



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*

October 13, 2022

Ryan Marshall, Director  
Cedar City Public Works  
10 North Main Street  
Cedar City, Utah 84720

RE: Draft Renewal Permit for the Cedar City – Bulloch Pit Class IVb Landfill  
SW126

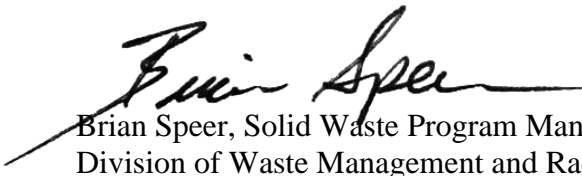
Dear Mr. Marshall:

The Division of Waste Management and Radiation Control has received and evaluated the June 30, 2022, Cedar City – Bulloch Pit Class IVb Landfill Permit Renewal Application (DSHW-2022-018588), and the amended application received on August 11, 2022 (DSHW-2022-022640). A draft renewal permit has been prepared and is attached with this letter for your review.

When you are finished reviewing the draft permit and your comments have been resolved, a 30-day public comment period will be started. Also, during this period, a public hearing may be scheduled. At the end of the comment period, any comments received will be addressed, and if necessary, changes will be made to the draft permit. Upon completion of this process, and if all issues are resolved, you will be issued a final permit that is valid for 10 years.

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

Sincerely,



Brian Speer, Solid Waste Program Manager  
Division of Waste Management and Radiation Control

(Over)

BS/DWT/wa

Enclosures: Draft Permit (DSHW-2022-023374)  
Draft Permit Attachment 1 – Landfill Design and Construction (DSHW-2022-023350)  
Draft Permit Attachment 2 – Operations Plan (DSHW-2022-023377)  
Draft Permit Attachment 3 – Closure and Post-Closure (DSHW-2022-023352)

c: Jeremy Roberts, Environmental Health Director, Southwest Utah Public Health Department  
Paul Wright, P.E., UDEQ District Engineer  
Jeff Hunter, Superintendent, Cedar City Road Dept.

DIVISION OF WASTE MANAGEMENT  
AND RADIATION CONTROL  
SOLID WASTE LANDFILL PERMIT

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**CLASS IV<sub>b</sub> SOLID WASTE PERMIT *RENEWAL***

**CEDAR CITY - BULLOCH PIT CD 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

Cedar City as owner and operator (Permittee),

to own, construct, and operate the *Cedar City - Bulloch Pit CD Landfill* located in the Southeast ¼, of Section 4 and the Southwest ¼ of Section 5, Township 36 South, Range 11 West, Salt Lake Base and Meridian, Iron County, Utah as shown in the *Permit Renewal Application* that was determined complete on August 11, 2022 (DSHW-2022-021543).

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 \_\_\_\_\_, 2022

Closure Cost Revision Date: \_\_\_\_\_, 2027

This Permit shall expire at midnight \_\_\_\_\_, 2032

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

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

**FACILITY OWNER/OPERATOR INFORMATION**

LANDFILL NAME:	Cedar City - Bullock Pit CD Landfill. Class IVb Landfill
OWNER NAME:	Cedar City Corporation
OWNER ADDRESS:	10 North Main Cedar City, UT 84720
OWNER PHONE NO.:	438-586-2950
OPERATOR NAME:	Cedar City Corporation – Public Works
OPERATOR ADDRESS:	716 North Airport Road Cedar City, UT 847210
OPERATOR PHONE NO.:	435-586-2912
TYPE OF PERMIT:	Class IVb Landfill
PERMIT NUMBER:	Permit Number 9611R2
LOCATION:	The landfill site is located in Township 36 South, Range 11 West, Sections 4 & 5, SLBM, Iron County. Lat. 37° 41' 44", Long. 113° 6' 38", at: 1050 North Lund Highway, Cedar City, UT 84720
PERMIT HISTORY	This facility first received a permit to accept solid waste on July 15, 1998. This is the 2nd renewal of the permit. This renewal permit is effective on the date 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 a secure gate and a disposal cell for all permitted 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;

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

I.B.5. Petroleum contaminated soils as allowed in R315-315-8(3) 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. 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 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 as specified in the Attachment # 1 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 one person 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 # 1 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; no alternative may be used.
- 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, 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 Cedar City Streets Department, 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. 1. 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 shown 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 Iron 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(s) 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. The Permittee shall submit the information as required in R315-309-8 of the Utah Administrative Code and shall meet the qualifications for the "Local Government Financial Test" or "Local Government Guarantee" each year.

