NO. 2 of 5	<b>S-01</b>
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P:\Manila\Landfill\Draws\Site\MLANDFILL-SITE.OLD.dwg Dec 30, 2016 4:08pm jmcCarthy



**CONSTRUCTION NOTES**

- ① CONSTRUCT 30% SIDE SLOPE.



- NOTES:**
1. "SWMP" REFERS TO THE SOLID WASTE MANAGEMENT PLAN, 2007.
  2. SEE SHEET T-01 FOR DETAILS.

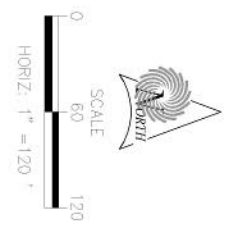
363 EAST MAIN STREET, SUITE 201  
 VERNAL, UTAH 84078  
 TEL. 435.789.7364  
 WWW.SUNRISE-ENG.COM

MANILLA

LANDFILL CLOSURE PLAN  
 SITE PLAN  
 FINAL GRADING

SD NO.	DESIGNED	DRAWN	CHECKED	SHEET NO.
S00790	AKJ	AKJ	KWB	3 of 5
				<b>S-02</b>





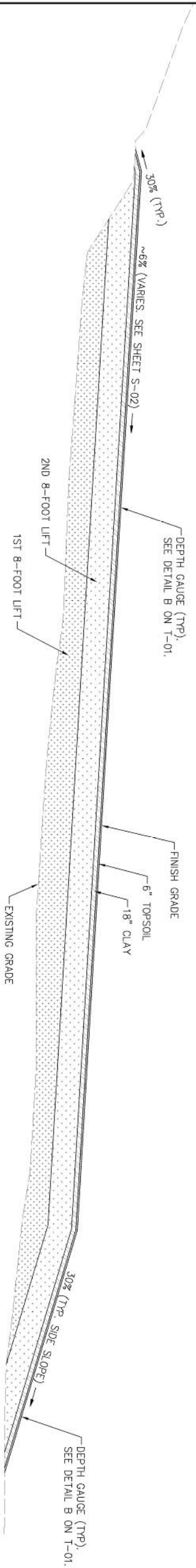

**SUNRISE**  
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 TEL. 435.789.7364  
[www.sunrise-eng.com](http://www.sunrise-eng.com)

MANILLA

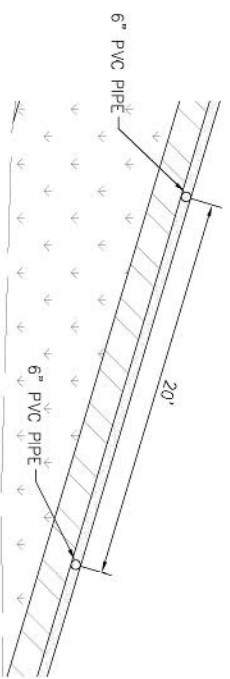
LANDFILL CLOSURE PLAN  
 SITE PLAN  
 NEW SITE PLAN

SD NO	DESIGNED	DRAWN	CHECKED	SHEET NO	S-03
02943	ALA	JAM	ALA	4 of 5	





**A** TYPICAL SECTION  
T-01 NOT TO SCALE



**B** SECTION-DEPTH GAUGES (TYP.)  
T-01 NOT TO SCALE

**SUNRISE**  
ENGINEERING

363 EAST MAIN STREET, SUITE 201  
VERNAL, UTAH 84078  
TEL. 435.789.7364  
WWW.SUNRISE-ENG.COM

MANILLA

LANDFILL CLOSURE PLAN  
TYPICAL DETAILS

SD NO	DESIGNED	DRAWN	CHECKED	SHEET NO
02943	AKJ	AKJ	KWB	4 of 5
				<b>T-01</b>

**APPENDIX B**

**Inspection Form**

**MUNICIPAL SOLID WASTE LANDFILL  
POST-CLOSURE INSPECTION FORM**

Facility Coordinator: \_\_\_\_\_ Phone: \_\_\_\_\_

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

Weather Conditions: \_\_\_\_\_

Landfill Cell Status: Active \_\_\_\_ Closed \_\_\_\_ Photographs: Yes \_\_\_\_ No \_\_\_\_ Attached \_\_\_\_\_

