



GARY R. HERBERT
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Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
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Division of Oil, Gas and Mining

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August 23, 2017

Richard Parkins, General Manager
Fossil Rock Resources, LLC
225 North 5th Street, Suite 900
Grand Junction, Colorado 81501

Subject: Disturbed Area Boundary & Legal Description Change, Fossil Rock Resources, LLC, Fossil Rock Mine, C/015/0009, Task #5494

Dear Mr. Parkins:

The Division has reviewed your application. The Division has identified deficiencies that must be addressed before final approval can be granted. The deficiencies are listed as an attachment to this letter.

The deficiencies authors are identified so that your staff can communicate directly with that individual should questions arise. The plans as submitted are denied. Please resubmit the entire application.

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

Sincerely,

Daron R. Haddock
Coal Program Manager

DRH/sqs

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Technical Analysis and Findings Utah Coal Regulatory Program

PID: C0150009
TaskID: 5494
Mine Name: FOSSIL ROCK MINE
Title: DISTURBED AREA BOUNDARY & LEGAL DESCRIPTION CHANGE

Summary

The Permittee submitted an amendment to the Fossil Rock mine's MRP on July 3, 2017. The amendment updates the permit boundary to fully incorporate the disturbed area of the Fossil Rock mine and separate it from the Cottonwood mine. This task is processed concurrently with Cottonwood mine's 'Update Permit Area Boundary' amendment, Task #5463. Adjusting the Fossil Rock permit boundary requires the Permittee to address the permanent discharge reporting to the mine's bypass culvert from an adjacent county culvert. Additionally, the amendment works to organize the MRP.

Deficiencies Details:

kstorar

General Contents

Right of Entry

Analysis:

The application meets the State of Utah R645 requirements for Right of Entry.

The amendment includes Appendix 4-2 which contains documents of transfer and sale, BLM leases, Special Warranty Deeds, and BLM Right-of-Ways, for which the applicant bases their legal right to enter. This amendment adds a Temporary Easement from Emery County: Tax Parcel No. L3-0011-0003, for "vehicular and pedestrian ingress and egress." The parcel is located east of Cottonwood Creek and to the center line of Cottonwood Canyon Road. All required right of entry documents have been provided.

aumarva

Legal Description

Analysis:

jeatchel

Legal Description

Analysis:

The amendment does not meet the State of Utah R645 requirements for Legal Description.

The Legal Description of the Fossil Rock mine permit boundary area is not Clear and Concise. The Legal Description must provide additional information for permit areas, Fee Properties, and for land ownership.

The amendment shows a 0.02 acre difference between Permit Acres and Right-of-Entry Acres. The table on p. 2, Chapter 2, shows 802.21 Permit Acres and 802.23 Right-of-Entry Acres. This difference in acreages is shown on p. 4, where the amendment proposes to remove the 25.85 permitted acreage and replace it with 25.87 Right-Of-Way acres. However, there is no narrative to support this change in permitted acres. The amendment must include a supporting narrative and an adjustment to the bonded area if 0.02 acres will be added to the permit area.

The Fee Property legal description is broken into two separate parcels of land and includes a reference to Appendix 4-2 or 'Exhibit A'. The two parcels include one parcel of land, 53.5 acres in size, west of Cottonwood Canyon Creek and one parcel of land, 2.86 acres, east of Cottonwood Canyon Creek. The legal description for the main mine area must be one contiguous area bounded by one perimeter. In order to map the exact permit area, the Legal Description must begin and end at a defined surveyed point and distances must be exact.

The references to Fee Property and narrative on property ownership must be consistent throughout Chapter 2. The ownership of the two parcels of fee property should be clearly shown on the Table on page 2 of Chapter 2. The owners for each specific parcel of land, the document type and date of execution must be clearly stated and shown in the table. It appears some of this information is included in the narrative at the top of p. 3 under Surface Right of Entry Information. However it is unclear if the ownership discussed in 'Surface Right of Entry' is the Fee Property outlined in the table and in the legal description.