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/s 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 IVb Landfill according to the design and Operation Plan described and explained in Attachment # 2. 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 – Landfill Design and Construction

Attachment 2 – Operations Plan

Attachment 3 – Closure and Post-Closure

# Attachment #1 - Landfill Design and Construction

## PART III – TECHNICAL DATA

### 1. SITE VICINITY MAP

An original of the most recent full size U.S. Geological Survey Topographic Map of Cedar City, 7-1/2 minute series, is attached. The map shows the landfill site, existing structures within one-quarter (1/4) mile of the site, surface drainage channels and the direction of the prevailing winds.

### 2. LANDFILL SITE MAP

A topographic map of the existing landfill site is also attached which is drawn to a scale of three hundred feet to the inch (1" = 300') containing two-foot (2) intervals. The map indicates landfill boundaries, the location of run-on and run-off control systems and borrow and fill areas.

### 3. CELL DESIGN AND RUN-OFF CONTROL

A drawing entitled "III Typical Sections" is attached which details typical landfill cross-sections and typical ditch and berm sections to be constructed around the landfill to prevent run-on. Run-off control will be by way of leaving the final compacted and seeded cover following closure of the area at an elevation no lower than the existing grade surrounding the landfill and sloping at a two per-cent (2%) grade into the unused area of the landfill.

### 4. OPERATIONAL INFORMATION

#### A. Facility Design, Operation, Cover Sources and Equipment

The landfill facility required minimal preparation in access road improvement and leveling of the pit base prior to acceptance of wastes. A 935 Caterpillar Loader is mainly used in daily operation of the facility however, a dozer and grader are available on an as needed basis from the Cedar City Street Division. Cover source for each fill area will be from city-owned property directly east of the landfill site.

B. Fugitive Dust Control

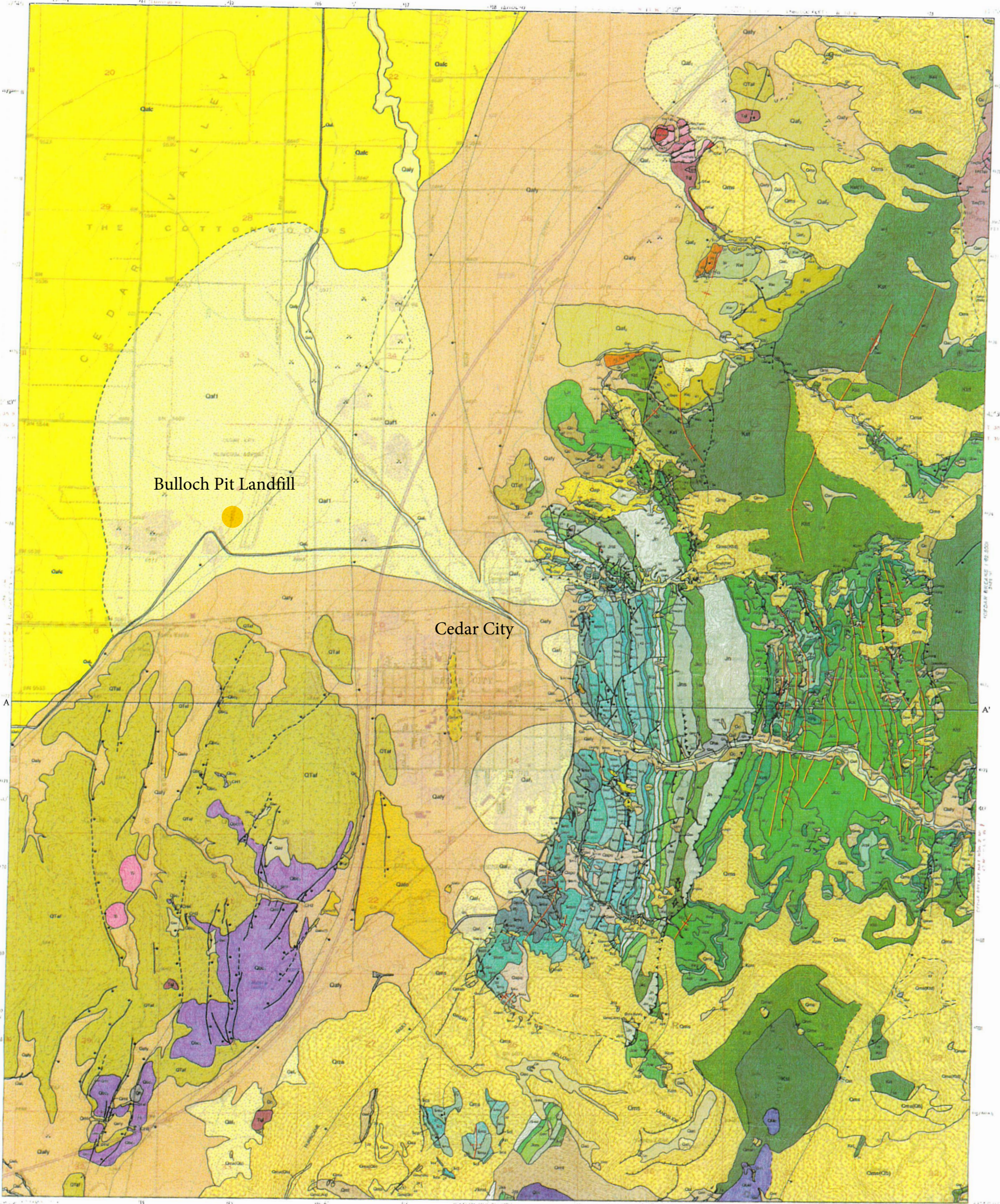
The waste material deposited in the facility will be spread out, covered and compacted as needed to prevent fugitive dust emissions. A water truck is available as needed from the Cedar City Street Division which will be used to lightly moisten the ground and cover materials.

