

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

September 4, 2008

TO: Internal File

THRU: Joe Helfrich, Team Lead 

FROM: Wayne H. Western, Environmental Scientist III *WHW*

RE: Permit Application – Kinney #2 Mine, Carbon Resources, LLC, Carbon County, C/007/0047, Task ID #2989

SUMMARY:

On February 19, 2008, the Division received an application for the Kinney #2 Mine. The Division determined the application to be administratively complete on June 24, 2008.

The proposed mine site is approximately ½ mile north of Scofield, Utah and east of Utah State Highway 96. Previous coal mining operations have occurred within much of the mine plan area. The Utah Abandoned Mine Lands Program reclaimed abandoned mine sites that are located within the proposed disturbed area.

R645-301-521, The Applicant must give a description of the permit area in the MRP, such as in Section 2.1.5.1. The information in Section 2.1.5.1 of the application describes the lease areas, which can be different from the permit area. [whw]

R645-301-521.190, The Applicant must include a table that states the acreages for permitted area and the disturbed area and list what acreages are owned by the federal government, State government, local government or private ownership. The Division needs that information for reports that are given to the Office of Surface Mining. [whw]

R645-301-521.120, The Permittee must provide the Division with a map that shows the existing surface and subsurface facilities within the proposed disturbed area. Map 4.5.1.2-4, Mine Surface Facilities Area Pre-Mining Topography, must either be updated or a new map provided that show • the disturbed area boundaries, • list on the map or in the text those existing facilities that will be used in connection with mining. [whw]

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R645-301-521.150, The Applicant must provide the Division with a map the shows the existing surface contours of proposed disturbed areas. The maps that the Applicant supplied the Division do not show the disturbed area boundaries. [whw]

R645-301-521.190, The Applicant must provide the Division with a list of sources that they used to compile the existing mine working map. The Division recommends that the Applicant contact the Utah Geologic Survey and the Office of Surface Mining map repository in Pittsburgh, Pennsylvania. [whw]

R645-301-526.110, The Applicant must list in the text of the MRP all existing structures within the disturbed area that will be used in connection with mining and reclamation activities. The Applicant must also list those structures with the proposed disturbed area that will not be used or reclaimed. [whw]

R645-301-526.116.1 and R645-301-526.116.1, The Applicant must have detailed plan on what work will be done in connection with modifications to Highway 96. Specifically will the Applicant relocated the road or the State. The Division needs to have plans in place or commitments not to begin construction until the plans have been approved. [whw]

R645-301-527.210, The Applicant must show the thickness of asphalt and sub-base on Figure 4-5.3. The Division also needs specific information on asphalt and sub-base thickness. [whw]

R645-301-534.130 and R645-301-121.200, The Applicant must address the safety factor for roads within the text of the MRP. [whw]

R645-301-528.320 and R645-301-121.200, The Applicant must refer to underground development rock as either coal mine waste or underground development waste. Those terms has specific meaning for the Utah Coal Rules while underground development rock does not have a specific meaning and the term could be confusing to the reader. In addition, the Applicant must not refer to low-grade coal as underground development waste. The rules for handling and disposing of coal are much different that coal mine waste. [whw]

R645-301-528.320, The Applicant must specifically state the volume of material that will stored in the temporary underground development waste storage site and the maximum time that material will remain on site. The Division needs so that there will not be any confusion about what constitutes temporary storage. [whw]

