



Technical Analysis and Findings
Utah Coal Regulatory Program

PID: C0150019
TaskID: 4789
Mine Name: COTTONWOOD/ WILBERG
Title: REMOVE VOLUME 10 (WASTE ROCK SITE)

Summary

This technical analysis is for the amendment to remove the Cottonwood Waste Rock Site from the Cottonwood/Wilberg MRP and permit area. The waste rock site is contained within Volume 10 of the Cottonwood MRP and is being added to the Trail Mountain MRP as Volume 4.

Energy West submitted three amendments. The first amendment is to Permit # C/015/0019 to remove the Cottonwood waste rock site from its MRP. The second amendment is to Permit # C/015/0009 to add the waste rock site to its MRP. The third amendment is to the legal and financial volume to amend the text and appendices affected by the transfer of the site from one permit to another. The three amendments were submitted simultaneously but evaluated as separate tasks.

The three amendments propose no changes to environmental resources, operations, or reclamation design. It is simply a transfer of a permitted area (25.85 acres consisting of the Waste Rock Site) from one mines MRP (Cottonwood/Wilberg) to another (Trail Mountain) and both mines are owned by Energy West Mining Company, a subsidiary of PacifiCorp. Therefore, a technical analysis was not necessary for the sections of Environmental Resource Information, Operation Plan, Reclamation Plan, or Special Categories.

This application is not categorized as a significant revision as it does not involve changes or circumstances set forth in R645-303-224.

Deficiencies Details:

None

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The Division of Oil, Gas and Mining (the Division) received an amendment to remove the Cottonwood-Wilberg waste rock site from the mine MRP by Energy West (the Permittee) on January 30, 2015. The Division has assigned Task ID #4789 to the amendment. The Cottonwood-Wilberg waste rock site is currently permitted as the waste rock disposal site for the Cottonwood-Wilberg, Trail Mountain and Des-Bee-Dove mines. The Des-Bee-Dove mine and Cottonwood-Wilberg mines will no longer need to dispose of waste rock because they have been fully reclaimed or are in the process of reclamation, respectively. The Trail Mountain mine is in temporary cessation, however the mine provides access to the very large Cottonwood lease coal tract. Therefore, the Permittee seeks to transfer the waste rock site from the current Cottonwood-Wilberg MRP to the Trail Mountain MRP in anticipation of any future coal extraction from the Trail Mountain mine and subsequent waste rock production associated with coal mining activities. This task is processed by the Division as a Permit Amendment per R645-303-223 because there is no increase in the Permit area and the amendment falls within the current Cumulative Hydrologic Impact Area (CHIA).

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## General Contents

### Completeness

*Analysis:*

All legal and financial aspects of the transfer are being handled in a separate task (4791) and is evaluated there.

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## Environmental Resource Information

### General

*Analysis:*

The application proposes no changes to the existing and approved MRP for both Cottonwood/Wilberg or Trail Mountain and therefore will not affect environmental resources such as historic and archaeological resources, vegetation, fish and wildlife or land use.

An updated permit area map is provided on page 57/71 and is identified as 1-2, CM-10370-WB

An updated vegetation map is provided on page 60/71 and is identified as 2-15A, CE-10829-WB

An updated raptor map is provided in the confidential volume and plate 2-20 and 2-20A consists of updated mule deer and elk habitat maps

An updated land use map is provided on page 62/71 and marked as plate 2-19

All references to the date of transfer to the Trail Mountain Mine permit (C/015/0009) need to be changed from January 2015 to March 2015. (See part 3, pages 20& 45 Part 4 page 26, )

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## Operation Plan

### Mining Operations and Facilities

*Analysis:*

The transfer of the Waste Rock Site does not affect any mining operations since the Cottonwood/Wilberg Mines are undergoing reclamation and mining is complete.

All references to the Cottonwood Waste Rock Site are changed to the Trail Mountain Waste Rock Site in Volume 2, Part 3, Mining Operation Plan.

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### Spoil Waste Coal Mine Waste

*Analysis:*

**Analysis:**

The Permittee, Energy West Mining Company, submitted Task ID # 4789 for the purpose of removing the Cottonwood / Wilberg active waste rock disposal site from the C/015/019 permit. All information addressing the requirements in the R645 Coal Mining Rules for coal mine waste, refuse piles, and the impounding structure at this site is included in Volume 10 of the MRP. Therefore, the removal of Volume 10 from this permit is required.

The Permittee submitted revised page vi of the INTRODUCTION, and pages 44 and 45 from Volume 2, Part 3 which delete information about the CWW waste rock site and add text transferring the waste rock site and its approved / permitted information contained in Volume 10. Volume 10 contains information addressing engineering requirements relative to compaction, lift thickness, slope requirements, etc., as well as information about the sediment containment pond providing the runoff control and treatment of precipitation intercepting the disturbed area acreage of the waste rock site. These text changes are minor, and have no affect on the engineering information contained in the Volume 10 document.

**Findings:**

Pages vi of the INTRODUCTION, and pages 44 and 45 of Volume 2, Part 3 relative to the Cottonwood / Waste rock site should be approved as submitted.