C. Run-on/Run-off Control

No run-off from the facility will be allowed. All leach from the landfill will be contoured in the pit and allowed to percolate into the gravel soil. Only inert waste will be allowed into the Class IV facility and no danger of ground contamination is anticipated.

Run-on to the Class IV Bulloch Pit facility will be eliminated through the use of berms and ditches, which will route the run-on around the landfill and ultimately to the Iron County drainage and flood system or allow the run-on to percolate into the gravel soil before entering an active area of the landfill.





**INTERIM GEOLOGIC MAP OF THE CEDAR CITY 7.5-MINUTE QUADRANGLE, IRON COUNTY, UTAH**

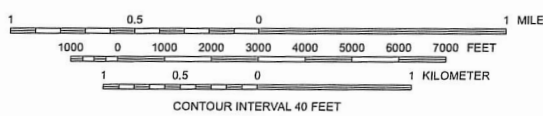
by  
**Tyler R. Knudsen**  
2014

Base from USGS Cedar City 7.5' Quadrangle (1950)  
Projection: UTM Zone 12  
Datum: NAD 1927  
Spheroid: Clarke 1866  
Project Manager: William R. Lund  
GIS and Cartography: Tyler R. Knudsen

This geologic map was funded by the Utah Geological Survey and the U.S. Geological Survey, National Cooperative Geologic Mapping Program, through USGS STATEMAP award numbers G15AC20249 and G15AC20228. The views and conclusions contained in this document are those of the author and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government.

This open-file report makes information available to the public during the review and production period necessary for a formal USGS publication. The map may be incomplete, and inaccuracies, errors, and omissions have not been resolved. While the document is in the review process, it may not conform to USGS standards; therefore it may be premature for an individual or group to take actions based on its contents. Although this product represents the work of professional scientists, the Utah Department of Natural Resources, Utah Geological Survey, makes no warranty, expressed or implied, regarding its suitability for a particular use. The Utah Department of Natural Resources, Utah Geological Survey, shall not be liable under any circumstances for any direct, indirect, special, incidental, or consequential damages, with respect to claims by users of this product.

For use at 1:24,000 scale only.

