State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
Ty L. Howard
Director

February 24, 2020

Wayne Nielson
Nielson Construction Company
P.O. Box 620
Huntington, UT 84528

RE: Completeness of Public Comment Period
Nielson Construction Class V Landfill Permit Renewal
SW184

Dear Mr. Nielson:

Enclosed is the approved permit for the Nielson Construction Class V Landfill. The 30-day public comment period for the Nielson Construction Class V Landfill draft permit ended December 9, 2019. No comments were received.

The effective date of the permit is February 24, 2020. Periodic inspections of the landfill will be conducted by representatives of the Division of Waste Management and Radiation Control and the Southwest Public Health Department to assess compliance with permit conditions and applicable Solid Waste Rules.

If you have any questions, please call Allan Moore at (801) 536-0211.

Sincerely,

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

TLH/TAM/kl

Enclosure(s): Nielson Construction Class V Landfill Permit
Attachment 1 - Landfill Design and Construction
Attachment 2 – Operations Plan
Attachment 3 Inspection Forms
Attachment 4 Closure and Post-Closure Care

c: Brady C. Bradford, MSPH, REHS, Health Officer, Southeast Utah Health Department
Orion Rogers, Environmental Health Director, Southeast Utah Health Department
Scott Hacking, P.E., DEQ District Engineer

DSHW-2020-001662

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Mailing Address: P.O. Box 144880 • Salt Lake City, UT 84114-4880
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DIVISION OF WASTE MANAGEMENT AND RADIATION CONTROL SOLID WASTE LANDFILL PERMIT

NIELSON CONSTRUCTION
CLASS V LANDFILL

Pursuant to the provision of the Utah Solid and Hazardous Waste Act, Title 19, Chapter 6, Part 1, Utah Code Annotated (Utah Code Ann.) (the Act) and the Utah Solid Waste Permitting and Management Rules, R315-301 through 320 of the Utah Administrative Code adopted thereunder, a Permit is issued to:

Nielson Construction
as owner and operator,

to own, construct, and operate the Nielson Construction Class V landfill located in, Emery County, Utah as shown in the Permit Renewal Application that was determined complete on November 4, 2019.

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 February 24, 2020.

This Permit shall expire at midnight February 23, 2030.

Closure Cost Revision Date: February 24, 2025.

Signed this 24th day of February, 2020.

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

FACILITY OWNER/OPERATOR INFORMATION

LANDFILL NAME:	Nielson Construction Class V Landfill
OWNER NAME:	Nielson Construction
OWNER ADDRESS:	P.O. Box 620, Huntington, Ut 84528
OWNER PHONE NO.:	435-687-2494
TYPE OF PERMIT:	Class V Landfill
PERMIT NUMBER:	9806R3
LOCATION:	Section sec.16, Township 18 South, Range 8 east, Salt Lake Base and Meridian
PERMIT HISTORY	Permit effective date February 24, 2020

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 Nielson Construction 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 V, and all attachments to this Permit.

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 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 R315-301 through 320 of the Utah Administrative Code, 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 Utah Code Ann. § 19-6-101 through 125 and applicable portions of R315-301 through 320 of the Utah Administrative Code constitutes a violation of the Permit or applicable statute or rule and is grounds for appropriate enforcement action, permit revocation, modification, or denial of a permit renewal application.

I.B. Acceptable Waste

I.B.1. Mine such as timbers, brattice, concrete blocks, wood and metal materials, empty lubricant containers and general mine refuse constitutes the majority of the waste coming into the landfill. Along with non-hazardous construction and demolition waste, yard waste, inert waste, and waste tires. Petroleum contaminated soils may be accepted with documentation demonstrating that the soils are non-hazardous.

