



# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

November 7<sup>th</sup>, 2016

R. Dan Eldredge  
Intermountain Power Agency  
10653 South River Front Parkway, Suite 120  
South Jordan, Utah 84095

Subject: Midterm Review, Intermountain Power Agency, Wildcat Loadout, C/007/0033,  
Task ID #5283

Dear Mr. Eldredge:

The Division of Oil, Gas and Mining (the Division) has completed its midterm review of the Wildcat Loadout facility. Deficiencies have been identified that must be addressed. The deficiencies are listed as an attachment to this letter. The author of each of the deficiencies is provided in order to facilitate communication between your staff and the Division's. Please provide a response to the deficiencies by December 15<sup>th</sup>, 2016.

During the course of the mid-term review process, Division staff identified an infestation of Russian Thistle and lack of vegetation on the in-place topsoil pile. The Division recommends a joint evaluation and revision of the past seed mixes and management practices (mulching, surface roughening, slope, aspect, etc.) prior to another attempt at establishing vegetation on the four topsoil stockpiles. The joint evaluation would include the Permittee, the Permittee's consultant(s) and the Division soil scientist and biologist.

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

Sincerely,

Daron R. Haddock  
Coal Program Manager

DRH/sqs  
Attachment  
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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0070033  
**TaskID:** 5283  
**Mine Name:** WILDCAT LOADOUT  
**Title:** MIDTERM PERMIT REVIEW

#### General Contents

#### Violation Information

*Analysis:*

The minimum requirements for R645-301-113 have been met.

An AVS evaluation was generated on 11/04/2016. The generated report listed no outstanding violations, suspensions or forfeitures.

ssteab

#### Right of Entry

*Analysis:*

The Wildcat Loadout Mining and Reclamation Plan (MRP) does not meet the State of Utah R645 requirements for Right of Entry.

The Permittee must revise Appendix B of the MRP to include the most recent Bureau of Land Management Right of Way document. The Right of Way document was recently revised to accommodate the trans-loading of oil on the property. The Permittee must provide the Right of Way revision for incorporation into the approved MRP in Appendix B.

*Deficiencies Details:*

The Wildcat Loadout Mining and Reclamation Plan (MRP) does not meet the State of Utah R645 requirements for Right of Entry. The following deficiency must be addressed:

R645-301-114: The Permittee must revise Appendix B of the MRP to include the most recent Bureau of Land Management (BLM) Right of Way Document that was recently revised to allow the trans-loading of oil on the property.

schriste

#### Legal Description

*Analysis:*

The MRP does not meet the State of Utah R645 requirements for providing an accurate legal description of the permit area and right of entry.

The legal description located in the last paragraph on Ch. 1, page 1-10 under Right of Entry (ROE) Information is missing T. 13S.,R.9E., Section 33: SW4SE4SW4NE4 under the permit area description. Evidence of ROE to this parcel is Lease U-48027. Additionally, this legal description was not updated with the addition of 23 acres which brings the disturbed area to a total of 111.62 acres and permit area to 123.19 acres.

Plate 16 shows the updated (presumably correct) permit and disturbed area. However, not all maps were updated accordingly when the permit and disturbed areas were changed with task #4895 and approved November 6, 2015.

*Deficiencies Details:*

The MRP does not meet the State of Utah R645 requirements for providing an accurate legal description of the permit area and right of entry.

The following deficiencies must be addressed prior to final approval

R645-301-114: The Permittee must update Ch. 1, page 1-10, permit area, to include SW4SE4SW4NE4 13S.,R.9E., Section 33 and the correct acreage of the permit area and disturbed area accordingly.

The Permittee must update all maps with the current permit and disturbed area boundary. All maps should reflect the same permit and disturbed boundary as shown on Plate 16.

