



State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF SOLID AND
HAZARDOUS WASTE
Dennis R. Downs
Director

JON HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

FILE COPY

August 11, 2005

Douglas Bjerregaard
Chairman, Sanpete County Landfill Cooperative
111 North 100 West
Box 7
Mayfield, Utah 84643

and

Larry Hansen
Operator, Chester Class IVb Landfill
RR#1, Box 82
Fairview, Utah 84629

Subject: Issuance of the Chester Class II Landfill Closure Permit

Dear Chairman Bjerregaard and Mr. Hansen:

The 30-day public comment period for the Chester Class II draft closure permit and permit application ended August 5, 2005. The announcement of the public comment period appeared in the, *Salt Lake Tribune*, *Deseret Morning News*, and the *Sanpete Messenger*. One comment letter was received which did not result in any changes to the draft permit. The Division's response to that comment letter is enclosed.

Also, enclosed is Permit # 0305C, which expires on August 10, 2015. A public notice of the permit issuance will appear on Wednesday, August 24, 2005 in the *Sanpete Messenger*.

Personnel from the Division of Solid and Hazardous Waste and the Central Utah Public Health Department will conduct periodic inspections of the landfill. The landfill inspections are to assess compliance with the conditions of the Permit and the *Solid Waste Permitting and Management Rules*.

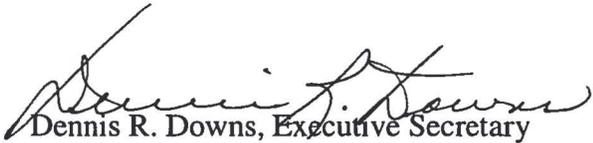
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If you have any questions, please feel free to contact either Ralph Bohn or Jeff Emmons with the Solid Waste Section at 801-538-6170.

Sincerely,



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

DRD/JE/kk

Enclosures: Closure Permit Response to Comments

c: Robert Resendes, MBA, MT, Director, Central Utah Health Department
George Johansen, Central Utah Health Dept.- Mt. Pleasant Office

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

CHESTER CLASS II LANDFILL

Pursuant to the provisions of the *Utah Solid and Hazardous Waste Act*, Title 19, Chapter 6, 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,

Sanpete Sanitary Landfill Cooperative as owner
and
Larry Hansen as operator

are hereby authorized to construct final cover, conduct closure and post-closure care activities at the Sanpete Sanitary Landfill Cooperative Chester Class II landfill located in Northwest 1/4 section of Section 11, Township 16 south, Range 3 east, Salt Lake Base and Meridian, Sanpete County, Utah as shown in the closure permit application that was determined complete on June 28, 2005.

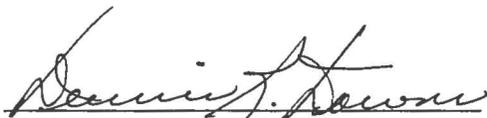
The construction of the final cover and performance of post-closure care of the landfill are subject to the condition that Sanpete Sanitary Landfill Cooperative and Larry Hansen (Permittees) meet the requirements set forth herein.

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 August 11, 2005

This permit shall expire at midnight August 10, 2015

Signed this 11th day of August, 2005.



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

PERMIT REQUIREMENTS

LANDFILL NAME: Chester Class II Landfill

OWNER NAME: Sanpete Sanitary Landfill Cooperative

OWNER ADDRESS: 111 North 100 West
P.O. Box 7
Mayfield, Utah 84643

OWNER PHONE NO.: (435) 528-3255

OPERATOR NAME: Larry Hansen

OPERATOR ADDRESS: RR #1, Box 82
Fairview, Utah 84629

OPERATOR PHONE NO.: (435) 427-3815

TYPE OF PERMIT: Class II Closed Solid Waste Landfill

PERMIT NUMBER: 0305C

LOCATION: Landfill site is located in Township 16 south, Range 3 east, Section 11, SLBM Sanpete County, Lat. 39° 26' 44", Long. 111° 32' 49".

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

The closure application, as deemed complete on June 29, 2005 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 supercedes that of the permit application.

The facility as described in this permit consists of one closed landfill cell approximately 12 acres in size as described in the closure permit application.

By this permit to own and operate, the Permittees are subject to the following conditions.

I. GENERAL COMPLIANCE RESPONSIBILITIES

A. General Operation

The Permittees shall perform closure and post-closure care in accordance with all applicable requirements of UAC R315-302 and 303, for a Class II 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 rules in UAC R315-301 through 320 constitutes a violation of the permit or applicable rule and is grounds for appropriate enforcement action, permit revocation, modification, or denial of a permit renewal application.