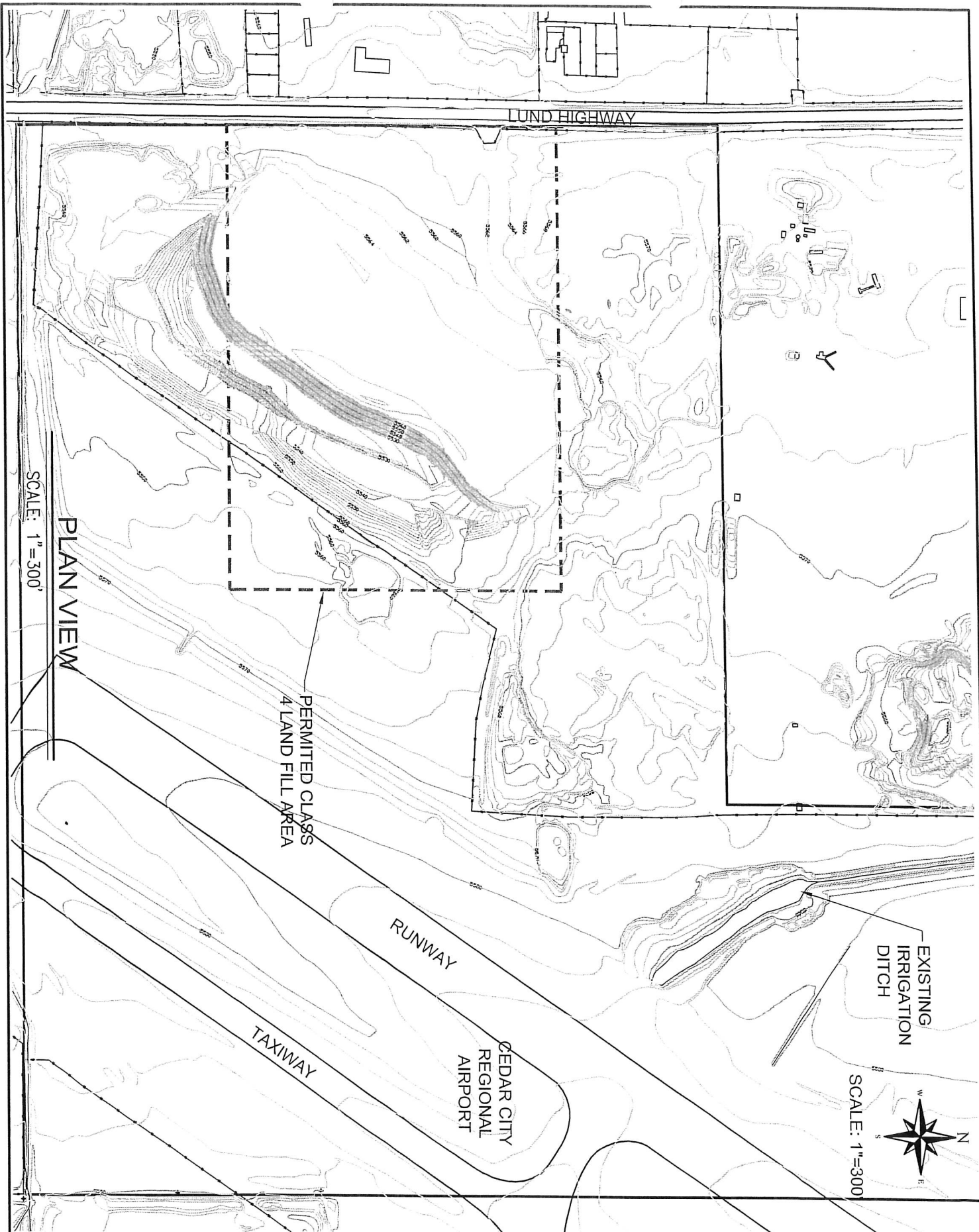


1	2	3
4	5	6
7	8	

ADJOINING 7.5' QUADRANGLE NAMES

1. The Three Peaks
2. Ensch
3. Summit
4. Cedar City NW
5. Flanigan Arch
6. Kanarrville
7. Cedar Mountain
8. Webster Flat





SCALE: 1" = 300'

PLAN VIEW

PERMITTED CLASS 4 LAND FILL AREA

RUNWAY

TAXIWAY

CEDAR CITY REGIONAL AIRPORT

EXISTING IRRIGATION DITCH

SCALE: 1" = 300'



BULLOCH PIT APPLICATION 2022.DWG

SHEET NO. 1 OF SHEETS FILE:

BULLOCH PIT CLASS 4 LANDFILL SITE  
 LOCATED IN SECTION 5, T36 S, R 11 W, SLM IRON COUNTY, UTAH

**CEDAR CITY**  
 P.O. BOX 249  
 10 NORTH MAIN STREET  
 CEDAR CITY, UTAH 84721  
 PH. (435) 586-2963

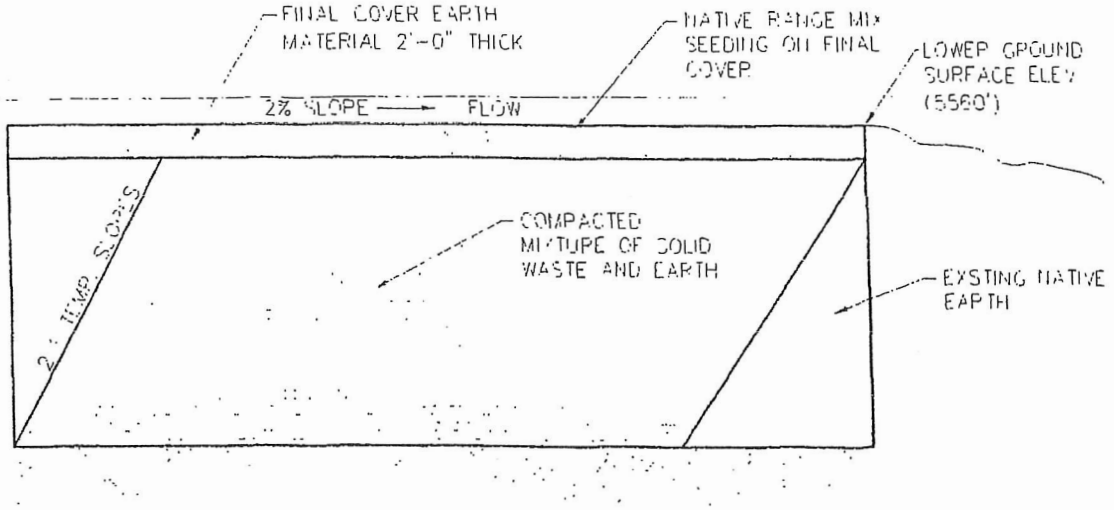
SCALE: 1" = 300'  
 DRAWN: T.B.M.

