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Technical Analysis and Findings
Utah Coal Regulatory Program

PID: C0410002
TaskID: 4781
Mine Name: SUFCO MINE
Title: ADD FENCE AND GATES

Summary

The Permittee submitted an amendment to add fencing with gates in the vicinity of the Annex building at the main facilities. To reflect the changes at the site a new figure was added Appendix 5-11 that contains details showing the fence and gate locations. An updated Annex sheet within Appendix 5-9 was also submitted reflecting the additional concrete demolition in the bond amount.

The amendment was found to be deficient in information under: R645-301-121.200,-121.141, & -830. The addition information requested from the Permittee is detailed below.

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Operation Plan

Maps Facilities

Analysis:

To reflect the changes at the site Appendix 5-11 has an addition new detail showing the fence and gate details. An updated Annex Building sheet within Appendix 5-9 was also submitted reflecting the additional concrete demolition in the bond amount.

Deficiencies Details:

R645-301-121.200,-121.141 Requires the maps to be clear and concise and be presented in a consolidated format set forth on U.S.G.S1:24,000 scale series.

- The figured supplied to be added to Appendix 5-11 is missing a legend as well as either a scale bar or scale base reference (i.e. Scale 1"=30' @ ARCH E). Scale alone when submitted in digital copies does not give enough information and leaves the chance for misinterpretation.
 - o The Permittee will need to add a legend clarifying what the green blocked area is representing as well as the various line types and preferably a scale bar with one inch base reference or some other kind of base reference to match the scale.

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Reclamation Plan

Bonding Determination of Amount

Analysis:

The Permittee submitted updated sheets for the Annex Building within the Demolition cost estimate reflecting the addition of the new six feet tall chain link fence with several various strength gates.

Deficiencies Details:

R645-301-830 The bond amount will be determined by the Division based upon the requirements of the approved permit and reclamation plan, reflect the probable difficulty of reclamation, etc.

- The line item for Steel Bldg. large has the wrong unit cost. According to the OSM Handbook for Calculation of Reclamation Bond Amounts, page 8, bond calculations will utilize the “bare cost” data from the RS Means reference manual.
 - o The 2014 RS Means 02 41 16.13 0020 bare unit cost is \$0.27/CF
- The Transportation Cost for a 16-ton Dump Truck describes and utilizes RS Means reference cost of 16-ton Dump Truck but utilizes the improper unit cost of 12 ton truck.
 - o Clarification is requested which truck was meant for this line item and then the following appropriate unit cost to be used:

Dump Truck 12 ton	01 54 33 20 5250	\$417.2 /day
Truck dump 16 ton payload	01 54 33 20 5300	\$692.2 /day
- There is an error in the costing of the Truck rental. The smallest increment is determined by the Unit in the Unit cost column. The total quantity displayed in the Quantity column must utilize the unit cost’s unit. This means that the smallest increment is a day, which must be rounded up.
 - o The ceiling function must be utilized in determining the total cost of the truck rental. (i.e. 18.3 days=19 days, Total Cost=\$692.2/day * 19 days=\$13,152)
- The improper concrete RS Means unit cost was utilized, concrete demo. The Permittee should use six inch on grade slab with no reinforcement unless more detail information can be determined
 - o RS Means 02 41 16.17 0400 6” thick concrete pain on grade
- The improper units for the fence concrete footings were utilized. The RS Means units are Linear Feet instead of each.
 - o The RS Means reference gives the height and width dimensions, the Length, in feet, of the footings must be utilized in the dimensions costing, not the Volume. Dimensions of the footings should be checked as a more relevant RS Means reference may be more accurate.
- There are several line items missing costing the removal of the various gates, two bollards, and gate posts detailed in the Appendix 5-11 figure. More detail as to how the gates are intended to open is also required.
 - o The Permittee will provide additional information clarifying how the gates will open so as to assist with the appropriate RS Means reference for each gate is applied.
 - o The Permittee will clarify what type of post will be utilized with the three foot man gate.
 - o The Permittee add the line item for Bollard removal
 - o The Permittee will add the line item for gate post removal
 - o The Permittee will add the line items for the Gates as appropriate
 - o The Permittee will add the line items for top and bottom rails
 - o The Permittee will add the line items for End and Gate braces
 - o Relevant RS Means:
 - RS Means 02 41 13.62 0100 - Chain link gate 3'-4'
 - RS Means 02 41 13.62 0530 motor operators
 - RS Means 02 41 13.62 0200 - 10'-12' chain link gate
 - RS Means 02 41 13.62 0510 - sliding
 - RS Means 02 41 13.62 0540 - transmitter systems
 - RS Means 02 41 13.62 1000 - Fence posts steel in concrete
 - RS Means 02 41 13.92 0800 – Pipe Bollards 6”-12” diameter
 - RS Means 02 41 13.62 1400 – Fence Rails
 - RS Means 02 41 13.62 0800 – Chain Link fence braces

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