



State of Utah

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Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL

Jalynn Knudsen
Interim Director

May 12, 2021

Dean Gibbs, General Manager
Ashley Valley Sewer Management Board
PO BOX 426
Vernal, UT 84078

RE: Notice of Completeness of Draft Permit for Ashley Valley, Class IIIb Landfill
Solid Waste Facility #332

Dear Mr. Gibbs:

The Division of Waste Management and Radiation Control has completed its review of your permit renewal application to operate the Ashley Valley, Class IIIb Landfill to dispose of dewatered sewage sludge in the unused lagoons adjacent to the Ashley Valley Water Reclamation Facility. The proposed permit renewal application also includes the treatment disposal option for spreading and tilling waste sludge. A draft permit renewal has been prepared and incorporates the proposed changes. The draft permit is enclosed with this letter.

Please review the draft permit and provide any comments to the Division within 30 days. Following your review, the Division will initiate the required 30-day public comment period for the draft permit.

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

Sincerely,

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

BS/RVO/wa

Enclosure: Ashley Valley Class IIIb Draft Permit (DSHW-2021-005524)
Ashley Valley Class IIIb Draft Permit Attachments (DSHW-2021-005526)

c: Kirk Bengé, Health Officer, Tri-County Health Department
Darrin Brown, LEHS, Environmental Health Director, Tri-County Health Department
Nathan Hall, UDEQ District Engineer

DSHW-2021-005504

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DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
SOLID WASTE LANDFILL PERMIT

Ashley Valley Class IIIb LANDFILL

Pursuant to *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

Ashley Valley Sewer Management Board (AVSWB) as owner and operator,
(Permittee)

to own and operate the Ashley Valley Class IIIb located in Sections 33 and 34, Township 5 south, Range 22 east, Salt Lake Base and Meridian, Uintah County, Utah as shown in the Permit Renewal Application that was determined complete on April 15, 2021.

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 _____.

This Permit shall expire at midnight _____.

Closure Cost Revision Date: _____.

Signed this ____ day of _____, 2021.

Jalynn Knudsen, Interim Director
Utah Division of Waste Management and Radiation Control

FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME: Ashley Valley Class IIIb Landfill

OWNER NAME: Ashley Valley Sewer Management Board

OWNER ADDRESS: 1947 S Burns Bench Rd
Vernal, Utah 84078

OWNER PHONE NO.: 435-789-9805

OPERATOR NAME: Ashley Valley Sewer Management Board

OPERATOR ADDRESS: 1947 S Burns Bench Rd
Vernal, Utah 84078

OPERATOR PHONE NO.: 435-789-9805

TYPE OF PERMIT: Class IIIb Landfill

PERMIT NUMBER: 1005R1

LOCATION: Landfill is located in Township 5S, Range 22E, Sections 33 & 34, SLMB, Uintah County, Lat. 40° 25' 42", Long. 109° 27' 19"

PERMIT HISTORY: This facility first received a permit to accept solid waste on April 16, 2011. This is the 1st 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.

The Permit Renewal application for Ashley Valley Landfill was received on January 11, 2021 (DSHW-2021-001035) was deemed complete on the date shown on the signature page of this Permit. All representations made in the attachments of this permit are enforceable under R315-301-5(2) of the Utah Administrative Code. Where differences in wording exist between this Permit and the attachments, the wording of this Permit supersedes that of the attachments.

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

The facility as described in this Permit consists of five separate lagoons previously designed as sewage lagoons. Since 2001, AVSMB has ceased using these lagoons in favor of a sewer treatment facility. These five cells are numbered 1 through 5 from north to south. Cell 1 is currently used as a disposal cell for dried sewage sludge. Cells 2 and 3 will be used as treatment area for the purpose of drying and biodegradation. Treatment will reduce the moisture content of the sludge and render the sludge manageable. Attachment #2 shows the location of the Class IIIb disposal cell and the two treatment cells.

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

The issuance of this Permit does not convey any property rights, other than the rights inherent in this Permit, in either real or personal property, or any exclusive privileges other than those inherent in this Permit. Nor does this Permit authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations, including zoning ordinances.

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

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

PERMIT REQUIREMENTS

I. GENERAL COMPLIANCE RESPONSIBILITIES

I.A. General Operation

I.A.1. The Permittee shall operate the landfill in accordance with all applicable requirements of R315-304 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 Annotated § 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. This Permit is for disposal of nonhazardous sewage sludge generated by the Ashley Valley Water Reclamation Facility as described in the Permit Application. No other waste is allowed for disposal in this landfill.

I.C. Prohibited Waste

I.C.1. Any wastes which are not nonhazardous sewage sludge generated by the Ashley Valley Water Reclamation Facility as described in the Permit Application are prohibited.

I.C.2. Any prohibited waste received and accepted for disposal at the facility shall constitute a violation of this Permit, of Utah Code § 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 or an authorized representative, or representatives from the Tri-County 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.a.(i) 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.a.(ii) 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.a.(iii) Create a record of any inspection by photographic, video, electronic, or any other reasonable means.

I.E. Noncompliance

I.E.1. If monitoring, inspection, or testing indicates that any permit condition or any applicable rule under R315-301 through 320 of the Utah Administrative Code may be or is being violated, the Permittee shall promptly make corrections to the operation or other activities to bring the facility into compliance with all permit conditions or rules.

I.E.2. In the event of noncompliance with any permit condition or violation of an applicable rule, the Permittee shall promptly take any action reasonably necessary to correct the noncompliance or violation and mitigate any risk to the human health or the environment. Actions may include eliminating the activity causing the noncompliance or violation and containment of any waste or contamination using barriers or access restrictions, placing of warning signs, or permanently closing areas of the facility.

I.E.3. The Permittee shall:

I.E.3.a Document the noncompliance or violation in the daily operating record, on the day the event occurred or the day the violation 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. Upon receipt and review of the assessment report, the Director may order the Permittee to perform appropriate remedial measures including development of a site remediation plan for approval by the Director.

I.E.5. In an enforcement action, the Permittee may not claim as a defense that it would have been necessary to halt or reduce the permitted activity to maintain compliance with R315-301 through 320 of the Utah Administrative Code and this Permit.

I.F. Revocation

I.F.1. This Permit is subject to revocation if the Permittee fails to comply with any condition of the Permit. The Director will notify the Permittee in writing prior to any proposed revocation action and such action shall be subject to all applicable hearing procedures established under R305-7 of the Utah Administrative Code and the Utah Administrative Procedures Act.