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## Hydrologic General

*Analysis:*

The application to remove the waste rock site from the Cottonwood-Wilberg MRP meets the minimum Hydrology requirements per R645-301-700. The application has completely and correctly removed all references to the Cottonwood-Wilberg waste rock site in the MRP in the following sections:

Volume 1, Part 2 - Appendix A: Hydrologic Monitoring Program

Volume 1, Part 2 – Appendix A: Hydrologic Water Monitoring Map – Plate HM-1B

Volume 9, Appendix A-2: Hydrologic Monitoring Program

Volume 9, Appendix A-2: Hydrologic Water Monitoring Map -- Plate HM-1B

Volume 9, Appendix A-2: Hydrology – Monitoring Program table

Volume 10: Volume completely removed from MRP. This volume specifically outlined all the Hydrology requirements per R645-301-700.

**Findings:**

The application is recommend for conditional approval upon receipt and inclusion of the up-to-date Cottonwood-Wilberg mine UPDES permit into the MRP.

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## Maps Certification Requirements

*Analysis:*

**Analysis:**

The Task ID # 4789 application contains the following maps, which the Permittee indicates are to replace the maps currently approved in the mining and reclamation plan. The Plates to be replaced are as follows;

1) CM-10519-WB, Coal Lease and Ownership Map

2) CM-10520-WB, Surface Ownership Map

3) CM-10370-WB, Permit Area Map

4) CM-10489-WB, Vegetation Map, Cottonwood / Wilberg Permit Area

5) CM-10829-WB, Vegetation Map, Cottonwood / Wilberg Permit Area Showing Hedysarum Occidentale Variant Canone

6) CM-10497-WB, General Soils Map

7) CM-10542-WB, Mule Deer Habitat

8) CM-10597-WB, Land Use Map

9) CM-10907-WB, Elk Habitat

10) CM- 10807-WB, Life of Mine / Hiawatha Seam

11) CM-10742-WB, East Mountain Spring and Subsidence Monitoring Location Map

12) Plate HM-1B, East Mountain Property Hydrology.

All of these maps being submitted have placed P.E. or professional geologist stamps on them. However, none of the stamps have signatures by the submitting engineer or geologist, or the dates of signature, which are required under R156-22-601, as mandated by the Utah Division of Professional Licensing.

As none of the drawings to replace those within the approved MRP are certified, the Division can only grant a conditional approval of the Task ID # 4789 application. In accordance with the requirements of R645-301-512.100, Cross Sections and Maps, upon conditional approval by the Division, all maps must be signed and dated by the verifying professional engineer / professional geologist before the Division can grant final approval of Task ID # 4789.

**Findings:**

All maps submitted to replace those in the approved MRP must be signed and dated by the verifying professional engineer / professional geologist before the Division can grant final approval of Task ID # 4789. (See R645-301-512.100, -512.120, -512.130, -512.140, -512.150, -512.200, -512.230, -512.240, -512.250

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## Reclamation Plan

## General Requirements

### Analysis:

The Waste Rock Site is removed from the Cottonwood/Wilberg Reclamation Plan on page 37/71. However, there are no changes to the engineering design and/or technical aspects to reclamation of the site.

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## Bonding Form of Bond

### Analysis:

#### Analysis:

The bond held by the Division to ensure the reclamation of the Cottonwood / Wilberg Mine and its associated surface disturbances is a surety bond, with the insurer being Travelers Casualty and Surety Company of America (Bond # 1037771497). This provider has an A.M. Best rating of A++. The bond amount insured is \$ 2,779,000.

#### Findings:

This information meets the requirements of R645-301-800 and R645-301-820.221.

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## Bonding Determination of Amount

### Analysis:

#### Analysis:

The Division completed a mid-term permit evaluation of the Cottonwood / Wilberg Mine permit including a review of the reclamation cost estimate on June 8, 2012 (Task ID#4078 for Final Approval, Bond Evaluation conducted under Task ID # 4003).

The Permittee submitted a revised reclamation cost estimate sheet (See Volume 2, Part 4, Appendix C, Bond Summary) as part of the Task ID # 4789 application. The revised sheet deletes the direct costs associated with the demolition, earthwork, Rip Rap, and re-vegetation costs for the Cottonwood / Wilberg waste rock site. The removal of this site from the C/015/019 permit area will reduce the direct costs used to determine the bond amount by \$ 299,718.79.

The amount of direct costs remaining are noted as \$ 1,715,028.86.

Indirect costs associated with the remaining direct costs for the Cottonwood / Wilberg Mine amount to \$ 459,627.73.

The total of the direct and indirect costs for the Cottonwood / Wilberg Mine (less the waste rock site (Removal of Volume 10)) amounts to \$ 2,174,657.00.

All costs are estimated in 2011 dollars.

This Total of the Direct and Indirect Costs (estimated in 2011 dollars) and escalated to 2015 using the 2011 escalation factor of 1.012 (for 4 years) or 1.04887 amounts to \$ 106,277.51.

The Total Cost escalated to 2015 = \$ 2, 280,934.37.

This cost must be escalated to 2016, which is the year of the next Midterm Permit Review.

Thus, \$ 2,280,934.37 X 1.012 (escalation factor for 2015) = \$ 2,308,305.58.

The new bond amount required for the Cottonwood / Wilberg Mine through 2016 is \$ 2,308,000, (2016 dollars).

This amount is a reduction of the original bond amount approved within the Task ID # 4003 midterm permit review of \$ 2,779,000 - \$ 2,308,000 = \$ 471,000.

Thus, Task ID # 4789 has applied for a bond reduction in the amount of \$ 471,000 for Cottonwood / Wilberg Mine bond.

#### Findings:

The Division recommends approval of the bond reduction of \$ 471,000 for the Cottonwood / Wilberg Mine.

The bond amount which must be retained by the Division, made payable to the Division and the US Office of Surface Mining, amounts to \$ 2,308,000.

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