Ireinhart

## Reporting of Technical Data

*Analysis:*

On September 28, 2016 the Division initiated the Mid-term review for the Wildcat loadout facility by way of correspondence to Dan Eldredge. This review included the following items:

A. Review of the Plan to ensure that the requirements of all permit conditions, division orders, notice of violations (NOV), abatement plans, and permittee-initiated Plan changes approved subsequent to permit approval or renewal (whichever is the most recent) are appropriately incorporated into the Plan document.

There are three topsoil commitments, one hydrology commitment and two engineering commitments that are being addressed by the corresponding disciplines. A records review of the Division's Coal Tracking system (CTS) indicates that there are no division orders, notice of violations (NOV), abatement plans, or permittee-initiated Plan changes approved subsequent to permit approval or renewal. The Division is waiting for the clean copies of the revised inspection schedule amendment, (Task # 5279).

B. Ensure that the Plan has been updated to reflect changes in the Utah Coal Regulatory Program which have occurred subsequent to permit approval or renewal.

A records review of the Division's CTS indicates that the Plan has been updated to reflect changes in the Utah Coal Regulatory Program which have occurred subsequent to permit approval or renewal.

C. Review applicable portions of the permit to ensure that the Plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

This item is being reviewed by the Divisions hydrologist.

D. Evaluate the compliance status of the permit to ensure that all unabated enforcement actions comport with current regulations for abatement; verify the status of all finalized penalties levied subsequent to permit issuance or permit renewal, and verify that there are no demonstrated patterns of violation (POV). This will include an AVS check to ensure that Ownership and Control information is current and correct.

The records review indicates that there are no unabated enforcement actions, civil penalties or patterns of violation (POV) subsequent to permit issuance or permit renewal. The AVS check to ensure that Ownership and Control information is current and correct is being performed by the Divisions administrative assistant.

E. Evaluate the reclamation bond to ensure that coverage adequately addresses permit changes approved subsequent to permit approval or renewal, and to ensure that the bond amount is appropriately escalated in current-year dollars.

This item is being reviewed by the Divisions reclamation engineer.

F. Evaluate the permit for compliance with variances or special permit conditions.

See item A for specific comments.

G. Conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness for operational, reclamation, and contemporaneous reclamation practices undertaken on predetermined portions of the disturbed area to minimize, to the extent practicable, the contribution of acid or toxic materials to surface or groundwater, and to otherwise prevent water pollution.

A site visit was conducted by the undersigned on November 2nd, 2016. The loadout is currently idle had has been for several months. There is no coal currently being stockpiled on the site. The site had received an appreciable amount of precipitation over the past several weeks noting that the four sediment ponds contained water and that approximately 2' of the contained water had evaporated from the structures. Pond A was the only one to appeared to have discharged at some point gauging by the debris left at the high water mark. The areas subject to coal fine deposition were visited noting that there was for the most part hardly any evidence of coal fine deposition. It is recommended that the infestation of Russian thistle and lack of vegetation on the in-place topsoil be addressed by the permittee.

*Deficiencies Details:*

It is recommended that the infestation of Russian thistle and lack of vegetation on the in-place topsoil be discussed with the Divisions soils scientist and biologist.

jhelfric

## **Environmental Resource Information**

### **Maps Existing Structures and Facilities**

*Analysis:*

The current MRP meets the State of Utah R645 requirements for Existing Structures and Facilities Maps.

The current MRP meets the requirements of R645-301-521.120 which require a map clearly showing the location of all building in and within a 1000 ft of the proposed permit area, along with identifying the current use of said building. Plate 1 shows the public road adjacent to the permit area as well as all buildings contained within a 1000 ft of the permit area shown by a green dash line. Construction at the Wildcat site began in 1984 and IPA commits to maintain the site until final reclamation.

cparker

### **Maps Existing Surface Configuration**

*Analysis:*

The current MRP meets the State of Utah R645 requirements for Existing Surface Configuration Maps.

The current MRP meets the requirements of R645-301-521.150 as it includes a drawing or plate that clearly calls out the existing surface prior to mining operations. Volume II contains the supportive plates of the Wildcat loadout MRP including Plate 1 which details the man made feature within the Permit Area. Plate 1A details the surface contours after site operations.

cparker

### **Maps Mine Working**

*Analysis:*

The current MRP meets the State of Utah R645 requirements for Mine Workings Maps.

