

GARY R. HERBERT

Governor

SPENCER J. COX Lieutenant Governor

# Department of Environmental Quality

Alan Matheson
Executive Director

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

April 29, 2019

Mark Franc, Senior Engineer Waste Management 3683 South 4975 West West Haven, UT 84401

RE: Mountainview Class VI Landfill Permit Modification

Dear Mr. Franc:

The 30-day public comment period for the Mountainview Class VI Landfill Final Grading Permit Modification began March 21, 2019 and ended on April 22, 2019. The announcement of the public comment period was published in the *Salt Lake Tribune* and the *Deseret News* on March 21, 2019. No public comments were received on the permit modification.

Enclosed is Permit 9811R2, which expires on August 31, 2023. Representatives of the Division of Waste Management and Radiation Control and the Salt Lake County Health Department will conduct periodic inspections of the landfill to assess compliance with the Permit and the Solid Waste Permitting and Management Rules.

If you have any questions, please contact Doug Taylor at (801) 536-0240.

Sincerely,

Ty L. Howard, Director

Division of Waste Management and Radiation Control

TLH/DT/kl

Enclosures:

Mountainview Class VI Landfill Permit Modification

c:

Gary Edwards, MS, Health Officer, Salt Lake County Health Dept.

Royal DeLegge, MPA, EHS, Environmental Health Director, Salt Lake County Health Dept.

# DIVISION OF WASTE MANAGEMENT AND RADIATION CONTROL SOLID WASTE LANDFILL PERMIT

#### **Mountainview CLASS VI LANDFILL**

Pursuant to the provisions 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*, Utah Administrative Code R315-301 through 320 adopted thereunder, a Permit is issued to

Mountainview Landfill, Inc., as owner and operator, (Permittee)

to own, construct, and operate the Mountainview Landfill located in the southwest quarter of Section 10., Township 1 South, Range 2 West, Salt Lake Base and Meridian, Salt Lake County, Utah as shown in the Permit Renewal Application that was determined complete on May 15, 2013.

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

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

This Permit shall become	me effective	September 1, 201	<u>3.</u>
This Permit shall expir	e at midnight	August 31, 2023.	
Closure Cost Revision	Date: August 31,	2018	
Signed this31 <sup>st</sup>	day of <u>August</u>	, 2013.	
	Ty L. Howard, Direc		
	Utah Division of Wa	ste Management ar	nd Radiation Control
Modification signed: _	29th day	of April , 201	9

# **FACILITY OWNER/OPERATOR INFORMATION**

LANDFILL NAME:

Mountainview Landfill, Inc.

OWNER NAME:

Mountainview Landfill, Inc.

**OWNER ADDRESS:** 

6976 West California Avenue Salt Lake City, Utah 84104

OWNER PHONE NO.:

801-250-0555

**OPERATOR NAME:** 

Mountainview Landfill, Inc.

**OPERATOR** 

ADDRESS:

6976 West California Avenue Salt Lake City, Utah 84104

**OPERATOR PHONE** 

NO.:

801-250-0555

TYPE OF PERMIT:

Class VI Landfill

PERMIT NUMBER:

9811R2

LOCATION:

Landfill site is located in Township 1 South, Range 2 West, Section 10, SLBM; Salt Lake County, Lat. 40° 44′ 25.4″, Long.

112° 03' 14.3"

PERMIT HISTORY

Permit renewal signed August 27, 2013

Permit Modification signed: April 29, 2019

The modification removed two swale features in the original design. These design changes will increase the capacity of the

landfill.

#### PERMIT REQUIREMENTS

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 modification for the Mountainview Class IVb Landfill dated August 29, 2018, DSHW-2018-008505, was deemed complete on the date shown on the signature page of this Permit. All representations made in the Permit Application are part of this Permit and are enforceable under R315-301-5(2) of the Utah Administrative Code. Where differences in wording exist between this Permit and the application, the wording of this Permit supersedes that of the application.

This Permit consists of the signature page, Facility Owner/Operator Information section, sections I through V, and the Permit Application and the Permit Modification in Attachment I as defined above.

The facility as described in this Permit consists of scale house, maintenance building, the disposal cell, and storm water runoff control structures.

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

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

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

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

# **PERMIT REQUIREMENTS**

# I. GENERAL COMPLIANCE RESPONSIBILITIES

# A. General Operation

The Permittee shall operate the landfill in accordance with all applicable requirements of Utah Administrative Code R315-304, that are in effect as of the date of this Permit unless otherwise noted in this Permit. Any permit noncompliance or noncompliance with any applicable portions of Utah Code Annotated 19-6-101 through 123 and applicable portions of Utah Administrative Code 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

- 1. Construction/demolition waste, as defined in Utah Administrative Code R315-301-2(17);
- 2. Yard waste, as defined in Utah Administrative Code R315-301-2(87);
- 3. Inert waste, as defined in Utah Administrative Code R315-301-2(37);
- 4. Waste tires, when the requirements of Utah Administrative Code R315-320 are met; and
- 5. Petroleum contaminated soils as allowed in Utah Administrative Code R315-315-8(3).