I.C. Prohibited Waste

I.C.1. Municipal Solid Waste as defined by R315-301-2(47) of the Utah Administrative Code;

I.C.2. Hazardous waste as defined by R315-261-3 of the Utah Administrative Code;

I.C.3. Bulk or Containerized Liquid Waste;

I.C.4. Dead Animals;

I.C.5. Grease pit and Animal Waste by products;

I.C.6. Infectious Wastes;

I.C.7. Used Oil and Batteries;

I.C.8. Regulated asbestos-containing material and;

I.C.9. Any prohibited waste received and accepted for treatment, storage, or 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 Southeastern Utah Health Department, to enter at reasonable times and;

I.D.1.a Inspect the landfill or other premises, practices or operations regulated or required under the terms and conditions of this Permit or R315-301 through 320 of the Utah Administrative Code;

I.D.1.b Have access to and copy any records required to be kept under the terms and conditions of this Permit or R315-301 through 320 of the Utah Administrative Code;

I.D.1.c Inspect any loads of waste, treatment facilities or processes, pollution management facilities or processes, or control facilities or processes required under this Permit or regulated under R315-301 through 320 of the Utah Administrative Code; and

I.D.1.d Create a record of any inspection by photographic, video, electronic, or any other reasonable means.

I.E. Noncompliance

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

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

I.E.3. The Permittee shall:

I.E.3.a Document the noncompliance or violation in the daily operating record, on the day the event occurred or the day it was discovered;

I.E.3.b Notify the Director 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 the Permit are incorporated by reference into this Permit and are enforceable conditions of this Permit, as are documents incorporated by reference into the attachments. Language in this Permit supersedes any conflicting language in the attachments or documents incorporated into the attachments.

II. DESIGN AND CONSTRUCTION

II.A. Design and Construction

II.A.1. The Permittee shall construct any landfill cell, sub-cell, run-on diversion system, runoff containment system, waste treatment facility, leachate handling system, or final cover in accordance with the design submitted as part of Attachment #1 and in accordance with the R315-301 thru 320 of the Utah Administrative Code.

II.A.1.a All engineering drawings submitted to the Director shall be stamped and approved by a professional engineer with a current registration in Utah.

II.A.1.b If ground water is encountered during excavation of the landfill, the Director shall be notified immediately, and a contingency plan implemented or alternative construction design developed and submitted for approval.

II.B. Run-On Control

II.B.1. The Permittee shall construct drainage channels and diversions as specified in the Permit Application and shall maintain them at all times to effectively prevent runoff from the surrounding area from entering the landfill.

II.C. Alternative Design

II.C.1. 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 Attachment #1. Any contamination of ground water resulting from operation of the landfill may result in the revocation of this alternative design approval.

III. LANDFILL OPERATION

III.A. Operations Plan

III.A.1. The Permittee shall keep the Operations Plan included in the 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 minor modification under R315-311-2 of the Utah Administrative Code. The Permittee shall note any modification to the Operations Plan in the daily operating record.

III.A.1.a Security

III.A.1.a.(i) The Permittee shall operate the Landfill so that unauthorized entry to the facility is restricted. The Permittee shall:

III.A.1.a.i.A Lock all facility gates and other access routes during the time the landfill is closed.

III.A.1.a.i.B Have at least one person employed by the Permittee at the landfill during all hours that the landfill is open.

III.A.1.a.i.C Construct all fencing and any other access controls as shown in the Permit Application to prevent access by persons or livestock by other routes.

III.B. Training

III.B.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.C. Burning of Waste

III.C.1. Intentional burning of solid waste is prohibited and is a violation of R315-303-4(2)(b) of the Utah Administrative Code.

III.C.2. The Permittee shall extinguish all accidental fires as soon as reasonably possible.

III.D. Daily Cover

III.D.1. The Permittee shall apply standard daily cover any time the waste will be exposed for greater than 24 hours. The permittee shall cover the waste periodically to prevent fires, and control vectors, blowing litter, odor, scavenging and fugitive dust.

III.D.2. The Permittee shall record daily cover use dates in the facility daily operating log.

III.E. Ground Water Monitoring

III.E.1. This facility is not required to monitor ground water (R315-303-3(3)(e)(iv) of the Utah Administrative Code).

III.F. Waste Inspections

III.F.1. The Permittee shall visually inspect incoming waste loads to verify that no wastes other than those allowed by this permit are disposed in the landfill. The Permittee shall conduct a complete waste inspection at a minimum frequency of 1 % of incoming loads, but no less than one complete inspection per day. The Permittee shall select the loads to be inspected on a random basis.

III.F.2. The Permittee shall inspect all loads suspected or known to have one or more containers capable of holding more than five gallons of liquid to ensure that each container is empty.

III.F.3. The Permittee shall inspect all loads that the Permittee suspect may contain a waste not allowed for disposal at the landfill.