Deficiencies Details:

The MRP does not meet the State of Utah R645 requirements for Legal Description. The following deficiency must be addressed prior to final approval:

The amendment shows a 0.02 acre difference between Permit Acres and Right-of-Entry Acres. This difference in acreages is shown on p. 4, where the amendment proposes to remove the 25.85 permitted acreage and replace it with 25.87 Right-Of-Way acres. The amendment must include a supporting narrative and an adjustment to the bonded area if 0.02 acres will be added to the permit area.

The Legal Description of the permit boundary area for the Fossil Rock mine is not Clear and Concise. The Fee Property legal description is broken into two separate parcels of land. The permit area legal description must be one contiguous area bounded by one perimeter. In order to map the exact permit area, the Legal Description must begin and end at a defined surveyed point and distances must be exact.

The references to Fee Property and narrative on property ownership must be consistent throughout Chapter 2. The ownership of the two parcels of fee property should be clearly shown on the Table on page 2 of Chapter 2. The owners for each specific parcel of land, the document type and date of execution must be clearly stated and shown in the table. It appears some of this information is included in the narrative at the top of p. 3 under Surface Right of Entry Information. However it is unclear if the ownership discussed in 'Surface Right of Entry' is the Fee Property outlined in the table and in the legal description.

kstorrar

Permit Application Format and Contents

Analysis:

The amendment does not meet the State of Utah R645 requirements for Clear and Concise.

The page numbers in the Hydrology section are not correct. Chapter 7 narrative starts on p. 1 and counts up to p. 43. The narrative continues past p. 43, however the page number drops back down to p. 25 and begins counting up again for the remaining pages. This makes the last five pages in Chapter 7 numerically out of sync with the chapter's preceding page numbers.

The amendment must include page numbers for Chapter 2. Without page numbers it is difficult to navigate and reference the document.

The amendment includes a figure titled, "ATLA/ACSM Land Title Survey PacifiCorp Trail MT. Mine". The amendment does not give a narrative providing context for why this figure is included in the amendment and the figure is illegible. In order to incorporate the figure into the MRP, a narrative and figure name and number must be provide and all the writing

on the figure must be legible.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Clear and Concise. The following deficiencies must be addressed prior to final approval:

The page numbers of last five pages in Chapter 7 do not appear to correctly lineup with the chapter's preceding page numbers.

The amendment must include page numbers for Chapter 2.

The amendment must include a narrative providing context for the figure titled "ATLA/ACSM Land Title Survey PacifiCorp Trail MT. Mine". The figure must be given a name and number which must be used to reference the figure. The figure must be provided in the document's original size so all of the writing on the figure is legible.

kstorrar

Permit Application Format and Contents

Analysis:

The application does not meet the requirements of Clear and Concise, because Plate 3-5 Post Mining Contour Map Reclamation Phase 1 should show contour intervals within the permit area and area immediately adjacent similar to those shown on Plate 3-7 Contemporaneous Reclamation and because the parcel number describing the additional acreage is incorrectly listed in the narrative.

Special Warranty Deed/Grant of Temporary Easement for parcel L3-0011-0003 executed in 2017 allows for expansion of the Fossil Rock mine site permit (disturbed) area to increase from 10.39 acres to 13.25 acres (Chap 2, p. 3 & 4 and Appendix 4-2, application e-pg 227). The parcel number is incorrectly listed in the narrative.

The Fossil Rock mine site is on fee land within the Manti La Sal National Forest (Plate 3-4). The mine portals were sealed in May 2001, at which time, the Permittee notified the Division of Temporary Cessation status (Section 3.3.6.4).

Plate 3-5 Post Mining Contour Map Reclamation Phase 1 should show contour intervals within the permit area and area immediately adjacent similar to those shown on Plate 3-7 Contemporaneous Reclamation, in accordance with R645-301-542.300.

Two different hatch marks are found on Plate 3-7, only one is explained in the legend. Plate 3-7 legend should explain all hatched areas shown on the map.

Deficiencies Details:

The application does not meet the Clear and Concise R534-301-121.200 requirements. The following deficiency must be addressed prior to final approval:

R645-301-121.200,

Correctly identify Parcel L3-0011-0003 in the narrative on Chapter 2 page 4.