# C. <u>Prohibited Waste</u>

- 1. Hazardous waste as defined by Utah Administrative Code R315-1 and R315-2;
- 2. PCB's as defined by Utah Administrative Code R315-301-2(53), except PCB's specified by Utah Administrative Code R315-315-7(2)(a) and (c);
- 3. Household waste, except waste resulting from the abatement, rehabilitation, renovation and remodeling of homes and other residences;
- 4. Municipal waste;
- Special waste except as specified in this Permit;
- 6. Regulated asbestos-containing material;

- 7. Industrial waste;
- 8. Commercial waste;
- 9. Containers larger than household size (five gallons) holding any liquid, non-containerized material containing free liquids or any waste containing free liquids in containers larger than five gallons.

Any prohibited waste received and accepted for disposal at the facility shall constitute a violation of this Permit, of Utah Administrative Code 19-6-101 through 123 and of Utah Administrative Code R315-301 through 320.

### D. <u>Inspections and Inspection Access</u>

The Permittee shall allow the Director of the Utah Division of Waste Managements and Radiation Control or an authorized representative, or representatives from the Salt Lake County 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 Utah Administrative Code 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 Utah Administrative Code 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 Utah Administrative Code R315-301 through 320; and
- 4. Create a record of any inspection by photographic, video, electronic, or any other reasonable means.

#### E. Noncompliance

If monitoring, inspection, or testing indicates that any permit condition or any applicable rule under Utah Administrative Code 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 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.

#### The Permittee shall:

- 1. Document the noncompliance or violation in the operating record, on the day the event occurred or the day it was discovered;
- 2. Notify the Director of the Utah Division of Waste Management and Radiation Control by telephone within 24 hours, or the next business day following documentation of the event; and
- 3. Give written notice of the noncompliance or violation and measures taken to protect human health and the environment within seven days of Director notification.

Within thirty days of 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.

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 Utah Administrative Code R315-301 through 320 and this Permit.

### F. Revocation

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 Utah Administrative Code R305-7 and the Utah Administrative Procedures Act.

# 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. <u>Design and Construction</u>

The landfill shall be constructed according to the design outlined in the Permit Application, and as outlined in Attachment I, and in the area designated in the Permit Application, including landfill cells, fences, gates, and berms.

The Permittee shall notify the Director upon completion of construction of any landfill cells or run-on and run-off diversion systems. No landfill cells or run-on and run-off diversion system may be used until construction is approved by the Director.

The Permittee shall notify the Director of the completion of construction of any final cover system and shall provide all necessary documentation and shall apply for approval of the construction from the Director.

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.

#### B. Run-On Control

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.

#### III. LANDFILL OPERATION

#### A. Operations Plan

The Permittee shall keep the Operations Plan included in the Permit Application 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 Utah Administrative Code R315-301 through 320, 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 Utah Administrative Code R315-311-2(1)(a)(xiii). The Permittee shall note any modification to the Operations Plan in the operating record.

The Permittee shall submit any modification to the Operations Plan to the Director for approval.

## B. <u>Security</u>

The Permittee shall operate the Landfill so that unauthorized entry to the facility is restricted. The Permittee shall:

- 1. Lock all facility gates and other access routes during the time the landfill is closed.
- 2. Have at least one person employed by the Permittee at the landfill during all hours that the landfill is open.
- 3. Construct all fencing and any other access controls as shown in the Permit Application to prevent access by 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. <u>Burning of Waste</u>

Intentional burning of solid waste is prohibited and is a violation of Utah Administrative Code R315-303-4(2)(b). The Permittee shall extinguish all accidental fires as soon as reasonably possible.

### E. <u>Cover</u>

The Permittee shall cover the waste as necessary to prevent fires and to control vectors, blowing litter, odor, scavenging, and fugitive dust. The Permittee shall cover wastes that are capable of attracting or providing food for vectors, materials that may become windblown litter, or fine materials that may become fugitive dust with a minimum of six inches of earth at the end of the working day in which they are received.

The Permittee may use an alternative cover material when the material and operation meets the requirements of Utah Administrative Code R315-303-4(4)(b) through (e).

The Permittee shall use a minimum of six inches of earthen cover no less than once each month for all wastes received at the landfill. This cover shall consist of soil, no alternative may be used.

The Permittee shall recorded in the operating record and the operator shall certify, at the end of each day of operation when soil or an alternative cover is placed, the amount and type of cover placed and the area receiving cover.

### F. 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. 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 week. The Permittee shall select the loads to be inspected on a random basis.

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.