III.F.4. The Permittee shall conduct complete random inspections as follows:

III.F.4.a The Permittee shall conduct the random waste inspection at the working face or an area designated by the Permittee.

III.F.4.b The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;

III.F.4.c Loads shall be spread by equipment or by hand tools;

III.F.4.d Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and

III.F.4.e The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Attachment #3. The Permittee shall place the form in the daily operating record at the end of the operating day.

III.F.4.f The Permittee or the waste transporter shall properly dispose of any waste 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; 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, 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 the Permit Attachments;

III.H.1.b.(ii) Results of inspections conducted by representatives of the Director, and of representatives of the Southeast 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. Litter Control

III.K.1. Litter resulting from operations of the landfill shall be minimized. In addition to the litter control plans found in Attachment #2, the Permittee shall implement the following procedures when high wind conditions are present:

III.K.1.a Reduce the size of the tipping face;

III.K.1.b Reduce the number of vehicles allowed to discharge at the tipping face at one time;

III.K.1.c Orient vehicles to reduce wind effects on unloading and waste compaction;

III.K.1.d Reconfigure tipping face to reduce wind effect;

III.K.1.e Use portable and permanent wind fencing as needed; and

III.K.1.f Should high winds present a situation that the windblown litter cannot be controlled, the Permittee shall cease operations of the landfill until the winds diminish.

IV. CLOSURE REQUIREMENTS

IV.A. Closure

IV.A.1. The Permittee shall install final cover of the landfill as shown in Attachment #4. The final cover shall meet, at a minimum, the standard design for closure as specified in the R315-303-3(4) of the Utah Administrative Code plus sufficient cover soil or equivalent material to protect the low permeability layer from the effects of frost, desiccation, and root penetration. The Permittee shall submit to the Director a quality assurance plan for construction of the final landfill cover, and approval of the plan shall be received from the Director prior to construction of any part of the final cover at the landfill. A qualified person not affiliated with the Permittee or the construction contractor shall perform permeability testing on the recompacted clay placed as part of the final cover.

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 Emery 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 Attachment #4. Post-closure care shall continue until all waste disposal sites at the landfill have stabilized and the finding of R315-302-3(7)(c) of the Utah Administrative Code is made.

IV.D. Financial Assurance

IV.D.1. The Permittee shall keep in effect and active the currently approved financial assurance mechanism or another approved mechanism that meets the requirements of R315-309 of the Utah Administrative Code and is approved by the Director to cover the costs of closure and post-closure care at the landfill. The Permittee shall adequately fund and maintain the financial assurance mechanism to provide for the cost of closure at any stage or phase or anytime during the life of the landfill.

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.F. Closure Cost and Post-Closure Cost Revision

IV.F.1. The Permittee shall submit a complete revision of the closure and post-closure cost estimates by the Closure Cost Revision Date listed on the signature page of this Permit and any time the facility is expanded, any time a new cell is constructed, or any time a cell is expanded.

V. ADMINISTRATIVE REQUIREMENTS

V.A. Permit Modification

V.A.1. Modifications to this Permit may be made upon application by the Permittee or by the Director. The Permittee shall be given written notice of any permit modification initiated by the Director.

V.B. Permit Transfer

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

V.C. Expansion

V.C.1. This Permit is for a Class V Landfill. The permitted landfill shall operate according to the design and Operation Plan described and explained in Attachment #2. Any expansion of the current footprint designated in the description contained in Attachment #2, 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.C.2. Any expansion of the landfill facility beyond the property boundaries designated in the description contained in the Attachment #2 shall require submittal of a new permit application in accordance with the requirements of R315-310 of the Utah Administrative Code and Utah Code Annotated § 19-6-108(1)(d) and shall receive all approvals required in Utah Code Ann. § 19-6-108.

V.C.3. Any addition to the acceptable wastes described in Section I-B shall require a permit modification in accordance with R315-311 of the Utah Administrative Code.

V.D. Expiration

V.D.1. If the Permittee desires to continue operating this landfill after the expiration date of this Permit, the Permittee shall submit an application for permit renewal at least six months prior to the expiration date, as shown on the signature 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 included in this permit
Attachment #1 – Landfill Design and Construction
Attachment #2 – Operations Plan
Attachment #3 – Inspection Forms
Attachment #4 – Closure and Post-Closure Care

Attachment #1
Landfill Design and Construction

2.3 CELL DESIGN

The filling of the NCL has been broken into three Phases. The Drawings (Appendix A) show the three Phases of the NCL. The Phases of the Landfill are as described in Sections 3.1 Part II.