DATE: 6/2022  
 CHECKED: C.T.

### III TYPICAL SECTIONS

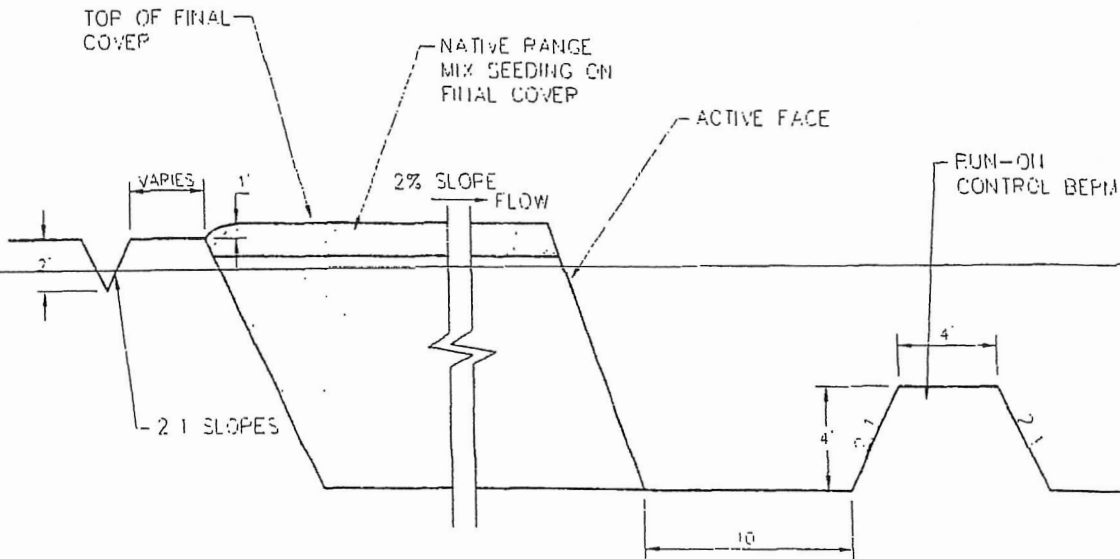
#### SECTION A-A TYPICAL LANDFILL SECTION

N.T.S.



#### SECTION B-B LANDFILL TYPICAL DITCH SECTION

N.T.S.



## Attachment #2 - Operations Plan

### 4. PLAN OF OPERATION

Copies of this plan of operation will be kept on file at the Cedar City Engineer's office located at 10 North Main, Cedar City, Utah, and at the Public Works Department located at 716 North Airport Road, Cedar City, Utah.

#### A. Schedule of Construction

The Class IVb facility is constructed in the abandoned gravel pit known as the Bulloch Pit. No additional work will be needed to improve the access road into the pit, storm water improvements and cell preparation.

No new infrastructure will need to be constructed. The facility will use the existing access road and the property is fenced and gated. The bottom of the pit will be properly graded to allow ease access and to prevent ponding of storm water prior to use. The class IVb landfill is now open and operating subject to a permit renewal being granted by the Utah Department of Environmental Quality (UDEQ).

#### B. Solid Waste Handling Procedures

The facility is accessible daily to those agencies that have permission to utilize it and closed when weather impedes access to the facility and makes operations difficult.

Equipment to operate the facility is made available through the City's Public Works Department. A front-end loader will be available each day the facility is open. A dozer is available as needed to place cover soil. A water truck is also available to control fugitive dust generated from roads, landfill operations and the covering of the waste.

The facility will accept construction/demolition waste, yard waste and inert waste for land filling. The following is a description of on-site solid waste handling procedures:

- 1- Cedar City maintains control of the Bulloch Pit Class IVb Landfill and permission has been given to the following agencies to dump at the site as needed:
  - a. Southern Utah University
  - b. Iron County School District
  - c. Iron County
  - d. State of Utah
- 2- The gate to the landfill is locked and agencies that have permission to dump have a remote-control device to open the gate.
- 3- The number of loads is counted before they are pushed off into the pit.
- 4- After disposal, waste will be spread, covered and compacted as needed.
- 5- The pit is not utilized every day, but the gate is monitored daily, Monday through Friday.
- 6- Directional signs are available and utilized as needed.

#### C. Contingency Plans in the Event of Fire

In the event of fire, the landfill will be evacuated if any dumping or covering operations are occurring at that time. The Fire Department and the Public Works Department will be notified immediately. The fire chief will be made aware of the type of waste that is on fire and any hazard that may be encountered.

