

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
SOLID WASTE LANDFILL PERMIT

**Western Water Solutions Sand Pass Oil and Gas
Exploration and Production Waste 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

Western Water Solutions as owner and operator (Permittee),

to own, construct, and operate the Landfill located in the NW ¼ of the SE 1/4 of Section 10 Township 4 South, Range 1 West, Salt Lake Base and Meridian, Duchesne County, Utah as shown in the Permit Application that was determined complete.

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

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

This Permit shall become effective _____, 2020.

This Permit shall expire at midnight _____, 2030.

Closure Cost Revision Date: _____, 2025.

Signed this ____ day of _____, 2020

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

FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME: Western Water Solutions Oil and Gas Exploration and
Production Waste Landfill

OWNER NAME: Western Water Solutions, LLC

OWNER ADDRESS: 3214 North University Avenue, STE 133
Provo, Utah 84604

OWNER PHONE NO.: 801-518-9790

OPERATOR NAME: Western Water Solutions, LLC

OPERATOR
ADDRESS: 3214 North University Avenue, STE 133
Provo, Utah 84604

OPERATOR PHONE
NO.: 801-518-9790

TYPE OF PERMIT: Oil and Gas Exploration and Production (E&P) Waste
Landfill

PERMIT NUMBER: 2002

LOCATION: Landfill located in the NW ¼ of the SE 1/4 of Section
10 Township 4 South, Range 1 West, Salt Lake Base
and Meridian, Duchesne County, Utah Lat. 40^o 09'
18.89"; Long. 109^o 59' 45.32".

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 application for the Landfill was deemed complete on the date shown on the signature page of this Permit.

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 an Oil and Gas Exploration and Production (E&P) Waste Landfill.

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 the requirements of this permit. For the purpose of this permit, requirements pertaining to Class IIIb landfills found in R315-304 of the Utah Administrative Code that are in effect as of the date of this permit, shall apply regardless of any apparent or stated exemptions in the Utah Administrative Code. Any permit noncompliance or noncompliance with any applicable portions of Utah Code Ann. § 19-6-101 through 126 and applicable portions of R315-301 through 320 of the Utah Administrative Code constitutes a violation of the Permit or applicable statute or rule and is grounds for appropriate enforcement action, permit revocation or modification.

I.B. Acceptable Waste

I.B.1. This Permit is for disposal of nonhazardous industrial waste, as defined in R315-301-2(35) of the Utah Administrative Code, generated by the oil and gas industry as described in the Permit Application.

I.C. Prohibited Waste

- I.C.1. Hazardous waste as defined by R315-260 and R315-261 of the Utah Administrative Code;
- I.C.2. PCB's 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;
- I.C.4. Municipal waste;
- I.C.5. Commercial waste; and
- I.C.6. Regulated asbestos-containing material.
- I.C.7. Any prohibited waste received and accepted for disposal at the facility shall constitute a violation of this Permit, of Utah Code Ann. § 19-6-101 through 126 and of R315-301 through 320 of the Utah Administrative Code.

I.D. Inspections and Inspection Access

- I.D.1. The Permittee shall allow the Director or an authorized representative, or representatives from the 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 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. Upon receipt and review of the assessment report, the Director may order the Permittee to perform appropriate remedial measures including development of a site remediation plan for approval by the Director.
- I.E.5. In an enforcement action, the Permittee may not claim as a defense that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with R315-301 through 320 of the Utah Administrative Code and this Permit.

I.F. Revocation

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

I.G. Attachment Incorporation

- I.G.1. Attachments to this Permit 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 according to the design outlined in Attachment #1 and in the area designated in Attachment #1, including landfill cells, fences, gates, and berms prior to acceptance of waste.
- 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.

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

II.B. Run-On Control

- II.B.1. The Permittee shall construct drainage channels and diversions as specified in 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, provided that the modification meets all of the requirements of R315-301 through 320 of the Utah Administrative Code, is as protective of human health and the environment as the Operations Plan approved as part of this Permit, and is approved by the Director as a permit modification under R315-311-2(1) of the Utah Administrative Code. 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 a 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 #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 or apply moisture as necessary to control fugitive dust. The Permittee shall record in the daily operating record and the operator shall certify, at the end of each day of operation when waste, cover and moisture are placed; the amount and type of cover placed and the area receiving cover.

III.F. Waste Inspections

III.F.1. The Permittee shall inspect all loads that the Permittee suspect may contain a waste not permitted for disposal at the landfill.

III.F.1.a 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.1.b The Permittee shall inspect all loads that the Permittee suspect may contain a waste not permitted for disposal at the landfill.
- III.F.1.c The Permittee shall conduct complete random inspections as follows:
- III.F.1.d The Permittee shall conduct the random waste inspection at the working face or an area designated by the Permittee.
- III.F.1.e The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;
- III.F.1.f Loads shall be spread by equipment or by hand tools;
- III.F.1.g Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and
- III.F.1.h The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Attachment #3. The Permittee shall place the form in the daily operating record at the end of the operating day.
- III.F.1.i 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, compaction, cover; fences and access controls; roads; run-on/run-off controls; ground water monitoring wells; final and intermediate cover; litter controls; and records. The Permittee shall place a record of the inspections in the daily operating record on the day of the inspection. The Permittee shall correct the problems identified in the inspections in a timely manner and document the corrective actions in the daily operating record.

