

**UTAH SOLID AND HAZARDOUS WASTE CONTROL BOARD
SOLID WASTE PERMIT RENEWAL**

SOLITUDE CLASS V LANDFILL

Pursuant to the provisions of the *Utah Solid and Hazardous Waste Act*, Title 19, Chapter 6, Part 1, Utah Code Annotated (UCA) 1953, as amended (the Act) and the *Utah Solid Waste Permitting and Management Rules*, Utah Administrative Code (UAC) R315-301 through 320 adopted thereunder,

Green River Landfill, LLC as owner and operator,

is hereby approved to construct and operate the Solitude Class V Landfill located in Section 22, Township 21 South, Range 17 East, Salt Lake Base and Meridian, Grand County, Utah as shown in the permit renewal application that was determined complete on December 1, 2008.

The operation of the landfill is subject to the conditions that Green River Landfill, LLC (Permittee) meet the requirements of UAC R315-301 through 320 and the requirements set forth herein.

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

This permit shall become effective March 1, 2009.

This permit shall expire at midnight February 28, 2019.

Closure Cost Revision Date: February 28, 2014.

Signed this 26 day of February, 2009.

Original Document signed by Dennis R. Downs on 2/26/09

Dennis R. Downs, Executive Secretary
Utah Solid and Hazardous Waste Control Board

FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME: Solitude Landfill

OWNER NAME: Green River Landfill, LLC

OWNER ADDRESS: 76 South Orange Ave, Suite 208
South Orange, NJ 07079

OWNER PHONE NO.: (973) 762-6060

OPERATOR NAME: same as owner

TYPE OF PERMIT: Class V Landfill

PERMIT NUMBER: 0301R1

LOCATION: Landfill site is located in Township 21 South, Range 17 East,
Section 22, SLMB; Grand County, Lat. N 38° 58' 20", Long. W
110° 1' 42"

DIRECTIONS TO FACILITY: Approximately nine miles east of Green River, Utah

PERMIT REQUIREMENTS

Permit as used in this document is defined in UAC R315-301-2(55).

The renewal application, as deemed complete on the date shown on the signature page of this permit, is hereby incorporated by reference into this Solid Waste Permit and will be referred to as the permit application throughout this permit. All representations made in the permit application are part of this permit and are enforceable under UAC 315-301-5(2). The permit application will become part of the operating record of the Landfill. Where differences in wording exist between this permit and the permit application, the wording of the permit supersedes that of the permit application.

This permit consists of the signature page, Facility Owner/Operator Information section, sections I through V, Appendix A (Ground Water Monitoring and Liner Exemption Statement of Basis), and the permit application as defined above.

The facility as described in this permit covers any future construction of any of the following scale house and maintenance buildings, rail haul unloading equipment, disposal cells for all

permitted waste, waste treatment areas and areas for storage of any prohibited waste, recyclable materials, green waste, and compost.

By this permit to own and operate, the Permittee is subject to the following conditions.

I. GENERAL COMPLIANCE RESPONSIBILITIES

A. General Operation

The Permittee shall operate the landfill in accordance with all applicable requirements of UAC R315-302 and 303, for a Class V landfill, that are in effect as of the date of this permit unless otherwise noted in this permit. Any permit noncompliance or noncompliance with any applicable portions of UCA 19-6-101 through 123 and applicable portions of UAC R315-301 through 320 constitutes a violation of the permit or applicable statute or rule and is grounds for appropriate enforcement action, permit revocation, modification, or denial of a permit renewal application.

B. Acceptable Waste

This permit is for the disposal of non-hazardous solid waste that may include municipal solid waste, commercial waste, industrial waste, construction/demolition waste, and special waste as allowed by UAC R315-315 and authorized in section IIIJ of this permit. The Permittee may accept conditionally exempt small quantity generator hazardous waste as specified in UAC R315-303-4(7)(a)(i)(B) and PCB's as specified by UAC R315-315-7(2).