Provide contour intervals on Plate 3-5 Post Mining Contour Map Reclamation Phase 1. Contour intervals should be shown within the permit area and extending outward 100 feet in all directions in accordance with R645-301-521.150.

Plate 3-2 Mining Plan must show the mining plan in the current leases in accordance with R645-301-521.140.

Plate 3-7 legend should explain all hatched areas shown on the map.

pburton

Permit Application Format and Contents

Analysis:

The amendment does not meet the State of Utah R645 requirements for permit application format and contents at R645-301-121.200 and .300;

The current MRP, amendment and associated text changes are not in the format approved by the Division (R645 rules). Realizing this task will take some time a commitment and timeline for submittal is acceptable for this amendment.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for permit application format and contents at R645-301-121.200 and .300;

The current MRP, amendment and associated text changes are not in the format approved by the Division (R645 rules). Realizing this task will take some time a commitment and timeline for submittal is acceptable for this amendment.

jhelfric

Reporting of Technical Data

Analysis:

Section 1.2 Scope of Operation Chapter 1, Page 2 and 3 do not meet the Coal Program Rules at R645-301-130 and 150. If the acreages in this section of the MRP are correct they need to be retained as part of the historic data for the mine. If they are incorrect they need to be updated.

Chapter 3, Section 3.1, the following text needs to be retained as part of the history of the mine.

Coal mining at the Trail Mountain Mine ceased as of March 15, 2001. In preparation of temporary cessation, all mining equipment including; production (longwall-311 and continuous miner), belt haulage and electrical were removed from the mine. Verification of equipment removal \ .. '3s conducted on April 6, 2001 with Bureau of Land Management (Steve Falk) and Division of Oil, Gas and Mining (Pete Hoss) participating in the review. A plan to construct permanent seals was submitted to and approved by the Mine Safety Health Administration. Sealing of the mine portals was completed on May 1, 2001.

Deficiencies Details:

Section 1.2 Scope of Operation Chapter 1, Page 2 and 3 do not meet the Coal Program Rules at R645-301-130 and 150. If the acreages in this section of the MRP are correct they need to be retained as part of the historic data for the mine. If they are incorrect they need to be updated.

Chapter 3, Section 3.1, the following text needs to be retained as part of the history of the mine.

Coal mining at the Trail Mountain Mine ceased as of March 15, 2001. In preparation of temporary cessation, all mining equipment including; production (longwall-311 and continuous miner), belt haulage and electrical were removed from the mine. Verification of equipment removal \ .. '3s conducted on April 6, 2001 with Bureau of Land Management (Steve Falk) and Division of Oil, Gas and Mining (Pete Hoss) participating in the review. A plan to construct permanent seals was submitted to and approved by the Mine Safety Health Administration. Sealing of the mine portals was completed on May 1, 2001.

jhelfric

Maps and Plans

Analysis:

The amendment does not meet the State of Utah R645 requirements for Maps and Plans. The following deficiency must be addressed prior to final approval:

Deficiencies Details:

R645-301-521.141, R645-301-121.200: In the legal description of the permit area defining the main mine site, Exhibit A describes an area that is defined by the centerline of the county road along the east side of the property. However, numerous mapped references of the permit area (Plates 3-1, 3-4) delineate the eastern boundary of the property as the western edge of the county road, and not the centerline. This is a point of confusion because there cannot be two different lines defining the same area. The legal description and the permit area as defined on all mine maps must be the same. Permittee must update all maps and plates so that the permit boundary reflects the legal description. Specifically, this requires that the lines defining the eastern edge of the permit boundary be moved from the western edge of the county road to the centerline on all maps and plans.

jeatchel

Maps and Plans

Analysis:

The amendment does not meet the State of Utah R645 requirements for Maps and Plans.

Plate 3-4 does not clearly delineate the permit area boundary for the main mine site and the waste rock site. All three areas of focus use different boundary markers for the Fossil Rock Mine Permit Area and the Waste Rock Storage Site. The permit boundaries for these two sites must be the same.

Plate 4-1 does not clearly identify coal or surface ownership and it does not show a clear permit boundary for the mine and waste rock site. The legend on Plate 4-1 has coal ownership and surface ownership grouped together making it difficult to tell what the color coding is identifying. The color coded areas and associated labels must be grouped by coal ownership and surface ownership and each group must be labeled according to the referenced colors.