I.G. Attachment Incorporation

- I.G.1. Attachments to the Permit Application are incorporated by reference into this Permit and are enforceable conditions of this Permit, as are documents incorporated by reference into the attachments. Language in this Permit supersedes any conflicting language in the attachments or documents incorporated into the attachments.

II. DESIGN AND CONSTRUCTION

II.A. Design and Construction

- II.A.1. The landfill shall be constructed in the existing unused sewer lagoons adjacent to the AVSMB using the trench and fill method design outlined in Attachment #1. This landfill shall be secured by gates to prevent unauthorized access and berms to prevent run-on and run-off of surface water. The landfill shall be constructed according to the design outlined in Attachment #1 and in the area designated in Attachment #2, 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 and this permit modified.
- 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 and modification of this permit.
- II.A.4. If ground water is encountered during excavation of the landfill, the Director shall be notified immediately, and an alternative construction design developed and submitted for approval.

II.B. Run-On Control

- II.B.1. The Permittee shall construct drainage channels and diversions as specified in Attachment #3 and shall maintain drainage channels and diversions 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 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. Burning of any waste is prohibited. All accidental fires shall be extinguished 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. The Permittee shall cover wastes that attract or provide food for vectors, materials that may become windblown litter, or fine materials that may become fugitive dust with a minimum of six inches of earth at the end of the working day in which the wastes are received. The Permittee may use an alternative cover material when the material and operation meet the requirements of R315-303-4(4)(b) through (e) of the Utah Administrative Code.

III.E.2. 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.3. 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 shall be recorded in the operating record and certified by the operator.

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.

III.F.1.a Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and

- III.F.1.b The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Attachment #4. The Permittee shall place the form in the daily operating record at the end of the operating day.
- III.F.1.c The Permittee or the waste transporter shall properly dispose of any waste found that is not acceptable at the facility at an approved disposal site for the waste type and handle the waste according to the rules covering the waste type.

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, cover; fences and access controls; roads; run-on/run-off controls; litter controls; and records. The Permittee shall place a record of the inspections in the daily operating record on the day of the inspection. The Permittee shall correct the problems identified in the inspections in a timely manner and document the corrective actions in the daily operating record.

III.H. Recordkeeping

- III.H.1. The Permittee shall maintain and keep on file at Ashley Valley Water Reclamation Facility, a daily operating record and other general records of landfill operation as required by R315-302-2(3) of the Utah Administrative Code. The landfill operator, or other designated personnel, shall date and sign the daily operating record at the end of each operating day. Each record to be kept shall contain the signature of the appropriate operator or personnel and the date signed. The Daily operating record shall consist of the following two types of documents:

III.H.1.a Records related to the daily landfill operation or periodic events including:

- III.H.1.a.(i) The number of loads of waste and the weights or estimates of weights or volume of waste received each day of operation and recorded at the end of each operating day;
- III.H.1.a.(ii) Major deviations from the approved plan of operation recorded at the end of the operating day the deviation occurred;
- III.H.1.a.(iii) 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.1.a.(iv) Records of all inspections conducted by the Permittee, results of the inspections, and corrective actions taken shall be recorded in the record on the day of the event.

III.H.1.b Records of a general nature including:

- III.H.1.b.(i) A copy of this Permit, including all attachments;

III.H.1.b.(ii) Results of inspections conducted by representatives of the Director of the Division of Waste Management and Radiation Control, and of representatives of the local Health Department, when forwarded to the Permittee;

III.H.1.b.(iii) Closure and Post-closure care plans; and

III.H.1.b.(iv) 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, a re-application for approval of the financial assurance mechanism.

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 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.

IV. **TREATMENT DISPOSAL CELL OPERATION**

IV.A. Sludge Application

IV.A.1. Sludge (16% solids) will be spread to approximately 3 or 4 inches deep using a tractor and side discharging manure spreader at a 50% coverage rate. The coverage rate on the treatment cell surface shall be no greater than 22 dry metric tons per acre.

IV.B. Sludge Treatment

IV.B.1. Sludge will be disced or tilled into the soil at a frequency no less than once per week until the sludge solids content is increased to 70%.

IV.B.2. The Permittee will continue to monitor the treatment area to ensure that biodegradation occurs aerobically to minimize odors.

IV.C. Recordkeeping and Inspections

IV.C.1. The Permittee shall monitor the progress of biodegradation and inspect the treatment cell at least quarterly to monitor signs of threats to human health or the environment.

IV.C.2. Inspection records shall be documented indicating sludge application date, tonnage, application rates and area of application, sludge moisture content (solids content), assessment of odors, and any issues resulting from sludge application.

IV.C.3. Should sludge treatment create an odor which becomes a nuisance, or dust which exceeds 20% opacity (see R307-205-4), the Permittee shall take actions to either resolve the issue at the treatment cell or transfer the sludge to the disposal cell.

V. CLOSURE REQUIREMENTS

V.A. Closure

V.A.1. Final cover of the landfill shall be as shown in Attachment #1. 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.

V.B. Title Recording

V.B.1. The Permittee shall meet the requirements of R315-302-2(6) of the Utah Administrative Code by recording a notice with the Uintah County Recorder as part of the record of title that the property has been used as a landfill. The notice shall include waste disposal locations and types of waste disposed. The Permittee shall provide the Director the notice as recorded.

V.C. Post-Closure Care

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

V.D. Financial Assurance

V.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 at any stage or phase or anytime during the life of the landfill or the permit life, whichever is shorter.

V.E. Financial Assurance Annual Update

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

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

V.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.

VI. ADMINISTRATIVE REQUIREMENTS

VI.A. Permit Modification

VI.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.

VI.B. Permit Transfer

VI.B.1. This Permit may be transferred to a new Permittee or new Permittees by complying with the permit transfer provisions specified in R315-310-11 of the Utah Administrative Code.

VI.C. Expansion

VI.C.1. This Permit is for the operation of a Class IIIb Landfill according to the design and Operation Plan described and explained in the Permit Application. Any expansion of the current footprint designated in the description contained in the Permit Application, but within the property boundaries designated in the Permit Application, shall require submittal of plans and specifications to the Director. The plans and specifications shall be approved by the Director prior to construction.

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

VI.C.3. Any addition to the list of acceptable waste in Section I.B shall require submittal of all necessary information to the Director and the approval of the Director.