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

The Permittee shall conduct complete random inspections as follows:

- 1. The Permittee shall conduct the random waste inspection at the working face or an area designated by the Permittee.
- 2. The Permittee shall direct that loads subjected to complete inspection be unloaded at the designated area;
- 3. Loads shall be spread by equipment or by hand tools;
- 4. Personnel trained in hazardous waste recognition and recognition of other unacceptable waste shall conduct a visual inspection of the waste; and
- 5. The personnel conducting the inspection shall record the results of the inspection on a waste inspection form as found in Appendix D of the Permit Application. The Permittee shall place the form in the operating record at the end of the operating day.
- 6. 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.

#### G. 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. The Permittee shall complete these general inspections no less than quarterly for the following areas: Waste placement, cover; fences and access controls; roads; run-on/run-off controls; final and intermediate cover; litter controls; and records. The Permittee shall place a record of the inspections in the daily operating record on the day of the inspection. The Permittee shall correct the problems identified in the inspections in a timely manner and document the corrective actions in the daily operating record.

# H. 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 Utah Administrative Code 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:
  - 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;
  - 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 this Permit, including the Permit Application;
  - b. Results of inspections conducted by representatives of the Director of the Division of Waste Managements and Radiation Control, and of representatives of the local Health Department, when forwarded to the Permittee;

- c. Closure and Post-closure care plans;
- d. Records of employee training; and
- e. Results of groundwater monitoring as provided to the Salt Lake County Health Department.

#### I. Reporting

The Permittee shall prepare and submit to the Director an Annual Report as required by Utah Administrative Code 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, and all training programs completed.

#### J. Roads

The Permittee shall improve and maintain all access roads within the landfill boundary that are used for transporting waste to the landfill to assure safe and reliable all-weather access to the disposal area.

#### K. Litter Control

Litter resulting from operations of the landfill shall be minimized. In addition to the litter control plans found in section 4.9 of the Permit Application, the Permittee shall implement the following procedures when high wind conditions are present:

- 1. Reduce the size of the tipping face;
- 2. Reduce the number of vehicles allowed to discharge at the tipping face at one time;
- 3. Orient vehicles to reduce wind effects on unloading and waste compaction;
- 4. Reconfigure tipping face to reduce wind effect;
- 5. Use portable and permanent wind fencing as needed; and
- 6. 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

#### A. Closure

The Permittee shall place the final cover of the landfill as shown in the Permit Application. The final cover shall meet, at a minimum, the standard design for closure as specified in Utah Administrative Code R315-305-5(5)(b)

## B. <u>Title Recording</u>

The Permittee shall meet the requirements of Utah Administrative Code R315-302-2(6) by recording a notice with the Salt Lake 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.

### C. Post-Closure Care

The Permittee shall perform post-closure care at the closed landfill in accordance with the Post-Closure Care Plan contained in the Permit Application. Post-closure care shall continue until all waste disposal sites at the landfill have stabilized and the finding of Utah Administrative Code R315-302-3(7)(c) is made.

# D. Financial Assurance

The financial assurance mechanism for Mountainview Landfill is a surety bond (Bond Number X-850856) between the facility, Evergreen National Indemnity Company, and the Salt Lake County Health Department. The Permittee shall keep in effect and active this mechanism or obtain approval for another mechanism that meets the requirements of UAC R315-309 to cover the costs of closure and post-closure care at the landfill.

# E. Financial Assurance Annual Update

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

# F. <u>Closure Cost and Post-Closure Cost Revision</u>

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

#### A. Permit Modification

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.

#### B. Permit Transfer

This Permit may be transferred to a new Permittee or new Permittees by meeting the requirements of the permit transfer provisions specified in Utah Administrative Code R315-310-11.

# C. Expansion

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

Any expansion of the landfill facility beyond the property boundaries designated in the description contained in the Permit Application shall require submittal of a new Permit Application in accordance with the requirements of UAC R315-310.

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

# D. <u>Expiration</u>

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

# Attachment I Mountainview Landfill — Final Grading Modification



#### SALT LAKE AREA OFFICE

859 W South Jordan Pkwy – Ste 200 South Jordan, Utah 84095 Phone: (801) 566-5599 www.hansenallenluce.com

Mr. Scott Anderson Director Utah Division of Waste Management and Radiation Control (DWMRC) PO Box 144880 Salt Lake City, Utah 84114

August 29, 2018

Div of Waste Management and Radiation Control

AUG 3 0 2018

Attn: Phillip Burns

Re:

Mountain View Landfill - Final Grading Modification

DSHW-2018-008505

Dear Mr. Anderson:

On behalf of Mountainview Landfill, Inc. (a wholly owned subsidiary of Waste Management of Utah, Inc.), Hansen, Allen & Luce (HAL) is requesting approval to modify the closure design at their Class VI facility located in Salt Lake County, Utah within the southwest quarter of Section 10 of Township 1 South, Range 2 West Salt Lake Base and Meridian.