The permit boundary must be consistent between the waste rock site and the main mine site. It is unclear if the boundary of the waste rock site is a permit boundary or lease boundary. The plate should show the main mine site and the waste rock site surrounded using the same permit boundary delineation.

Additionally, disturbed area is separate from ownership. It is confusing to include it as a color delineating an area on the ownership map. In order to clear up the map, disturbed area must be removed from the ownership map.

Legend colors should be uniquely distinct from each other. The colors used for Permit Area and Unleased Federal Coal are too close together making it difficult to identify the respective areas on the map.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Maps and Plans. The following deficiencies must be addressed prior to final approval:

Plate 3-4 does not clearly delineate the permit area boundary for the main lease area and the waste rock site. All three areas of focus use different boundary markers for the Fossil Rock Mine Permit Area and the Waste Rock Storage Site. The permit boundaries for these two sites must be the same.

Plate 4-1 does not clearly identify coal or surface ownership and it does not show a clear permit boundary for the mine and waste rock site. The legend on Plate 4-1 has coal ownership and surface ownership grouped together making it difficult to tell what the color coding is identifying. The color coded areas and associated labels must be grouped by coal ownership and surface ownership and each group must be labeled according to the referenced colors.

The permit boundary must be consistent between the waste rock site and the main mine site. It is unclear if the boundary of the waste rock site is a permit boundary or lease boundary. The plate should show the main mine site and the waste rock site surrounded using the same permit boundary delineation.

Additionally, disturbed area is separate from ownership. It is confusing to include it as a color delineating an area on the ownership map. In order to clear up the map, disturbed area must be removed from the ownership map.

Legend colors should be uniquely distinct from each other. The colors used for Permit Area and Unleased Federal Coal are too close together making it difficult to identify the respective areas on the map.

kstorrar

Maps and Plans

Analysis:

The application does not meet the R645 regulations for geologic maps. The Operator has supplied updated maps which describe the Geology of the proposed permit and adjacent area as required by R645-301-624. Plate 6-1 is geological cross section of the area. Plate 6-2 is a Geology base map and shows the general geology of the permit and adjacent area. Plate 6-3 is a Structural contour map. Plate 6-4 is an Isopach map of the Hiawatha coal seam. Plate 6-5 is an Isopach map of the Hiawatha seam overburden. It appears that most of these maps are reproductions of the existing Trail Mountain mine maps, which were updated to reflect the new name and ownership of this mine (Fossil Rock).

However, it appears that there is an error in the map legend on the maps describing the coal seams. The Hiawatha seam is shown in black and the Blind Canyon is shown in Blue on Plates 6-3, 6-4, and 6-5. In reality it should be just the opposite with the Hiawatha seam shown in blue and the Blind Canyon seam shown in black. Other than the problems with the color in the legends, the maps seem to be fine and show the required information.

Deficiencies Details:

The application does not meet the R645-301-624 regulations for geologic maps. It appears that there is an error in the map legend on the maps describing the coal seams. The Hiawatha seam is shown in black and the Blind Canyon is shown in Blue on Plates 6-3, 6-4, and 6-5. In reality it should be just the opposite with the Hiawatha seam shown in blue and the Blind Canyon seam shown in black. The legend should be corrected to show the correct seams with the correct color and hatch pattern.

dhaddock

Environmental Resource Information

Permit Area

Analysis:

The amendment meets the State of Utah requirements for Permit Area.

A previous deficiency required that the Permittee clarify the ownership of the perpetual discharge from the Cottonwood mine. Section 7.5.2 states that Emery County accepts ownership and all accompanied maintenance of the culvert that carries the discharge water from the Cottonwood mine under the county road to the Fossil Rock bypass culvert. A signed letter from the Emery county road department in appendix 3-11 verifies that the county has agreed to these terms. Plate 7-12 also includes catchment designs for the discharge outfall that the Permittee will construct to catch the mine water discharge from Cottonwood mine upon reclamation.