VI.D. Expiration

VI.D.1. If the Permittee desires to continue operating this landfill after the expiration date of this Permit, the Permittee shall apply for renewal at least six months prior to the expiration date, as shown on the signature (cover) page of this Permit. If the Permittee timely submits a permit renewal application and the permit renewal is not complete by the expiration date, this Permit shall continue in force until renewal is completed or denied.

ATTACHMENTS

Attachment 1 – Landfill Cell Construction

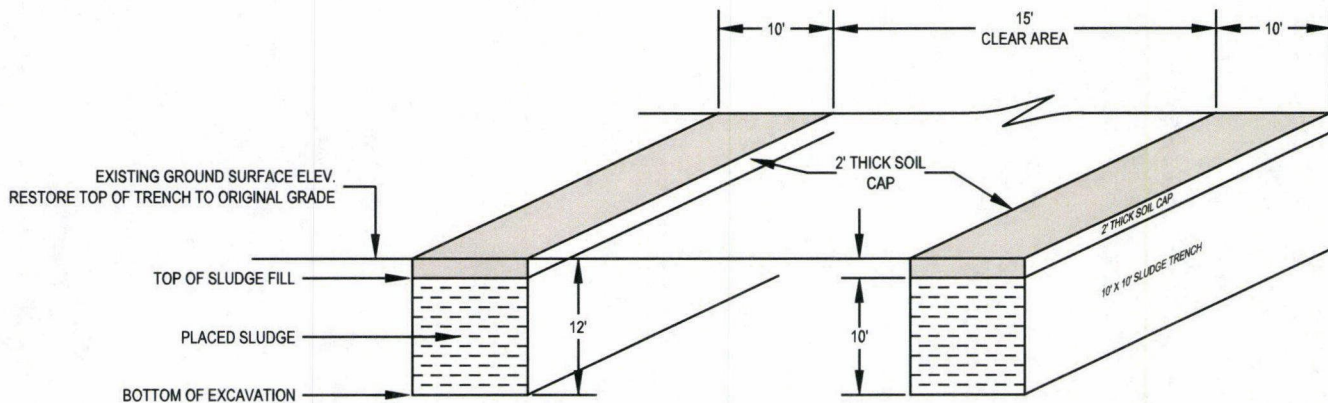
Attachment 2 – Facility Information & Plan of Operation

Attachment 3 – Facility Technical Information

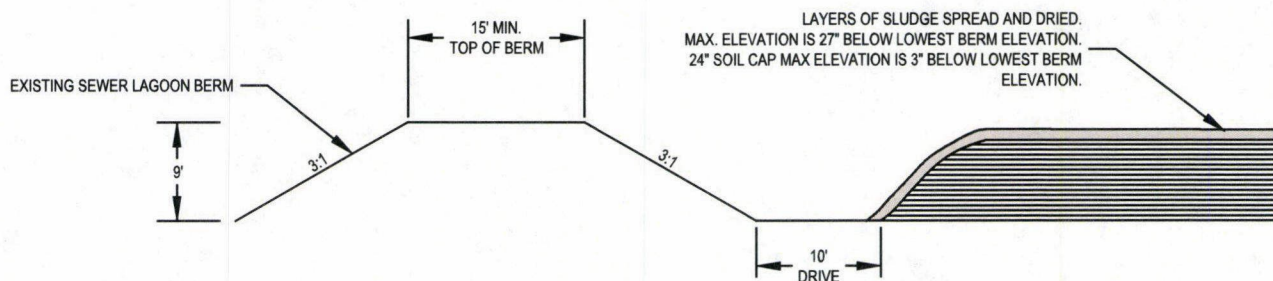
Attachment 4 – Example Forms

Attachment #1

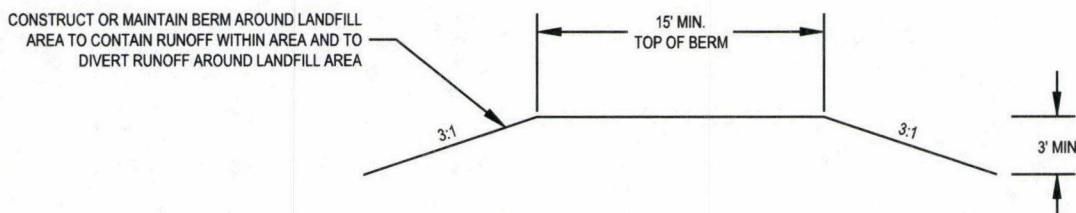
Landfill Cell Construction



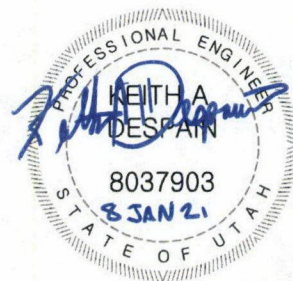
CELL 1 SLUDGE DISPOSAL - TRENCH METHOD DETAIL



CELLS 2 AND 3 DISPOSAL - SPREAD, DRY AND TILL



CONTAINMENT BERM DETAIL



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ASHLEY VALLEY CLASS IIIb LANDFILL
ASHLEY VALLEY SEWER MANAGEMENT BOARD
LANDFILL DETAILS

PROJECT NUMBER		2020-0575	
SHEET	1	OF	1
SHEET NUMBER			
APPENDIX D			

Attachment #2

Facility Information & Plan of Operation

Ia. General Information

The Ashley Valley Sewer Management Board (AVSMB) owns property in Uintah County east of Vernal City. On the property is situated the Ashley Valley Water Reclamation Facility (AVWRF), which treats sewer from the Maeser Water Improvement District, the Ashley Valley Water and Sewer Improvement District and Vernal City residents. The Facility has a capacity of 4.7 MGD but is currently treating about 2.6 MGD.