The current MRP meets the minimum requirement of R645-301-521.140 which require maps that clearly show all mine

plans. There are no underground mine working associated with the site at it is only a surface processing facility.

cparker

## Maps Surface and Subsurface Manmade Features

### Analysis:

The current MRP meets the State of Utah R645 requirements for preexisting Surface and Subsurface Manmade features maps.

The current MRP meets the requirements of R645-301-521.122 as it includes a drawing or plate that clearly calls out the existing surface and subsurface man made features within, passing through, or passing over the permit area. R645-301-521.120 through-521.125 requires maps to clearly show existing surface and subsurface facilities. Plate 1 meets the general requirements of R645-521 by detailing the existing surface and subsurface faculties within the permit area. After the competition of activities at the loadout facility no structures will remain with the exception of the railroad grade, the tracks, and its associated drainage structure.

cparker

## Maps Surface and Subsurface Ownership

### Analysis:

The current MRP meets the State of Utah R645 requirements for Surface and Subsurface Ownership Maps.

The current MRP meets the requirements of R645-301-521.130 which requires landowners, right of entry, and public interest maps. Plate 16 depicts the surface and subsurface ownerships of all land within the permit area of the Wildcat Loadout. The surface facilities are located completely within federal BLM land.

The current MRP meets all the State of Utah R645 requirements for Mining Operations and Facilities.

The current MRP meets the requirements of R645-301-523 by including a description of the mining operation, method of coal mining, engineering techniques, anticipated annual and total production of coal by tonnage, and major equipment to be used for all aspects of those operations proposed to be conducted during the life.

The mitigation plan for DO-04 regarding windblown coal fines is contained with Appendix P of the MRP. In 2014 the MRP included the additional operations of crude oil unloading station, storage system, and railcar loading station on the west side of the Utah Railroad tracks. The oil transloading is outside the jurisdiction of UDOGM but is within the Wildcat Loadout permit area therefore items pertaining to the operations of the oil transloading are addressed in Chapter 9 of the Wildcat MRP.

cparker

## Operation Plan

### Mining Operations and Facilities

#### Analysis:

The Division initiated a mid-term review of the Wildcat loadout mining and reclamation plan (Task ID #5283) on September 28, 2016 in accordance with R645-303-211. This Technical Memorandum presents the findings of the Midterm Permit review for the Wildcat load related to engineering and bonding, including:

- A review of the Plan to ensure that the requirements of all the permit conditions, Division orders, notice of violations (NOVs), abatement plans, and permittee-initiated Plan changes approved subsequent to permit approval or renewal are appropriately incorporated into the Plan document.
- A review of the application portions of the permit to ensure that the mine plan contains the commitments for the application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.
- Evaluate the compliance status of the permit to ensure that all unabated enforcement actions comport with current regulations for abatement; verify the status of all finalized penalties levied subsequent to permit issuance or permit renewal, and verify that there are no demonstrated patterns of violation (POV). This will include an AVS check to ensure that Ownership and Control information is current and correct.

- Evaluate the reclamation bond to ensure that coverage adequately addresses permit changes approved subsequent to permit approval or renewal, and to ensure that the bond amount is appropriately escalated in current-year dollars.
- Evaluate the permit for compliance with variances or special permit conditions related to engineering and bonding.
- Optional for active mines, mandatory for reclamation only sites: conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness for operational, reclamation, and contemporaneous reclamation practices undertaken on predetermined portions of the disturbed area to minimize, to the extent practicable, the contribution of acid or toxic materials to surface or groundwater, and to otherwise prevent water pollution.

The Permittee has not submitted a formally revised reclamation cost estimate and the Division is currently in the middle of reaching an initial action plan draft that will change how the Division implements reclamation cost estimates.

cparker

## Existing Structures

### Analysis:

The current MRP meets the State of Utah R645 requirements for the Relocation or Use of Public Roads.