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- R645-301-536.510**, If the Applicant wants to ship coal mine waste off site then the Applicant must state specifically to which permitted disposal site the material will be sent. In addition, the receiving site must also be permitted to receive material from the Applicant. [whw]
- R645-301-528.323.1**, The Applicant must state that only authorized personal who understand the plan will be involved with extinguishing the fires. In addition, the Division does not recommend that the Applicant try to extinguish the fire with water due to the possibility of a steam explosion. [whw]
- R645-301-533.100 and R645-301-121.200**, The Applicant must state if any of the impoundments meet the NRCS Class B or C criteria for dams in TR-60, or the size or other criteria of 30 CRF Section 77.216. [whw]
- R645-301-512.240**, The Applicant did not have the designs for Sediment Pond 1 certified by a registered professional engineer. The information in Exhibit 4.7.2.2.1 was not certified. [whw]
- R645-301-533.100 and 533.110**, the Applicant did not specifically state the safety factor for Sediment Pond 1. [whw]
- R645-301-533.300**, The Applicant did not state how Sediment Pond 1 would be protected against sudden drawdown. [whw]
- R645-301-524** The Applicant must address is applicable blasting regulation. Specifically the Applicant must cite each specific regulation and then describe how they will comply. The Division needs to have specific information on how the public will be protected from blasting given the State Highway 96 is within 1,000 of the disturbed area. The Applicant may want to submit the blasting plan at a later day. See R645-301-524.220, when specific blasting plans can be developed. [whw]
- R645-301-553.120**, The Applicant must provide the Division with cross sections for each portal area that show the existing configuration (including any previously mined areas) the proposed operational configuration and the reclaimed configuration. The Division needs that information to evaluate highwall reclamation. [whw]
- R645-301-553.130**, The Applicant must provide the Division with information on the angle of repose and if any of the reclaimed slopes will exceed that angle. [whw]

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R645-301-553.300, The Applicant must provide the Division with cross sections that show that all coal seams will be backfilled with a minimum of four feet of material. [whw]

R645-301-551, The Applicant must also backfill the portal openings with a minimum of 25 feet of material. The main reason is that backfill acts a protection against vandalism to the seals. [whw]

R645-301-542.600, The Applicant must revise the road reclamation plan so that all roads not to be retained as part of the postmining land use will be removed during the bond liability period. The Permittee must also state what roads if any will be retained as part of the postmining land use. [whw]

R645-301-512.130, The Applicant must have all reclamation maps and cross sections certified by a registered professional engineer. [whw]

R645-301-542.200, The Applicant must have provide the Division with maps and cross section that show final reclamation. Map 4.7.2.9-1 does not show the site after final reclamation. The pond, which is scheduled for removal, is shown. In addition, the Applicant must show identify what surface and subsurface manmade features will remain after final reclamation. [whw]

TECHNICAL ANALYSIS:

GENERAL CONTENTS

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

The Applicant did not meet the requirements of this section. The Permittee must include a table that shows the number of federal, state and fee acres in the permit area. In addition, the

Permittee must also include a table that shows the number of acres within the disturbed area. The Division needs this information for a verity of reports.

In Section 2.1.5.1 of the application, the Applicant lists the fee surface, leased surface and leased coal. The Applicant must also state the permit boundaries and disturbed surface boundaries because the fee property and leased property may not be the same as the permit area.

Findings:

The information in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Applicant must provide the following in accordance with:

R645-301-521, The Applicant must give a description of the permit area in the MRP, such as in Section 2.1.5.1. The information in Section 2.1.5.1 of the application describes the lease areas, which can be different from the permit area. [whw]

R645-301-521.190, The Applicant must include a table the states the acreages for permitted area and the disturbed area and list what acreages as owned by the federal government, State government, local government or private ownership. The Division needs that information for reports that are given to the Office of Surface Mining. [whw]

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Affected Area Boundary Maps

The Applicant met the requirements of this section. They provided maps that show the permit and adjacent areas. Such maps include Map 4.5.1.2-1, Regional Surface Ownership Map and Map 4.5.1.2-2, Regional Coal Ownership Map.

Existing Structures and Facilities Maps

The Applicant did not meet the requirements of this section. The Applicant did not provide the Division with a map the adequately shows the existing structures and facilities. The Permittee must provide the Division with a map that:

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- Show the proposed disturbed area boundaries.
- List the existing structures and facilities that will be used by the Applicant.

Existing Surface Configuration Maps

The Applicant did not meet the requirements of this section. The Applicant did not provide the Division with a map that adequately shows the existing surface configuration in connection with the disturbed area boundaries. Map 3.7.2.1-1 shows the existing surface configuration for the permit area.

Mine Workings Maps

The Applicant did not meet the requirements of this section. The Applicant did not list the references used to determine the existing mine workings. The Division requires that the Applicant list the references for the existing mine workings. The Division recommends that the Applicant check with the Utah Geologic Survey and the Office of Surface Mining map repository in Pittsburgh, Pennsylvania.

