



State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL

Douglas J. Hansen
Director

April 6, 2022

Stacey Hughes, President
ONP, LLC
105 North Landfill Road
Washington, UT 84780

RE: Approval of the Class VI Landfill Permit for the Purgatory Landfill, Washington County
SW240

Dear Mr. Hughes:

Enclosed is the approved permit to operate the Purgatory Landfill (Landfill). The public comment period for the permit began on January 31, 2022 and ended on March 1, 2022. No comments were received.

Periodic inspections of the Landfill will be conducted by representatives of the Division of Waste Management and Radiation Control and the Southwest Utah Public Health Department.

If you have any questions, please call Matt Sullivan at (801) 536-0241.

Sincerely,

Douglas J. Hansen, Director
Division of Waste Management and Radiation Control

DJH/MBS/kd

Enclosures: Purgatory Landfill Permit (DSHW-2021-021906)
Attachment 1, Designs (DSHW-2021-021908)
Attachment 2, Operations Plan (DSHW-2021-021910)
Attachment 3, Closure and Post-Closure (DSHW-2021-021912)
Statement of Basis (DSHW-2022-002782)

c: Jeremy Roberts, Environmental Health Director, Southwest Utah Public Health Department
Paul Wright, P.E., UDEQ District Engineer

DSHW-2022-002784

195 North 1950 West • Salt Lake City, UT
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DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
SOLID WASTE LANDFILL PERMIT

CLASS VI SOLID WASTE PERMIT RENEWAL

PURGATORY 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, a Permit is issued to

ONP, LLC as owner and operator
(Permittee),

to own, construct, and operate the Purgatory Landfill located in Section 17, Township 42 South, Range 14 West, Salt Lake Base and Meridian, Washington County, Utah as shown in the Permit Renewal Application that was determined complete on August 5, 2021 (DSHW-2021-010645).

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

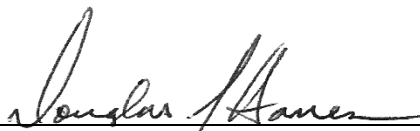
All references to R315-301 through 320 of the Utah Administrative Code are to regulations that are in effect on the date that this Permit becomes effective.

This Permit shall become effective April 6, 2022.

Closure Cost Revision Date: April 6, 2027.

This Permit shall expire at midnight April 5, 2032.

Signed this 6th day of April, 2022.



Douglas J. Hansen, Director
Division of Waste Management and Radiation Control

FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME:	Purgatory Landfill
OWNER NAME:	ONP, LLC
OWNER ADDRESS:	105 N. Landfill Rd, Washington, Utah 84780
OWNER PHONE NO.:	(435) 619-2506
OPERATOR NAME:	Same as above
OPERATOR ADDRESS:	Same as above
OPERATOR PHONE NO.:	(435) 703-4742
TYPE OF PERMIT:	Class VI Landfill
PERMIT NUMBER:	0404R2
LOCATION:	Landfill site is located in Township 42 South, Range 14 West, Section 17, SLMB; Washington County, Latitude 37° 7' 52", Longitude 113° 27' 14". 105 North Landfill Road off Telegraph Road in Washington, Utah.
PERMIT HISTORY	This facility received its first permit to accept solid waste on June 15, 2005. The first permit renewal was effective on May 15, 2011. This is the second permit renewal, and its effective date is shown on the signature page.

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.

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

The facility as described in this Permit consists of scale house, the disposal cell for all permitted solid waste, and dumpster bins (for unacceptable solid waste).

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 operation of the landfill.

The issuance of this Permit does not convey any property rights, in either real or personal property, or any exclusive privileges. 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 R315-305 of the Utah Administrative Code 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, termination, or denial of a permit renewal application.

I.B. Acceptable Waste

I.B.1. Construction/demolition solid waste as defined in R315-301-2(17) of the Utah Administrative Code;

I.B.2. Yard waste as defined in R315-301-2(87) of the Utah Administrative Code;

I.B.3. Inert waste, as defined in R315-301-2(37) of the Utah Administrative Code; and

I.B.4. Waste tires, may be accepted and managed in accordance with the requirements of R315-320 of the Utah Administrative Code.

I.C. Prohibited Waste

I.C.1. Hazardous waste as defined by R315-261 of the Utah Administrative Code;

I.C.2. PCBs as defined by R315-301-2(53) of the Utah Administrative Code, except PCB's specified by R315-315-7(2)(a) and (c) of the Utah Administrative Code;

I.C.3. Household waste, except waste resulting from the abatement, rehabilitation, renovation and remodeling of homes and other residences;

I.C.4. Municipal waste;

I.C.5. Special waste except as specified in this Permit;

I.C.6. Regulated asbestos-containing material;

I.C.7. Industrial solid waste as defined in R315-301-2(35) of the Utah Administrative Code;

I.C.8. Commercial solid waste as defined in R315-301-2(14) of the Utah Administrative Code;

I.C.9. 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.10. Dead animals; and

I.C.11. Waste tires.

I.C.12. Any prohibited waste received and accepted for disposal at the facility shall constitute a violation of this Permit, of 19-6-101 through 125 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 of the Division of Waste Management and Radiation Control or an authorized representative, or representatives from the Southwest Utah Public 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, including the day the event occurred or the day it was discovered;

I.E.3.b Notify the Director of the Utah Division of Waste Management and Radiation Control 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 Director notification.

I.E.4. Within thirty days after the documentation of the event, the Permittee shall submit to the Director a written report 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. After 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 may be revoked 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 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 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

II.A. Design and Construction

II.A.1. The landfill shall be constructed and maintained according to the design outlined in the Attachment 1 and in the area designated in the Attachment 1, including landfill cells, fences, gates, and berms.

II.A.2. The Permittee shall notify the Director upon completion of construction of any landfill cells or run-on and run-off diversion systems. No landfill cells or run-on and run-off diversion system may be used until construction is approved by the Director.

II.A.3. The Permittee shall notify the Director of the completion of construction of any final cover system and shall provide all necessary documentation and shall apply for approval of the construction from the Director.

II.A.4. If ground water is encountered during excavation of the landfill, the Director shall be notified immediately, and a contingency plan implemented, or alternative construction design developed and submitted for approval.

II.A.5. All engineering drawings submitted to the Director shall be stamped by a professional engineer with a current registration in Utah.

II.B. Run-On and Run-off Control

II.B.1. 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.

III. LANDFILL OPERATION

III.A. Operations Plan

III.A.1. The Permittee shall keep the Operations Plan included in 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 following the procedures of R315-311-2(1) of the Utah Administrative Code and approved of by the Director. The Permittee shall note any modification to the Operations Plan in the daily operating record.

III.B. Security

III.B.1. The Permittee shall operate the Landfill so that unauthorized entry to the facility is restricted. The Permittee shall:

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

III.B.1.b Have at least two people employed by the Permittee at the landfill during all hours that the landfill is open.

III.B.1.c Construct all fencing and any other access controls as shown in the Attachment 2 to prevent access by persons or livestock by other routes.

III.C. Training

III.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.

III.D. Burning of Waste

III.D.1. Intentional burning of solid waste is prohibited and is a violation of R315-303-4(2)(b) of the Utah Administrative Code.

III.D.2. The Permittee shall extinguish all accidental fires as soon as reasonably possible.

III.E. Cover

III.E.1. The Permittee shall cover the waste as necessary to prevent fires and to control vectors, blowing litter, odor, scavenging, and fugitive dust.

- III.E.2. The Permittee may use an alternative cover material when the material and operation meets the requirements of R315-303-4(4)(b) through (e) of the Utah Administrative Code.
- III.E.3. The Permittee shall use a minimum of six inches of earthen cover no less than once each month for all wastes received at the landfill. This cover shall consist of soil.
- III.E.4. The Permittee shall record in the daily operating record and the operator shall certify, at the end of each day of operation when soil or an alternative cover is placed, the amount and type of cover placed and the area receiving cover.