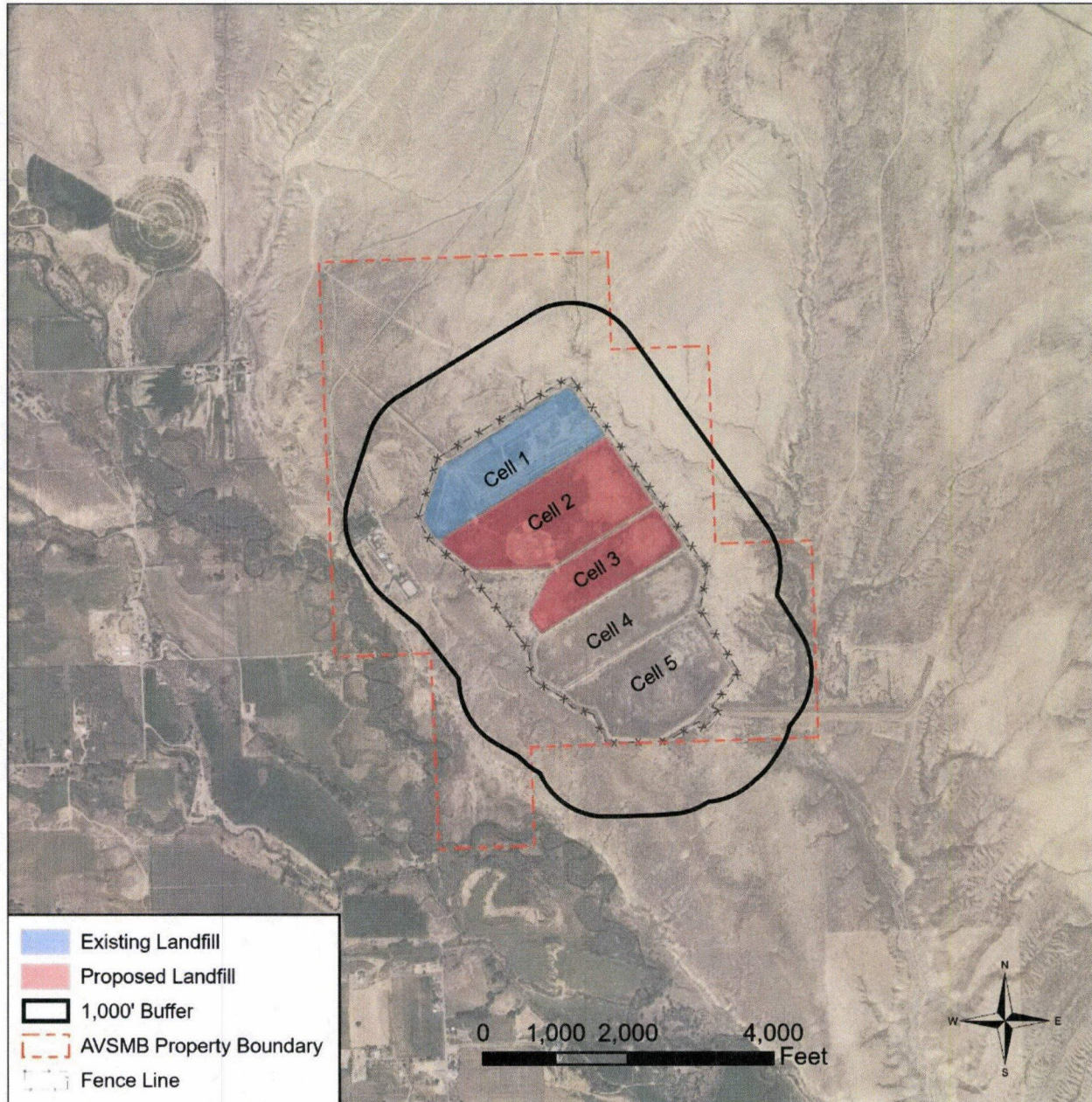


Figure 1: Landfill Site

Historically, five sewer lagoons were used for sewage containment. Since 2001, the AVWRF has treated wastewater and released it back to natural waterways leaving all

five lagoon cells unused. In 2010, the AVSMB permitted all five lagoons as a landfill with Cell 1 being the only active cell under phase 1 (Ashley Valley Class IIIb Permit Number: 1005). This application is to renew the use of Cell 1 and activate Cells 2 and 3 for landfill activities. Figure 1 shows the facility with existing and proposed landfill areas. Cell 1 will continue to operate as it has been, but Cells 2 and 3 will implement different techniques than in Cell 1. These techniques are described later in this application. Appendix A shows the survey of the property.

The proposed landfill expansion will dispose of the same sludge material as the current landfill. The Water Reclamation Facility currently produces about 550 dry metric tons of sludge each year. It is anticipated that all produced sludge will be disposed of either in the first lagoon under the current permit or in lagoons two and three under this expansion. No outside entities will be allowed to dispose of waste of any kind at the facility. Cells 2 and 3 will begin to be used upon approval of this application.

1b. General Information for New or Laterally Expanding Class III Landfills

The landfill operations will take place within the lagoons that have not been used as such since 2001. When the lagoons were built, significant excavation occurred. The lagoons do not have structures in or around them that do not pertain to the operation of sewer treatment facilities. Due to the disturbed state of the existing facility from original conditions, a Historical Survey is not necessary for the proposed expansion.

The five lagoon cells have a fence around them. This fence was taken as the facility boundary and a 1000-foot buffer was mapped as shown in Figure 2. Names and addresses of properties falling within that buffer are shown in Table 1. Appendix B shows the letter sent to these property owners.

Table 1: Landowners within 1000 feet

Parcel Number	Owner	Address
06: 044: 0066	Baxter Enterprises, LLC	4300 E 2500 S Vernal, UT 84078
06: 043: 0002	Baxter Enterprises, LLC	4620 E 2500 S Vernal, UT 84078
06: 043: 0001	Green Domain, LLC	4884 E 2500 S Vernal, UT 84078
	BLM	Roger Bankert, Field Manager 170 S 500 E Vernal, UT 84078