Permit Area Boundary Maps

The Applicant met the requirements of this section. They provided maps that show the permit and adjacent areas. Such maps include Map 4.5.1.2-1, Regional Surface Ownership Map and Map 4.5.1.2-2, Regional Coal Ownership Map.

Surface and Subsurface Manmade Features Maps

The Applicant met the requirements of this section.

Surface and Subsurface Ownership Maps

The Applicant met the requirements of this section. They provided maps that show the surface and subsurface ownership. Such maps include Map 4.5.1.2-1, Regional Surface Ownership Map and Map 4.5.1.2-2, Regional Coal Ownership Map.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-521.120, The Permittee must provide the Division with a map that shows the existing surface and subsurface facilities within the proposed disturbed area. Map 4.5.1.2-4, Mine Surface Facilities Area Pre-Mining Topography, must either be updated or a new map provided that show • the disturbed area boundaries, • list on the map or in the text those existing facilities that will be used in connection with mining. [whw]

R645-301-521.150, The Applicant must provide the Division with a map the shows the existing surface contours of proposed disturbed areas. The maps that the Applicant supplied the Division do not show the disturbed area boundaries. [whw]

R645-301-521.190, The Applicant must provide the Division with a list of sources that they used to compile the existing mine working map. The Division recommends that the Applicant contact the Utah Geologic Survey and the Office of Surface Mining map repository in Pittsburgh, Pennsylvania. [whw]

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

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

Analysis:

The Applicant did not meet the requirements of this section. The Applicant gave the Division a general overview of the operational plan in Chapter 4 of the application.

Findings:

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

EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

Analysis:

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The Applicant did not meet the requirements of this section. The Applicant must list the existing structures within the disturbed area that will be used in connection with mining. If there are structures that will not be used and not reclaimed then the Applicant list those structures.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-526.110, The Applicant must list in the text of the MRP all existing structures within the disturbed area that will be used in connection with mining and reclamation activities. The Applicant must also list those structures with the proposed disturbed area that will not be used or reclaimed. [whw]

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

Analysis:

The Permittee did not meet the requirements of this section. In Section 4.5.2.1, the Applicant states that "required highway modifications will occur prior to mine development and entirely within the existing Highway 96 right of way.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-526.116.1 and R645-301-526.116.1, The Applicant must have detailed plan on what work will be done in connection with modifications to Highway 96. Specifically will the Applicant relocated the road or the State. The Division needs to have plans in place or commitments not to begin construction until the plans have been approved. [whw]

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

The Applicant meets the requirements of this section. In Section 4.5.2.2 of the MRP, the Applicant describes the coal recovery plan.

Findings:

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

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

The Applicant met the requirements of this section. In Section 4.5.2.2 of the MRP, (page 4.5-28) the Applicant states that no subsidence is anticipated because no longwall mining or second mining (pillar splitting or removal) will occur. The Applicant also stated that the pillars have been sized to prevent failure over the anticipated life of mine.

Based on the pillar design, the Division concludes that subsidence during the anticipated life of mine is not likely to occur. The Division does acknowledge pillars do deteriorate over time and that some subsidence could occur at the mine has been closed.

Renewable Resources Survey

The Applicant does will not conduct mining that will cause planned subsidence.

Subsidence Control Plan

The Applicant does will not conduct mining that will cause planned subsidence.

Performance Standards For Subsidence Control

The Applicant does will not conduct mining that will cause planned subsidence.

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Notification

The Applicant does will not conduct mining that will cause planned subsidence.

Findings:

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

SLIDES AND OTHER DAMAGE

Regulatory Reference: 30 CFR Sec. 817.99; R645-301-515.

Analysis:

The Applicant meets the requirements of this section of the regulations. The Permittee stated in Section 4.6.2.3 of the MRP the reporting plan for slices.

Findings

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

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 Applicant met the requirements of this section. In Sections 4.5.2.1 and 4.5.2.3 of the MRP, the Applicant states that all roads within the disturbed area boundaries will be primary roads.