C. Prohibited Waste

No hazardous waste as defined by UAC R315-1 and R315-2, except waste specified by UAC R315-303-4(7)(a)(i)(B); or PCB's as defined by UAC R315-301-2(53), except those specified by UAC R315-315-7(2) may be accepted for treatment, storage, or disposal at the landfill. No industrial waste may be received directly from an industrial waste generator. No industrial waste may be received for disposal other than as part of a contract for municipal waste disposal. No waste generated as part of a site cleanup under CERCLA or other contaminated waste from a site remediation may be received for disposal. No waste as described by R315-315-3 may be received for disposal from an incinerator that has a design capacity of more than 10 tons per day. Any prohibited waste received and accepted for treatment, storage, or disposal at the facility will constitute a violation of this permit and UAC R315-303-4(7).

D. Inspections and Inspection Access

The Permittee shall allow the Executive Secretary of the Utah Solid and Hazardous Waste Control Board or an authorized representative of the Board, or representatives from the Southeastern Utah District Health Department, to enter at reasonable times and:

1. Inspect the landfill or other premises, practices or operations regulated or required under the terms and conditions of this Permit or UAC R315-301 through 320;
2. Have access to and copy any records required to be kept under the terms and conditions of this Permit or UAC R315-301 through 320;
3. 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 UAC R315-301 through 320; and
4. Create a record of any inspection by photographic, videotape, electronic, or any other reasonable means.

E. Noncompliance

If monitoring, inspection, or testing indicates that any permit condition or any applicable rule under UAC R315-301 through 320 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.

In the event of any noncompliance with any permit condition or violation of an applicable rule, the Permittee shall promptly take any feasible 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.

The Permittee shall: document the noncompliance or violation in the operating record on the day the event occurred or the day it was discovered; notify the Executive Secretary of the Solid and Hazardous Waste Control Board by phone within 24 hours or the next business day following documentation of the event; and give written notice of the noncompliance or violation and measures taken to

protect public health and the environment within seven days of Executive Secretary notification.

Within thirty days of the documentation of the event, the Permittee shall submit, to the Executive Secretary, 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 Executive Secretary may order the Permittee to perform appropriate remedial measures including development of a site remediation plan for approval by the Executive Secretary.

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 UAC R315-301 through 320 and this permit.

Compliance with the terms of 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.

F. Revocation

This permit is subject to revocation if any condition of this permit is not being met. The Permittee will be notified in writing prior to any proposed revocation action and such action will be subject to all applicable hearing procedures established under UAC R315-12 and the *Utah Administrative Procedures Act*.

Revocation of this permit does not revoke the financial assurance established for closure and post-closure care of the facility, nor remove any responsibility on the

part of the Permittee for completion of closure and post-closure care for the facility required in UAC R315-302-3.

Revocation of this permit will necessitate that the Executive Secretary exercise the option to require the funds or other mechanism provided for financial assurance for completion of closure and post-closure care for the facility required in UAC R315-302-3 be called.

G. Attachment Incorporation

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

A. Design and Construction

The Permittee shall construct any landfill cell, sub-cell, run-on diversion system, runoff containment system, waste treatment facility, or final cover in accordance with the alternative design submitted as part of the permit application and in accordance with the Utah Solid Waste Permitting and Management Rules (UAC R315-301 thru 320).

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

The Permittee shall submit final construction drawings and plans and receive Executive Secretary approval prior to commencement of construction at the facility and shall notify the Executive Secretary 10 days prior to commencement of construction.

The Permittee shall notify the Executive Secretary upon completion of construction of any landfill cell, sub-cell or engineered control system. No landfill cell or engineered control system may be used until as-built documents are submitted and construction is approved by the Executive Secretary.

The Permittee shall notify the Executive Secretary of any proposed incremental closure, placement of any part of the final, or placement of the full final cover.

Construction of any portion of the final cover shall be considered as a separate construction event and shall be approved separately from any other construction or expansion of the landfill. Design approval must be received from the Executive Secretary prior to construction and must be accompanied by a Construction Quality Control and Construction Quality Assurance (CQC/CQA) Plan, for each construction season where incremental or final closure is performed.

A qualified independent third party shall perform the quality assurance function on cover components and other testing as required by the approved CQC/CQA Plan. The results must be submitted as part of the as-built drawings to the Executive Secretary

All engineering drawings submitted to the Executive Secretary must be stamped and approved by a professional engineer with a current registration in Utah.