III.F. Waste Inspections

- III.F.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, but no less than one complete inspection per day. The Permittee shall select the loads to be inspected on a random basis.
- III.F.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.
- III.F.3. The Permittee shall inspect all loads that the Permittee suspect may contain a waste not allowed for disposal at the landfill.
- III.F.4. The Permittee shall conduct complete random inspections as follows:
 - III.F.4.a The Permittee shall conduct the random waste inspection at the working face, or an area designated by the Permittee.
 - III.F.4.b The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;
 - III.F.4.c Loads shall be spread by equipment or by hand tools;
 - III.F.4.d Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and
 - III.F.4.e The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Attachment 2. The Permittee shall place the form in the daily operating record at the end of the operating day.
 - III.F.4.f The Permittee or the waste transporter shall properly dispose of any waste that is not acceptable at the facility at an approved disposal of that type of waste.

III.G. Self Inspections

- III.G.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, good compaction, adequate cover, fences and access controls, roads, run-on/run-off controls, final and intermediate cover, litter controls, and records. The Permittee shall record 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.

III.H. Recordkeeping

III.H.1. The Permittee shall maintain and keep on file at the scale house 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. The daily operating record shall consist of the following two types of documents:

III.H.2. Records related to the daily landfill operation or periodic events including:

III.H.2.a 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;

III.H.2.b Major deviations from the approved plan of operation recorded at the end of the operating day the deviation occurred;

III.H.2.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;

III.H.2.d Records of all inspections conducted by the Permittee, results of the inspections, and corrective actions.

III.H.3. Records of a general nature including:

III.H.3.a A copy of this Permit, including the Attachments;

III.H.3.b Results of inspections conducted by representatives of the Director and representatives of the local Health Department, when forwarded to the Permittee;

III.H.3.c Closure and Post-closure care plans; and

III.H.3.d Records of employee training.

III.I. Reporting

III.I.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.

III.J. Roads

III.J.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 as necessary to assure safe and reliable all-weather access to the disposal area.

III.K. Litter Control

III.K.1. Litter resulting from operations of the landfill shall be minimized. In addition to the litter control plans found in Attachment 2, the Permittee shall implement the following procedures when high wind conditions are present:

III.K.1.a Reduce the size of the tipping face;

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

III.K.1.c Orient vehicles to reduce wind effects on unloading and waste compaction;

III.K.1.d Reconfigure tipping face to reduce wind effect;

III.K.1.e Use portable and permanent wind fencing as needed; and

III.K.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.

IV. CLOSURE REQUIREMENTS

IV.A. Closure

IV.A.1. The Permittee shall place the final cover of the landfill as noted in the Attachment 3. The final cover shall meet, at a minimum, the standard design for closure as specified in R315-305-5(5)(b) of the Utah Administrative Code.

IV.B. Title Recording

IV.B.1. The Permittee shall meet the requirements of R315-302-2(6) of the Utah Administrative Code by recording a notice with the Washington 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 after recordation.

IV.C. Post-Closure Care

IV.C.1. The Permittee shall perform post-closure care at the closed landfill in accordance with the Post-Closure Care Plan in 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.

IV.D. Financial Assurance

IV.D.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 and post-closure until termination of financial assurance in accordance with R315-309-11 of the Utah Administrative Code.

IV.E. Financial Assurance Annual Update

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

IV.F. Closure Cost and Post-Closure Cost Revision

IV.F.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.

V. ADMINISTRATIVE REQUIREMENTS

V.A. Permit Modification

V.A.1. Modifications to this Permit may be made upon application by the Permittee or by the Director following the procedures specified in R315-311-2 of the Utah Administrative Code. The Permittee shall be given written notice of any permit modification initiated by the Director.

V.B. Permit Transfer

V.B.1. This Permit may be transferred to a new Permittee in accordance with R315-310-11 of the Utah Administrative Code.

V.C. Expansion

V.C.1. This Permit is for the operation of a Class VI Landfill according to the design and Operation Plan described and illustrated in Attachment 1. 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.

V.C.2. 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 R315-310 of the Utah Administrative Code.

V.C.3. Any addition to the acceptable wastes described in Section I.B shall require a permit modification in accordance with R315-311 of the Utah Administrative Code.

V.D. Expiration

V.D.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 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.

VI. ATTACHMENTS

Attachment 1 – Designs

Attachment 2 – Operations Plan

Attachment 3 – Closure and Post-Closure

Attachment 1
Designs

1.0 – ENGINEERING REPORT

1.1 CELL DESIGN

The Dixie Waste Service Reuse Facility (Landfill) has been broken into two phases, Phase A, and B. The Permit Drawings show the two Phases in relation to the topography of the site. Phase A consists of three Cells (1, 2, & 3) beginning at the north-central area of the site and progressing uphill. The lowest elevation of Phase A is approximately 2,722 feet above mean sea level. Phase A will be completed at an approximate elevation of 2,836 feet. The updated Drawings reflect the site grading and drainage improvements performed since the initial permit submittal and lateral expansion to the southeast of Phases A & B.

Phase B will consist of an additional three Cells (4, 5, & 6). Phase B will be constructed immediately southeast of Phase A and extend uphill in a similar manner. The lowest elevation of Phase B is approximately 2,700 and will extend vertically to an elevation of approximately 2,834. The landfill is designed to fill in the undulating site topography and maintain adequate site access and landfill support structures. The layout of the site is as indicated on Drawing 2 (Appendix A).

1.1.1 Fill Method

As described in Section 3.2.3 of Part II – General Report, Waste will be end dumped at the toe of the work face when possible and spread up the slope in one to two-foot lifts, keeping the slope at a typical five to one (horizontal to vertical) configuration. The C&D wastes will then be compacted by making three to five passes up and down the slope.

1.1.2 Interim and Final Cover

Interim and final cover will be placed in compliance with the DSHW Class VI requirements. Section R315-305-5 stipulates that timbers, wood, and other combustible waste be covered as needed to avoid a fire. Wastes within the Landfill will be covered with a minimum 6-inch soil cover no less frequently than every 30 days.

1.1.2.1 Final Cover

As specified in Rule R315-305-5 the final cover will consist of a minimum of two feet of soil, the upper six inches of which will be topsoil material capable of sustaining vegetation. The topsoil layer will then be seeded with indigenous grasses and other shallow rooted vegetation.

1.1.3 Final Cover Elevations

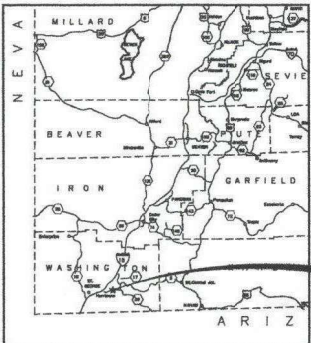
As discussed previously, the maximum elevation for the final cover is planned to be approximately 2,830 feet above mean sea level at the highest point. The upper area of the cover will slope at approximately 5% downward to the southeast. All side slopes of the final cover are planned to be a maximum of 4:1 (horizontal to vertical). These slopes will allow for some settlement without compromising the run-off characteristics of the cover soil. Drawing 4 (Appendix A) details the topography of the final cover.

1.2 DESIGN AND LOCATION OF RUN-ON/RUN-OFF CONTROL SYSTEMS

Run-on control ditches (berms) will be installed to intercept potential run-on above all areas of the site. All run-on will be diverted around the site by two run-on ditches (berms). The topography of the site will necessitate the construction of two run-off ditches downhill of the Landfill to direct all potential run-off to a storm water detention pond. The run-off control ditches will be constructed as indicated on Drawing 6 (Appendix A). The existence, location, and cross sectional area of the field located run-on ditches will be verified prior to the acceptance of waste. Modifications to the site topography have been made with perimeter drainage structures being constructed.