The current MRP meets the requirements of R645-301-521.133 due to information detailing measure to be used such as a general mining method that will be employed under or within 100 ft of public roads to protect interest of the public. The Consumers county road starts at highway 6 in Gordon Creek and bypasses the IPA's Wildcat loadout, as shown on Plate 1. There are two entrances from the county road into the permit area. Both entrances include the required signs at the entrances to alert the public they are entering the Wildcat Loadout permit area.

cparker

## Coal Recovery

### Analysis:

The current MRP meets the State of Utah R645 requirements for Coal Recovery.

The current MRP meets the requirements of R645-301-522 due to a discussion of the measures to be used to maximize the use and conservation of the coal resources. The Wildcat loadout has only surface mining operations at the site in the form of providing rapid train loading and stockpiling of coal.

cparker

## Topsoil and Subsoil

### Analysis:

#### Analysis:

The information in the MRP meets the requirements of soil salvage R645-301-232. there are four topsoil stockpiles on site: Topsoil piles A, B, E & F. These stockpiles are shown on Plate 1. However, the topsoil stockpiles have been in place for decades without developing a protective cover of vegetation, as required by R645-301-234.230. The Division recommends a joint evaluation and revision of the past seed mixes and management practices (mulching, surface roughening, slope, aspect, etc) prior to another attempt at establishing vegetation on the four topsoil stockpiles. The joint evaluation with the Permittee and the Division soil scientist and biologist could include the Permittee's consultant(s) as well.

MRP Section R645-301-212, Plate 1A and Appendix P, Item 2, Item 4 and Figure 2 describe soil handling and protection practices to be undertaken prior to construction of Pond G (when the site is re-activated).

MRP Section R645-301-528.300 describes the leachate testing of coal processing waste during final reclamation to identify and bury potential acid/toxic forming material as required by R645-301-731.311.

### Deficiencies Details:

R645-301-234.230, The Division recommends a joint evaluation and revision of the past seed mixes and management practices (mulching, surface roughening, slope, aspect, etc) prior to another attempt at establishing vegetation on the four topsoil stockpiles. The joint evaluation would include the Permittee, the Permittee's consultant(s) and the Division soil scientist and biologist.)

## Road Systems Classification

### Analysis:

The current MRP meets the State of Utah R645 requirements for Road Systems and Other Transportation Facilities.

The current MRP meets the requirements of R645-301-527.100 by classify each road as primary or ancillary. Chapter 5 details that primary roads have two typical designs of a single land 16 ft wide gravel or double land 26 ft gravel or asphalt. Plate 17 shows the typical designs and dimensions of the roads. The MRP then detail the ten primary roads located within the Permit Area of the Wildcat loadout.

cparker

## Road System Plans and Drawings

### Analysis:

The current MRP meets the State of Utah R645 requirements for Transportation Plans and Drawings.

The current MRP meets the requirements of R645-301-534.100 by submitting plans and drawing for each road to be maintained within the permit area on Plate 1 and Plate 17.

cparker

## Road System Performance Standards

### Analysis:

The current MRP meets the State of Utah R645 requirements for Performance Standards of roads within the permit area.

The current MRP meets the 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 Permittee committed to surfacing primary roads to reduce the runoff sediment load.

cparker

## Road System Certification

### Analysis:

The current MRP meets the State of Utah R645 requirements for Primary Road Certification

The current MRP meets the 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. Plate 1 shows the location of all roads located throughout the facility and Plate 17 shows the design typically associated with primary roads.

cparker

## Road System Other Transportation Facilities

### Analysis:

The current MRP meets the State of Utah R645 requirements for Other Transportation Facilities.