B. Run-On Control

Drainage channels and diversions shall be constructed as specified in the permit application and maintained at all times to effectively prevent runoff from the surrounding area from entering the landfill.

C. Alternative Design

This facility has demonstrated through geologic, hydrogeologic, climatic, waste stream, and other factors that the landfill will not contaminate ground water and is approved for the alternative design as outlined in the permit application. Any contamination of ground water resulting from operation of the landfill may result in the revocation of this alternative design approval. The basis for approval of the alternative design is found in the "Alternative Design Statement of Basis" found in Appendix A of this permit.

III. LANDFILL OPERATION

A. Operations Plan

The Operations Plan included in the permit application and the solid waste permit issued by the Executive Secretary shall be kept onsite at the landfill or at the location designated in section III.L of this permit. The landfill shall be operated in accordance with the operations plan as included in the permit application. If necessary, the facility owner may modify the Operations Plan, provided that the modification meets all of the requirements of UAC R315-301 through 320, is as

protective of human health and the environment as that approved in the permit application, and is approved by the Executive Secretary as a minor modification under UAC R315-311-2(1)(a)(xiii). Any modification to the Operations Plan shall be noted in the operating record.

Any modification to the operations plan must be submitted to the Executive Secretary for approval and is considered a minor permit modification in compliance with UAC R315-311-2(1)(a)(xiii) unless the Executive Secretary determines the change should be subject to public comment under UAC R315-311-2(1)(b).

B. Security

The Permittee shall operate the Landfill so that unauthorized entry to the facility is prevented. All facility gates and other access routes shall be locked during the time the landfill is closed. At least two persons, employed by Green River Landfill, LLC, shall be at the landfill during all hours that the landfill is open. Fencing and any other access controls as shown in the permit application shall be constructed to prevent access of persons or livestock by other routes.

C. Training

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

D. Burning of Waste

Intentional burning of solid waste is prohibited and is a violation of UAC R315-303-4(2)(b). All accidental fires shall be extinguished as soon as reasonably possible.

E. Daily Cover

The solid waste received at the landfill shall be completely covered at the end of each working day with a minimum of six inches of earthen material.

An alternative daily cover material may be used when the material meets the requirements of UAC R315-303-4(4)(b) through (d) or when the alternative daily cover meets the requirement of UAC R315-303-4(4)(e).

Baled waste shall be covered with a minimum of six inches of soil on top of the bales at the end of each operating day.

F. Ground Water Monitoring

For the reasons outlined in Appendix A, "Statement of Basis," attached to this permit, the ground water monitoring requirement for the Solitude Landfill has been waived in accordance with R315-308-1(3). Any contamination of ground water resulting from operation of the landfill will result in the revocation of this waiver.

G. Gas Monitoring

The Permittee shall monitor explosive gases at the landfill in accordance with the Gas Monitoring Plan contained in the permit application and shall otherwise meet the requirements of UAC R315-303-3(5). If necessary, the Permittee may modify the Gas Monitoring Plan, provided that the modification meets all of the requirements of UAC R315-301 through 320 and is as protective of human health and the environment as that approved in the permit application, and is approved by the Executive Secretary as a minor modification under UAC R315-311-2(1). Any modification to the Gas Monitoring Plan shall be noted in the operating record.

If the concentrations of explosive gases at any of the facility structures, at the property boundary, or beyond the property boundary ever exceed the standards set in UAC R315-303-2(2)(a), the Permittee shall immediately take all necessary steps to ensure protection of human health and notify the Executive Secretary. Within seven days of detection, place in the operating record the explosive gas levels detected and a description of the immediate steps taken to protect human health. Implement a remediation plan that meets the requirements of UAC R315-303-3(5)(b) and shall submit the plan to, and receive approval from, the Executive Secretary prior to implementation.

H. Waste Inspections

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. A complete waste inspection shall be conducted at a minimum frequency of 1 % of incoming loads, but no less than one complete inspection per day. Loads to be inspected are to be chosen on a random basis.

All loads suspected or known to have containers capable of holding more than five gallons of liquid will be inspected to assure that the container is empty.

All loads that the operator suspects may contain a waste not allowed for disposal at the landfill will be inspected.