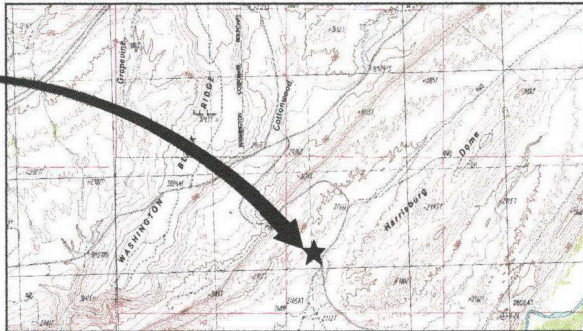
The design of all storm water ditches was based on a 25-year 24-hour storm event of 2.52 inches of precipitation, which was obtained from the Utah Climate Center. Using a curve number of 80, time of concentration of 1-hour and type II rainfall with the TR55 computer software, a peak discharge of 12 cubic feet per second (cfs) was obtained. The cover and surrounding drainage areas was divided into two areas of approximately 26 acres each. Based on our analysis the flow depth in a "V" ditch with 2:1 side slopes would be approximately 1 foot during peak discharge. The location and section view of the run-off control ditches are shown on Drawings 4 & 5 (Appendix A).

PURGATORY LANDFILL 2021 PERMIT RENEWAL



LOCATION MAP

NOT TO SCALE



VICINITY MAP

0 1000 2000 4000
SCALE IN FEET

INDEX

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- 2 GENERAL ARRANGEMENT
- 3 LANDFILL DEVELOPMENT
- 4 FINAL COVER
- 5 ELEVATION VIEW
- 6 DETAILS



BACKGROUND IMAGERY FROM UTAH AGRC: 2018 NAIP SERIES

0 250 500 1000
SCALE IN FEET

SITE MAP



P.O. BOX 910278
ST. GEORGE, UT 84791-02780
(435) 673-5610

CONSULTANTS



2702 South 1030 West, Suite 10
Salt Lake City, Utah 84119
(801) 270-9400 Fax: (801) 270-9401

MARK	DATE	DESCRIPTION
	5/27/21	2021 DRAFT PERMIT
ISSUE:		

SHEET TITLE

TITLE SHEET

1



P.O. BOX 910278
 ST. GEORGE, UT 84791-02780
 (435) 673-5610

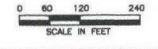


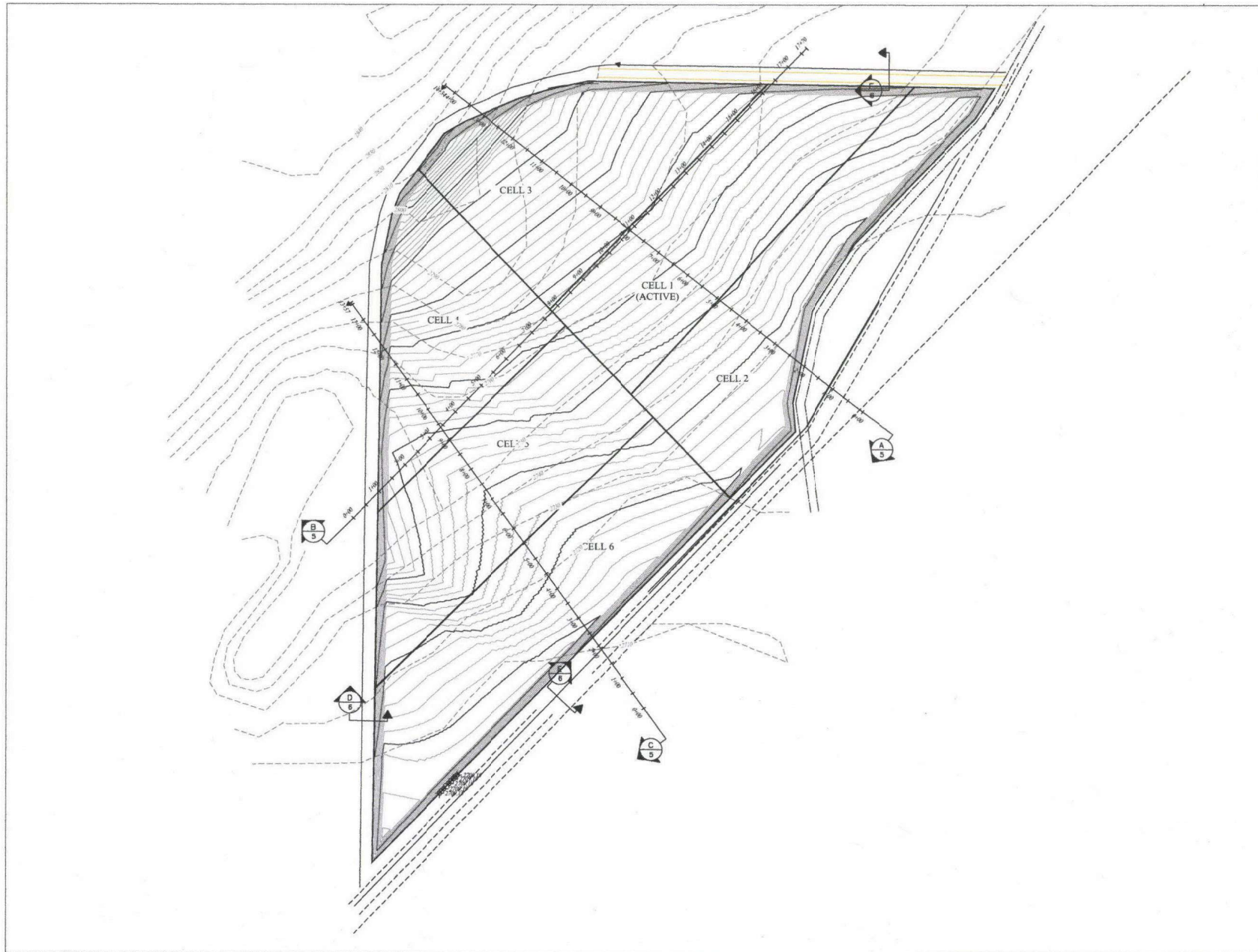
2702 South 1030 West, Suite 10
 Salt Lake City, Utah 84119
 (801) 270-9400 Fax: (801) 270-9401

MARK	DATE	DESCRIPTION

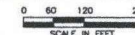
ISSUE:		

SHEET TITLE
GENERAL ARANGEMENT





LANDFILL EXCAVATION (SEE NOTE 1)



P.O. BOX 910278
ST. GEORGE, UT 84791-02780
(435) 678-5610

CONSULTANTS



2702 South 1030 West, Suite 10
Salt Lake City, Utah 84119
(801) 270-9400 Fax: (801) 270-9401

NOTES:

COMPLETE EXCAVATION AS SHOWN TO DEPTH OF 10-15 FT. EXCAVATION OF CELLS TO BE PERFORMED SEQUENTIALLY AND IN ORDER AS NUMBERED.

SOIL VOLUMES GENERATED PER CELL EXCAVATION*

CELL 1: 149,94 CYD
CELL 2: 158,366 CYD
CELL 3: 129,161 CYD
CELL 4: 111,370 CYD
CELL 5: 126,900 CYD
CELL 6: 177,110 CYD

TOTAL: 847,560 CYD

AIRSPACE AVAILABLE PER CELL*

CELL 1: 59,041 CYD
CELL 2: 92,314 CYD
CELL 3: 58,878 CYD
CELL 4: 53,504 CYD
CELL 5: 66,493 CYD
CELL 6: 84,570 CYD

TOTAL: 1,256,091 CYD

* ACTUAL VOLUMES WILL DEPEND ON DEPTH OF EXCAVATION AND HEIGHT OF CELL WITHIN PERMITTED FOOTPRINT.

