

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

December 22, 2003

Chuck Semborski, Environmental Supervisor
Energy West Mining Company
P.O. Box 310
Huntington, Utah 84528

Re: Update Volume 10 (Waste Rock Site), PacifiCorp, Deer Creek Mine,
C/015/0018, Task ID #1770, Outgoing File

Dear Mr. Semborski:

The above-referenced amendment has been reviewed. There are deficiencies that must be adequately addressed prior to approval. A copy of our Technical Analysis is enclosed for your information. In order for us to continue to process your application, please respond to these deficiencies by January 22, 2004.

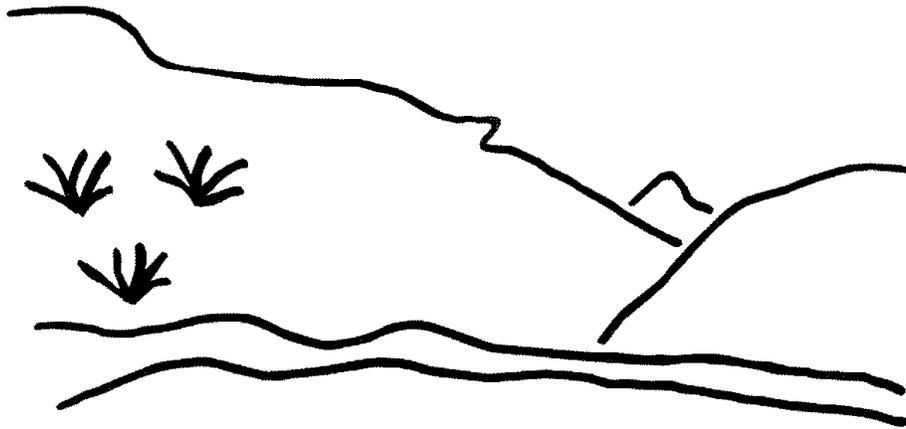
If you have any questions, please call me at (801) 538-5325 or Stephen J. Demczak at (435) 613-5242.

Sincerely,

Daron R. Haddock
Permit Supervisor

SJD/sd
Enclosure
cc: Price Field Office
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State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Deer Creek Mine
Update to Volume 10
C/015/0018, Task ID #1770
Technical Analysis
December 19, 2003

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TECHNICAL ANALYSIS

TECHNICAL ANALYSIS

The Division ensures compliance with the Surface Mining Control and Reclamation Act of 1977(SMCRA). When mines submit a Permit Application Package or an amendment to their Mining and Reclamation Plan, the Division reviews the proposal for conformance to the R645-Coal Mining Rules. This Technical Analysis is such a review. Regardless of these analyses, the permittee must comply with the minimum regulatory requirements as established by SMCRA.

Readers of this document must be aware that the regulatory requirements are included by reference. A complete and current copy of these regulations and a copy of the Technical Analysis and Findings Review Guide can be found at <http://ogm.utah.gov/coal>

This Technical Analysis (TA) is written as part of the permit review process. It documents the Findings that the Division has made to date regarding the application for a permit and is the basis for permitting decisions with regard to the application. The TA is broken down into logical section headings that comprise the necessary components of an application. Each section is analyzed and specific findings are then provided that indicate whether or not the application is in compliance with the requirements.

Often the first technical review of an application finds that the application contains some deficiencies. The deficiencies are discussed in the body of the TA and are identified by a regulatory reference that describes the minimum requirements. In this Technical Analysis we have summarized the deficiencies at the beginning of the document to aid in responding to them. Once all of the deficiencies have been adequately addressed, the TA will be considered final for the permitting action.

It may be that not every topic or regulatory requirement is discussed in this version of the TA. Generally only those sections are analyzed that pertain to a particular permitting action. TA's may have been completed previously and the revised information has not altered the original findings. Those sections that are not discussed in this document are generally considered to be in compliance.

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TECHNICAL ANALYSIS

INTRODUCTION

INTRODUCTION

The permittee has submitted an amendment to update Volume 10, Deer Creek Waste Rock Site. Besides updating Volume 10, the permittee has submitted information addressing the asphaltting of the primary road leading to the Waste Rock Site.

The road to the Deer Creek Mine waste-rock disposal site has been surfaced with roto-milled asphalt, which was recycled from a road-resurfacing project in Huntington Canyon. This new surface will greatly reduce dust and reduce or eliminate the need for application of magnesium chloride. Several other changes - addition of vegetation as a sediment control measure along portions of the road, changes in repair of rills and gullies, and alternatives to riprap at inlets and outlets to culverts - have been included in this amendment.