2.3.1 Liner

Due to the great distance to groundwater and low permeability of the type of wastes accepted, site soils, arid climate, and high evaporation rate, the NCL is not required to have a synthetic liner.

2.3.2 Fill Method

Wastes will be dumped at the toe of the work face and spread up the slope in one to two-foot layers, keeping the working slope at a maximum three to one (horizontal to vertical).

Work face dimensions are kept narrow enough to minimize blowing litter and reduce the amount of soil needed for cover. Working face dimensions will be kept wide enough to safely accommodate vehicles bringing waste into the facility. Grade stakes will be used when necessary to control cell height and top surface grade.

2.3.3 Daily, Intermediate and Final Cover

2.3.3.1 Daily and Intermediate Cover

Daily cover is not required, intermediate cover is required to be placed every 30 days. The soil source for the 30-day (intermediate cover) are site soils located north of the active landfill. The intermediate cover is to minimize the potential for water infiltration, blowing waste, potential vector problems and isolation in case of fire. Intermediate cover will consist of at least 6 inches of site soils.

Damaged areas of the intermediate cover will be regraded and recompacted when necessary to restore the intermediate cover.

2.3.3.2 Final Cover

The NCL will utilize a final cover consisting of 24" of fine-grain site soils. The Drawings (Appendix A) show a cross section of the final cover. The slope of the final cover will be maintained greater than 2% to promote run-off and minimize the potential for erosion.

2.3.3.3 Borrow Sources

As indicated previously, borrow sources for intermediate and final cover comes primarily from the areas north of the existing landfill operation that are located on Nielson owned property. Site soils are derived from the weathering of the Mancos shale.

2.3.3.4 Elevations of Liner and Final Cover

As illustrated on the Drawings (Appendix A), the landfill will not be constructed with a synthetic liner and the bottom of the landfill will be established on native soil without a significant amount of excavation. The bottom of the landfill varies from approximately elevation 5910 to approximately elevation 5930.

The maximum planned elevation for the final cover in Phases I through Phase III is planned to be nearly 5980 feet above mean sea level. Final cover side slopes are planned to be a maximum of 4:1 (horizontal to vertical) with the top surface sloping at a minimum of 10:1.

Attachment #2
Operations Plan

3.0 - OPERATIONS PLAN

This Operations Plan has been written to address the requirements of UAC R315-302-2 and briefly describes the planned operations at the NCL. The purpose of the Operations Plan is to provide the Landfill Supervisor, Waste Screeners and Equipment Operators with standard procedures for day-to-day operation of the landfill. A copy of the Operations Plan will be kept on file at the landfill. Forms to be utilized by landfill personnel are included in Appendix C.

3.1 SCHEDULE OF CONSTRUCTION

Since the amount of waste being delivered to the NCL has been relatively small, the schedule of construction presented in the 2008 Permit Application will still be utilized.

The development of the NCL has been presented in three Phases. The expansion of the existing landfill eastward will constitute Phase I. The landfill will then begin expanding to the north approximately 200 feet with the final Phase (Phase III) expanding another approximately 600 feet north along the eastern boundary of the landfill property. Construction of the landfill site will be made according to the general layout presented in the drawings 3, 4, and 5 (Appendix A). The proposed configuration was developed based on geologic/hydrogeologic conditions, geotechnical considerations and the previously defined landfill boundary.

The remaining capacity of the landfill is approximately 190 years of disposal based on available fill volume, expected annual waste disposal rates, and an in-place density of 1,000 pounds per cubic yard (ppcy).

3.2 DESCRIPTION OF HANDLING PROCEDURES

3.2.1 General

The landfill is open for commercial disposal only. A sign is posted near the landfill entrance that indicates the following information:

Types of wastes that are accepted

Types of wastes not accepted
Emergency telephone numbers
Hours and days of landfill operation

All vehicles delivering wastes to the site must be scheduled since the landfill is no longer operating during regular business hours. NCL reserves the right to refuse service to any suspect load. No open burning is allowed. No smoking is allowed near the work face.