Complete random inspections shall be conducted as follows:

1. The operator shall conduct the random waste inspection at the working face or an area designated by the operator.
2. Loads subjected to complete inspection shall be unloaded at the designated area;
3. Loads shall be spread by equipment or by hand tools;
4. A visual inspection of the waste shall be conducted by personnel trained in hazardous waste recognition and recognition of other unacceptable waste; and
5. The inspection shall be recorded on the waste inspection form found in the permit application. The form shall be placed in the operating record at the end of the operating day.

I. Disposal of Liquids

Disposal of containers larger than household size (five gallons) holding any liquid, noncontainerized material containing free liquids, sludge containing free liquids, or any waste containing free liquids in containers larger than five gallons is prohibited.

J. Disposal of Special Wastes

If loads of incinerator ash, provided they meet the requirements of section IC of this permit, are accepted for disposal it shall be transported in such a manner to prevent leakage or the release of fugitive dust. The ash shall be completely covered with a minimum of six inches of material, or use other methods or material, if necessary, to control fugitive dust. Ash may be used for daily cover when its use does not create a human health or environmental hazard.

Animal carcasses may be disposed in the landfill working face and must be covered with other solid waste or earth by the end of the operating day in which they are received. Alternatively, animal carcasses may be disposed in a special trench or pit prepared for the acceptance of dead animals. If a special trench is used, animals placed in the trench shall be covered with six inches of earth by the end of each operating day.

Asbestos waste shall be handled and disposed in accordance with UAC-315-315-2.

K. Self Inspections

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. These general inspections shall be completed no less than quarterly and shall cover the following areas: Waste placement, compaction, cover; fences and access controls; roads; run-on/run-off controls; final and intermediate cover; litter controls; and records. A record of the inspections shall be placed in the daily operating record on the day of the inspection. Areas needing correction, as noted on the inspection report, shall be corrected in a timely manner. The corrective actions shall be documented in the daily operating record.

L. Recordkeeping

The Permittee shall maintain and keep on file at the landfill office, a daily operating record and other general records of landfill operation as required by UAC R315-302-2(3). 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.

1. The daily operating record shall include the following items:
 - 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;
 - b. Major deviations from the approved plan of operation recorded at the end of the operating day the deviation occurred;
 - c. Results of other monitoring required by this permit recorded in the operating record on the day of the event or the day the information is received;
 - d. 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.

2. The general record of landfill operations shall include the following items:
 - a. A copy of The permit including the permit application;
 - b. Results of inspections conducted by representatives of the Utah Solid and Hazardous Waste Control Board and/or representatives of the Southeastern Utah District Health Department, when forwarded to the Permittee;
 - c. Closure and Post-closure care plans;
 - d. Records of employee training; and
 - e. results of landfill gas monitoring.

M. Reporting

The Permittee shall prepare and submit, to the Executive Secretary, an Annual Report as required in UAC R315-302-2(4). 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, the results of gas monitoring, and all training programs completed.

N. Roads

All access roads, within the landfill boundary, 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.

IV. CLOSURE REQUIREMENTS

A. Closure

Final cover of the landfill shall be as shown in the permit application. The final cover shall meet, at a minimum, the standard design for closure as specified in the UAC (R315-303-3(4)) plus sufficient cover soil or equivalent material to protect the low permeability layer from the effects of frost, desiccation, and root penetration. A quality assurance plan for construction of the final landfill cover shall be submitted to, and approval of the plan must be received from the Executive Secretary prior to construction of any part of the final cover at the landfill. A qualified person not affiliated with the landfill owner/operator shall

perform permeability testing on the recompacted clay placed as part of the final cover.

B. Title Recording

The Permittee shall meet the requirements of UAC R315-302-2(6) by recording with the Grand County Recorder as part of the record of title that the property has been used as a landfill. The recording shall include waste locations and waste types disposed.

C. Post-Closure Care

Post-closure care at the closed landfill shall be done 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 UAC R315-302-3(7)(c) is made.

D. Financial Assurance

The approved mechanism, as described in the permit application, shall be established and funded, as required, by the Permittee prior to receipt of waste. The financial assurance mechanism(s) shall be adequately maintained 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 Executive Secretary has released the facility from all post-closure care requirements.