B. Inspections and Inspection Access

The Permittees shall allow the Executive Secretary of the Utah Solid and Hazardous Waste Control Board or an authorized representative of the Board, including representatives from the Central Utah Public 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. Create a record of any inspection by photographic, videotape, electronic, or any other reasonable means.

C. 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 Permittees 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 Permittees 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 Permittees 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 Permittees 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 Permittees to perform appropriate remedial measures including development of a site remediation plan for approval by the Executive Secretary.

In an enforcement action, the Permittees 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 Permittees from obtaining any other local, State or Federal permits or approvals required for facility closure and post-closure.

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 nor does it 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 shall be 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.

D. Revocation

This permit is subject to revocation if any condition of this permit is not being met. The Permittees 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 Permittees for completion of closure and post-closure care for the facility required in UAC R315-302-3.

E. 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 supercedes any conflicting language in the attachments or documents incorporated into the attachments.

II. DESIGN AND CONSTRUCTION

A. Design and Construction

The Permittees shall construct any landfill run-on and runoff diversion system or final cover in accordance with the 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).

Prior to construction of any landfill run-on and runoff diversion system or final cover, the Permittees shall submit construction design drawings and a Construction Quality Control and Construction Quality Assurance (CQC/CQA) Plan to the Executive Secretary for approval. Buildings do not require approval. The Permittees shall construct any landfill run-on and run-off diversion system or the final cover in accordance with the design drawings and CQC/CQA Plans submitted and approved by the Executive Secretary. No less than fifteen (15) days prior to construction, the permittees shall submit the a construction schedule through completion of the project

Subsequent to construction, the Permittees shall notify the Executive Secretary of completion of construction of the run-on or run-off diversion system or final cover. No less than 60 days from completion of construction, the construction CQC/CQA documents and construction related documents including as-builts must be submitted to the Executive Secretary for review and approved by the Executive Secretary. The Permittees shall submit as-built drawings for each construction event that are signed and sealed by an engineer registered in the State of Utah.

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 run-on from the surrounding area from entering the landfill.

C. Alternative Final Cover Design

This facility has demonstrated through geologic, hydrogeologic, climatic, and other factors that the proposed alternative final cover will provide equivalent protection as the "standard cover" and is approved for the alternative/equivalent design as outlined in the permit application. The basis for approval of the alternative final cover design is in the "Statement of Basis" found in Appendix A of this permit.

III. CLOSURE REQUIREMENTS

A. Closure

Final cover of the landfill shall be as shown in the permit application. A quality assurance / quality control 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 third party shall perform permeability testing on the recompacted clay placed as part of the final cover.

B. Title Recording

The Permittees shall also meet the requirements of UAC R315-302-2(6) by recording with the Sanpete County Recorder as part of the record of title that the property has been used as a landfill.

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 disposed at the site has stabilized and a demonstration to the Executive Secretary as defined in UAC R315-302-3(7)(c) is made.

D. Financial Assurance

The Permittees shall keep in effect and active the currently approved financial assurance mechanism or another mechanism that meets the requirements of UAC R315-309 to cover the costs of closure and post-closure care at the landfill. The financial assurance fund shall be adequately funded to provide for the cost of closure and post-closure.

With each annual revision of the closure and post-closure care cost estimate, the annual payments to be made to the trust fund shall be determined by the following formula:

$$NP=[CE-CV]/Y$$

where NP is the next payment, CE is the current cost estimate for closure and post-closure care (updated for inflation or other changes), CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

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.

IV. ADMINISTRATIVE REQUIREMENTS

A. Permit Modification

Modifications to this permit may be made upon application by the Permittees or by the Executive Secretary. The Permittees 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 R315-310-10.

C. Expiration

This permit shall expire ten years from the effective date which is the date shown on the signature (first) page of this permit. Application for permit renewal shall be made at least 180 days prior to the expiration 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.

APPENDIX A

**Statement of Basis for Approval of the
Alternative Final Cover Design
at the
Closed Chester Class II Landfill**

The Sanpete Sanitary Landfill Cooperative has submitted an evapotranspiration (ET) final cover for the closed Chester Class II landfill. This alternative ET design incorporates the use of 36-inch thick silty clay loam soil as the final cover.

Landfill closures are designed and constructed to minimize the release of constituents into the environment. This incorporates a design, which minimizes the amount of moisture that can move through the final cover and enter into the waste. Accordingly, the *Utah Solid Waste Permitting and Management Rules, R315-303-3(4)* states that the standard cover design shall consist of:

a layer to minimize infiltration, consisting of at least 18 inches of compacted soil, or equivalent, with a permeability of 1×10^{-5} cm/sec or less, or equivalent, shall be placed upon the final lifts. and;

The Executive Secretary may approve an alternative final cover design, on a site specific basis, if it can be demonstrated that the alternative final cover design provides equivalent reduction in infiltration as specified as the standard design.