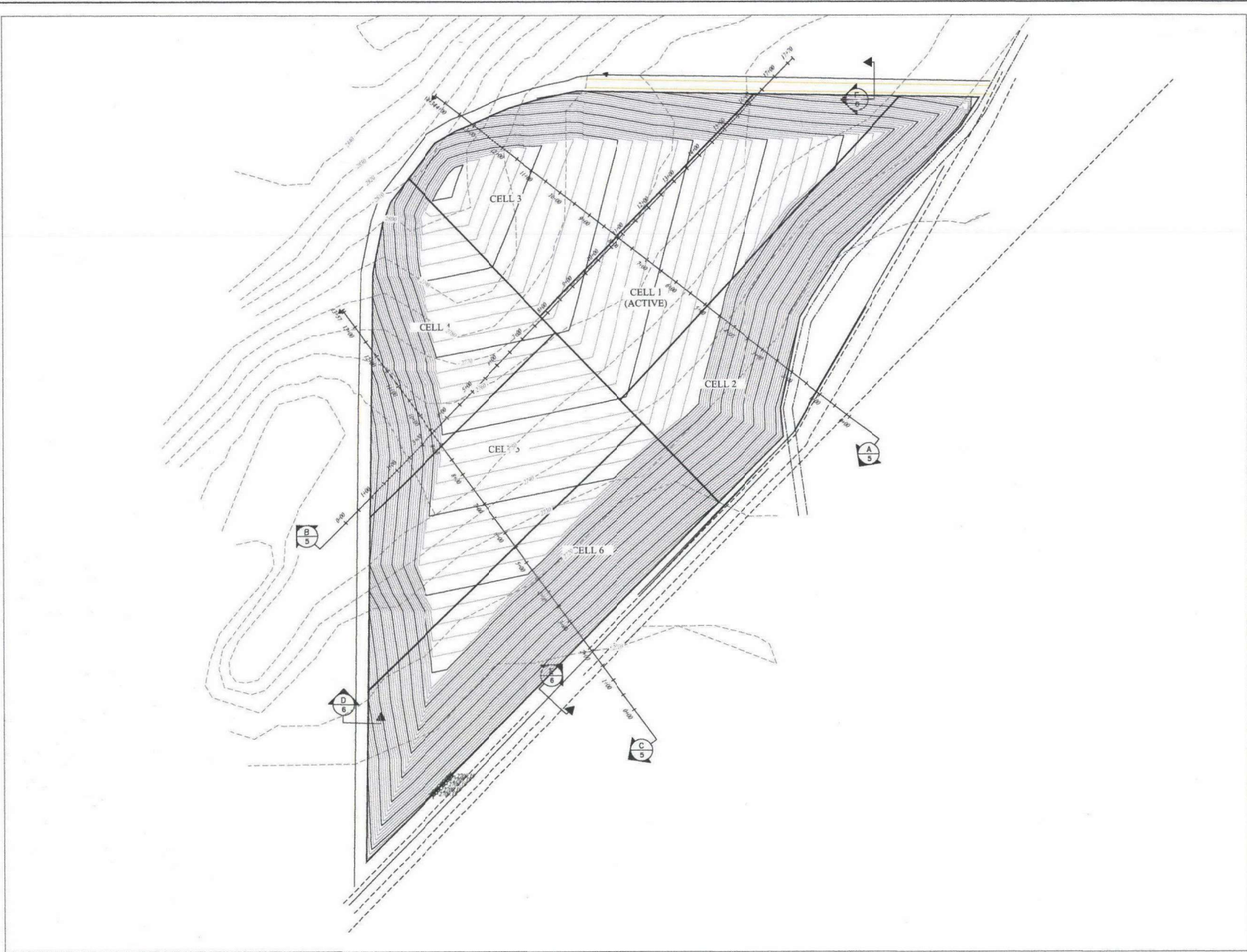
5/27/21	2021 PERMIT DRAFT
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MARK	DATE	DESCRIPTION

ISSUE:

SHEET TITLE

LANDFILL DEVELOPMENT



0 60 120 240
SCALE IN FEET



P.O. BOX 910276
ST. GEORGE, UT 84791-02760
(435) 673-5610



2702 South 1030 West, Suite 10
Salt Lake City, Utah 84119
(801)270-9400 Fax: (801)270-9401

NOTES

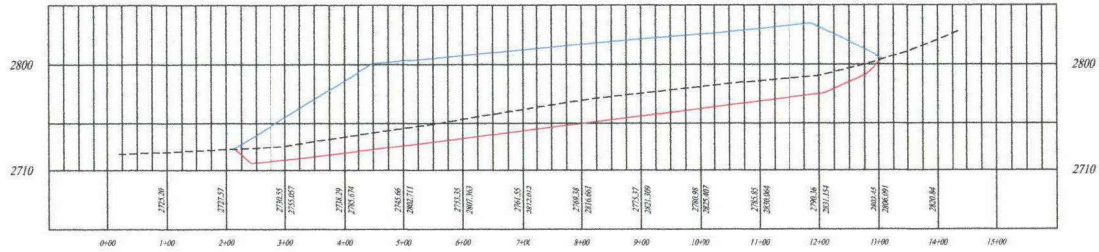
COVER AREA

CELL 1	311,981 SQ-FT
CELL 2	307,480 SQ-FT
CELL 3	306,255 SQ-FT
CELL 4	251,931 SQ-FT
CELL 5	308,812 SQ-FT
CELL 6	394,017 SQ-FT
TOTAL:	1,883,476 SQ-FT

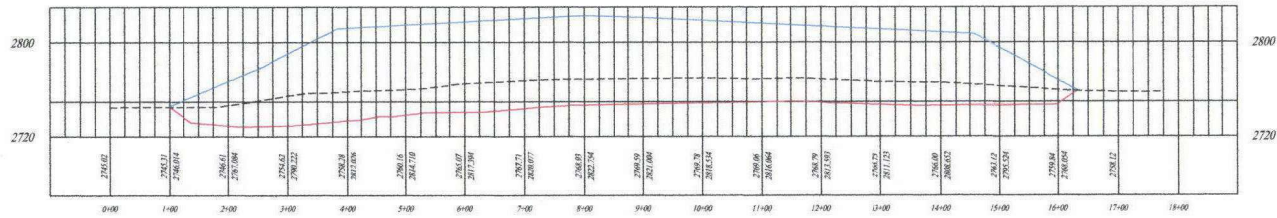
MARK	DATE	DESCRIPTION
	5/27/21	2021 PERMIT DRAFT

SHEET TITLE

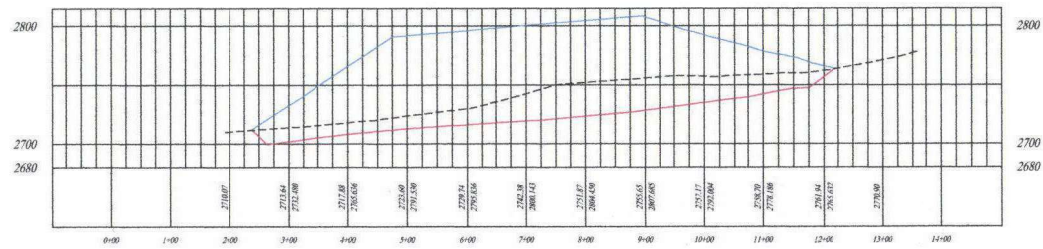
FINAL COVER



SECTION A-ELEVATION VIEW
2X VERTICAL EXAGGERATION



SECTION B-ELEVATION VIEW
2X VERTICAL EXAGGERATION



SECTION C-ELEVATION VIEW
2X VERTICAL EXAGGERATION

0 30 100 200
SCALE IN FEET
2X VERTICAL EXAGGERATION



P.O. BOX 910278
ST. GEORGE, UT 84791-02780
(435) 673-5610

CONSULTANTS



2702 South 1030 West, Suite 10
Salt Lake City, Utah 84119
(801)270-9400 Fax: (801)270-9401

NOTES

MARK	DATE	DESCRIPTION
	5/27/21	2021 PERMIT DRAFT

ISSUE:

SHEET TITLE

ELEVATION
VIEW

5

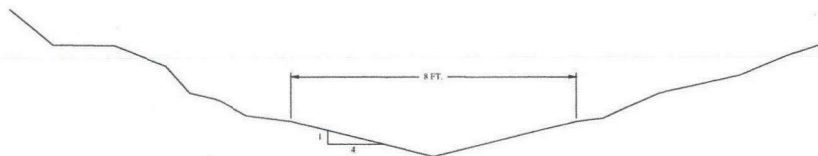


P.O. BOX 910278
ST. GEORGE, UT 84791-02780
(435) 673-5810

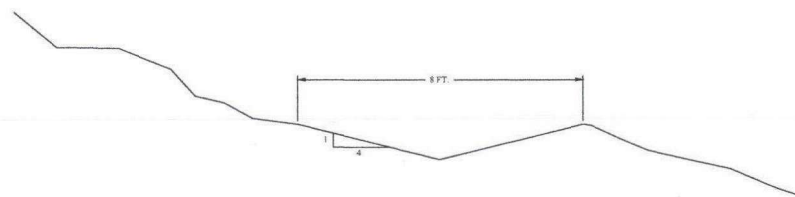
CONSULTANTS




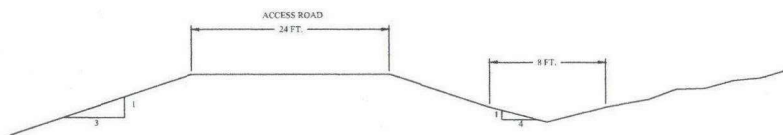
2702 South 1030 West, Suite 10
Salt Lake City, Utah 84119
(801) 270-9400 Fax: (801) 270-9401




 **DETAIL D (NTS)**
STORM WATER RUN-ON DITCH



 **DETAIL F (NTS)**
STORM WATER RUN-OFF DITCH



 **DETAIL G (NTS)**
ACCESS ROAD WITH RUN-ON DITCH

NOTES

MARK	DATE	DESCRIPTION
	5/27/21	2021 PERMIT DRAFT

ISSUE:

SHEET TITLE

DETAILS

6

Attachment 2
Operations Plan

3.0 – OPERATIONS PLAN

The Operation Plan for the Landfill has been written to address the requirements of Utah State Solid Waste Regulations and describes the proposed operations at the facility.

The following section details the operational specifics of the Landfill. Forms used to document the operations of the Landfill are included in Appendix C.

3.1 SCHEDULE OF CONSTRUCTION

The construction and operation of the Landfill has been broken down into two Phases as indicated on Drawing 3 (Appendix A); Phase A will consist of the development and filling of the first three cells. Phase A will include all site development activities including water diversion structures and site support facilities. Soil excavated from Cell 1 will be utilized for the general site grading of the support area, creation of site access roads and water diversion and retaining structures. As Cell 1 begins accepting C& D wastes; Cell 2 will be excavated to provide cover soil for the Cell 1 operations. Excess excavated soils from Cell 2 will be stockpiled for use as final cover. Cell 3 will be developed in the same manner with excavated soils being utilized for operational cover or stockpiled for future use.

Phase B will be developed by excavating the Cell 4 area. Soils from Cell 4 will be utilized as final cover for the Phase A area. Excess soil from Cell 4 will be stockpiled for use in the final cover of the Phase B area. As Cell 4 begins to accept waste; Cell 5 will be excavated to provide operational cover soils. Cell 6 will be developed in the same manner with excavated soils being utilized for operation cover or stockpiled for future use. The Landfill will be constructed and commence operations following legislative approval.

The excavation depth of each Cell may vary due to the actual depth of soil overlying the bedrock. The excavated surface indicated on Drawing 3 (Appendix A) are approximate only

since the depth to bedrock will vary across the site. The actual depth of excavation for each Cell is not crucial in the design or operation of the facility as long as the minimum 2% bottom slope and maximum 3:1 side slopes are maintained.

The operation of the Landfill will be continual in nature, the Phased arrangement is more of a design concept rather than actual operational milestones. Based on the projected waste stream, Phase A will provide operational airspace for approximately 11 to 12 years, with design capacity being reached in 2031 or early 2032. Phase B will commence operation in approximately 2032 and last until approximately 2043. The landfill capacities are initially based upon reported waste acceptance of 30,000 tons per year (2018-2020) and escalating at 25% for an additional two years, then at 2% growth (mirroring current population growth) each year thereafter.

3.2 DESCRIPTION OF WASTE HANDLING PROCEDURES

3.2.1 General

The waste control program is designed to detect and deter attempts to dispose of hazardous, municipal solid waste or other unacceptable wastes at the Landfill. The program is designed to protect the health and safety of employees, customers, and the general public, as well as to protect against the contamination of the environment.

The Landfill will be open for public and private disposal. Signs will be posted at the Landfill access point to clearly indicate (1) the types of wastes that are accepted at the C&D facility; (2) the types of wastes not accepted at the site; and (3) the penalty for illegal disposal. The following waste handling procedure will be followed to minimize the potential for non C&D waste being incorporated in the Landfill:

- All vehicles delivering wastes to the site will be met at the gate by a Landfill Technician. The Landfill Technician will inquire as to the contents of each incoming load and enter the description of the vehicle and waste content into the Daily Log.
- The vehicle will be directed to the drop off facility (for recyclables), working face (for C&D), Washington County Landfill operations (for MSW), or rejected due to unacceptable materials.
- Any vehicle suspected of carrying unacceptable materials (liquid waste, sludges, or hazardous waste) will be prevented from entering the disposal areas unless the driver can provide evidence that the waste is acceptable for disposal at the site. ONP, LLC reserves the right to refuse service to any suspect load. Vehicles carrying unacceptable materials will be required to exit the site without discharging their loads.
- Loads will be regularly surveyed at the tipping area. If a discharged load contains inappropriate or unacceptable material, the discharger will be required to reload the material and remove it from the Landfill. If the discharger is not immediately identified, the area where the unacceptable material was discharged will be cordoned off. Unacceptable material will be moved to a designated area for identification and preparation for proper disposal.

No open burning or smoking will be allowed near the work face.

3.2.2 Waste Acceptance Records

A monthly summary of all landfill transactions will be created and kept on file at the Landfill or sent to the ONP, LLC offices for storage.

3.2.3 Waste Disposal

The geometry of the Landfill is such that the waste will be pushed upslope into place. The C&D wastes will be dumped at the toe of the work face when possible and spread up the slope in one- to two-foot lifts, keeping the slope at a typical five to one (horizontal to vertical) configuration.

Work face dimensions will be kept narrow enough to minimize blowing litter and reduce the amount of soil needed for cover.

Typically, the track loader will be operated with the bucket facing uphill. Equipment operations across the slope will be avoided to minimize the potential of equipment tipping over. In addition to safety concerns, a toe of slope to crest of slope working orientation provides the following benefits:

- Increases effective compaction.
- Increased visibility for waste placement and compaction.
- More uniform waste distribution.