Also addressed in this deficiency are the disturbance acreage totals, which were previously incorrect. Red line text in chapter 2 correctly states that the total disturbed acreage is 29.07 acres. This total takes into account the 13.25 acres for the mine site and the 15.82 acres for the waste rock site.

jatchel

Historic and Archeological Resource Information

Analysis:

The amendment meets the State of Utah R645 requirements for R645-301-411, Historic and Archeological Resource Information;

The strike-out text in section 3.4.2.1 paragraph 2 is clarified in section 3.4.2.2.

jhelfric

Vegetation Resource Information

Analysis:

The amendment does not meet the State of Utah R645 requirements for Fish and Wildlife Resource Information at R645-301-322;

The amendment needs to include vegetation maps with the appropriate permit boundary delineated.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Fish and Wildlife Resource Information at R645-301-322;

The amendment needs to include vegetation maps with the appropriate permit boundary delineated.

jhelfric

Fish and Wildlife Resource Information

Analysis:

The amendment does not meet the State of Utah R645 requirements for Fish and Wildlife Resource Information at R645-301-322;

The amendment needs to include wildlife maps with the appropriate permit boundary delineated.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Fish and Wildlife Resource Information at R645-301-322;

The amendment needs to include wildlife maps with the appropriate permit boundary delineated.

jhelfric

Operation Plan

Mining Operations and Facilities

Analysis:

The amendment meets the State of Utah R645 requirements for Mining Operations and Facilities.

A previous deficiency requested that the Permittee not remove descriptive or adjective parts of sentences that are required for clarity in certain narrative sections in chapter 3. The narrative has been amended to include clarifying adjectives where appropriate.

Additionally, the original narrative in Section 3.3.6 incorrectly stated that the mine was in temporary cessation. Narrative has since been changed stating that Permittee moved out of temporary cessation in June 2016.

jeatchel

Relocation or Use of Public Roads

Analysis:

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

A previous deficiency required that the Permittee restore the descriptive text detailing access to the site from the county road in Chapter 3 Section 3.2.10. Narrative in Section 3.2.10 has been edited to comply with these requirements.

jeatchel

Coal Recovery

Analysis:

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

A previous deficiency identified several items that needed to be addressed prior to full approval. The first required that the Permittee justify why 1,026,564 tons of coal within the lease is no longer recoverable. Narrative in Section 3.3.3.2 clarifies that this coal is not recoverable because it is located in pillars that are holding up the mine and maintaining the physical integrity intact.

A second item required that the Permittee add narrative in 3.3.6 describing proposed mining operations. Red line text in Section 3.3.6 states that development mining may begin in 2018, and proposes an operating schedule that is similar to the schedule that was being followed by the previous owners of the lease.

jeatchel

Fish and Wildlife Protection and Enhancement Plan

Analysis:

The amendment meets the State of Utah R645 requirements for R645-301-411, Fish and Wildlife Protection and Enhancement Plan;

The strikeout text in section 3.4.6.1, .2 and .3 is adequately addressed and included in section 10.4

jhelfric

Road Systems Classification

Analysis:

The amendment meets the State of Utah R645 requirements for Road Systems Classification.

A previous deficiency required the Permittee to classify each road on the permit area as primary or ancillary. Narrative in section 3.2.10 describes the layout of the mine site and classifies each access road as primary or ancillary and details the considerations that were made in regards to disturbance and environmental impacts to public and private property.

jeatchel

Spoil Waste Coal Mine Waste

Analysis:

The amendment meets the State of Utah R645 requirements for Spoil Waste/Coal Mine Waste.

In a previous deficiency, narrative had been removed in section 3.3.5.3 indicating that there are to be no refuse piles at the mine site. The narrative has since been amended to include this wording. Additionally, erroneous acreages defining the area of the waste rock site was present in the original MRP. The text in the MRP has since been amended to reflect the correct acreages.

jeatchel

Hydrologic Diversion General

Analysis:

The amendment meets the State of Utah R645 requirements for Diversions.