The operation of the landfill is documented on various forms. The forms that Nielson personnel use to help maintain an orderly processing of waste while minimizing the potential for environment impacts are:

Daily Log
Inspection Form
Equipment Checklist
Random Load Inspection Record

Copies of all forms are included in Appendix C.

3.2.2 Waste Acceptance

Nielson personnel utilizes the Daily Log to track all material delivered to the landfill and serves as the basis for all billing. The Daily Log includes information on hauler's name, vehicle license number, time, weight, description of waste, and initials of the Waste Screener filling out the form.

The Equipment Operator or Landfill Supervisor will inquire as to the contents of each incoming load to screen for unacceptable materials. Any vehicle suspected of carrying unacceptable materials (liquid waste, sludges, or hazardous waste) will be prevented from entering the disposal site unless the driver can provide evidence that the waste is acceptable for disposal at the site. The Equipment Operator or Landfill Supervisor directs each vehicle to the working face and discharges the load. The Equipment Operator or Landfill Supervisor makes an estimate of the tons of waste each truck contains.

Vehicles carrying unacceptable materials will be required to exit the site without discharging their loads. If a load is suspected of containing unacceptable materials; the Equipment

Operator or Landfill Supervisor will then further inspect the load as it is discharged at the landfill tipping area.

Loads will be regularly surveyed at the tipping area. If a discharged load contains inappropriate or unacceptable material, the discharger will be required to reload the material and remove it from the landfill site. If the discharger is not immediately identified, the area where the unacceptable material was discharged will be cordoned off. The unacceptable material will be moved to a designated area for identification and preparation for proper disposal.

Each load is visually inspected. Waste screening is done as needed or scheduled according to the procedures outlined in Section 3.3 Waste Inspection.

3.2.3 Waste Disposal

Wastes are dumped at the toe of the work face when possible and spread up the slope in one to two-foot lifts, keeping the slope at three to one (horizontal to vertical) configuration. Working face dimensions are kept wide enough to safely accommodate the vehicles bringing waste into the landfill.

Typically, the dozer or loader is operated with the blade facing uphill. Equipment operations across the slope are avoided to minimize the potential of equipment tipping over. In addition to safety concerns, a toe of slope to crest of slope working orientation provides the following benefits:

Increases in equipment compaction effectiveness.
Increased visibility for waste placement and compaction.
More uniform waste distribution.

Wastes are compacted by making several passes up and down the slope. Compaction reduces litter, differential settlement, and the quantities of cover soil needed. Compaction also extends the life of the site, reduces unit costs, and leaves fewer voids to help reduce vector problems. Care is taken that no holes are left in the compacted waste. Voids are filled with additional waste as they develop.

Grade stakes will be used when necessary to control cell height and top surface grade. Soil cover is applied to all areas of the active cell that will not receive additional waste within 30 days.

3.2.4 Acceptable Wastes

3.2.4.1 Appliances and Car Bodies

Appliances and car bodies are accepted at the landfill and are separated for recycling. No appliances containing refrigerants are accepted.

3.2.4.2 Construction & Demolition Waste

Nonhazardous construction and demolition (C&D) waste is accepted at the landfill.

3.2.4.3 Nonhazardous Mining Wastes

Nonhazardous mining wastes are accepted at the landfill. Nonhazardous mining wastes include timbers, brattice, concrete blocks, wood and metal materials, empty lubricant containers, and general mine refuse.

3.2.4.4 Tires

Tires are accepted in small quantities from the commercial haulers. When sufficient quantities of tires are collected, a tire hauler is called, and the tires are removed from the facility for recycling.

3.2.4.5 Petroleum Contaminated Soil

Petroleum contaminated soil will be **conditionally** accepted at the landfill with documentation that the petroleum contaminated soils are not hazardous. **ALL** petroleum contaminated soils being delivered to the landfill will be chemically characterized to demonstrate that the soils are not hazardous. Laboratory testing results will be delivered to landfill personnel for review and acceptance **prior** to soil being delivered to the site.

3.2.5 Prohibited Wastes

3.2.5.1 Asbestos Waste

Asbestos waste is not accepted at the landfill.

3.2.5.2 Bulk or Containerized Liquid Waste

Bulk or containerized liquid wastes are not accepted at the landfill.

3.2.5.3 Dead Animals

Dead animals are not accepted at the landfill.

3.2.5.4 Grease pit and Animal Waste By-Products

Waste from restaurant grease traps and slaughterhouse by-products are not accepted at the landfill.