Location or Cell #: \_\_\_\_\_

Drawing/Schematic of Landfill Cell or Facility:

**GENERAL OBSERVATIONS/ RECOMMENDED COURSE OF ACTION:**

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**OVERALL CAP INTEGRITY:**

Complete the following checklist. If the answer is yes to any of the items, please provide an explanation, photograph and identify item location on the drawing/schematic of landfill cell.

- A. Erosion (gullies or washouts) on the cap: YES \_\_\_\_ NO \_\_\_\_ Depth/Length \_\_\_\_\_
- B. Sloughing of embankments: YES \_\_\_\_ NO \_\_\_\_ Est. of Area \_\_\_\_\_
- C. Sparsely vegetated areas or stressed vegetation: YES \_\_\_\_ NO \_\_\_\_ Est. of Area \_\_\_\_\_
- D. Subsidence, depressions or settlement of soil: YES \_\_\_\_ NO \_\_\_\_ Est. of Area \_\_\_\_\_
- E. Cracks in cover cap: YES \_\_\_\_ NO \_\_\_\_ Depth/Length \_\_\_\_\_
- F. Damage to cap due to wildlife: YES \_\_\_\_ NO \_\_\_\_ Type \_\_\_\_\_
- G. Growth of woody vegetation on cap: YES \_\_\_\_ NO \_\_\_\_ Type \_\_\_\_\_
- H. Non-landfill related use of the cap? YES \_\_\_\_ NO \_\_\_\_ Type \_\_\_\_\_

**EXPLANATION/COMMENTS:**

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**GROUNDWATER MONITORING:**

Is monitoring of groundwater required? YES \_\_\_\_ NO \_\_\_\_

Any evidence of potential groundwater contamination? YES \_\_\_\_ NO \_\_\_\_ If yes, explain.

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Monitoring Testing Results completed: YES \_\_\_\_ NO \_\_\_\_ Attached: \_\_\_\_\_

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**LANDFILL GAS MONITORING:**

Is monitoring of gas required? YES \_\_\_ NO \_\_\_

Evidence of methane odors at/or around this landfill cell or facility? YES \_\_\_ NO \_\_\_ If yes, explain.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Concentration Level: \_\_\_\_\_ Location of Source \_\_\_\_\_

**LEACHATE MANAGEMENT:**

Are there any leachate breakouts on the side slopes or at the toe of the landfill, noticeable seeps, ponded or discolored water, or any areas of concern? YES \_\_\_ NO \_\_\_ If yes, explain.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**STORM WATER MANAGEMENT:**

Are swales, culverts and catch basins free of leaves and other debris? YES \_\_\_ NO \_\_\_

Do all swales and culverts have positive slope? YES \_\_\_ NO \_\_\_

Is there erosion within swales? YES \_\_\_ NO \_\_\_

Are there areas of ponding on the landfill or at the toe? YES \_\_\_ NO \_\_\_

Has there been any storm water damage at the facility? YES \_\_\_ NO \_\_\_

Provide explanation of all observed problems:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**OTHER:**

Is the public access control adequate? YES \_\_\_\_\_ NO \_\_\_\_\_

Any vandalism noted, what type, location? YES \_\_\_\_\_ NO \_\_\_\_\_

Are there any holes or damaged fence? YES \_\_\_\_\_ NO \_\_\_\_\_

Is maintenance access in good condition? YES \_\_\_\_\_ NO \_\_\_\_\_

Has the cap vegetation been mowed? YES \_\_\_\_\_ NO \_\_\_\_\_  
Date (if known) was last mowed (mo./yr.): \_\_\_\_\_ / \_\_\_\_\_

Provide explanation of all observed problems:

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