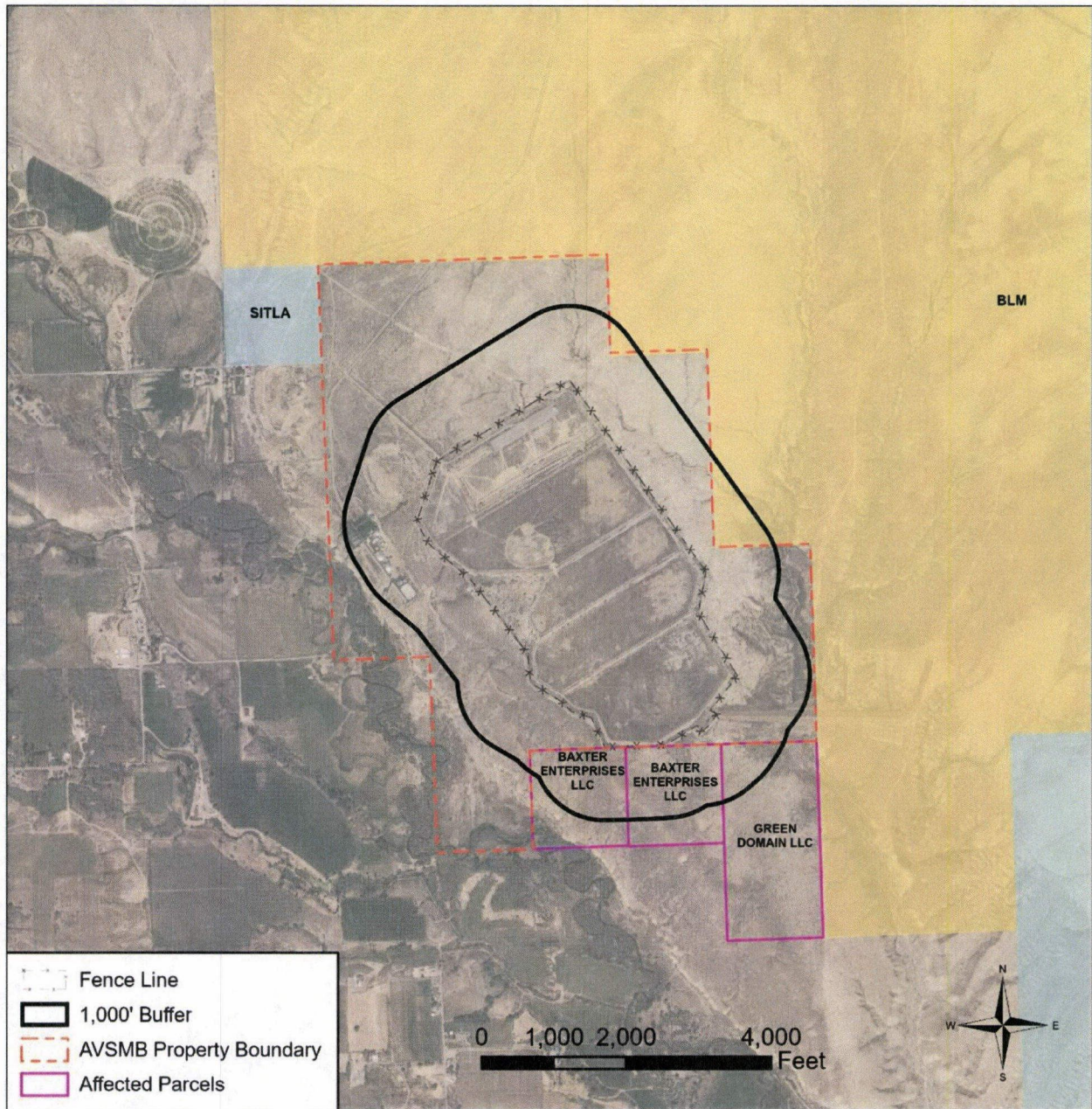


Figure 2: Land ownership within 1000 feet

le. Location Standards

The Ashley Creek drainage is located south and west of the existing water reclamation facility. The flood plain for Ashley Creek and adjacent drainages are shown in Figure 3. As shown, the flood plain does not conflict with the proposed landfill expansion footprint. The area directly north and east of Ashley Creek near the existing water reclamation facility and proposed landfill location is very dry; as a result no wetlands are in conflict.

Figure 4 shows the wetlands around the lagoon area from the National Hydrography Dataset (NHD) managed by the USGS National Geospatial Program. All of the current and proposed landfill activity will be confined to within the abandoned lagoons, so wetlands will be affected.