Based on requirements in R315-311-2(1)a, Mountainview Landfill, Inc. is requesting a Major Permit Modification for changes to the final grading plan. The drainage plan and other items associated with the existing permit will remain unchanged.

The current design for the final grading and drainage plan was prepared by Shaw EMCON/OWT, Inc. (EMCON) in 1996. This design included two areas, one on the south slope and one on the east slope that were designed and constructed with swale features. The majority of the facility is designed with 2:1 (horizontal:vertical) slopes with 25-foot wide benches every 40 vertical feet. The south facing slope, however, has an area that contains a flatter slope of 3:1 (horizontal:vertical). Likewise, a change in slope from 2:1 to 5:1 along the top of the south and east slopes was included. Our understanding is that these features were added to subjectively improve the appearance of the facility. They serve no regulatory or engineering design purpose.

These variations in the slope cause operational issues because they decrease the amount of maneuverable space on top and are also an inefficient use of the landfill footprint. In order to alleviate these issues, it is proposed that the slopes in the portions that vary from the 2:1 side slopes be straightened to conform with the rest of the slopes at the facility. This will have no adverse effect on the functionality of the original design and will mitigate the issues of maneuverability and air space inefficiencies. The proposed revisions to the grading plan will also result in the removal of the two knoll design feature on top of the facility and replace it with a single wider top deck that still reaches the same approximate elevation of 4425 feet with a minimum 2% slope for drainage. Only revisions to the final grading are proposed which means that the previously approved design for the final cover, downdrains, grass-lined benches, and perimeter drainage will remain the same.

The remaining capacity, based on the current design of the facility, is 738,000 cubic yards, which was calculated from the aerial topography from the flight completed on February 11,

Mr. Scott Anderson August 29, 2018 Page 2

2018. The proposed design changes increase the remaining capacity to 1,207,255 cubic yards. This will add several more years to the design life of the facility.

The revised final grading plan drawing is the only part of the existing permit that requires updating as part of the permit modification. This letter provides the background and basis for approval of a permit modification from the Utah Division of Waste Management and Radiation Control (DWMRC).

Locations and configurations of the on-site facilities used to support landfill operations were not modified and are shown on the drawings only to provide a general concept layout plan regarding the types of facilities being used. These facilities include a shop, office and other related facilities at the entrance. The locations, sizes and configurations of these facilities are not critical to the design requirements associated with the landfill and its closure. Therefore, it is understood that the types and locations of support facilities presented may be modified from those shown herein.

A discussion of specific design elements and technical justification for the revisions are provided in the sections below.

#### FLOOR ELEVATIONS AND SLOPES

The floor elevations and slopes are not affected by the proposed changes to the closure slopes. The landfill footprint is also unchanged.

#### **GROUNDWATER MONITORING WELLS**

Groundwater monitoring wells were installed previously and have been monitored according to Salt Lake County Health Department requirements. This permit modification does not include any modifications to the existing groundwater monitoring wells. Since the landfill footprint has not been modified, no changes to the groundwater monitoring well locations will be required.

#### **STABILITY**

The stability of the final grading and closure design was originally evaluated by EMCON. Since the changes proposed here simply bring the whole facility in line with the 2:1 slopes with 25-foot wide benches every 40 vertical feet, there is no need for additional stability analyses. Because the current design is not outside of the parameters used in the original slope stability evaluation, the previous evaluation is incorporated by reference for use in the modified design.

#### STORMWATER MANAGEMENT

The major drainage patterns for the facility will not be affected by the proposed changes. Downdrains designed as part of the permitted facility plan will still be sized and located the same as the previous design completed by EMCON. Downdrains constructed previously will continue to function as designed following the final grading modifications.

#### **EROSION PROTECTION**

Long term options to provide erosion protection generally consist of establishing vegetation or by placing stone mulch. In this case, the establishment of vegetation was the selected erosion Mr. Scott Anderson August 29, 2018 Page 3

protection method identified in the original design. Grading revisions will not change the previously approved plans for erosion protection because the 2:1 slopes and slope lengths will not exceed those considered for the design of the original erosion control methodology.

#### REOPENING PREVIOUSLY CLOSED AREAS

The lower portions of the south and east slope areas that will undergo changes in grading were previously closed. Therefore, these areas, totaling 5.71 acres, will need to be reopened to accommodate the proposed modifications. These areas will be stripped of vegetation and the cover soil recovered and stockpiled for future use prior to placement of waste materials.

Please contact us with any questions or comments regarding information contained in this letter.

Sincerely,

HANSEN, ALLEN & LUCE, INC.

Gordon L. Jones, P.E.

Principal

Cc: Mark Franc, Senior District Manager, Waste Management