The wastes will be compacted by making three to five passes up and down the slope. Compaction reduces litter, differential settlement, and the quantities of cover soil needed. Compaction also extends the life of the site, reduces unit costs, and leaves fewer voids to help reduce vector problems. Care will be taken that no holes will be left in the compacted waste. Voids will be filled with additional waste as they develop. Cover soils will be applied to all areas of the active cell at a minimum of every 30 days.

3.2.4 Special Wastes – Wastes Excluded from the Landfill

3.2.4.1 Used Oil and Batteries

Used Oil and Batteries will not be accepted at the Landfill.

3.2.4.2 Appliances

White goods will be accepted at the Landfill and be separated for recycling. All appliances containing refrigerants will be segregated in a separate area and stored until the refrigerant is removed. The appliances will be loaded into a metal bin for recycling. Used cars will not be accepted at the facility.

3.2.4.3 Tires

Tires will not be accepted at the Landfill.

3.2.4.4 Dead Animals

Dead animals will not be accepted at the Landfill.

3.2.4.5 Asbestos Waste

Asbestos waste will not be accepted at the Landfill.

3.2.4.6 Grease By-Products

Grease By-Product wastes will not be accepted at the Landfill.

3.2.4.7 Sewer Sludge

Sewer sludge of any kind (wet or dry) will not be accepted at the Landfill.

3.3 WASTE INSPECTION

3.3.1 Landfill Spotting

Learning to identify and exclude prohibited and hazardous waste from the Landfill is required to maintain the Class VI classification and necessary for the safe operation of the facility. The Landfill Technicians are required to receive initial and periodic hazardous waste screening inspection training. Waste screening certificates of the training received will be kept in the personnel files.

3.3.2 Random Waste Screening

Random inspections of incoming loads will be conducted according to the schedule established by the Landfill Supervisor. If frequent violations are detected, additional random checks will be scheduled at the discretion of the Landfill Supervisor.

If a suspicious or unknown waste is encountered, the Landfill Technician will proceed with the waste screening as follows:

- The driver of the vehicle containing the suspect material will be directed to the waste screening area.
- The waste screening form (Appendix C) will be completed.
- Protective gear will be worn (leather gloves, steel-toed boots, and hard hat).
- The suspect material will be spread out with landfill equipment or hand tools and visually examined. Suspicious marking or materials, like the ones listed below, are investigated further:
 - Containers labeled hazardous
 - Material with unusual amounts of moisture
 - Biomedical (red bag) waste
 - Unidentified powders, smoke, or vapors
 - Liquids, sludges, pastes, or slurries
 - Asbestos or asbestos contaminated materials
 - Batteries
 - Other wastes not accepted by the Landfill
- The Landfill Supervisor will be called if unstable wastes that cannot be handled safely or radioactive wastes are discovered or suspected.

3.3.3 Removal of Hazardous or Prohibited Waste

Should hazardous or prohibited wastes be discovered during random waste screening or during tipping, the waste will be removed from the Landfill as follows:

- The waste will be loaded back on the hauler's vehicle. The hauler will then be informed of the proper disposal options.

- If the hauler or generator is no longer on the premises and is known, they will be asked to retrieve the waste and informed of the proper disposal options.
- The Landfill Supervisor will arrange to have the waste transported to the proper disposal site and then bill the original hauler or generator.

A record of the removal of all hazardous or prohibited wastes will be kept in the site operational records.

3.3.4 Hazardous or Prohibited Waste Discovered After the Fact

If Hazardous or prohibited wastes are discovered at the Landfill after the hauler has left the premises, the following procedure will be used to remove them:

- Access to the area will be restricted.
- The Landfill Supervisor will be immediately notified.
- The Landfill Technician will remove the waste from the working face if it is safe to do so.
- The waste will be isolated in a secure area of the Landfill and the area cordoned off.
- Local authorities will then be notified as appropriate.

The DSHW, the hauler (if known), and the generator (if known) will be notified within 24 hours of the discovery. The generator (if known) is responsible for the proper cleanup, transportation, and disposal of the waste.

3.3.5 Notification Procedures

The following agencies and people are contacted if any hazardous materials are discovered at the Landfill:

- Landfill Supervisor (435) 703-4742
- Washington County Health Department..... (435) 673-3528
- Director, DSHW..... (801) 536-0200

- Washington City Fire Department.....(435) 673-4788

A record of conversation will be completed as each of the entities is contacted. The record of conversation will be kept in the site operational records.

3.4 FACILITY MONITORING AND INSPECTION

3.4.1 Groundwater

The Landfill is not required to monitor groundwater.

3.4.2 Surface Water

Run-on diversion structures will be installed around the perimeter of the Landfill site during the initial construction as shown on Drawing 3 and detailed on Drawing 6 (Appendix A). The diversion structures envisioned are ditches, but berms may also be added in small areas if necessitated by topography. Potential run-on waters will be prohibited from accessing the working area of the landfill and diverted towards the Virgin River. Drawing 6 (Appendix A) shows the section view of the storm water diversion ditches.

ONP, LLC staff will inspect the drainage system monthly. Temporary repairs will be made as required to any observed deficiencies until permanent repairs can be scheduled. ONP, LLC or a licensed general contractor will repair drainage facilities as required.

3.4.3 Leachate Collection

The Landfill is not required to collect or monitor leachate.

3.4.4 Landfill Gas

The Landfill is not required to monitor landfill gas.

3.4.5 General Inspections

Routine inspections will be necessary to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to release of wastes to the environment or a threat to human health. Landfill Technicians will be responsible for conducting and recording routine inspections of the landfill facilities according to the following schedule:

- Landfill Technicians (when operating equipment) will perform a pre-operational inspection of all equipment daily. A post-operational inspection will be performed at the end of each shift while equipment is cooling down.
- All equipment will be on a regular maintenance schedule. A logbook will be maintained on each piece of equipment and any repairs and comments concerning the inspection will be recorded in the log.
- Facility inspections will be completed on a quarterly basis. Any needed corrective action items will be recorded, and the Landfill Technicians will complete any needed repairs. If a problem is of an urgent nature, the problem will be corrected immediately.

3.5 CONTIGENCY AND CORRECTIVE ACTION PLANS

The Washington City Fire Department will be contacted in all cases where hazardous materials are suspected to be involved. The following sections outline procedures to be followed in case of fire, explosion, run-on/run-off contamination, or suspected groundwater contamination:

3.5.1 Fire

The potential for fire is a concern in any landfill. The Landfill will follow a waste handling procedure to minimize the potential for a landfill fire. If any load comes to the facility on fire, the driver of the vehicle will be directed to a pre-designated area away from the working face. The burning waste will be unloaded, spread out, and immediately covered with sufficient amounts of soil to smother the fire. Once the burning waste cools and is deemed safe, the

material will then be incorporated into the working face. Some loads coming to the facility may be on fire but not detected until after being unloaded at the working face. If a load of waste that is on fire is unloaded at the working face, the load of waste will be immediately removed from the working face, spread out, and covered with soil.

The Washington City Fire department will be called if it appears that facility personnel and equipment cannot contain any fire. The Washington City Fire department will also be called if a fire is burning below the disposal surface or is difficult to reach or isolate.

In case of fire, the Landfill Supervisor will be notified immediately. A written report detailing the event will be placed in the operating record within seven days, including any corrective action taken.

3.5.2 Explosion

If an explosion occurs or seems possible, all personnel and customers will be accounted for and the Landfill will be evacuated. A corrective action plan will immediately be evaluated and implemented as soon as practicable.

The Landfill Supervisor will be notified immediately, and the Washington City Fire department will be called. The Director will be notified immediately.

3.5.3 Failure of Run-On/Run-Off Containment

The purpose of the run-on/run-off control system is to manage the stormwater falling in or near the Landfill. Were possible, water will be diverted away from the facility by utilizing ditches and berms. These ditches will be inspected on a regular basis and repaired as needed. All precipitation falling near the facility will flow around the site perimeter towards the Virgin River.