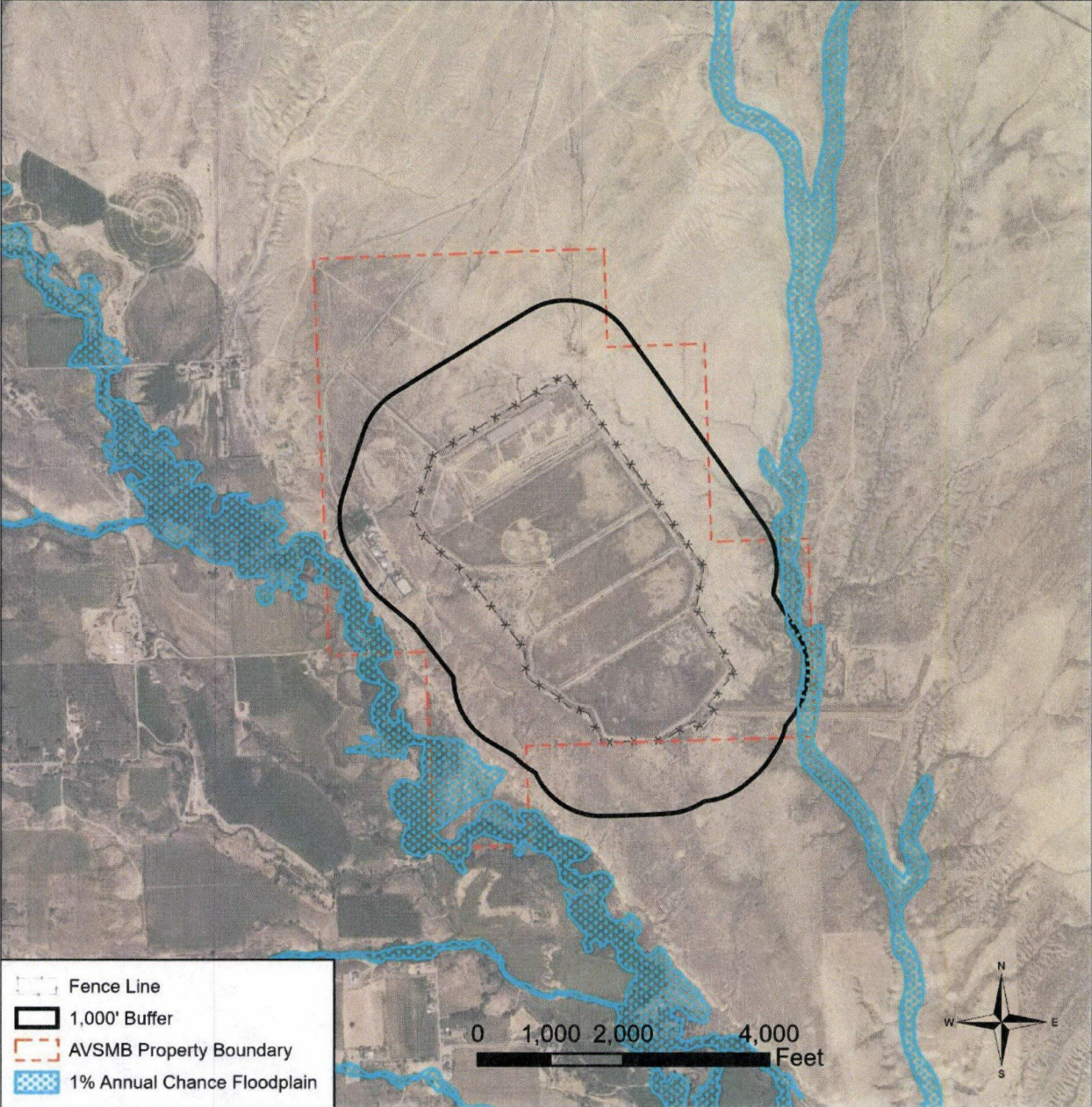


Figure 3: Floodplain map



Figure 4: Wetlands near landfill area

The lowest level of waste is at least 10 feet above the historical high level of ground water. Over the 10 years Cell 1 has been operating trenches 12 feet deep have been dug year round. Ground water has not been encountered. The Cell 3 of the lagoons are situated 120 feet above Ashley Creek, the waterway to the southwest and 40 feet above the intermittent stream to the northeast. No signs of leaching groundwater on the sides of these river valleys are present. Cell 2 and 3 activity will be as fill on existing grade.

If. Plan of Operations

The currently approved trench and bury method of sludge disposal will continue to be used in Cell 1 as needed. In this cell, sludge that meets the required paint filter test and is between 13% and 20% solids is buried in trenches approximately 10' wide and 10' deep and capped with a minimum of 24" of soil. When filled, trenches are capped with 6 feet of soil. Trenches are separated by 15 feet. The Ashley Valley Sewer Management Board estimates about 30% to 50% of the sludge produced in 2021 will be disposed of using the trench and bury method. This equates to approximately 165 to 275 dry metric tons of sludge. In 2022 and beyond, it is estimated that only 25% (138 dry metric tons) will be disposed of in this manner.

Cells 2 and 3 will implement a different procedure for sludge disposal. These cells are expected to receive 50% to 70% of the sludge produced in 2021 and 75% of the sludge produced thereafter. In these cells, sludge (16% solids) will be spread to approximately 3 or 4 inches deep using a tractor and side discharging manure spreader at a 50% coverage rate. The approximate coverage rate will deposit 20 to 22 dry metric tons of sludge per acre. Depending on temperature and weather, it will take sludge 14 to 28 days to dry to 70% to 80% solids, reducing to a 0.5-inch layer of dried sludge which will be turned into the existing soil 8" to 10" deep using a disc or tillage implement. With about 43 useable acres in Cell 2 it will take approximately 20 months to cover the entire cell with 0.5" of dried sludge at current production rates. Cell 3 has approximately 21 useable acres and will take about 10 months to cover with each layered application.

The distance traveled to transport sludge from the Water Reclamation Facility to the landfill area is about 2.8 mile round trip and is entirely on AVSMB property. Appendix C shows examples of the forms used to track daily biosolids transported to the landfill (Bio-Solids Loadout) and monthly sludge report (Dewatering Summary Report).

The facility will be inspected by the owner or operator at least quarterly to ascertain the proper function of the landfill and monitor signs of threats to human health or the environment. Inspection logs (form below) will be filled out and kept on file for at least three years.

ASHLEY VALLEY WATER RECLAMATION FACILITY LANDFILL INSPECTION FORM	
DATE / / 20 _____	TIME : <input type="checkbox"/> AM <input type="checkbox"/> PM
INSPECTOR NAME (PRINT)	
OBSERVATIONS / COMMENTS	
CORRECTIVE ACTION TAKEN OR NEEDED	
SIGNATURE	
Keep this inspection form on file for at least three years.	

It is very unlikely that an event rendering the facility incapable of disposing the sludge in the landfill will occur. If that extremely unlikely event takes place, sludge will be stockpiled on the existing drying pad until disposal in the landfill can take place.

The semi-moist disposed sludge will be dumped out of the dump truck and either spread or buried. There is no real threat of fire or explosion occurring or being fueled by the landfill. The receiving area is lower than surrounding berms of the lagoons which should minimize the wind. Dust on existing and future roads required to access the proposed disposal area shall be controlled as necessary using a water truck. The location of the existing water reclamation facility is in a remote area within Uintah County with prevailing winds from the north, northwest, west, southwest and south depending on the time of year. Typical winds, in any season, would blow dust and odor away from populated areas. It is not anticipated that large scale dust control will be necessary, but primarily performed as desired for comfortable operation of the facility.

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Disposed material consists of sludge only with no other commercial deposition within the landfill. It is anticipated that there will be no additional litter to control as a result of the landfill.

As mentioned, no outside disposal will be allowed within the facility, therefore no outside waste, hazardous or not, will be allowed to be disposed of.

Material disposed of will have been treated and stabilized previously within the Ashley Valley Water Reclamation Facility. As a result, no material harboring disease vectors is expected to be present in the landfill. Soil and sludge will be graded to avoid ponding to prevent mosquito larvae habitat.

Staff participate in monthly training meetings to educate and remind staff of proper plant functions and safety measures required.

Attachment #3

Facility Technical Information

Ila. Maps

The most recent U.S. Geological Survey topographic 7 1/2 minute series map showing the waste facility boundary, property boundary, surface drainage channels, existing structures within 1/4 mile of the site, and the direction of the prevailing winds is shown in Figure 5.

