

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 30 2018

Attn: Phillip Burns

DSHW-2018-008505

Re: Mountain View Landfill – Final Grading Modification

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,

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

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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.

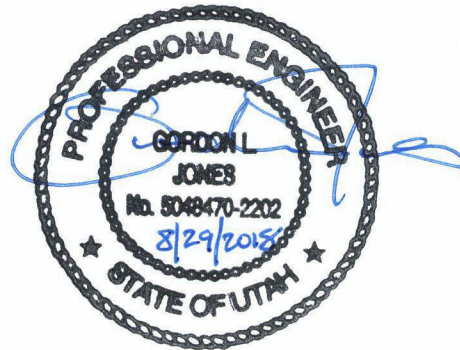
### REOPENING PREVIOUSLY CLOSED AREAS

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.

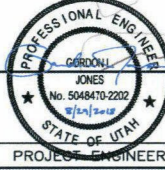
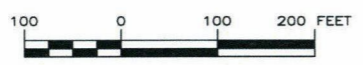
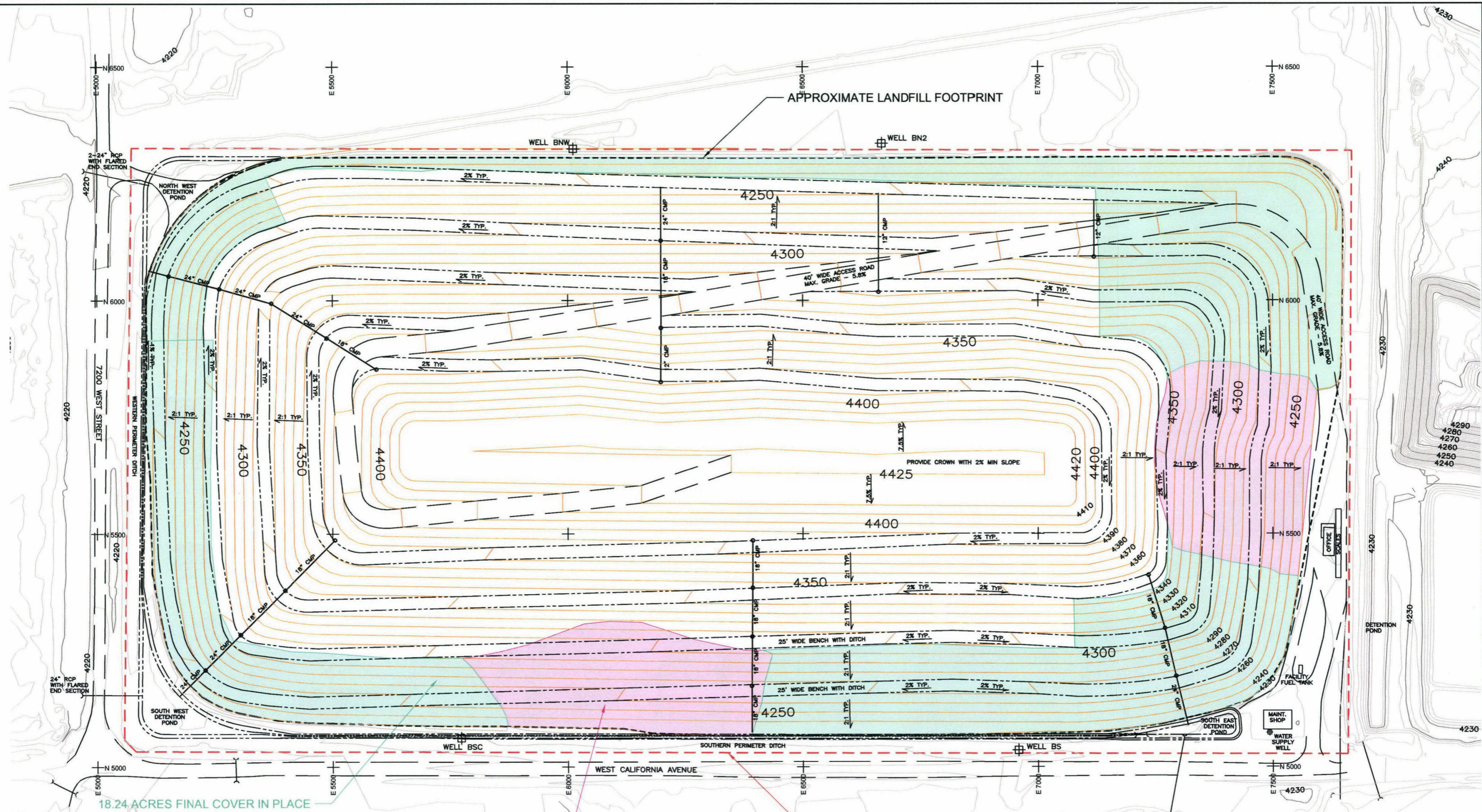
Sincerely,  
HANSEN, ALLEN & LUCE, INC.

  
Gordon L. Jones, P.E.  
Principal



Cc: Mark Franc, Senior District Manager, Waste Management

FILE NAME: PROJECTS\290 - WASTE MANAGEMENT\03.300 - MOUNTAIN VIEW PERMIT MODIFICATION\CAD\WORKING DRAWINGS\CLOSURE DESIGN.DWG  
 FILE DATE: 8.29.2018 16:41:06 (CAH)



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DRAFTED	GDS	2
CHECKED	GLJ	1
DATE	AUGUST 2018	NO.

NO.	DATE	REVISIONS	BY	APVD.

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MOUNTAIN VIEW PERMIT MODIFICATIONS  
FINAL GRADING PLAN