Plans and Drawings

The Applicant did not meet the minimum requirements of this section. The general requirements for roads include:

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- Maps and cross sections. The Applicant provided profiles for the roads that show grades. The road cross sections on Figure 4.5-3 do not show the amount of road base or asphalt thickness that will be used on the roads.
- Site-specific designs. The Applicant will not construct roads in or around intermittent or perennial streams.
- Reclamation. The Applicant provided a road reclamation plan in section 5.4.2.3 of the MRP, (p 5.4-14).

Performance Standards

The Applicant

- The Division considers that the Applicant will meet the requirements to control erosion and air pollution if the general hydrology and air quality requirements have been met.
- The Division considers that the Applicant prevent damage to fish, wildlife and other habitats if the general biology requirements have been met.
- The Division considers that the Applicant will prevent additional contributions of suspended solids to stream flow or runoff outside the permit area if the general hydrology requirements have been met.
- The Division considers that the Applicant will not violate State or federal water quality standards if the general hydrology requirements have been met.
- The Division found that the Applicant would not alter the flow of water in a streambed or drainage channel as part of road construction.
- The Division found that the Applicant would not construct any roads in intermittent or perennial stream channels.
- The Division considers that the Applicant will prevent or control damage to public or private property if the general hydrology requirements have been met.
- The Applicant committed not to use acid or toxic-forming materials in connection with road construction.
- The Applicant committed to repair a road that is damaged by a catastrophic event. (p. 4.5-39)

In addition to the above requirements, all primary roads must meet the following:

- The Applicant provided the Division with designs that were certified by a registered professional engineer, such as Figure 4.5-3.
- The Applicant stated on page 4.5-38 that all road embankments will have a minimum static factor of safety of 1.3. The Applicant must state in the text of the MRP where the support material can be found. (Exhibit 4.5.2.1-1)
- The Division considers that the roads will minimize erosion if the general hydrology requirements are met.

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- The Applicant did not meet the requirement to show that all road surfaces will be sufficiently durable for the anticipated volume of traffic and weight and speed of the vehicles using the road. The Applicant did not show the asphalt thickness or sub-base in Figure 4.5-3.

Primary Road Certification

The Applicant met this requirement by having the road designs certified.

Other Transportation Facilities

The only other transportation facilities that will be constructed on site are conveyors.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-527.210, The Applicant must show the thickness of asphalt and sub-base on Figure 4-5.3. The Division also needs specific information on asphalt and sub-base thickness. [whw]

R645-301-534.130 and R645-301-121.200, The Applicant must address the safety factor for roads within the text of the MRP. [whw]

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.

Analysis:

Disposal Of Noncoal Mine Wastes

The Applicant met the requirements of this section. In Section 4.5.2.3 (p .4.5-43) of the MRP, the Applicant outlined how they will handle noncoal wastes.

Coal Mine Waste

The Applicant did not meet the requirements of this section. In Section 4.5.2.2 of the MRP, (p. 4.5-22 and p. 4.5-23) the Applicant describes how they will handle coal mine waste. Coal mine waste is defined as coal processing waste and underground development waste.

The Applicant states that they will store much of the underground development waste underground. R645-301-528.321 requires that the Applicant has MSHA approval to dispose of underground development waste in the mine. The Applicant must show that they have MSHA approval to dispose of underground development waste in the mine.

The Applicant states that some underground development waste will be temporarily stored outside the mine. The Applicant also states that the material might be low-grade coal and sold to local preparation facilities or will be disposed of in other facilities permitted by UDOGM.

The Applicant must use terms defined in the R645 Rules. Instead of using the term coal mine development rock or mine development rock the Applicant must use the term underground development waste. The Applicant must use the terms low quality coal and underground development waste to refer to the same material.

Underground development waste is a form of coal mine waste and must be disposed of either underground with MSHA approval or in a refuse pile. The Applicant states that the temporary storage area will have a capacity of approximately 3,900 tons. The Applicant must also state the capacity as a volume and the maximum time that the material will be stored in the temporary pile.

Before the Division can approve any coal mine waste which includes underground development waste off site the Applicant must have UDOGM approved to send the material to a specific refuse pile.

