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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
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### Division of Oil, Gas and Mining

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September 8, 2017

Gerald Hascall, Plant Manager  
Sunnyside Cogeneration Associates  
One Power Plant Road  
P.O. Box 159  
Sunnyside, Utah 84539

Subject: East Access Road W, Sunnyside Cogeneration Associates, Sunnyside Refuse, C/007/0035, Task #5508

Dear Mr. Hascall:

The Division has reviewed your application. The Division has identified deficiencies that must be addressed before final approval can be granted. The deficiencies are listed as an attachment to this letter.

The deficiencies authors are identified so that your staff can communicate directly with that individual should questions arise. The plans as submitted are denied. Please resubmit the entire application.

If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron R. Haddock  
Coal Program Manager

DRH/sqs  
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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0070035  
**TaskID:** 5508  
**Mine Name:** SUNNYSIDE REFUSE & SLURRY  
**Title:** EAST ACCESS ROAD W

#### Operation Plan

##### Topsoil and Subsoil

###### *Analysis:*

The application does not meet the requirement of R645-301-233, because it should indicate that public access road W is temporary. The application should describe the status of the road at reclamation, whether it will be replaced or reclaimed. During operations, signs should be placed along the road to discourage off-road travel into the borrow area. Plans for handling compacted road soils and imported road base (if any) should be described in the reclamation plan (Chapter 9, & 10).

Soil borrow areas are identified on drawing 5-1. Proposed road W will cross the 22 acre reclamation borrow area 1 diagonally on the SE side of the permit area. Road W will be 900 ft long. The road will bring vehicles to the base of a ridge on the SE side of the permit area. The road elevation begins at an elevation of 6525 and climbs to 6550 ft. This road must necessarily be a temporary road, because at that time Borrow Area 1 will provide 745,844 CY of soil (MRP, p. 200-4). The physical and chemical evaluation of the borrow area soils in accordance with R645-301-233 was completed in Appendices 2-5, 2-8 and 2-9. Redistribution of borrow area soils is described in MRP Chapter 9 and 10. The final contour of Borrow Area 1 is shown on Plate 10-6. The location of the access road will be lowered approximately 25 feet on the SE side of the borrow area and the climb to the ridge will be steeper than it is currently.

Access through the permit area is already available by traveling 600 ft S on road B from the proposed beginning of road W to road K and thence 450 East to exit the permit area. The diagonal road W will shorten the exit from the permit area by 150 ft and land the vehicle in approximately the same vicinity, but on top of the ridge.

Road W will not affect the borrow area topsoil stockpile which holds 651 CY adjacent to the N end of Road B.

###### *Deficiencies Details:*

The application does not meet the R645-301-233 requirements. The following deficiency must be addressed prior to final approval:

R645-301-233, The application should indicate that the public access across the Reclamation borrow area is temporary. During operations, signs should be placed along the road to discourage off-road travel into the borrow area. The application should describe the status of the road at reclamation, whether it will be replaced or reclaimed. Plans for handling compacted road soils and imported road base (if any) should be described in the reclamation plan (Chapters 9, & 10).

pburton

#### Road System Plans and Drawings

*Analysis:*

The amendment meets the State of Utah R645 requirements for Road System Plans and Drawings.

This amendment proposes the addition of a road to the southeast portion of the permit area. Road "W" is a proposed primary haul road that is intended to allow access for offsite activities to cross through the permit area.

Plates 5-2, 5-2C, 5-2G, 5-2H, and 7-1 show the location of the proposed haul road W in relation to other active primary roads on the permit area. Plate 5-2G also includes profiles and cross-sections to illustrate the grade and orientation of proposed haul road W.

jeatchel

## **Road System Performance Standards**

*Analysis:*

The amendment meets the State of Utah R645 requirements for Road System Performance Standards.

This amendment proposes the addition of a road to the southeast portion of the permit area. Road "W" is a proposed primary haul road that is intended to allow access for offsite activities to cross through the permit area.