3.2.5.5 Infectious Wastes

Infectious wastes are not accepted at the landfill.

3.2.5.6 Used Oil and Batteries

Used oil and batteries are not accepted at the landfill.

3.3 WASTE INSPECTION

3.3.1 Landfill Spotting

Learning to identify and exclude prohibited and hazardous waste is necessary for the safe operation of the landfill. The Waste Screeners and Equipment Operators are required to receive initial and periodic hazardous waste inspection training (equivalent to the SWANA waste screening training).

Hazardous wastes have either physical or chemical characteristics that could harm human health or the environment. A waste is considered hazardous if it falls into either of two categories: 1) a listed waste, or 2) a characteristic waste. Hazardous wastes are not accepted at the landfill.

3.3.2 Random Waste Screening

Random inspections of incoming loads are conducted according to the schedule established by the Landfill Supervisor. One or more commercial waste loads per week are selected randomly

according to the schedule. If frequent violations are detected, additional random checks are scheduled at the discretion of the Landfill Supervisor.

If a suspicious or unknown waste is encountered, the Waste Screener or Equipment Operator proceeds with the waste screening as follows:

- The driver of the vehicle containing the suspect material is directed to the waste screening area.
- The Random Load Inspection Record is completed.
- Protective gear is worn (leather gloves, steel-toed boots, goggles, coveralls, and hard hat).
- The load being inspected is spread out with the landfill equipment or hand tools and visually examined. Suspicious marking or materials, like the ones listed below, are investigated further:

    - Containers labeled hazardous
    - Material with radioactive markers
    - Material with unusual amounts of moisture
    - Biomedical (red bag) waste
    - Unidentified powders, smoke, or vapors
    - Liquids, sludges, pastes, or slurries
    - Asbestos or asbestos contaminated materials
    - Batteries
    - Other wastes not accepted by the landfill

The Landfill Supervisor is called if any of the above-mentioned wastes are encountered or if unstable wastes that cannot be handled safely are discovered or suspected.

3.3.3 Removal of Hazardous or Prohibited Waste

Should hazardous or prohibited wastes be discovered during random waste screening or during tipping, the waste is removed from the landfill as follows:

- The waste is loaded back on the hauler's vehicle. The hauler is then informed of the proper disposal options.

- If the hauler or generator is no longer on the premises and the identity of the hauler is known, they are asked to retrieve the waste and informed of the proper disposal options.
- The Landfill Supervisor arranges to have the waste transported to the proper disposal site and then bill the original hauler or generator.

A record of the removal of all hazardous or prohibited wastes is kept in the Daily Log.

3.3.4 Hazardous or Prohibited Waste Discovered After the Fact

If hazardous or prohibited wastes are discovered in the landfill, the following procedure is used to remove them:

- Access to the area is restricted.
- The Landfill Supervisor is immediately notified.
- The Equipment Operator removes the waste from the working face if it is safe to do so.
- The waste is isolated in a secure area of the landfill and the area cordoned off.
- The Emery County Sheriff's Department Hazmat Response Team is notified. The Response Team physically inspects the material and provides waste handling specifics for the disposal.

The DWMRC, the hauler (if known), and the generator (if known) is notified within 24 hours of the discovery. The generator (if known) is responsible for the proper cleanup, transportation, and disposal of the waste.

3.3.5 Notification Procedures

The following agencies and people are contacted if any hazardous materials are discovered at the landfill:

Southeastern Utah Health Department.....(435) 637-3671
Director, DWMRC .....(801) 536-0200
Emery Co. Sheriff's Office.....(435) 381-2404

3.4 MONITORING AND INSPECTION SCHEDULE

3.4.1 Groundwater

Nielson Construction is not required to monitor groundwater as part of the landfilling operations; therefore, no inspections or maintenance activities are required.

3.4.2 Surface Water

Drainage control problems can result in accelerated erosion of a particular area within the landfill. Differential settlement of drainage control structures can limit their usefulness and may result in a failure to properly direct storm water off-site. Drawings 8, and 9 (Appendix A) illustrates the surface water drainage control features designed to incorporate both existing topographical features as well as changes to the overall site layout. Landfill staff will inspect the drainage system monthly. Temporary repairs will be made to any observed deficiencies until permanent repairs can be scheduled.