The amendment provides a design for conveying perpetual discharge from the county culvert outlet down to the reclaimed Cottonwood Canyon Creek stream channel. The perpetual discharge from the Cottonwood mine currently flows through the county culvert and into Fossil Rock mine's bypass culvert. At reclamation the Fossil Rock mine will convey this discharge from the outlet of the county culvert across a stable diversion and into the reclaimed channel along Cottonwood Canyon Creek. The amendment provides a cross-section of the design in Plate 7-12. The county has agreed to maintain the culvert running under the road and provides a signed letter stating this in Appendix 3-11. The perpetual discharge is very high quality groundwater and has flowed at a constant rate since it began discharging when Cottonwood mine was shut down.

kstorrar

Hydrologic Sediment Control Measures

Analysis:

The amendment does not meet the State of Utah R645 requirements for Sediment Control Measures.

R645-301-741: The amendment includes a narrative that does not take appropriate measures to, 'Prevent to the extent possible additional contributions of sediment to stream flow or to runoff outside the permit area'. The fourth paragraph on p. 24 within Chapter 7, discusses the potential for additional contributions of sediment to Cottonwood Canyon Creek. The paragraph does not discuss sediment control measures that will be taken to prevent offsite impacts. The paragraph should be expanded upon to include all sediment control measures that will be taken to prevent offsite impacts or the paragraph should be removed.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Sediment Control Measures. The following deficiency must be addressed prior to final approval:

R645-301-741: The amendment includes a narrative that does not take appropriate measures to, 'Prevent to the extent possible additional contributions of sediment to stream flow or to runoff outside the permit area'. The fourth paragraph on p. 24 within Chapter 7, discusses the potential for additional contributions of sediment to Cottonwood Canyon Creek. The paragraph does not discuss sediment control measures that will be taken to prevent offsite impacts. The paragraph should be expanded upon to include all sediment control measures that will be taken to prevent offsite impacts or the paragraph should be removed.

kstorrar

Support Facilities and Utility Installations

Analysis:

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

A previous deficiency made reference to narrative within this section that wasn't clear due to the removal of certain text - specifically why "explosive magazines" and "calcium chloride tanks" were removed from section 3.2.3. The text has been amended and the strikeout removed to render the narrative more clear.

jeatchel

Explosives General

Analysis:

The amendment meets the State of Utah R645 requirements for General Explosives.

A previous deficiency made reference to the fact that narrative had been removed within the MRP that details explosive storage on site. The narrative has since been restored to include items that were previously omitted. In addition to this, the narrative points out that there has not been active blasting on site since 2001. Blasting activities may once again resume in the future, at which point the commitments outlined in this section will apply.

jeatchel

Explosives Preblasting Survey

Analysis:

The amendment meets the State of Utah R645 requirements for Explosives Preblasting Survey.

A previous deficiency made reference to the fact that narrative had been removed within the MRP that describes preblasting surveys. The narrative has since been restored to address the omitted text. Since there are no plans to utilize more than five pounds of blasting agent in any eight millisecond period, a preblast survey is not required as per R645-301-524.300

jeatchel

Explosives General Performance Standards

Analysis:

The amendment meets the State of Utah R645 requirements for Explosives General Performance Standards.

A previous deficiency made reference to the fact that narrative had been removed within the MRP that describes general explosives performance standards. The narrative has since been restored to include items that were previously omitted. In addition to this, the narrative points out that there has not been active blasting on site since 2001. Blasting activities may once again resume in the future, at which point the commitments outlined in this section will apply.

jeatchel

Explosives Blasting Signs Warnings Access Control

Analysis:

The amendment meets the State of Utah R645 requirements for Explosives Blasting Signs Warnings Access Control.

A previous deficiency found this section to be lacking a narrative appropriate to a blasting plan. Section 3.3.5.4 makes it clear that the blasting activities at this mine have been notably absent for 16 years, and lays out blasting commitments that will be followed should the mine return to full production.

jeatchel

Explosives Control of Adverse Effects

Analysis:

The amendment meets the State of Utah R645 requirements for Explosives Control of Adverse Effects.

A previous deficiency found this section to be lacking a narrative appropriate to a blasting plan. Section 3.3.5.4 makes it clear that the blasting activities at this mine have been notably absent for 16 years, and lays out blasting commitments that will be followed should the mine return to full production.

jeatchel

Explosives Records of Blasting Operations

Analysis:

The amendment meets the State of Utah R645 requirements for Explosives Records of Blasting Operations.