Refuse Piles

The Applicant met the requirements of this section. The Applicant states in Section 4.5.2.2 of the MRP, (p. 4.5-22 and p. 4.5-23) how they will handle coal mine waste. The Applicant does not propose to process the coal so no coal processing waste will be produced. The Applicant will either return underground development waste to the mine or ship it off site to a disposal facility. Therefore, the Applicant will not construct a refuse pile. (p. 4.5-6)

Impounding Structures

The Applicant met the requirements of this section. The Applicant will not construct any impounding structures from coal mine waste.

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Burning And Burned Waste Utilization

The Applicant did not meet the requirements of this section. In Section 4.5-28 of the MRP (p. 4.5-47) the Applicant outlines the process for handling burning waste. The plan is deficient because it does not state that only authorized personal who understand the plan will be involved with extinguishing the fires. In addition, the Division does not recommend that the Applicant try to extinguish the fire with water due to the possibility of a steam explosion.

Return of Coal Processing Waste to Abandoned Underground Workings

See Coal Mine Waste section of the TA.

Excess Spoil:

The Applicant met the requirements of this section. On page 4.5-40 of the MRP, the Applicant states that there will be no excess spoil generated on site.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-528.320 and R645-301-121.200, The Applicant must refer to underground development rock as either coal mine waste or underground development waste. Those terms has specific meaning for the Utah Coal Rules while underground development rock does not have a specific meaning and the term could be confusing to the reader. In addition, the Applicant must not refer to low-grade coal as underground development waste. The rules for handling and disposing of coal are much different that coal mine waste. [whw]

R645-301-528.320, The Applicant must specifically state the volume of material that will stored in the temporary underground development waste storage site and the maximum time that material will remain on site. The Division needs so that there will not be any confusion about what constitutes temporary storage. [whw]

R645-301-536.510, If the Applicant wants to ship coal mine waste off site then the Applicant must state specifically to which permitted disposal site the material will be sent. In addition, the receiving site must also be permitted to receive material from the Applicant. [whw]

R645-301-528.323.1, The Applicant must state that only authorized personal who understand the plan will be involved with extinguishing the fires. In addition, the Division does not recommend that the Applicant try to extinguish the fire with water due to the possibility of a steam explosion. [whw]

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:

Impoundments

The Applicant did not meet the requirements of this section.

- The Applicant did not specifically state if any of the impoundments meet the NRCS Class B or C criteria for dams in TR-60, or the size or other criteria of 30 CRF Section 77.216.
- The Applicant did not have the designs for Sediment Pond 1 certified by a registered professional engineer. The information in Exhibit 4.7.2.2.1 was not certified.
- The Applicant did not specifically state the safety factor for Sediment Pond 1.
- The Applicant did state in Section 4.5.2.3 of the MRP, (p. 4.5-35) that Sediment Pond 1 had two feet of free board to protect against overtopping.
- The Applicant did state on page 4.5-31 that the sediment pond foundations will be stable under all conditions of construction and operation.
- The Applicant did not state how Sediment Pond 1 would be protected against sudden drawdown.
- The Division considers that the spillway requirements have been met is the general hydrology requirements have been met.
- There are no highwalls associated with the sediment ponds.

Findings:

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The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-533.100 and R645-301-121.200, The Applicant must state if any of the impoundments meet the NRCS Class B or C criteria for dams in TR-60, or the size or other criteria of 30 CRF Section 77.216. [whw]

R645-301-512.240, The Applicant did not have the designs for Sediment Pond 1 certified by a registered professional engineer. The information in Exhibit 4.7.2.2.1 was not certified. [whw]

R645-301-533.100 and 533.110, the Applicant did not specifically state the safety factor for Sediment Pond 1. [whw]

R645-301-533.300, The Applicant did not state how Sediment Pond 1 would be protected against sudden drawdown. [whw]

SUPPORT FACILITIES AND UTILITY INSTALLATIONS

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

Analysis:

The Applicant met the minimum requirements of this section. The Applicant described the type of facilities that will be used in connection the mining operation.

Findings:

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

SIGNS AND MARKERS

Regulatory Reference: 30 CFR Sec. 817.11; R645-301-521.

Analysis:

The Applicant met the minimum requirements of this section. In Section 4.5.2.4 (p. 4.5-58) of the MRP, the Applicant states how they will comply with the requirements to place mine identification signs, disturbed area signs and blasting warning signs.