The Public Works Director, the City Manager and the UDEQ must be notified immediately. A written report will be submitted to the UDEQ within fourteen (14) days of the event.

#### Emergency Telephone Numbers

Emergency Fire and Rescue	911
Cedar City Fire Department	435-586-2964
Cedar City Police Department	435-586-2956
Iron County Sheriff Department	435-867-7500
Utah Highway Patrol	435-865-1970
Cedar City Hospital	435-868-5000
Utah Department of Environmental Quality	801-536-0200
Southwest Utah Public Health Department	435-586-2437

#### D. Alternative Waste Handling and Disposal

During periods when the facility is not able to accept and dispose of waste (in case of equipment breakdown or other unforeseen events), Class IVb waste materials can be stockpiled on site. If required by regulation, waste can be transported to the Iron County Landfill.

#### E. Procedure for Excluding Prohibited Waste and PCB's (Polychlorinated Biphenyls)

The Cedar City Bulloch Pit Class IVb facility can only accept for landfilling construction/demolition waste, yard waste and inert waste.

Should non-hazardous prohibited wastes or other unacceptable wastes for landfilling at a Class IV facility (such as household garbage) be encountered in any load that has been dumped at the site, the unacceptable wastes will be collected and removed to the Iron County Landfill.

If hazardous wastes or wastes containing PCBs are discovered to have been inadvertently accepted, the following procedure will be implemented:

- 1- Access to the area will be restricted.
- 2- The situation will be carefully assessed. The fire department will be called if unstable wastes that cannot be handled safely or radioactive wastes are discovered or suspected. Proper notifications will be made if any hazardous wastes are discovered.
- 3- If waste can be safely moved, it will be transported to a secure zone.
- 4- The Public Works Director will be contacted for further disposition of the waste.
- 5- A record will be made of the discovery, handling and disposition of any hazardous wastes, including notification of the authorities. A copy of this record will be sent to the UDEQ within fourteen (14) days of the incident.

### 5. INSPECTIONS

#### A. Fencing and Gate

The Bulloch Pit Class IVb Landfill borders the Cedar City Regional Airport on the east and south sides. Those sections of fence are inspected daily by the Airport staff. The north fence borders the Ashdown gravel pit and the west fence borders Lund Highway. The entire site's fencing is inspected when the City is utilizing the pit for dumping, covering or compaction. The gate is monitored daily, Monday through Friday.

B. Access Roads

Access roads are created as needed inside the landfill. The main road to the pit is inspected daily Monday through Friday.

C. Litter and Weed Control

The site is sprayed for weed control and inspected on a quarterly basis. The site is inspected for litter when the pit is being utilized and the litter is collected and removed.

6. TRAINING AND SAFETY PLAN

A. Operator Training

Each operator/employee of the City that utilizes the landfill will be provided with adequate training to comply with the approved "Plan of Operation: and the "Permit." Refresher training will be provided as needed to ensure compliance within the approved plan and permit.



## Attachment #3 - Closure and Post-Closure

### 6. FINANCIAL ASSURANCE PLAN

#### A. Cost Estimates for Closure

Cost estimates for closure are based on the Cedar City Street Department performing closure operations. Total closure costs include inhouse engineering and construction totals of \$4,369.00 and \$39,957.00, respectively. Each of these totals includes a 10% contingency. Adding to the subtotals of these two (2) figures a 25% legal fee, the total closure costs are estimated at \$58,889.00.

#### Estimated Closure Costs

Construction Total	\$39,957.00
Engineering Total	<u>\$ 4,369.00</u>
Subtotal	\$44,326.00
25% Legal Fee	<u>\$14,563.00</u>
Total Closure Costs	<u>\$58,889.00</u>

#### B. Post-Closure Cost Estimates

The post-closure cost estimates cover the 30-year post-closure period and include annual reporting, site inspections, soil replacement, vegetation reseeding, site security, record-keeping and any correctional maintenance work required. The

post-closure cost total is estimated at \$17,490.00 which includes a 10% contingency.

Total estimated Financial Assurance costs are \$76,379.00 (closure plus post-closure costs). Estimated closure cost calculations are shown on the spreadsheets included in the Appendix.

### C. Financial Assurance Mechanism

Cedar City Corporation as the owner/operator of the Bulloch Pit Class IVb Landfill has established an account with the Utah Public Treasurer's Investment Fund (PTIF.) The current amount in this account is \$78,082.78.

## 8. CLOSURE PLAN

### A. Closure Schedule and Landfill Capacity

In accordance with UAC R315-302-3(4)(a) and (b) the City, as owner and operator, will notify the Director of the intent to implement the closure plan in whole or in part, sixty (60) days prior to the projected final receipt of waste at the facility. The City shall commence implementation of the closure plan, in part or whole, within thirty (30) days after receipt of the final volume of waste and will be completed within one hundred eighty (180) days from the starting time. Extensions of the closure period may be granted by the Director if justification for the extension is documented by the city.

