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**Technical Analysis and Findings**  
**Utah Coal Regulatory Program**

July 8, 2015

**PID:** C0070005  
**TaskID:** 4899  
**Mine Name:** SKYLINE MINE  
**Title:** RAIL LOADOUT UPDATES

**Operation Plan**

**Mining Operations and Facilities**

*Analysis:*

The application includes the expansion of pavement in the northern Area 22 to widen the pavement of the exit from the rail loadout area of the Skyline Mine loadout. Drawing 3.2.1-3 shows Area 22 has been expand. Clarification is required on the drawing as it appears that a culvert is drawn under the pad area. The area labeled as Area 22 appears to have increased the size of the ASCA but is not detailed under Section 3.2.12, page 3-71, of the MRP. The findings of this amendment are deficient under R645-301-521.180 due to a lack of clarity of size of the ASCA drainage area.

The Rail loadout application contemplates the addition of concrete around silos and silt trap to DD-11. The drawing 3.2.1-3 was updated to reflect these areas clearly however text needs to be added to the MRP on page 3-30(a) in section 3.2.4 detailing the area to be paved west of the silos as well as the addition silt trap. The text within in the stated section is supportive material to help the Division staff validate the information shown on Drawing 3.2.1-3.

*Deficiencies Details:*

The application does not meet the minimum requirements of R645-301-521.180 and -526.221 as the application lacks amendments to the text in various sections. Specifically the sections that require text edits within the MRP would include Section 3.2.4, page 3-30(a), to describe the size of the additional concrete west of the Silos and how it will be graded to drain to the appropriate pond. An additional section that needs clarification within the MRP is Area 22 in Section 3.2.12, page 3-71, which is missing text to describe the size of the area that will be paved with concrete. The current amendment to Drawing 3.2.1-3 details the new Area 22 to be larger and a significantly different footprint than the previously approved MRP Drawing 3.2.1-3 Area 22. Clarification is also required as drawing 3.2.1-3 also appears to have a culvert under the new Area 22. The Permittee will add text to the appropriate sections detailed above and clarify what modification as being done to Area 22 of Drawing 3.2.1-3.

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**Hydrologic Sediment Control Measures**

*Analysis:*

The Division received an application to amend the Skyline MRP to include an operational sediment trap on a disturbed ditch at the loadout facilities. The sediment trap will be installed along disturbed ditch DD-11. This ditch drains into the sediment ponds, and the purpose of the sediment trap is to prevent further sediment from depositing in the pond. The Skyline mine facilities have installed and are currently using these sediment traps in other areas, and they appear to be

effective at allowing suspended solids to drop out of disturbed drainage. Plate 3.2.1-3 has been updated to display the location of the sediment trap, and page 3-44a displays a detail of the sediment trap. This structure should not adversely effect the current function of ditch DD-11. The application meets the minimum requirements of R645-301-742.

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## Support Facilities and Utility Installations

### Analysis:

The application does not meet the minimum requirements of R645-301-526. See comments and analysis of mining operations and facility section.

### Deficiencies Details:

The application does not meet the minimum requirements of R645-301-526.221 as the application lacks amendments to the text in various sections and Drawing 3.2.1-3 needs clarification. The current amendment to Drawing 3.2.1-3 details the new Area 22 to be larger and a significantly different footprint than the previously approved MRP Drawing 3.2.1-3 Area 22. Clarification is also required as drawing 3.2.1-3 also appears to have a culvert under the new Area 22. The Permittee will add text to the appropriate sections detailed above and clarify what modification as being done to Area 22 of Drawing 3.2.1-3. See the comments under mining operations and facilities for further information.

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## Maps Facilities

### Analysis:

Drawing 3.2.1-3 of the loadout area was updated within this amendment. The application does not meet the minimum requirements of R645-301-526.220 as provided drawing has changed to footprint of the Area 22 while Detail "A" was not updated. Drawing 3.2.1-3 also appears to show a culvert under Area 22.

### Deficiencies Details:

Drawing 3.2.1-3 of the loadout area was updated within this amendment. The application does not meet the minimum requirements of R645-301-526.220 as provided drawing has changed to footprint of the Area 22 while Detail "A" was not updated. Drawing 3.2.1-3 also appears to show a culvert under Area 22. The Permittee will clarify what the total area reporting to Area 22 is and clarify the drawing 3.2.1-3 and Detail "A" as need.

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## Reclamation Plan

### Maps Reclamation Facilities

### Analysis:

The Reclamation Drawing remains unchanged and the rail loadout area will be reclaimed as previously approved. The Application meets the minimum requirements of R645-301-542.

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## Bonding Determination of Amount

### Analysis:

The amendment is deficient under R645-301-830 due to difference in the concrete unit cost between the Division and the Permittee. An error was found in the Division's revision 2014 Midterm review where the units for the unit cost for concrete demolition were not applied correctly. A region specific cost estimate for concrete removal from Nelson at \$13.75/CY, a local contractor, is also suggested to replace the more generalized R.S. Means Heavy Construction estimate at \$3.43/SF. The Skyline bond sheets and Nelson unit cost are specific to concrete demolition in cubic yards while the R.S. Means cost estimate utilizes square feet. The bond sheets were not updated to account for concrete demolition by square feet, therefore to reduce the risk of error in transforming from a volume to a surface area, the sheets will be left in the units of cubic yards as they currently are and the Nelson construction quote will be utilized as the cost unit. The bond sheets will be

corrected as the individual sheets are updated during amendments and any sheets not updated will be readdressed during the 2019 midterm. The bond sheets updated during this amendment, Pavement Rail Loadout 34 and Concrete Lined Ditch 27, will update the dismantling cost to Nelson's unit cost of \$13.75/CY. The rest of the bond sheet changes are correct.

*Deficiencies Details:*

The amendment is deficient under R645-301-830 as the Pavement Rail Loadout 34 and Concrete Lined Ditch 27 should utilize the dismantling cost of Nelson's unit cost of \$13.75/CY.

An error was found in the Division's revision 2014 Midterm review where the units for the unit cost for concrete demolition were not applied correctly. A region specific cost estimate for concrete removal from Nelson at \$13.75/CY, a local contractor, is also suggested to replace the more generalized R.S. Means Heavy Construction estimate at \$3.43/SF. The Skyline bond sheets and Nelson unit cost are specific to concrete demolition in cubic yards while the R.S. Means cost estimate utilizes square feet. The bond sheets were not updated to account for concrete demolition by square feet, therefore to reduce the risk of error in transforming from a volume to a surface area, the sheets will be left in the units of cubic yards as they currently are and the Nelson construction quote will be utilized as the cost unit. The bond sheets will be corrected as the individual sheets are updated during amendments and any sheets not updated will be readdressed during the 2019 midterm. The bond sheets updated during this amendment, Pavement Rail Loadout 34 and Concrete Lined Ditch 27, will update the dismantling cost to Nelson's unit cost of \$13.75/CY. The new bond sheet for Pavement Rail Loadout 34 should show a volume of 121 CY with a demo subtotal of \$1,663.37 instead of \$17,236. The new Concrete Lined Ditch 27 should show a volume of 5.3 CY for a subtotal demolition of concrete of \$76.59 instead of \$1,574. The rest of the bond sheet changes are correct.

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