Approval of the resurfacing is recommended as it will reduce air pollution and contribute to controlling sedimentation and erosion along the road. Approval of the changes regarding repair of rills and gullies and alternatives to riprap at culvert inlets and outlets is also recommended.

However, the Permittee needs to provide additional information or clarification regarding the use of vegetation and silt fence as sediment control measures along the road before the proposed change can be approved. Also, the location and extent of silt fence along the outside toe of the fill or "berm fill" at the Waste Rock Site needs to be clarified on maps.

The Division should deny the amendment until the permittee adequately addresses all of the deficiencies.

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INTRODUCTION

GENERAL CONTENTS

SUMMARY OF DEFICIENCIES

The Technical analysis of the proposed permit changes cannot be completed at this time. Additional information is requested of the permittee to address deficiencies in the proposal. A summary of deficiencies is provided below. Additional comments and concerns may also be found within the analysis and findings made in this Draft Technical Analysis. Upon finalization of this review, any deficiencies will be evaluated for compliance with the regulatory requirements. Such deficiencies may be conditioned to the requirements of the permit issued by the division, result in denial of the proposed permit changes, or may result in other executive or enforcement action and deemed necessary by the Division at that time to achieve compliance with the Utah Coal Regulatory Program.

Accordingly, the permittee must address those deficiencies as found within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

Regulations

R645-301-512.250, The professional engineer will certify the design and construction or reconstruction of primary road as meeting the requirements of R645-301-534.200 and R645-301-742-420..... 14

R645-301-527.100, The permittee must classify each road. 14

R645-301-527-200, R645-301-527.210, The plan must include a detailed description of each road and appropriate cross-section. The permittee must update the road design in Volume 10, Chapter 2, Page 2-1..... 14

R645-301-741, The Permittee needs to clearly show the silt fence along the outside toe of the fill or “berm fill” at the Waste Rock Site on either Drawing CM-10778-DR (Map Packet 4-5) or CM-10779-DR (Map Packet 4-6). 18

R645-301-742.100, The paragraph “When revegetation, as outlined in volume 10, page 3-7, chapter 3, has met those requirements, silt fencing or other sediment control means can be removed (with DOGM approval) and vegetation will become the primary treatment method. Any erosion rills that may develop will be addressed as outlined on page 3-7, volume 10.” needs to be retained as part of the MRP. 17

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R645-301-742.110, Page 2-5 of the current permit contains a paragraph that describes the cleaning of the silt fences, but this paragraph has been omitted in the latest revision. Because silt fence is a sediment control measure, this information needs to be retained in the proposed revision..... 17

GENERAL CONTENTS

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

No changes.

Findings:

The permittee has met the minimum requirements of this section.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

No changes.

Findings:

The permittee has met the minimum requirements of this section.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

Analysis:

No changes.

Findings:

The permittee has met the minimum requirements of this section.

LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

Analysis:

The permittee has updated Chapter 10 to reflect the correct disturbed area of the Waste Rock Site as 31.92 acres. This is now the same number used in Volume 1 in the MRP.

Findings:

The permittee has met the minimum requirements of this section.

PERMIT TERM

Regulatory References: 30 CFR 778.17; R645-301-116.

Analysis:

No changes.

Findings:

The permittee has met the minimum requirements of this section.

PUBLIC NOTICE AND COMMENT

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

Analysis:

No changes.

Findings:

The permittee has met the minimum requirements of this section.

GENERAL CONTENTS

FILING FEE

Regulatory Reference: 30 CFR 777.17; R645-301-118.

Analysis:

No changes.

Findings:

The permittee has met the minimum requirements of this section.

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

Changes to Volume 10 have been made. These changes meet the requirements for format and content.

Findings:

The permittee has met the minimum requirements of this section.

REPORTING OF TECHNICAL DATA

Regulatory Reference: 30 CFR 777.13; R645-301-130.

Analysis:

Not all of the technical designs have been submitted. New primary road designs are required for the road to the Waste Rock Site. A deficiency will be addressed in the engineering section of this review.

Findings:

The permittee has met the minimum requirements of this section.

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

No changes.

Findings:

The permittee has met the minimum requirements of this section.

COMPLETENESS

Regulatory Reference: 30 CFR 777.15; R645-301-150.

Analysis:

This amendment has been determined complete for review.

Findings:

The permittee has met the minimum requirements of this section.

OPERATION PLAN

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

No changes.