Each fill area will be covered and closed as soon as it has been filled to the finish elevation. As the area is filled, the ground will be graded and contoured until a cover with a 2% slope is provided with adjacent or imported earth material. Cover material is available from the land immediately east of the pit, which is owned by Cedar City Corporation. The final soil cover will be seeded with a Bureau of Land Management (BLM) native range mix. The final cover of soil will be two (2) feet thick and will be contoured so that storm water will run off and away from the landfill. The facility shall be maintained and monitored until the site becomes stabilized (i.e., little or no settlement, gas production or leachate generation) and monitoring and maintenance activities can be safely discontinued.

Post-closure care will consist of semi-annual inspections in June and November of each year to ensure cover integrity, identification of drainage-related problems and inspection of fencing and facility security. The post-closure care period will be in place for thirty (30) years, or as long as the Director determines is required for the facility to become stabilized and to protect human health and the environment.

The post-closure plan may be amended if conditions and circumstances justify such amendment. If it is determined that amendment of the post-closure plan is

required, the Director may direct facility post-closure activities, in part or whole, to cease until the post-closure plan amendment has been reviewed and approved.

When post-closure activities are complete, as determined by the Director, the City as owner and operator, shall submit a certification to the Director, signed by the City Manager, stating why post-closure activities are no longer necessary (i.e., little or no settlement, gas production or leachate generation). If the Director finds that post-closure monitoring has established that the facility is stabilized (i.e., little or no settlement, gas production or leachate generation) the Director may authorize the City to discontinue any portion or all of the post-closure maintenance and monitoring activities.

Cedar City Public Works will be the point of contact during the post-closure period. The address and phone number are: 716 North Airport Road Cedar City, Utah 84721; 435-586-2912.

This section should be reviewed, and existing regulations incorporated when permits are updated.

**BULLOCH PIT ESTIMATED CLOSURE COSTS**

**Section 1.0 Engineering**

Item No.	Description	Unit Measure	Cost/Unit	No. of Units	Total Cost
1.1	Topographic Survey	N/A	\$ -		\$ -
1.2	Boundary Survey for Closure	N/A	\$ -		\$ -
1.3	Site Evaluation	N/A	\$ -		\$ -
1.4	Development of Plans (Cover)	LS	\$ 2,000.00	1	\$ 2,000.00
1.5	Contract Administration (Bidding and Award)	N/A	\$ -		\$ -
1.6	Administrative Costs (Certification of Final Cover and Closure Notice)	LS	\$ 2,369.00	1	\$ 2,369.00
1.7	Project Management (Construction Observation and Testing)	N/A	\$ -		\$ -
1.8	Monitor Well Consultant Costs	N/A	\$ -		\$ -
1.9	Other Environmental Permit Costs	N/A	\$ -		\$ -
	<b>Engineering Subtotal</b>				<b>\$ 4,369.00</b>