The current MRP meets the 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 rail siding roughly bisects the permit area and run in a north south direction. The siding is part of a Utah Railroad lease agreement with the BLM. Other transportation structures include the reclaim conveyor, a 72 inch belt, three 54 inch reclaim transfer conveyors, one 36 inch yard conveyor from the crusher to stacker (Conv Y) and one 48 inch conveyor from the truck dump to the crusher (Conv T).

cparker

## Spoil Waste Disposals of Noncoal Mine Wastes

*Analysis:*

The current MRP meets the State of Utah R645 requirements for Spoil and Waste Materials.

The current MRP meets the minimum standards or R645-301-528.330 due to not changes in the MRP text noncoal mine waste disposal located in the current MRP.

cparker

## **Spoil Waste Coal Mine Waste**

*Analysis:*

The current MRP meets the State of Utah R645 requirements for Coal Mine Waste.

The current MRP meets the minimum standards or R645-301-528.320 due to not changes in the MRP text in Chapter 5. There are no underground mining operations that occur at the loadout area. There is a small amount of rock material that is removed from the lump coal product at the facility. The refuse pile was utilized during the Andalex ownership of the loadout and has not had waste placed in the area since the change in ownership to IPA.

cparker

## **Spoil Waste Refuse Piles**

*Analysis:*

The current MRP meets meet the State of Utah R645 requirements for Refuse Piles

The current MRP meets the minimum standards or R645-301-528.322 due to not changes in the MRP text in Chapter 5 and Appendix O.

Appendix O contains the plan and profile cross sections of the Coal Refuse disposal pile on the east side of the Utah railroad. The plates are certified by Dan Guy, PE #4548, who is a Utah licensed engineer with experience in coal mine waste refuse pile construction. The design narrative within Appendix O states that no water will be impounded by or within the coal refuse piles, lifts will be placed with a front loader and compacted. The piles maximum design will not exceed 20 feet in height and be constructed with 2:1 side slopes. Drainage from the pile is carried to Pond F via disturbed ditches D-32, D-33, and D-34. The refuse pile was utilized during the Andalex ownership of the loadout and has not had waste placed in the area since the change in ownership to IPA. The last reports estimated volume within the refuse pile to be approximately 44,500 CY above AOC.

cparker

## **Hydrologic Sediment Control Measures**

*Analysis:*

The Wildcat Loadout Mining and Reclamation Plan (MRP) meets the State of Utah R645 requirements for Sediment Control Measures. The Permittee has demonstrated the use of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

Appendix R, Wildcat Loadout Sedimentation and Drainage Control Plan, contains the detailed designs and supporting narrative for the sediment control measures implemented within the permit area to prevent additional contributions of sediment outside the approved permit area.

The sediment pond design information is provided in Appendix R, Wildcat Loadout Sedimentation and Drainage Control Plan. The primary form of sediment control at the Wildcat Loadout site is the utilization of sedimentation ponds. Six sediment ponds (A, B, C, D, E and F) are utilized to safely contain and treat the storm water runoff generated at the site. The locations of the ponds are provided on Plate 2A, Wildcat Loadout Proposed Drainage Map Response to DO-04. Per the requirements of the Permittee's Utah Pollution Discharge Elimination System permit, the Permittee samples the effluent from the sediment ponds and provides the data quarterly to the Division's electronic water quality database. The sediment ponds have been designed to safely control the runoff generated from a 10-year, 24-hour event as required for a temporary sediment pond.

The other form of sediment control utilized at the site is the use of Alternative Sediment Control Areas (ASCA). The

Permittee utilizes 7 ASCA areas to control sediment transport in areas where the storm water runoff is not readily routed to a sediment pond. The ASCA's that are utilized are primarily straw bales, berms and vegetation. The ASCA areas are shown on Plate 2. Chapter 5 of the approved MRP provides a description for each one.

*schriste*

## **Support Facilities and Utility Installations**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Support Facilities and Utility Installations.