If a run-off ditch or berm fails, temporary berms or ditches will be constructed until a permanent run-off structure can be repaired.

Any temporary berms or other structures will be checked at least every 2 hours during the storm event until storm water flow has stopped. Permanent improvements or repairs will be made as soon as practicable.

The Landfill Supervisor will be notified immediately if a failure of the run-off systems is discovered. The event will be fully documented in the operating record, including any corrective actions implemented within 14 days.

3.5.4 Groundwater Contamination

The Landfill will not have ground water monitoring wells. If ground water contamination is ever suspected, studies to evaluate the potential contamination will be conducted and the existence and/or extent of contamination will be documented. This program may include the installation of ground water monitoring wells. A ground water monitoring program would be developed, and corrective action taken as deemed necessary, with the approval of the Director.

3.6 CONTINGENCY PLAN FOR ALTERNATIVE WASTE HANDLING

The most probable reason for a disruption in the waste handling procedures at the Landfill will be weather related. The facility may close during periods of inclement weather such as high winds, heavy rain, snow, flooding, or any other weather-related condition that would make travel or operations dangerous. The Landfill may also close for other reasons like fire, natural disaster, etc. In general, the ONP, LLC staff will minimize the possibility of disruption of waste disposal services from an operational standpoint.

In case of equipment failure, waste will be temporarily diverted for disposal at the Washington County Landfill while repairs to site equipment are being made.

3.7 MAINTENANCE PLAN

3.7.1 Groundwater Monitoring System

The Landfill will be exempt from requirements for groundwater monitoring. As a result, no groundwater monitoring system is planned.

3.7.2 Leachate Collection and Recovery System

The Landfill will be exempt from requirements for leachate collection. As a result, no leachate collection and recovery system is planned.

3.7.3 Gas Monitoring System

The Landfill will be exempt from requirements for a landfill gas monitoring system. No gas collection system is planned.

3.8 DISEASE, VECTOR, DUST, AND LITTER CONTROL

The vectors typically encountered at landfills are flies, birds, mosquitoes, rodents, skunks, and snakes. Due to the rural location of the facility, stray house pets may occasionally be encountered at the landfill. The program for controlling these vectors is as follows:

3.8.1 Insects

The elimination of breeding areas is essential in the control of insects. The facility will minimize the breeding areas by covering the waste with soil at a minimum of every 30 days and maintaining surfaces to reduce ponded water.

3.8.2 Rodents

Reducing potential food sources minimizes rodent populations at the landfill. Due to the nature of the C&D wastes, limited food is available and a significant numbers of mice or rats are therefore not anticipated.

In the unlikely event of a significant increase in the number of rodents at the landfill, a professional exterminator will be contacted. The exterminator will then establish an appropriate protocol for pest control in accordance with all county, state and federal regulations.

3.8.3 Birds

It is anticipated that the Landfill will have minimal problems with birds due to the nature of the C&D wastes. Good land filling practices of waste compaction, daily covering of working faces, and the minimization of ponded water, and the nature of the waste should alleviate most of the bird related problems. If the occasional need arises, the birds will be encouraged to leave by using cracker and whistler shells.

3.8.4 Household Pets

Because of the Landfill's location, some stray cats and dogs may wander onto landfill property. If stray animals are encountered (and can be caught), they will be turned over to the animal shelter. If the Landfill Technicians are unable to apprehend the animals, they will be chased off the property.

3.8.5 Wildlife

The Landfill may have a variety of wildlife located on or near the landfill property. Wildlife may include deer, snakes, foxes, skunks, and coyotes. If problem skunks or snakes are encountered, they will be exterminated. If other site wildlife becomes a problem, the facility will coordinate with the Division of Wildlife Resources to provide methods and means to eliminate the problem.

In the event that any of these vectors become an unmanageable problem, the services of a professional exterminator will be employed.

3.8.6 Fugitive Dust

The roads leading to the Landfill are paved, however; site access roads to the working face will be improved dirt/gravel road and will need occasional dust control measures. General landfill activities, site access by vehicles compounded with occasional high winds may present a fugitive dust problem. If the dust problem elevates above the “minimum avoidable dust level”, facility personnel will apply water to the problem areas. A combination of gravel and a dust palliative may be utilized if dust becomes prevalent.

3.8.7 Litter Control

The nature of the C&D waste anticipated to be received at the Landfill is such that it will naturally resist blowing. However; due to the nature of landfilling operations, it is anticipated blowing litter will still be an occasional problem. Landfill personnel will perform routine litter cleanup to keep the landfill and surrounding properties clear of windblown debris.

Whenever possible, the working face will be placed down wind so that blowing litter is worked into the landfill face. During windy conditions, landfill personnel will minimize the spreading of the waste to reduce the quantity of windblown debris.

3.9 RECYCLING AND MATERIAL REUSE

Material reuse and recycling activities are planned to be conducted in conjunction with the C&D operations. Metals, appliances, wood, and other re-useable or recyclable materials will be accepted at the Landfill. As the recycling markets fluctuate; other recyclable materials may be added to the list of material that the facility accepts.

3.10 TRAINING PROGRAM

As part of the initial training of new employees, site specific training will be required. All on-site personnel will be required to review the approved permit annually.

All personnel associated with the operation of the landfill receive site specific training annually. The "Sanitary Landfill Operator Training Course" offered by the Solid Waste Association of North America (SWANA) will be required for the Landfill Supervisor. SWANA waste screening will also be required of all Landfill Technicians. Certificates of completion will be kept in personnel files.

Regular safety and equipment maintenance training sessions will be held to ensure that employees are aware of the latest technologies and that good safety practices are used at all times.

3.11 RECORDKEEPING

An operating record will be maintained as part of a permanent record on the following items:

- Number of vehicles entering the landfill and types of wastes received on a monthly basis.
- Daily logs forms will be submitted to the ONP, LLC office for storage.
- Deviations from the approved Plan of Operation.
- Personnel training and notification procedures.
- Random load inspection log.

3.12 SUBMITTAL OF ANNUAL REPORT

ONP, LLC will submit a copy of its annual report to the Director by March 1 of each year for the most recent calendar or fiscal year of facility operation. The annual report will include facility activities during the previous year and will include, at a minimum, the following:

- Name and address of facility.
- Calendar or fiscal year covered by the annual report.
- Annual quantity, in tons or volume, in cubic yards, and estimated in-place density in pounds per cubic yard of solid waste.

- Annual update of required financial assurances mechanism pursuant to Utah Administrative Code R315-309.
- Training programs completed.

3.13 INSPECTIONS

The Landfill Supervisor, or his/her designee, will inspect the facility to minimize malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or to a threat to human health. These inspections will be conducted on a quarterly basis, at a minimum. An inspection log (Appendix C) will be kept as part of the operating record. This log will include at least the date and time of inspection, the printed name and handwritten signature of the inspector, a notation of observations made, and the date and nature of any repairs or corrective actions. Inspection records will be available to the Director or an authorized representative upon request.

3.14 RECORDING WITH COUNTY RECORDER

Plats and other data, as required by the County Recorder, will be recorded with the Washington County Recorder as part of the record of title no later than 60 days after certification of closure.

3.15 STATE AND LOCAL REQUIREMENTS

The Landfill will maintain compliance with all applicable state and local requirements including zoning, fire protection, water pollution prevention, air pollution prevention, and nuisance control.

3.16 SAFETY

Landfill personnel will be required to participate in an ongoing safety program. This program will comply with the Occupational Safety and Health Administration (OSHA), and the National Institute of Occupational Safety and Health (NIOSH) regulations as applicable. This program will be designed to make the site and equipment as secure as possible and to educate landfill personnel about safe work practices.