3.4.3 Leachate Collection

Leachate is not collected as part of the landfilling operations; therefore, no inspections or maintenance activities are required.

3.4.4 Landfill Gas

This facility does not accept municipal solid waste and is not required to monitor for explosive gasses.

3.4.5 Inspection Documentation

The results of all routine inspections of site facilities will be recorded on Landfill Inspection Form. The inspection forms will be submitted to the Landfill Supervisor for inclusion in the landfill operating records as required in Section R315-302-2(5) of the Rules. Copies of all landfill forms utilized to document landfilling activities are included in Appendix C.

Attachment #3
Inspection Forms

Attachment #3 Inspection Forms
Submitted with Permit Application dated July 18, 2018

NIELSON CONSTRUCTION LANDFILL
DAILY LOG

Date	Company/Hauler Name	Vehicle License #	Time	Estimated Weight	Load Description	Initials

FILE: A:\DAILYLOG.FRM

NIELSON CONSTRUCTION LANDFILL
INSPECTION FORM

Performed by _____ Date:_____

Signature: _____

	Overall Condition	
	Satisfactory	Needs Work*
I. Structures and Roads		
1. Buildings	_____	_____
2. Fences	_____	_____
3. Gates	_____	_____
4. Roads	_____	_____

*Specify recommended repairs and/or list actions taken:

II. Operations		
1. Litter and Weed Control	_____	_____
2. Landfill Units	_____	_____
3. Daily Cover	_____	_____
4. Intermediate Cover	_____	_____
5. Final Cover	_____	_____
6. Segregated Waste Areas		
a. Scrap Metal/Appliances	_____	_____
b. Other_____	_____	_____

*Specify recommended repairs and/or list actions taken:

EQUIPMENT CHECKLIST

Walk around the rig and look for signs of wear, damage, or leaks before start up. Remember, even if everything looked fine last night, something could have happened in the mean time.

Use your intuition as you run through your check list and evaluate the machine's general condition. Operating an improperly running rig invites serious property damage and loss of time or well-being.

ITEM	REMARKS	DATE	INITIALS
Fluid Levels Indicate which-- Hydraulic Crankcase Oil Radiator Coolant Transmission Oil			
Tracks/Tread/Tires (wear or damage)			
Screens and Filters (check for clogging)			
Undercarriage			
Fuel Pressure Gauge			
Track Roller Collar, Bolts, Track Shoe Bolts			
Turbocharger, Manifold, and Air Cleaner Connections			
Joints in Drive Case			
Sprocket Hub Seals			

Operator Name _____ Signature _____

Nielson Construction LANDFILL
Random Load Inspection Record

INSPECTION INFORMATION	
Inspector's Name:	
Date of Inspection:	
Time of Inspection:	
TRANSPORTATION COMPANY INFORMATION	
Company Name:	Nielson Construction Company
Address:	850 No. Loop Road P.O. Box 620
	Huntington, Utah 84528
Phone Number:	(435) 687-2494
VEHICLE INFORMATION	
Driver's Name:	
Vehicle Type:	
Vehicle License Number:	
Vehicle Contents:	
OBSERVATIONS AND ACTIONS TAKEN	
Photo Documentation: o Yes o No	

Driver's Signature*: _____ Date: _____

Inspector's Signature: _____ Date: _____

*Driver's signature hereon denotes: His presence during the inspection and does not admit, confirm or identify liability.

Attachment #4
Closure Plan and Post-Closure Care

2.6 CLOSURE PLAN - EXISTING AND PROPOSED LANDFILL EXPANSION

2.6.1 Closure Schedule

Closure will occur incrementally with each phase of the landfill being closed once it has been filled to design capacity.

1) Nielson Construction will notify the Director of the intent to implement closure in part, 60 days prior to the projected final receipt of waste at the uppermost landfill phase.

2) Nielson Construction will begin closure of each landfill phases within 30 days after receipt of the final volume waste. Closure activities will be completed within 180 days from their starting time unless an extension is granted by the Director.

3) Since the projected life of the landfill is nearly 195 years, closure will be completed in several separate closure events. The closure events will take place when three or four acres of the landfill reaches final design elevations. Once the thickness of final cover is verified, the cover will be planted with a seed mixture to promote indigenous plant growth.