A previous deficiency found this section to be lacking a narrative appropriate to a blasting plan. Section 3.3.5.4 makes it clear that the blasting activities at this mine have been notably absent for 16 years, and lays out blasting commitments that will be followed should the mine return to full production. Additionally, Exhibit 1 in Appendix 3-6 provides a typical report that would be compiled to satisfy the requirements of this section.

jeatchel

Maps Facilities

Analysis:

The amendment meets the State of Utah R645 requirements for Facilities Maps.

This section was previously found deficient because Plate 3-1 did not accurately reflect the language in section 3. The facilities on Plate 3-1 have been updated to match the text in section 3.

jeatchel

Maps Mine Workings

Analysis:

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

A previous deficiency required that clarifying narrative previously omitted be restored to section 3. The strikeout text of section 3.3.1.4 has been removed and the text now references Plate 3-2, which shows the layout of mined out panels as well as locations of future mining development along 3rd West Mains and two small longwall panels in the U-49332 coal lease area.

jeatchel

Reclamation Plan

General Requirements

Analysis:

The amendment meets the State of Utah R645 requirements for General Requirements.

A previous deficiency required that the Permittee clarify the ownership of the perpetual discharge from the Cottonwood mine. Section 7.5.2 states that Emery County accepts ownership and all accompanied maintenance of the culvert that carries the discharge water from the Cottonwood mine under the county road to the Fossil Rock bypass culvert. A

signed letter from the Emery county road department in appendix 3-11 verifies that the county has agreed to these terms. Plate 7-12 also includes catchment designs for the discharge outfall that the Permittee will construct to catch the mine water discharge from Cottonwood mine upon reclamation.

jeatchel

Mine Openings

Analysis:

The amendment meets the State of Utah R645 requirements for Mine Openings.

A previous deficiency pointed out that according to the State of Utah R645 regulations, (specifically R645-301-513.500, R645-301-529, and R645-301-551) the Permittee will not remove an adjective of the noun from the conclusion sentence in the second paragraph of Chapter 3 Section 3.2.2 thereby making the sentence in a passive voice that is not clear and concise. Further, the Permittee was required to reword the sentences for clarity, and re-write all sentences entirely in an active voice.

The Permittee restored all of the adjectives of the nouns in Section 3, and now satisfies the State of Utah R645 requirements.

jeatchel

Revegetation Timing

Analysis:

The amendment does not meet the State of Utah Requirements for revegetation timing R645-301-354;

Chapter 3, Section 3.4.1 Preservation of Land Use has been revised to refer the reader to Sections 3.5.1 and 3.5.2 for a description of the seeding plan. These sections are for contemporaneous reclamation. The permittee needs to refer the reader to the section(s) of the MRP that describe timing for final reclamation or remove the redline strikeout from section 3.4.1 of the MRP.

Section 3.4.1.1 strikes out the acreage. The correct acreage should be included in all sections of the MRP where it has been deleted.

Deficiencies Details:

The amendment does not meet the State of Utah Requirements for revegetation timing R645-301-354;

Chapter 3, Section 3.4.1 Preservation of Land Use has been revised to refer the reader to Sections 3.5.1 and 3.5.2 for a description of the seeding plan. These sections are for contemporaneous reclamation. The permittee needs to refer the reader to the section(s) of the MRP that describe timing for final reclamation or remove the redline strikeout from section 3.4.1 of the MRP.

Section 3.4.1.1 strikes out the acreage. The correct acreage should be included in all sections of the MRP where it has been deleted.

jhelfric

Cessation of Operations

Analysis:

The amendment meets the State of Utah R645 requirements for Cessation of Operations.

A previous deficiency required that the Permittee amend the MRP to clarify the current status of the mine. Narrative in 3.3.6 and 3.3.6.4 makes it clear that the mine was originally placed into cessation in 2001, but was moved out of cessation in June 2016 when mining activities resumed at the waste rock site. Fossil Rock is now considered active.

jeatchel

Bonding Determination of Amount

Analysis:

A full revision of the current bond is contemplated in the Mid-Term review (Task #5488).

jeatchel