The current MRP meets the requirements of R645-301-521.180 and -526 the require the description, plans, and drawing for each support facility to be constructed, used, or maintained within the proposed permit area in Chapter 5. Support structures at the site include a loadout structure, under pile reclaim, storage pile, radial stacker, crusher building, truck dump, unit-Train loading track, office building, scale house, shop building, magnesium Chloride storage tank, substation, and two 10,000 culinary water tanks. Plate 1 shows the location of all the above described facilities. Power is supplied to the facility through pre-existing utility lines serving the Beaver Creek Coal Company. Upon completion of activities, all surface facilities will be removed except Utah Railroad's property.

*cparker*

## **Signs and Markers**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Signs and Markers.

The current MRP meets the requirements of R645-301-521.200 by the general discussion of signs in Chapter 5 page 5-32.

*cparker*

## **Maps Facilities**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements Mining Facilities Maps.

The current MRP meets the requirements of R645-301-521.120 through-521.125 which require maps to clearly show existing surface and subsurface facilities as detailed on Plate 1.

*cparker*

## **Maps Certification Requirements**

### *Analysis:*

The current MRP meets the State of Utah R645-301-512 Certification Requirements.

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

*cparker*

## **Reclamation Plan**

### **General Requirements**

#### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Reclamation Activities.

The requirements of R645-301-540 are met within the current MRP as there is no change to the existing MRP reclamation details in Chapter 5 section R645-301-541. The reclamation of the site includes the removal of the scale house trailer, truck scales, substation, three truck dumps, two crushing plants, three radial stackers, two reclaim tunnels, loadout conveyor west

die, control building west side, Conveyor T, lump coal belt, stacker radial stacker, Conveyor Y and Y-1, loadout reclaim tunnel, port supports and hopper on the east side, Conveyor R, loadout tower, guard rails, office, water tanks, motor control centers, power lines, shop building and foundation and office trailer. The only permanent facility to remain at the Wildcat loadout after reclamation will be the undisturbed Diversion UD-1, a permanent impoundment and the railroad. The diversion ditch and impoundment are being left to provide drainage control for a drainage that was blocked off over 30 years ago by the rail road. Appendix R contains the required design specifications for the permanent features.

cparker

## Approximate Original Contour Restoration

### Analysis:

The current MRP meets the State of Utah R645 requirements for Approximate Original Contour Restoration.

The current MRP meets the minimum R645-301-512.200, -553.110 through -553.150, and -302-270 due to the proposed post mining land use change that would not require a variance from approximate original contour (AOC).

AOC as defined by R645-301-553.100 through -553.150 is achieved when the final grade closely resembles the general surface configuration of the land prior to mining activities and provides a subsurface foundation for vegetative cover capable of stabilizing the surface from erosion.

The current MRP meets the minimum R645-301-512.200 and -553.110 as there is no change in the MRP and all grading will be place back to approximate original contours. The MRP estimates that approximately 74,000 cubic yards of material will be moved for the contouring and grading (see Tables II-1 and II-1A) as part of the Phase 1 reclamation.

cparker

## Backfill and Grading General

### Analysis:

The current MRP meets the State of Utah R645 requirements for Backfill and Grading.

The current MRP meets the general requirements of R645-301-553 by detailing a general backfill and grading plan that details how disturbed areas will be backfilled and graded to achieve the approximate original contour, eliminate all highwalls, spoil piles, and depressions, and achieve a postmining slope that does not exceed either the angle of repose or such lesser slope as is necessary to achieve a minimum long term static safety factor of 1.3 and to prevent slides, minimize erosion and water pollution both on and off the site, and support the approved postmining land use. The MRP estimates that approximately 74,000 cubic yards of material will be moved for the contouring and grading (see Tables II-1 and II-1A) as part of the Phase 1 reclamation.

cparker

## Road System Reclamation

### Analysis:

The current MRP meets the State of Utah R645 requirements for Reclamation of Roads.

The requirements of R645-301-534 are met within the current MRP as there is no change to the existing MRP reclamation of roads throughout the permitted area.

cparker

## Road System Retention

### Analysis:

The current MRP meets the State of Utah R645 requirements for Retention of Roadway Facilities.