The *Chester Class II Landfill Closure Permit Application* includes computer simulations using the Hydrologic Evaluation of Landfill Performance (HELP) Model to demonstrate the alternative final cover design provides a greater reduction in infiltration than the standard cover design. The HELP model was used to simulated the performance of the alternative final cover to the standard cover during a five year wet cycle modeled with the five wettest years on record; a five year dry cycle modeled with the five year driest years on record, and during normal precipitation model with a sixty year period of average precipitation. Under each of the three modeled scenarios the alternative final cover significantly reduce the amount of infiltration through the final cover as compared to the standard cover.

In conclusion, the Executive Secretary finds that the demonstration included in the Chester Class II Landfill Closure Permit Application which shows the alternative final cover design will result in reduce infiltration as compared to the standard design. The alternative final cover is approved as part of the landfill permit # 0305C.



RESPONSE TO COMMENT

Received on the
CLOSURE APPLICATION AND DRAFT PERMIT
for the

SANPETE SANITARY LANDFILL COOPERATIVE CHESTER CLASS II LANDFILL

A 30-day public comment period on the closure permit application and draft permit for the Chester Class II Landfill owned by the Sanpete Sanitary Landfill Cooperative (Cooperative) ended August 5, 2005. During the public comment period, one letter was received. The Division of Solid and Hazardous Waste's (Division) response to the letter is provided below.

The reader should bear in mind that the responses to each comment are based on the Division's responsibility to implement the requirements contained in the *Utah Solid Waste Permitting and Management Rules* (Rules) and the *Utah Solid and Hazardous Waste Act* (Act).

Overview

An overview of the landfill operations at Chester will aid in addressing the concerns contained in the referenced letter. In 1989, the Cooperative opened a Class II landfill near Chester, Utah to accept nonhazardous municipal solid waste (household garbage) generated within Sanpete County. As allowed by state solid waste rules, the landfill disposal cell was an unlined earthen trench. Because of the limited environmental protection provided by an unlined disposal cell, the Rules restrict Class II landfills to receive 20 tons of waste per day or less. Landfills that receive more than 20 tons per day are typically required to have bottom liners systems and ground water monitoring. A liner system and groundwater monitoring would be required if the Chester landfill was to receive more than 20 tons per day of municipal waste.

After two years of operation, the records indicated that the Chester landfill was or would soon be exceeding the 20 tons per day limit. The Cooperative made a decision to search for another landfill site that could receive more than 20 tons per day as well as successfully demonstrate that a liner system and ground water monitoring would not be required. As a result of the search, a suitable site was selected and a Class I landfill was constructed and opened in 2001 at White Hills, west of Mayfield, Utah. The geologic conditions at White Hills allowed the landfill to receive more than 20 tons per day of garbage without the incorporation of a liner system or groundwater monitoring.

Once the White Hills landfill was open, the Cooperative decided to stop accepting municipal solid waste (household garbage) at the Chester site. Alternatively, the site would therefore cease operations as a Class II landfill and subsequently be operated as a Class IV (construction/demolition) landfill, which does not require liners or groundwater monitoring. Since 2002, the Chester site has accepted only construction/demolition waste, green waste, dead animals, and waste tires. It is the Division's understanding that the Class IV Chester landfill operation will continue to operate as currently managed.

The application and draft permit released for public comment in July 2005 was for the management of the closed municipal solid waste disposal cell at the Chester site and addressed the final closer cover design to be installed later in 2005.

WRITTEN COMMENTS

Citizen Letter

One letter (tracking # 05.02620) was received on August 1, 2005 regarding the closure permit application and draft permit. Following are excerpts from the letter.

We do not believe it poses any threat whatsoever to ground water supplies, or any other threat to the environment.

Further, the closure of this landfill will impose a high degree of financial strain on the fixed income of senior citizens.

I believe that the closure of this landfill will result in a large amount of debris being scattered at will throughout the county, along highways, on private property where it has not been approved, and will become a huge problem over time etc.

This is not a good situation and could be easily remedied if the landfill were to remain open with current operating procedures.

Response

The closure permit and draft permit addresses only the post-closure management of the closed municipal waste disposal cell and does not affect the ongoing operation of the Chester Class IV landfill to continue to receive the type of waste for which it is currently permitted. The review of the closure application demonstrates the closed landfill will be managed in compliance with the Rules and will therefore protect the environment and public health.

No change to the current operation of the Chester Class IV landfill is anticipated. The current operation to receive construction demolition waste, green waste, dead animals, and tires will continue.

Determination

No change is required to the draft closure permit. The closure permit was approved and issued on August 11, 2005. The closure permit for the closed Class II disposal cell was issued without change.