4) When closure is completed, Nielson Construction shall submit construction documentation from a licensed professional engineer in the state of Utah that the site has been closed in accordance with the approved closure plan.

2.6.2 Design of Final Cover

The final cover will consist of a monolithic soil cover constructed from the on-site borrow sources. The cover will be designed to maximize runoff and store remnant precipitation until it can be lost to evaporation and transpiration (evapotranspiration), thus providing a barrier to infiltration. The final cover design for the landfill has been previously discussed in Section 2.3.3.2.

2.6.3 Final Inspection

The DWMRC will be invited to inspect the final grading of the landfill. After approval of the final grading, a schedule will be established for revegetation. Nielson Construction personnel will monitor the performance of the vegetation as scheduled in the post-closure care documents.

2.7 POST-CLOSURE CARE PLAN

2.7.1 Site Monitoring

Nielson Construction shall provide post-closure activities for continued facility maintenance and monitoring of the closed landfill for 30 years. The Director may continue monitoring (even longer that the 30-year post-closure period) if it is felt more time is needed for the facility to become stabilized and/or to protect human health and the environment.

Landfill settlement will be monitored and surface depressions in the cover repaired if excessive consolidation of the wastes occurs to a degree that could pond water.

2.7.1.1 Gas Monitoring

Gas monitoring is not required for the NCL.

2.7.1.2 Land Monitoring

Post-closure monitoring will be conducted quarterly throughout the closure and post-closure period. Landfill topography shall be visually checked for depressions that could results in

ponding or rapid erosion. Irregularities in the surface of the final cover will be regraded and revegetated as needed to protect the surface from erosion and to eliminate ponding.

Side slopes will be maintained or reestablished with a maximum gradient of 4:1 and the top slopes will be maintained at no less than 10:1 to prevent ponding. The frequency of monitoring may be reduced only after a successful demonstration to the Executive Secretary that the closed landfill has stabilized.

Unscheduled monitoring of the landfill surfaces will be conducted after a 25-year storm event.

2.7.1.3 Groundwater Monitoring

Groundwater monitoring is not required for the NCL.

2.7.1.4 Surface Water Monitoring

During post-closure, run-off from the final cover will be directed by ditches and berms along the perimeter of the landfill site into a natural drainage that exits along the southern side of the landfill. The ditches will be inspected quarterly through the post-closure period. Repairs will be completed as part of the maintenance activities.

2.7.2 Changes to Record of Title, Land Use and Zoning

The Emery County Recorder will be provided plats and a statement of fact concerning the location of any disposal site no later than 60 days after certification of closure, as per Section 302-2(6) of the Rules. A description of the landfill history and filled areas will be permanently appended to the record of title. Land use restrictions will be assigned to the site in compliance with existing regulations for closed landfills at the time of closure.

2.7.3 Maintenance

Post-closure maintenance activities will be designed and implemented under the direction of a licensed professional engineer. Design decisions will be made after the first post-closure quarterly inspection and implemented within 30 days after identification of maintenance

issues. Results of post-closure maintenance shall be reported to the Director by a professional engineer licensed in the state of Utah.

Because of the arid climate in Emery County, maintenance of final covers and run-on/run-off systems should be minimal. Final cover and control structures will be inspected quarterly as outlined in the post-closure plan.

Run-on/run-off control structures and final covers could be damaged by and unusually intense storm. Consequently, an unscheduled inspection will be required after any occurrence of a 25-year storm event within a five-mile radius of the site. If the post-storm inspection discloses damage, it will be appraised by a licensed engineer. The engineer will solicit bids if necessary and supervise repairs completed by Nielson Construction.

2.7.4 Post-Closure Contacts

Post-Closure contact will be the general phone number for Nielson Construction (435) 687-2494.

2.8 POST-CLOSURE LAND USE - EXISTING AND PROPOSED LANDFILL EXPANSION

Nielson Construction will complete a post-closure land use plan to be implemented at the landfill within 5 years prior to the end of the landfill's life. Nielson Construction will select an end use for the landfill consistent with good landfilling practices and will be in accordance with zoning and other regulations in force at the time. The final land use selected for the landfill will be based upon maintaining a functional landfill cover.

Typical end uses range from recycling operations (which complement existing operations) to recreational activities. Since the closure of the site is nearly 195 years away and additional growth may occur, it is not practical to develop land use plans consistent with surrounding land uses that are not fully known.