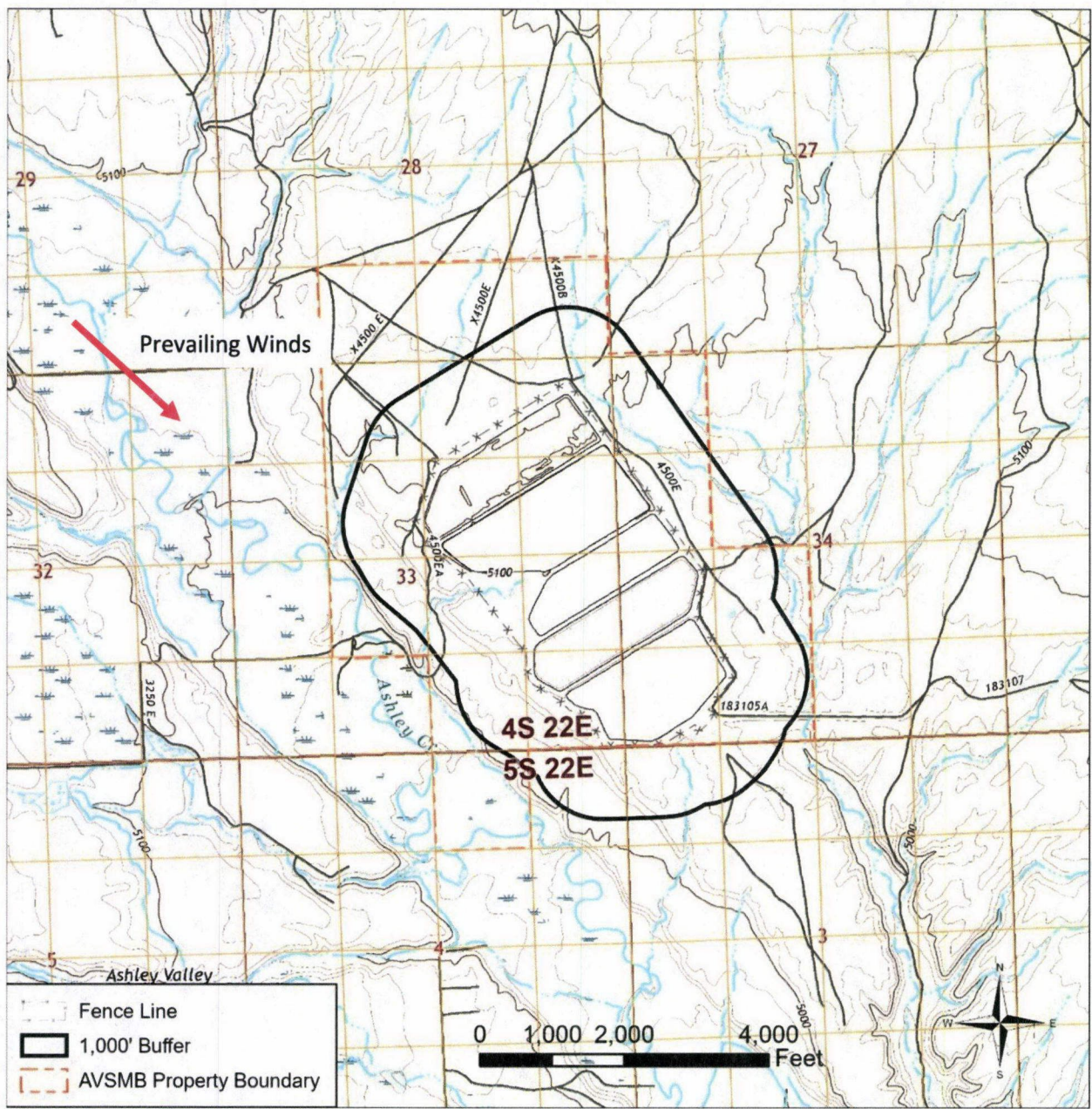


Figure 5: 7 1/5 minute series map

IIc. Engineering Report – Plans, Specifications, and Calculations

The currently approved trench disposal method will continue in Cell 1 as described earlier. In Cells 2 and 3 the spreading method will be implemented, allowing the sludge to dry and be tilled into the soil. When the landfill is closed, a soil cap 24 inches thick will be placed over the active landfill areas. Deposited sludge will not be allowed to reach a height higher than 27" below the lowest point on the lagoon berm. When the 24-inch cap is placed on top of the sludge, the elevation will be 3 inches below the berm which will provide ample storm water hold capacity for the 100-year 24-hour storm event.

Storm water is prevented from running on to and off of the landfill site by the existing berms from the abandoned sewer lagoons. When the lagoons were built the berms were constructed above the adjacent natural grade. This effectively contains storm water falling within the landfill area from discharging to the environment and prevents runoff from the environment from entering the landfill area.

IIe. Closure Requirements

The owner shall notify the Director of the intent to implement the closure plan in whole or part, 60 days prior to the projected final receipt of waste at the unit or facility unless otherwise specified in the closure plan.

Within 30 days of the receipt of the final volume of waste, the owner or operator shall commence implementation of the closure plan, in part or in whole.

Within 180 days of commencement of closure plan implementation, closure activities shall be completed. Extensions of the closure period may be granted by the Director if justification for the extension is documented by the owner or operator.

Within 60 days from the completion of closure, the owner or operator will submit plats and a statement of fact concerning the location of the disposal site to the county recorder to be recorded as part of the record of title. Proof of this filing will be submitted to the Director.

Within 90 days from the completion of the closure of a cell or the entire facility, the owner or operator will provide to the Director plans representing the closure of the unit or the facility with as-built changes noted if modifications were made to the final closure construction plans as approved in the closure plan together with a certification by the owner or operator that the site has been closed in accordance with the approved closure plan.

Facility closure will be performed to minimize further maintenance, minimize or eliminate threats to human health and the environment, and prepare the facility for the post-closure period. The owner will cover the landfill area with a minimum of 24 inches of clean fill graded smooth and representative of adjacent topography and seeded with

vegetation native to the area. Grade shall be such to prevent water from draining on or off the landfill. Runoff shall be contained on-site.

The facility closure timeline is not anticipated to be due to the landfill reaching capacity. More likely reasons for the landfill closure are the Water Reclamation Facility reaching the end of its usable lifecycle or being modified to accommodate demand. The lagoon berms are 9' high. At a sludge production rate of 550 dry metric tons per year and a spreading rate of 22 dry metric tons per acre, it will take 2.5 years to cover Cells 2 and 3 with one layer of sludge. The sludge will dry to a 0.5" layer within 28 days.

The maximum design elevation of the sludge in Cells 2 and 3 is three inches below the lowest elevation on the berm. This allows for 105" of dried sludge to be placed in these cells, or 210 layers. At 2.5 years per layer, the lifespan of Cells 2 and 3 is 525 years. Table 2 shows the capacities and lifespan of each cell following the previously mentioned distribution of 25% of the produced sludge going to Cell 1, 50% to Cell 2 and 25% to Cell 3.