Findings:

The permittee has met the minimum requirements of this section.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

Analysis:

Road Classification System

The permittee in Volume 10 has not classified the road to the Waste Rock Site. All roads must be classified as either primary or ancillary roads. This road should be classified as a primary road, because the road will be used in excess of six months. The coal-mine waste area, including ramps and the immediate mining area, is not a road. But, from the gate to the topsoil stockpile (approx.) will be considered a road access to the mine waste disposal site. The elevation or route to the mine Waste Rock Site has never changed, except for paving the road with asphalt in the summer. It is ¼ to ½ mile in distances to the disposal area. No coal-mine waste can be placed on or near the road. It has metal culverts passing under the road and a side diversion to keep water off the road. No metal can be placed within a refuse pile (coal mine waste pile). On page 2 of 3 in the Hydrologic information of this letter, states "Waste Rock Site Access Road" and "Deer Creek Waste Access Road". Further quotes in the approved MRP stating this is an access road. On Page 2-1 in Volume 10 gives a road design prior to asphaltting the road. An update of design and cross-section is necessary for approval of this amendment. The cross-section must be P.E. certified.

OPERATION PLAN

A MSHA inspector considers this to be an access road to the coal mine waste disposal site. If this area is not an access road, but is now considered the immediate mining area (Waste Rock Site). MSHA could change the requirements for this area such as having a safety berm or guardrail for the total $\frac{1}{4}$ to $\frac{1}{2}$ miles. The permittee would have to submit an amendment to address 30 CFR 77.214 and 30 CFR 77.215 with MSHA for reflecting this change. This is a requirement of R645-301-536.900. An approval from MSHA would have to come first prior to Division approval.

Plans and Drawings

The permittee has asphalted the road to the Waste Rock Site. This road meets the requirements of a primary road in the R645 Coal Rules. Therefore, the permittee must update the cross sections of this road as required in R645-301-527.200 and R645-301-527.210.

Primary Road Certification

A professional engineer will certify the design and construction or reconstruction of primary roads as meeting the requirements of R645-301-534.200 and R645-301-742.420.

Findings:

The permittee did not meet the minimum requirements of this section. Prior to approval the permittee must address the following R645 Coal Rules.

R645-301-512.250, The professional engineer will certify the design and construction or reconstruction of primary road as meeting the requirements of R645-301-534.200 and R645-301-742-420.

R645-301-527.100, The permittee must classify each road.

R645-301-527-200, R645-301-527.210, The plan must include a detailed description of each road and appropriate cross-section. The permittee must update the road design in Volume10, Chapter 2, Page 2-1.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

OPERATION PLAN

Analysis:

Impounding Structures

The permittee has added the requirement of examine the impoundments four times per year. Structural weakness, erosion, and other hazardous conditions, if identified, will be reported

The permittee made a commitment in the MRP to do inspections of the sediment pond. Those reports will include the quarterly inspection by a qualified individual and a yearly inspection that is certified by a registered professional engineer.

Findings:

The permittee has met the minimum requirements of this section.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Sediment Control Measures

Silt Fence and Vegetation

In the proposed revision of Table I, the Permittee indicates silt fence and vegetation as methods of Sediment Control for several small areas, totaling 0.11 acre, along the Waste Rock Site Access Road: up until now these small areas have been treated by silt fence only. These areas are shown on Drawing 4-5 (CM-10778-DR), along with the areas along the road, totaling 0.58 acre, that are treated by vegetation only.

DOGM approved removal of most of the silt fence along Waste Rock Site access road effective May 13, 1997 (ACT/015/018-97A). However, based on a review of revegetation cover done by both DOGM and Energy West personnel during the summer of 1996, vegetation was found deficient to control sedimentation and erosion along specific sections of the Waste Rock Site Access Road. Silt fence was therefore retained as the sediment control measure in those specific locations, totaling 0.11 acre. The proposed revision would add vegetation as a sediment

control measure for these locations along the Waste Rock Site Access Road, without eliminating silt fence.

Page 2-10 of the Volume 10 was revised March 26, 1997 to state, "When revegetation, as outlined in volume 10, page 3-7, chapter 3, has met those requirements, silt fencing ... can be removed (with DOGM approval) and vegetation will become the primary treatment method." The Permittee has not submitted data, inspection reports, or other information to show that vegetation now meets the requirements outlined on page 3-7, that vegetation is adequate to control sedimentation. The silt fences are currently full of sediment, indicating vegetation alone is not yet sufficient to provide sediment control. The silt fences must be retained and maintained until it can be demonstrated that vegetation meets the requirements.

