



Technical Analysis and Findings
Utah Coal Regulatory Program

November 4, 2015

PID: C0070035
TaskID: 5019
Mine Name: SUNNYSIDE REFUSE & SLURRY
Title: CULVERTS AND ROADS

Operation Plan

Road Systems Classification

Analysis:

The application meets the minimum requirements of R645-301-527.100 by classify each road as primary or ancillary. The proposed new road through the facility site to allow ash trucks to the new ash waste disposal area is labeled correctly as primary road. Though the exact location of the road may shift through the Coarse Refuse pile due to the activating mining of the area, the end and start point of the primary road will remain in the same place.

cparker

Road System Plans and Drawings

Analysis:

The application meets the minimum requirements of R645-301-521.170 by submitting plans and drawing for each road, conveyor, and rail system to be used within the proposed permit area. The application meets the minimum requirements of R645-301-534.100 by providing updated information within the MRP Chapter 5 Section 527, plate 5-2K, and Appendix 5-7.

The application included all the required plans and drawing for each road to be maintained within the permit area relevant to the upcoming ash disposal area as detailed in 5-2K. The text within Chapter 5 Section 527 (page 500-13) was updated to included Plate 5-2K for the typical cross-sections of the road and plans. Appendix 5-7 details the road descriptions and was completely updated within the application to include the new primary use of the road.

cparker

Road System Performance Standards

Analysis:

The application meets the minimum requirements of R645-301-534.150 by submitting plans and drawing for each road to be maintained within the permit area to prevent and control erosion. The design typical detailed with Appendix 5-7 meet the R645 requirements.

cparker

Road System Certification

Analysis:

The application meets the minimum requirements of R645-301-521.170 by submitting plans and drawing for each road to be prepared by or under the direction of and certified by a qualified registered professional engineer.

cparker

Spoil Waste Impounding Structures

Analysis:

The application meets the minimum standards of R645-301-533 due to updating the hydrology characteristics relevant to reclaimed areas within the watershed of mining operations. Text was updated within Chapter 7 detailing the updated outfall location of Outfall No. 008, 009, and 016. The runoff from the ponds reports now to a stream or Pond 014, respectively, before discharging into Icelander Creek. The MRP was updated to include text describing how the pasture sediment pond calculations were updated with new curve numbers and how the pasture pond discharge was re-routed to flow into the coal pile sediment pond, pond 0014. Due to the increase in flow new diversion and culvert design flows were provided for C1, C3, and C4-5.

cparker

Hydrologic Impoundments

Analysis:

The amendment meets the State of Utah R645 Requirements for Hydrologic Impoundments.

The Permittee removed references to impoundments that are located off the permitted site, in an adjacent facility. They were not necessary to meet the R645 rules and were creating confusion in the MRP.

The Permittee also updated Sheet 7-18 to show the diversions more accurately.

adaniels

Maps Facilities

Analysis:

The application meets the minimum requirements of R645-301-521.120 through-521 detailing updated culvert and ditch information on Map 5-2, 5-2K and 7-1.

cparker

Maps Certification Requirements

Analysis:

R645-301-512 minimum requirements are met as all mine drawings and plates are stamped electronically by a Utah certified professional engineer with experience in underground mining operations.

cparker

Reclamation Plan

General Requirements

Analysis:

This Technical Memorandum presents the findings related to engineering and bonding updates for the culvert and road additions that are and will be made to the site to complete the new ash disposal area at the Sunnyside Refuse and Slurry. The Application meets the minimum requirements of R645 due to text updates within the MRP.

cparker

Backfill and Grading General

Analysis:

The minimum requirements of R645-301-553 are met within the application as there is no change to the existing MRP grading reclamation details within Chapter 10 Section 10.5.2. No changes were made to Plates 10-3, 10-4, 10-6, and 10-7 which detail what portions of roads B,E, I, J, and R will be retained post mining operations.

cparker

Road System Reclamation

Analysis:

The minimum requirements of R645-301-534 are met within the application as there is no change to the existing MRP reclamation of roads throughout the permitted area within Chapter 10 Section 10.5.2. No changes were made to Plates 10-3, 10-4, 10-6, and 10-7 which detail what portions of roads B,E, I, J, and R will be retained post mining operations.

cparker

Road System Retention

Analysis:

The minimum requirements of R645-301-534 and -552 are met within the application as there is no change to the existing MRP reclamation of roads that will be retained at the end of mining that exist throughout the permitted area within Chapter 10 Section 10.5.2. No changes were made to Plates 10-3, 10-4, 10-6, and 10-7 which detail what portions of roads B,E, I, J, and R will be retained post mining operations..

cparker

Maps Bonded Area

Analysis:

The minimum requirements of R645-301-800 are met within the application as the bonded area map was updated.

cparker

Maps Reclamation Backfilling and Grading

Analysis:

The minimum requirements of R645-301-542 are met within the application as there is no change to the existing MRP plan of backfilling and grading areas or volumes within Chapter 10 Section 10.5.2. No changes were made to Plates 10-3, 10-4, 10-6, and 10-7 which detail what portions of roads B,E, I, J, and R will be retained post mining operations.

cparker

Maps Reclamation Facilities

Analysis:

The minimum requirements of R645-301-542 are met within the application as there is no change to the existing MRP plan of facilities that will remain post mining operations. Chapter 10 Section 10.5.2. No changes were made to Plates 10-3, 10-4, 10-6, and 10-7 which detail what portions of roads B,E, I, J, and R will be retained post mining operations.

cparker

Bonding and Insurance General

Analysis:

The application meets the minimum requirements of R645-301-800 as the applicant is current on the bond and insurance standings.

cparker

Bonding Form of Bond

Analysis:

The application meets the minimum requirements of R645-301-860.100 as the applicant currently maintains a collateral bond amount of \$1,775,000 which is held by Treasury Securities with Wells Fargo as the escrow agent.

cparker

Bonding Determination of Amount

Analysis:

The application meets the minimum requirements of R645-301-830.140 as the Permittee submitted detailed bond information in regards to the application.

cparker

Bonding Terms and Conditions Liability Insurance

Analysis:

The application meets the minimum requirements of R645-301-850 as the applicant currently holds liability insurance through Federal Insurance Company, effective until 8/1/16. The insurance includes the required Marsh from, explosives and claims made per occurrence.

cparker