**Section 2.0 Construction**

Item No.	Description	Unit Measure	Cost/Unit	No. of Units	Total Cost
2.1	Final Cover System				
2.1.1	Site Preparation/Site Regrading	LS	\$32,000.00	1	\$ 32,000.00
2.1.2	Gas Collection Layer/Pipes	N/A	\$ -		\$ -
2.1.3	Low Permeability Layer (Soil - if Applicable)				
a	Soil Purchase	N/A	\$ -		\$ -
b	Soil Processing (Load)	N/A	\$ -		\$ -
c	Soil Transportation	N/A	\$ -		\$ -
d	Soil Placement	N/A	\$ -		\$ -
e	Soil Amendment (Compact)	N/A	\$ -		\$ -
2.1.4	Low Permeability Layer (Synthetic - if Applicable)				
a	Geotextile	N/A	\$ -		\$ -
b	GCL	N/A	\$ -		\$ -
c	Geomembrane (HDPE, PVC, LLDPE, etc.)	N/A	\$ -		\$ -
2.1.5	Drainage Layer (Soil - if Applicable)				
a	Geotextile	N/A	\$ -		\$ -
b	Sand/Gravel	N/A	\$ -		\$ -
2.1.6	Drainage Layer (Synthetic - if Applicable)				
a	Geotextile	N/A	\$ -		\$ -
b	Geonet/Geocomposite	N/A	\$ -		\$ -
2.1.7	Erosion Protection Soil Layer				
a	Soil Purchase	N/A	\$ -		\$ -
b	Soil Processing (Load)	N/A	\$ -		\$ -
c	Soil Transportation	N/A	\$ -		\$ -
d	Soil Placement	N/A	\$ -		\$ -
e	Soil Amendment (Compact)	N/A	\$ -		\$ -
2.1.8	Topsoil Layer				
a	Soil Purchase	N/A	\$ -		\$ -
b	Soil Processing (Load)	N/A	\$ -		\$ -
c	Soil Transportation	N/A	\$ -		\$ -
d	Soil Placement	N/A	\$ -		\$ -
e	Soil Amendment	N/A	\$ -		\$ -
2.1.9	Revegetation				
a	Seeding	LS	\$ 5,826.00		\$ 5,826.00
b	Fertilizing	LS	\$ 2,131.00		\$ 2,131.00
c	Mulch	N/A	\$ -		\$ -
d	Tacifier	N/A	\$ -		\$ -
2.2	Stormwater Protection Structures				
a	Culverts	N/A	\$ -		\$ -
b	Pipes	N/A	\$ -		\$ -
c	Ditches/Berms	N/A	\$ -		\$ -
d	Detention Basins	N/A	\$ -		\$ -
2.3	Gas Collection System				
a	Design	N/A	\$ -		\$ -
b	Additional Gas Collection Wells and Connection	N/A	\$ -		\$ -
2.4	Leachate Collection System				
a	Design	N/A	\$ -		\$ -
b	Additional Equipment/Installation	N/A	\$ -		\$ -
2.5	Groundwater Monitoring System				
a	Monitor Well Installation	N/A	\$ -		\$ -
b	Monitor Well Abandonment	N/A	\$ -		\$ -
2.6	Site Security				
a	Lighting, Signs, Etc.	N/A	\$ -		\$ -
b	Fencing and Gates	N/A	\$ -		\$ -
2.7	Miscellaneous				
a	Performance Bonds	N/A	\$ -		\$ -
b	Contract/Legal Fees	LS	\$14,563.00	1	\$ 14,563.00
	<b>Construction Subtotal</b>				<b>\$ 54,520.00</b>

**Total Closure Cost \$ 58,889.00**

**Section 3.0 Post-Closure Cost**

Item No.	Description	Unit Measure	Cost/Unit	No. of Units	Total Cost
3.1	Post-Closure Cost	LS	\$17,490.00	1	\$ 17,490.00
	<b>Post-Closure Cost Subtotal</b>				<b>\$ 17,490.00</b>

**Total Closure and Post-Closure Cost \$ 76,379.00**

## LANDFILL POST-CLOSURE COSTS (30 YEARS)

### Section 1.0 - Engineering

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
1.1	Post-Closure Plan	NA			\$0
1.2	Annual Report (including results from gas, leachate, and ground water sampling - details of maintenance performed)	LS	\$200	30	\$6,000
a	Site Inspections	LS	\$100	30	\$3,000
b	Plan Update	LS			\$0
<b>Engineering Subtotal</b>					<b>\$9,000</b>

### Section 2.0 - Gas Collection System - Sampling

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
2.1	Sample Collection	LS			\$0
2.2	Sample Analysis	NA			\$0
2.3	Report (Part of Annual Report)				
<b>Gas Collection System - Sampling Subtotal</b>					<b>\$0</b>

### Section 3.0 - Leachate Collection System - Sampling

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
2.1	Sample Collection	LS			\$0
2.2	Sample Analysis	NA			\$0
2.3	Report (Part of Annual Report)				
<b>Leachate Collection System - Sampling Subtotal</b>					<b>\$0</b>

### Section 4.0 - Ground Water Monitoring System - Sampling

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
3.1	Sample Collection	LS			\$0
3.2	Sample Analysis	LS			\$0
3.3	Report	LS			\$0
<b>Ground Water Collection System - Sampling Subtotal</b>					<b>\$0</b>

### Section 5.0 - Facility Operations and Maintenance

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
4.1	Cover				
a	Soil Replacement	LS	\$500	6	\$3,000
b	Vegetation/Reseeding	LS	\$300	3	\$900
4.2	Storm Water Protection Structures				
a	Ditch and Culvert Maintenance	LS			\$0
b	Berm and Basin Maintenance	LS			\$0
4.3	Gas Collection System				
a	System Operation	NA			\$0
b	System Repair	LS			\$0
4.4	Leachate Collection System				
a	System Operation	NA			\$0
b	System Repair	NA			\$0
4.5	Ground Water Monitoring System				
a	System Operation	NA			\$0
b	System Repair	LS			\$0
4.6	Site Security				
a	Lighting, signs, etc...	LS	\$500	3	\$1,500
b	Fencing and Gates	LS	\$500	3	\$1,500
4.7	Miscellaneous				
a					
b					
<b>Facility Operations and Maintenance Subtotal</b>					<b>\$6,900</b>

<b>Total</b>	<b>\$15,900</b>
10% Contingency	\$1,590
<b>Total Post-Closure Cost</b>	<b>\$17,490</b>