With each annual revision of the closure and post-closure care cost estimate, the approved financial assurance mechanism shall be updated to reflect the current cost estimates.

E. Financial Assurance Annual Update

An annual revision of closure and post-closure costs and financial assurance funding as, required by R315-309-2(2), shall be submitted to the Executive Secretary as part of the annual report.

F. Closure Cost and Post-Closure Cost Revision

The Permittee shall submit a complete revision of the closure and post-closure cost estimates by the date listed on the signature page of this permit.

V. ADMINISTRATIVE REQUIREMENTS

A. Permit Modification

Modifications to this permit may be made upon application by the Permittee or by the Executive Secretary. The Permittee will be given written notice of any permit modification initiated by the Executive Secretary.

B. Permit Transfer

This permit may be transferred to a new permittee or new permittees by meeting the requirements of the permit transfer provisions of UAC R315-310-11.

C. Expansion

This permit is for the operation of a Class V Landfill in accordance with 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, will require submittal of plans and specifications to the Executive Secretary. The plans and specifications must be approved by the Executive Secretary prior to construction.

Any expansion of the landfill facility beyond the property boundaries designated in the description contained in the permit application will require submittal of a new permit application in accordance with the requirements of UAC R315-310 and UCA 19-6-108(1)(d) and must receive all approvals required in UCA 19-6-108.

Any addition to the acceptable wastes described in Section 1B will require submittal of all necessary information to the Executive Secretary and the approval of the Executive Secretary. Acceptance for PCB bulk product waste under UAC R315-315-7(3)(b) can only be done after submittal of the required information to the Executive Secretary and modification of Sections 1B and IC of this permit. Acceptance of a broader waste stream may also require a new permit and compliance with the requirements for a new permit under UAC R315-301 through 320 and UCA 19-6-108.

D. Expiration

Application for permit renewal shall be made at least six months prior to the expiration date, as shown on the signature (cover) page of this permit. If a timely renewal application is made and the permit renewal is not complete by the expiration date, this permit will continue in force until renewal is completed or denied.

F. Construction Approval and Request to Operate

The Permittee shall notify the Executive Secretary, prior to acceptance of waste, that all the requirements of this permit have been met and all required facilities, structures and accounts are in place as required.

APPENDIX A

Solitude Landfill Ground Water Monitoring And Liner Exemption Statement of Basis

Green River Landfill, LLC has applied for a solid waste permit to construct and operate the Solitude Landfill on 320 acres of privately owned land located nine miles east of the City of Green River, Utah. The permit application includes a request for exemption to the requirements for a Class I landfill to be constructed with a bottom liner and conduct ground water monitoring at the site. The information provided in support of the exemption request has been reviewed and has been determined to qualify for the exemption. This exemption is based on the following factors:

- The climate in the area is very dry, with average annual precipitation of 6.5 inches and evaporation of approximately 56 inches.
- Ground water is at a depth of at least 200 feet below the site, and possibly as deep as 1,000 feet or more.
- The site is underlain by Mancos Shale, a highly impermeable dark gray marine shale. The Mancos Shale is at least 1,100 feet thick below the site. It is weathered near the surface, but rapidly grades with depth to a competent shale. Permeability values for the Mancos Shale are in the range of 10^{-7} to 10^{-13} cm/s.
- The ground water in aquifers below the site is of very poor quality. Samples of perched water obtained from drill holes near ephemeral streams at the site have total dissolved solids (TDS) values ranging from 9,400 to 30,000 mg/l; regional studies of the deep aquifers in the region indicate ground water TDS values range from 500 to 14,000 mg/l. There are no wells located within five miles of the site.
- Modeling of open and closed landfill cells shows minimal amounts moisture infiltration through the bottom of the landfill, on the order of hundredths to thousandths of an inch per year. The majority of precipitation is lost through evaporation.

The final cover on the landfill will minimize infiltration. From bottom to top, it consists of 18 inches of low permeability (10^{-7} cm/s) compacted native clay, 24 inches of soil, and 6 inches of coarse aggregate for erosion protection. The final cover design, including the low permeability clay, is an integral part of the liner and ground water monitoring exemption.