Table 2: Landfill cell properties

	Cell 1	Cell 2	Cell 3
Usable Area (ac)		42	21
Usable Volume (ac-ft)	20.4	126	63
Usable Volume (cy)	32,900	203,280	101,640
Sludge Load (dmt/year)	n/a	277.5	138.8
Sludge Load (dcy/year)	936.0	234.6	117.3
Lifespan (years)	35	867	867

The owner shall schedule a final inspection with all regulatory agencies prior to final closure of the landfill.

II.f. Post-Closure Care Requirements

The Owner shall provide post-closure activities for continued facility maintenance and monitoring of land, and water run-on/run-off for 30 years or for as long as the Director determines is necessary for the facility or unit to become stabilized and to protect human health and the environment.

Any changes to ownership, zoning, or land use shall be reported the appropriate regulatory agency and the Director.

Post Closure Inspections shall be conducted annually to ensure soil stability and erosion control systems are still in place and that the structure and intent of the site grading is still performing as intended. The person inspecting the site shall have a competent understanding of the design of the landfill, closure design and final cover, and post-closure procedures for the facility. The report shall include a site description comparing existing conditions, previous year's conditions, and initial conditions at closure. Details

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shall include diagrams illustrating compromises and potential compromises to the structure and to the intended drainage paths.

The inspector will be required to complete the inspection report detailing his/her observations and recommendations for repair and/or remediation if deemed necessary. A copy of the report shall be submitted to the Director and to all regulatory agencies pertinent to the landfill.

Contact the following person during post-closure care period:

Dean Gibbs, Plant Manager
Ashley Valley Water Reclamation Facility
1947 S. Burns Bench Rd. Vernal, Utah 84078
(435) 789-9805

IIg Financial Assurance

As reported, the life and capacity of the landfill should easily outlast the needs of the Ashley Valley Water Reclamation Facility. Closure of the landfill will most likely coincide with closure of the facility. Anticipated costs associated with closing and post-closure maintenance of the three cells of the landfill are shown in Table 3. When cells 2 and 3 close, the soil cap will come from native material in Cells 4 and 5 and placed as designed.

Table 3: Closure and post-closure costs

	Cell 1 (as permitted)	Cells 2 & 3	Total
Closure (Final Cover, Grading, Seeding)	\$ 11,667.34	\$ 8,000.00	\$19,667.34
Post-Closure Inspection	\$28,001.61	\$ 8,000.00	\$36,001.61

Ashley Valley Sewer Management Board has created an account specifically for landfill closure and post-closure costs along with bond obligation reserve funds in Utah PTIF Account #7434. The balance of the account as of November 30, 2020 which includes sufficient funds to cover both landfill closure costs and outstanding bond obligations was \$616,621.11. Deposits/adjustments are made annually based on an estimated closing of the facility in 2045 and in accordance with the Division's inflation calculations.

Since the landfill area is being constructed within existing sewer lagoons, containment berms are already in place. A detail has been provided in case the berm is destroyed or if construction methods require the temporary removal or modification of the in-place berms. The existing berm is sufficient to both retain rainfall falling on the enclosed landfill area and to provide a barrier from rainfall falling outside the area. See Appendix D for berm details. During daily routine use of the facility, berms and runoff evidence will

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be observed to become aware of issues that may be developing. If problems are detected, a quarterly inspection will be performed and documented.

Appendix C – Sludge Report Forms

Attachment #4

Example Forms

BIO-SOLIDS LOADOUT

DATE: 1-2-20

TIME	LOADOUT WEIGHT	OPERATOR
9:00	8300	DL
12:00	8800	DL
1:15	12600	MD
3:30	6070	DL
DAILY TOTAL	35,770	

DATE: 1-3-20

TIME	LOADOUT WEIGHT	OPERATOR
9:20	12810	DL
11:35	7660	MD
1:35	8620	DL
3:30	7290	DL
DAILY TOTAL	35,780	

DATE: 1-6-20

TIME	LOADOUT WEIGHT	OPERATOR
9:30	11450	MD
11:50	8370	MD
2:00	11350	
3:35	6270	Rw
DAILY TOTAL	37,440	

DATE: 1-7-20

TIME	LOADOUT WEIGHT	OPERATOR
8:55	10020	Rw
11:45	9940	MD
1:20	7710	MD
2:45	6790	Rw
DAILY TOTAL	34,460	

Dewatering Summary Report

Interval: Jan-20 - Jan-20

Date	Sludge Feed (gal)	Cake Solids (%)	Wet Solids (lbs)	Cake Dry Solids (lbs)	Polymer Used (lbs)	Disposal Location
1/1/20	0	-	-	-	-	-
1/2/20	0	15.13	35770	5412	41	Landfill
1/3/20	0	14.83	35780	5306	41	Landfill
1/4/20	0	-	-	-	-	-
1/5/20	0	-	-	-	-	-
1/6/20	0	14.12	37440	5287	44	Landfill
1/7/20	0	15.23	34460	5248	39	Landfill
1/8/20	0	-	-	-	-	-
1/9/20	0	16.93	38770	6564	42	Landfill
1/10/20	0	14.65	22030	3227	25	Landfill
1/11/20	0	-	-	-	-	-
1/12/20	0	-	-	-	-	-
1/13/20	0	18.19	36180	6581	43	Landfill
1/14/20	85314	18.14	38990	7073	45	Landfill
1/15/20	73758	15.64	34110	5335	41	Landfill
1/16/20	54819	-	-	-	-	-
1/17/20	86289	16.93	37830	6405	45	Landfill
1/18/20	0	-	-	-	-	-
1/19/20	53553	-	-	-	-	-
1/20/20	83453	17.94	34810	6245	45	Landfill
1/21/20	84113	14.62	40619	5938	42	Landfill
1/22/20	83750	14.86	38530	5726	46	Landfill
1/23/20	55347	-	-	-	-	-
1/24/20	85693	18.36	35790	6571	47	Landfill
1/25/20	0	-	-	-	-	-
1/26/20	54962	-	-	-	-	-
1/27/20	85365	16.74	37600	6294	46	Landfill
1/28/20	81633	14.53	37300	5420	53	Landfill
1/29/20	84293	14.27	37710	5381	45	Landfill
1/30/20	55494	-	-	-	-	-
1/31/20	86907	15.89	37360	5937	44	Landfill
Totals	1,194,743	X	651,079	103,949	774	X
Average	74,671	15.94	36,171	5775	43.0	X
Dry MTons	X	X	X	47.2	X	X