The requirements of R645-301-534 and -552 are met within the current MRP as there is no change to the existing MRP reclamation of roads that no roads will be retailed at the end of mining that exist throughout the permitted area.

cparker

## **Cessation of Operations**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Cessation of Operations

The requirements of R645-301-515 and -541 are met within the current MRP as there is no change to the existing MRP plan of communication with the appropriate parties in the event of the cessation of operations and final reclamation.

cparker

## **Maps Bonded Area**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Bonded Area.

The requirements of R645-301-800 are met within the current MRP as the bonded area map is up to date, Plate 1.

cparker

## **Maps Reclamation Backfilling and Grading**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Reclamation Backfilling and Grading Maps.

The requirements of R645-301-542 are met within the current MRP as there is no change to the existing MRP plan of backfilling and grading areas or volumes to achieve the surface depicted on Plate 8 through 10.

cparker

## **Maps Reclamation Facilities**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Reclamation Facilities Maps

The requirements of R645-301-542 are met within the current MRP as there is no change to the existing MRP plan of facilities that will remain post mining operations as shown on Plate 8.

cparker

## **Maps Reclamation Final Surface Configuration**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Final Surface Configuration Maps.

The requirements of R645-301-542 are met within the current MRP as there is no change to the existing MRP plan of the estimated final surface configuration back to AOC as shown on Plate 8 through 10.

cparker

## **Maps Reclamation Surface and Subsurface Man Made**

### *Analysis:*

The current MRP meets the State of Utah R645 requirements for Reclamation of Surface and Subsurface Manmade Features Maps.

The requirements of R645-301-542 are met within the current MRP as there is no change to the existing MRP plan in the surface and or subsurface manmade features within the permit area, see Plate 8.

cparker

## Bonding Determination of Amount

### Analysis:

The midterm review does not meet the State of Utah R645 requirements for Determination of Bond Amount in that permittee has not submitted updated 2016 detailed estimated bond cost sheets.

### Deficiencies Details:

The midterm review does not meet the State of Utah R645 requirements for Determination of Bond Amount in that permittee has not submitted updated 2016 detailed estimated bond cost sheets.

The Division requires an evaluation of the reclamation cost estimate during each midterm permit review. This cost estimate is then escalated for five years or until the next midterm review. In accordance with the requirements of R645-303-211, R645-301-830, and -301-830.140, it is the Permittees responsibility to provide detailed estimated cost sheets to support the reclamation cost estimate.

The Permittee must update the unit cost data used in the prior approved bonding calculations for reclamation cost estimate to 2016 unit costs using the 2016 R.S. Means Heavy Construction Cost Data manual. All computation sheets for demolition, earthwork and re-vegetation must be updated and submitted to the Division so the Division can determine the required bond amount needed through 2021.

In accordance with R645-301-830.410, Division Technical Directive 007, and Office of Surface Mining Handbook for Calculation of Reclamation Bond Amounts the Permittee may utilize third party contractors for cost references when a general cost references does not adequately describe the required reclamation task. In the event the Permittee utilizes local third party contractors cost estimates within the reclamation bond amount additional information must be submitted with the application including a minimum of three individual quotes for the work. References may include items such as a letter or email transcript but must include all relevant contact information from the contractor so that the Division may contact said contractor to verify unit cost is valid in the event the Division was the hiring personal. References must be submitted at the time the reclamation bond amount is submitted to the Division.

In accordance with R645-301-830.410, Division Technical Directive 007, and Office of Surface Mining Handbook for Calculation of Reclamation Bond Amounts the Permittee must utilize bare unit costs when using standardized cost reference manuals such as R.S. Means Heavy Construction. The Division applies an indirect cost of 26.8% that covers overhead and profit calculations in the indirect line items of the total sheet.

The total reclamation cost for the Mine (sum of the direct and indirect costs) must be escalated from 2016 to 2021 (5 years) using an escalation factor of 0.7 %.

This escalated cost is rounded to the nearest \$ 1,000 to determine the amount of required bond which must be posted with the Division by the Permittee.

bwiser