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**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

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**FINDINGS DOCUMENT**  
**Utah Coal Regulatory Program**

**PID:** C0150015  
**TaskID:** 4409  
**Mine Name:** EMERY DEEP MINE  
**Title:** MIDTERM REVIEW RESPONSE

**General Contents**

**Identification of Interest**

*Analysis:*

The Operator submitted updated ownership and control information to be inserted into Chapter 1, Appendix 1-1 of the MRP. The submission included updates to Consol Energy Inc. and Consolidation Coal Company. The information was compared with the Applicant Violator System. No anomalies were found.

ssteab

**Reclamation Plan**

**Bonding Determination of Amount**

*Analysis:*

As part of a mid-term permit review, an amendment was submitted to the MRP for the Emery Deep Mine. The amendment provided updated information for the reclamation bond.

The amendment included updated unit costs (detailed within the bond calculation spreadsheets), and updated escalation factors. Updates were provided using the 2013 data from R.S. Means Heavy Construction Cost data manual and other appropriate resources.

The bonding summary sheet and corresponding bond calculation sheets (located in Chapter IV of the MRP, beginning on page 12) were updated and appropriately escalated to 2018 dollars using Division's approved 1.5% and 5 year escalation.

The updated bond estimation for direct costs are as follows;  
Demolition and removal: \$232,113  
Back-filling & Grading: \$1,916,150  
Re-vegetation: \$536,101.  
Total: \$2,684,364

The subtotal for the corresponding indirect costs is \$719,409. The total estimated reclamation cost before escalation is \$3,403,773. An additional \$263,057 is added to account for 1.5% escalation at 5 years.

The reclamation cost (rounded) including escalation is estimated at \$3,667,000. The amount of bond currently posted is \$3,510,000 in the form of a surety bond with Travelers Casualty and Surety Company of America as the Principal Holder. This results in a difference of -\$157,000 or -4.28%.

According to the "Five Percent Rule" as detailed in Division Tech Directive 007, after reviewing the bond, the Division may choose not to change the bond amount if the cumulative difference between the revised reclamation cost and the approved bond amount is less than 5%. The Division believes those increases in the reclamation costs of up to 5% can be made without compromising reclamation.

Based on the implementation of this rule, no additional bond will need to be posted at this time. If there are any additions to the bond amount in excess of \$26,350, additional bond will need to be posted at that time.

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## Operation Plan

### Subsidence Control Plan Subsidence

#### *Analysis:*

On September 18, 2013, a pedestrian subsidence survey was conducted over the 00 North panel of the Emery Deep Mine. The survey was conducted to address a deficiency identified as part of the 2012 annual report review. Raw subsidence data was included in the annual report but subsidence monitoring was not completed in whole according to the requirements of the MRP. The data submitted with task # 4409 addresses the missing portions of the subsidence monitoring report.

During the inspection, six new subsidence depressions were observed. A narrative description of each depression was included with the submittal. The coordinates of the depressions were provided and the locations were plotted on a mine map to show relation to mine workings. Photographs of each depression were included in Attachment A of the submittal.

The report was provided by Richard While of EarthFax Engineering. The report included recommendations for subsidence mitigation which are in compliance with the subsidence mitigation details in the approved MRP.

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