The paragraph "When revegetation, as outlined in volume 10, page 3-7, chapter 3, has met those requirements, silt fencing or other sediment control means can be removed (with DOGM approval) and vegetation will become the primary treatment method. Any erosion rills that may develop will be addressed as outlined on page 3-7, volume 10." has been omitted from the revised section R645-301-751. Because silt fence is a sediment control measure, this paragraph needs to be retained as part of the MRP.

Pages 2-5 and 2-6 of the MRP state that, during both Phase I and Phase II of the waste-rock disposal site, silt fence filter will be installed and maintained along the outside toe of the fill or "berm fill". The 1996 review also produced the determination that silt fence was to be retained around the base of this soil berm, and Table I on page 2-10.0 (revised March 26, 1997) shows that sediment control for the 1.72 acres of the Waste Rock Site Berm Outslope ASCA is to be silt fence. The proposed revision still contains these commitments, on pages 2-6 and 2-8, and Table 1 in the proposed revision indicates silt fence will still be the only sediment control measure for this ASCA.

The current permit contains a paragraph that describes the cleaning of the silt fences, but this paragraph has been omitted in the revision. This information needs to be included in the proposed revision.

Repair of Rills and Gullies

Commitments - to control sedimentation and erosion on fill slopes by backfilling where erosion is over 9 inches deep, ripraping small channels that develop where drainage concentrates, and cleaning silt fences - have been stricken in the proposed amendment (page 2-4 of the current MRP). These specific commitments have been replaced by a general commitment (page 2-5 of the proposed amendment) that "Sediment control measures will conform to the requirements of R645-301-742". Although R645-301-742 does not provide the same specificity as the commitments that are being removed, the expected performance results remain: minimize

OPERATION PLAN

erosion, meet effluent limitations, and prevent additional contributions of sediment to streamflow or runoff outside the permit area.

Discharge Structures

Under the discussion of access-road drainage controls on page 2-5 of the current MRP is the commitment to use riprap to control erosion at the inlets and outlets of all culverts. In the proposed change, the words “or other method” have been inserted after “riprap”. “Sediment control measures will conform to the requirements of R645-301-742” has also been added.

There are undoubtedly acceptable methods other than riprap to control erosion at these inlets and outlets. The Permittee has clarified that before any “other methods” are implemented, they will be submitted to the Division for approval.

Findings:

The permittee did not meet the minimum requirements of this section. Prior to approval the permittee must address the following R645 Coal Rules.

R645-301-742.110, Page 2-5 of the current permit contains a paragraph that describes the cleaning of the silt fences, but this paragraph has been omitted in the latest revision. Because silt fence is a sediment control measure, this information needs to be retained in the proposed revision.

R645-301-742.100, The paragraph “When revegetation, as outlined in volume 10, page 3-7, chapter 3, has met those requirements, silt fencing or other sediment control means can be removed (with DOGM approval) and vegetation will become the primary treatment method. Any erosion rills that may develop will be addressed as outlined on page 3-7, volume 10.” needs to be retained as part of the MRP.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Mining Facilities Maps

Drawing CM-10778-DR (Map Packet 4-5) and the current Table I show both vegetation and silt fence are used as sediment control measures along the access road: 0.11 acre treated

OPERATION PLAN

with silt fence and 0.58 acre treated by revegetation. The location and extent of the silt fence along the outside toe of the fill or “berm fill” at the Waste Rock Site is not clearly shown on either Drawing CM-10778-DR (Map Packet 4-5) or CM-10779-DR (Map Packet 4-6).

Findings:

The permittee did not meet the minimum requirements of this section. Prior to approval, the permittee must address the following R645 Coal Rules.

R645-301-741, The Permittee needs to clearly show the silt fence along the outside toe of the fill or “berm fill” at the Waste Rock Site on either Drawing CM-10778-DR (Map Packet 4-5) or CM-10779-DR (Map Packet 4-6).

RECLAMATION PLAN

RECLAMATION PLAN

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

Analysis:

Reclamation

This road will be reclaimed as stated on Page 3-3.

Findings:

The permittee has met the minimum requirements of this section.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

Determination of Bond Amount

The Permittee added the cost for removing the asphalt from the waste-rock road. The Division reviewed those costs and found them to be adequate.

The current bond amount is \$3,000,000. The reclamation cost estimate for the Deer Creek Mine is \$2,469,000. Because the bond amount exceeds the reclamation cost estimate no change to the bond amount is needed.

Findings:

The information submitted in the amendment is considered adequate to meet the minimum requirements of this section of the regulations.