3.17 EMERGENCY PROCEDURES

In the event of an accident or any other emergency situation, the Landfill Technician will immediately contact the Landfill Supervisor and proceed as directed. If the Landfill Supervisor is not available, the Landfill Technicians will call the appropriate emergency number posted by the telephone. The emergency telephone numbers for the facility are:

- Washington County Central Dispatch..... 911
- Washington City Fire Department..... (435) 673-4788
- Washington County Sheriff's Office (435) 637-5730
- St. George Regional Hospital (435) 251-1000
- Landfill Supervisor (435) 703-4742

Purgatory Landfill

Daily Log

Date: _____

Load #	Time	Vehicle Identification	Size of Load (Cu. Yds.)	Type of Waste	Charge
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Signature of Inspector

Purgatory Landfill

Random Load Inspection

Date of Inspection: _____
Owner of Load: _____
Address of Owner: _____

Description of Materials in Load:

Approximate Quantity of Load:

_____ Tons
_____ Cu. Yds.

Signature of Owner / Carrier

Signature of Inspector

Purgatory Landfill

Site Inspection Form

DATE OF INSPECTION: _____

LANDFILL AREA: _____

PERSONNEL ON SHIFT: _____

GENERAL SITE CONDITIONS: _____

SPECIFIC CONDITIONS:

Closed Cover Condition: _____

Daily Cover: _____

Run-On Structures: _____

Run-Off Structures: _____

Fences: _____

Site Structures: _____

CORRECTIVE ACTION REQUIRED: _____

Signature of Inspector

Attachment 3
Closure and Post-Closure

2.0 – CLOSURE PLAN

2.1 CLOSURE SCHEDULE

The Landfill will be closed in the same Phases as the landfill is developed. Phase 1 of the closure will incorporate the area of Phase A (Cells 1, 2, & 3). As indicated in Part II – General Report, the Phases have been designated to facilitate access, development and design. The facility life has been estimated based on the first two years’ annual reports and projected forward at a rate that mirrors anticipated population growth in the area. The anticipated life of the landfill extends from a previously predicted 2034 date to 2043. Increases in waste volume are predicted at a 2 percent growth rate after an initial 5-year period when rates are less stable as the landfill becomes a known alternative for disposal in the area.

2.2 DESIGN OF FINAL COVER

As discussed previously, the final cover will consist of a minimum of two feet of soil, the top six inches of which will consist of soil suitable to sustain native vegetation. The cover soil will be seeded with indigenous grasses and cover slopes will be primarily at a 4:1 with no slopes less than 5%.

2.3 CAPACITY OF SITE IN VOLUME AND TONNAGE

The approximate Landfill capacity and projected life by Phase are presented in the following summary table:

Landfill Cell	Waste & Soil Volume (cubic yards)	Capacity (net tons of waste)	Projected Phase Life (years at 2% growth)
1	591,041	265,968	
2	582,514	262,131	
3	585,876	263,644	Phase A – 13 to14 years
4	533,504	240,076	
5	646,488	290,919	
6	816,578	367,460	Phase B – 11 to 12 years
TOTAL	3,756,000	1,690,200	Max. Total Life – 26 years

The waste tonnage numbers presented in the table are net numbers (total airspace reduced by 25% to account for cover soil usage). The detailed analysis of the landfill life is presented in Appendix D.

2.4 FINAL INSPECTION

A final inspection will be performed at the Landfill site at the termination of landfilling activities. The final inspection will determine if the Landfill meets all the closure requirements as outlined in the permit and closure plans. The final inspection will be conducted by members of the State of Utah DSHW and ONP, LLC.

3.0 – POST-CLOSURE CARE PLAN

3.1 SITE MONITORING

There are no post-closure monitoring requirements for groundwater or gas at the Landfill since it is a Class VI facility. However, other physical aspects of the Landfill will be monitored on a semi-annual basis.

Landfill topography shall be visually checked for depressions that could result in ponding or rapid erosion. Irregularities in the surface of the final cover will be regraded and revegetated as needed to protect the surface from erosion and to eliminate ponding.

Side slopes will be maintained or reestablished with a maximum gradient of 4:1 and the top slopes will be maintained at no less than 5% to prevent ponding. The frequency of monitoring may be reduced only after a successful demonstration to the Secretary that the closed landfill has stabilized.

During post-closure, run-off from the covered landfill will be directed toward ditches constructed to collect and transport runoff to the storm water detention pond. The ditches will be inspected semi-annually through the post-closure period. Repairs to the ditches and storm water detention pond will be completed as part of the maintenance activities.

3.2 CHANGES TO RECORD OF TITLE, LAND USE AND ZONING

The Washington County Recorder will be provided plats and a statement of fact concerning the location of any disposal site no later than 60 days after certification of closure. If necessary, the closed Landfill will be rezoned to conform to the existing Washington County zoning regulations after final closure. A description of the Landfill history and filled areas will be permanently appended to the record of title. Land use restrictions will be assigned to the site in compliance with existing regulations for closed landfills at the time of closure.

3.3 MAINTENANCE

Post-closure maintenance activities will be designed and implemented under the direction of a licensed professional engineer in response to results of inspections. Design decisions will be made after the first post-closure semi-annual inspection and implemented within 30 days after identification of maintenance issues. Results of post-closure maintenance shall be reported to the Director by a professional engineer licensed in the State of Utah.

Because of the arid climate in Washington County, maintenance of final covers and run-on/run-off systems should be minimal. Final cover and control structures will be inspected semi-annually as indicated previously.

Run-on/run-off control structures and final covers could be damaged by an unusually intense storm. Consequently, an unscheduled inspection will be required after any occurrence of a 25-year storm event within a five-mile radius of the site. If the post-storm inspection discloses damage, it will be appraised by a licensed engineer. The engineer will solicit bids if necessary and supervise repairs completed by ONP, LLC or a licensed contractor. Funds for payment for the repair work will be disbursed from the Financial Assurance Plan after approval by the Director.

3.4 POST-CLOSURE CONTACTS

ONP, LLC (435) 673-5610

Statement of Basis for Purgatory Landfill Permit

1. INTRODUCTION

This Statement of Basis provides the rationale of the Director of the Division of Waste Management and Radiation Control for issuing the Purgatory Landfill permit. The Director's staff conducted this evaluation to ensure compliance with the applicable Solid Waste Permitting and Management Rules. Matt Sullivan wrote this Statement of Basis.

2. FACILITY BACKGROUND

a. Facility Location and History

The Purgatory Landfill is located at 105 N. Landfill Road in the south central portion of Washington County, and south and east of the Washington City limits in an isolated geographic area known as Purgatory Flat. Prior to the landfill, the property was undeveloped.

b. Regulatory History

The facility received its first permit from the State of Utah effective on June 15, 2005. A permit was renewed effective on May 15, 2011. This is the second permit renewal (0404R2) and is effective on the date noted in this permit.

3. EVALUATION OF THE PERMIT APPLICATION

- a. The permit renewal application (DSHW-2021-010302) was received on July 16, 2021. The application was evaluated and determined complete on August 5, 2021.

4. JUSTIFICATION FOR ISSUING THE PERMIT

- a. The Director's staff has evaluated the permit application as required by Section 19-6-108 of the Solid and Hazardous Waste Act and R315-301 through 320 of the Solid Waste Permitting and Management Rules. The information provided in the application satisfies all requirements.

5. PUBLIC PARTICIPATION

- a. As required by Utah Administrative Code R315-311-3, the Director provided a 30-day public comment period between January 31, 2022 through March 1, 2022. No Comments were received during that time.

- 6. **DIRECTOR RESPONSE TO PUBLIC COMMENTS:** No comments were received during the public comment period. There were no responses from the Director.

Purgatory Landfill Location Map (North Bearing – top of map)