III.H. Recordkeeping

- III.H.1. The Permittee shall maintain and keep on file at the 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 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 shall be improved and maintained as necessary to assure safe and reliable all-weather access to the disposal area.

III.K. Ground Water Monitoring

III.K.1. The Permittee shall monitor the ground water underlying the landfill in accordance with the Ground Water Monitoring Plan and the Ground Water Monitoring Quality Assurance/Quality Control Plan contained in Attachment # 3. The Permittee shall note in the daily operating record any modification to the Ground Water Monitoring Plan and the Ground Water Monitoring Quality Assurance/Quality Control Plan. A plan change that the Director finds to be less protective of human health or the environment

than the approved plan is a major modification and is subject to the requirements of R315-311 of the Utah Administrative Code.

IV. CLOSURE REQUIREMENTS

IV.A. Closure

- IV.A.1. Final cover of the landfill shall be as shown in Attachment #4. 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.A.2. This Permittee has demonstrated through geologic, hydrogeologic, climatic, waste stream, cover material properties, infiltration factors, and other factors that the landfill will not contaminate ground water and is approved for the alternative cover design as outlined in the Permit Application. Upon finding by the Director of any contamination of ground water resulting from the landfill, the Director may revoke this alternative cover design approval and the Director may require placement of a cover meeting the requirements of R315-303-3(4)(a) of the Utah Administrative Code or other remedial action as required by the Director.

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 Duchesne 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.

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 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.

IV.D. Financial Assurance

- IV.D.1. The Permittee shall establish and fund the approved mechanism, as described in the Permit Application, prior to receipt of waste. 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. The Permittee shall keep the approved financial assurance mechanism in effect and active until closure and post-closure care activities are completed and the Director has released the facility from all post-closure care requirements.
- IV.D.2. The Permittee shall notify the Director of the establishment of the approved financial assurance mechanism and shall receive acknowledgment from the Director that the established mechanism complies with the approved method prior to the acceptance of waste.

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 funding as required by R315-309-2(2) of the Utah Administrative Code, to the Director as part of the annual report.

IV.E.2. Closure Cost and Post-Closure Cost Revision

IV.E.3. The Permittee shall submit a complete revision of the closure and post-closure cost estimates by the Closure Cost Revision Date listed on the signature page of this Permit and any time the facility is expanded, any time a new cell is constructed, or any time a cell is expanded.

V. ADMINISTRATIVE REQUIREMENTS

V.A. Permit Modification

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

V.A.2. Permit Transfer

V.A.2.a 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.

V.B. Expansion

V.B.1. This Permit is for the operation of an Oil and Gas Exploration and Production (E&P) Waste 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.

V.B.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.

V.B.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.

V.C. Expiration

V.C.1. If the Permittee desires to continue operating this landfill after the expiration date of this Permit, the Permittee shall submit an application for permit renewal at least six months prior to the expiration date, as shown on the signature (cover) page of this

Permit. If the Permittee timely submits a permit renewal application and the permit renewal is not complete by the expiration date, this Permit shall continue in force until renewal is completed or denied.

V.D. Status Notification

V.D.1. Eighteen months from the date of this Permit, the Permittee shall notify the Director in writing of the status of the construction of this facility unless construction is complete and operation has commenced. If construction has not begun within 18 months the Permittee shall submit adequate justification to the Director as to the reasons that construction has not commenced. If no submission is made or the submission is judged inadequate by the Director, this Permit shall be revoked.

V.E. Construction Approval and Request to Operate

V.E.1. The Permittee shall meet each of the following conditions prior to receipt of waste:

V.E.1.a The Permittee shall notify the Director that all the requirements of this Permit have been met and all required facilities, structures and accounts are in place.

V.E.1.b The Permittee shall submit to the Director, for approval, documentation that all local zoning requirements and local government approvals have been obtained for operation of this landfill prior to construction of any portion of the landfill; including offices, fences, and gates.

V.E.1.c The Permittee shall demonstrate that the lowest level of the landfill liner is greater than 5 feet from the historic high ground water elevation. The Permittee shall submit documentation of this demonstration for approval by the Director.

V.E.1.d The Permittee shall obtain from the Director written approval, prior to receipt of waste that all information required by this section has been submitted and the information meets the requirements of this Permit and R315-301 through 320 of the Utah Administrative Code.

Attachment 1
Landfill Design and Construction

Attachment 2
Operations Plan

Attachment 3
Groundwater Monitoring

Attachment 4
Closure and Post-closure