Narrative on Pages 2 and 3 addresses the structural stability of the roads on the permit area. Embankment stability is calculated using Hoek and Bray's Rock Slope Engineering manual, and uses the "Circular Failure Method" to determine that most roads (including road W) have a factor of safety of 2.2 against circular failure. Most roads in this context require a minimum factor of safety of 1.3, so the road embankments within the permit area appear to be adequate.

jeatchel

## **Road System Certification**

*Analysis:*

The amendment meets the State of Utah R645 requirements for Road System Certification.

This amendment proposes the addition of a road to the southeast portion of the permit area. Road "W" is a proposed primary haul road that is intended to allow access for offsite activities to cross through the permit area. The location of the proposed haul road W is illustrated on Plates 5-2, 5-2C, 5-2G, 5-2H, and 7-1, and have all been stamped and certified by S. Scott Carlson, a Licensed Professional Engineer for the State of Utah.

jeatchel

## **Hydrologic Diversion General**

*Analysis:*

The application does not meet the State of Utah R645 requirements for Hydrologic Diversions General.

The Permittee provides an updated map 7-1 depicting the sediment control features used on site. The map is updated to include a new haul road, Road W, to be constructed to allow traffic to cross-through the permit area to/from office facilities to the east of the Permit Area. The map also removes Road L which is no longer in existence. The profile and cross-section for Road W are provided on Plate 5-2G and the sediment control features on Plate 7-1. At the base of Road W, the Permittee adds a 24" CMP, BOR-C1. Appendix 7-3 Hydrologic Design of Sediment Pond in the MRP presents the specifications of culvert design for the Borrow Area in section F. The MRP states that culverts and diversion ditches are designed to pass a 100 year- 6 hour storm which well exceeds the regulatory requirements of minimum 10 year, 6 hr storm. The design flow does not exceed 5 fps and therefore, the Permittee does not plan to add lining. The area will be monitored and if erosion occurs, the Permit requires remediation. The diversion and culvert design criteria with calculations is presented for the new 24" culvert,. However, the MRP states that "no culverts are needed at this time" and that provided design criteria is to be used in the event the "borrow area becomes active in

the future, a culvert will be needed to carry runoff across the access road." The Permittee must update the MRP language to reflect the addition of Road W haul road and the BOR-C1 24" culvert. The MRP does not indicate how the culvert design will prevent the functions of the sediment control structures from becoming impaired due to debris from the drainage area. A narrative must be included.

*Deficiencies Details:*

The amendment does not meet the State of Utah R645 requirements for Hydrologic Diversions General. The following deficiency must be addressed prior to final approval.

R645-301-121.200: The Permittee must update the MRP to reflect the addition of Road W. Appendix 7-3 must be updated to include the addition of BOR-C1.

R645-301-742.423.3: The Permittee must include a narrative describing how the culvert design will prevent the functions of the sediment control structures from becoming impaired in the event of debris from the drainage area, i.e. use of trash racks.

aumarva

## Maps Facilities

*Analysis:*

The application does not meet the requirements of R645-301-521.141, because the permit area shown on the revised maps differs from that shown on the approved MRP. The difference in permit area was noted in the SE corner of the permit area at road K.

*Deficiencies Details:*

The application does not meet the R645-301-521.141 requirements. The following deficiency must be addressed prior to final approval:

R645-301-521.141, Please clarify the permit boundary shown in the SE corner of all maps included in the application (by road K), because they are inconsistent with the permit boundary shown on approved maps in the MRP.

pburton

## Reclamation Plan

### Bonding and Insurance General

*Analysis:*

The amendment meets the State of Utah R645 requirements for General Insurance and Bonding.

This amendment proposes the addition of a road to the southeast portion of the permit area. Road "W" is a proposed primary haul road that is intended to allow access for offsite activities to cross through the permit area. Since the location of this road will cross through a future disturbed area, no adjustments need to be made to the bond.

jeatchel