Findings:

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

USE OF EXPLOSIVES

Regulatory Reference: 30 CFR Sec. 817.61, 817.62, 817.64, 817.66, 817.67, 817.68; R645-301-524.

Analysis:

General Requirements

The Applicant did not meet the requirements of this section. The Applicant must address is applicable blasting regulation. The Division needs to have specific information on how the public will be protected from blasting given the State Highway 96 is within 1,000 of the disturbed area. The Applicant may want to submit the blasting plan at a later day. See R645-301-524.220, when specific blasting plans can be developed.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-524 The Applicant must address is applicable blasting regulation.

Specifically the Applicant must cite each specific regulation and then describe how they will comply. The Division needs to have specific information on how the public will be protected from blasting given the State Highway 96 is within 1,000 of the disturbed area. The Applicant may want to submit the blasting plan at a later day. See R645-301-524.220, when specific blasting plans can be developed. [whw]

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:

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Affected Area Maps

The Applicant met the requirements of this section. The Applicant gave the Division several maps that show the affected area (permit boundary) such as Map 4.5.1.2-1, Regional Surface Ownership Map.

Mining Facilities Maps

The Applicant met the requirements of this section. The Applicant gave the Division a map that shows the mine facilities, Map 4.5.1.2-3, Surface Facilities.

Mine Workings Maps

The Applicant met the requirements of this section. The Applicant gave the Division a map that shows the proposed mine workings, Map 4.5.1.2-5, Mine Plan Layout Production Schedule.

Certification Requirements

The Applicant met the requirements of this section. All appropriate maps have been certified.

Findings:

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

RECLAMATION PLAN

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Analysis:

The Applicant meets the requirements of this section. The Applicant stated in Section 5.4.1.3 of the MRP that because the area had been previously mined and later reclaimed by the Utah Abandoned Mine Lands Program that the site should be reclaimed to similar on the ground conditions.

Findings:

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

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

The Applicant did not meet the minimum requirements of this section.

The Applicant must show on cross section all existing and proposed highwalls. The Division needs this information to determine if the Applicant will eliminate all high walls.

The Applicant states in Section 4.5.2.2 of the MRP that they will not generate spoil because only underground mining will be used. Spoil is defined as overburden removed to conduct coal mining. While some spoil might technically be produced, the amount will be minor.

The Applicant did not address in the text the requirements that the reclaimed areas do not exceed the angle of repose.

The Applicant did meet the requirement to have reclaimed slopes with a minimum long-term static safety factor of 1.3. See page 5.4-12

The Division considers that the Applicant will meet the requirements of minimize erosion and water pollution if the hydrology regulations are addressed.

The Division considers that the Applicant will meet the postmining requirements if the general postmining regulations have been addressed.

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The Applicant states in Section 5.4.1.2 of the MRP, (page 5.4-11) that all exposed coal seams will be covered with a minimum of four feet of material. The Applicant must show the location of all coal seams on the cross sections.

Previously Mined Areas

The Applicant has met the requirements of this section. The Applicant has addressed that most of the area has been part of coal mining operations and that the Utah Abandoned Mine Land Program reclaimed much of the area. Because much of the area was reclaimed, the Division will generally require the Applicant to restore the area to the condition before they disturbed it.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-553.120, The Applicant must provide the Division with cross sections for each portal area that show the existing configuration (including any previously mined areas) the proposed operational configuration and the reclaimed configuration. The Division needs that information to evaluate highwall reclamation. [whw]

R645-301-553.130, The Applicant must provide the Division with information on the angle of repose and if any of the reclaimed slopes will exceed that angle. [whw]

R645-301-553.300, The Applicant must provide the Division with cross sections that show that all coal seams will be backfilled with a minimum of four feet of material. [whw]

MINE OPENINGS

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

Analysis:

The Applicant did not meet the requirements of this section. In addition to seals, the Division also requires a minimum of 25 feet of backfill. The main reason is that backfill acts a protection against vandalism to the seals.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-551, The Applicant must also backfill the portal openings with a minimum of 25 feet of material. The main reason is that backfill acts a protection against vandalism to the seals. [whw]

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

The Applicant did not meet the requirements of this section. The Applicant stated on pages 5.4-14 and 5.4-15 of the MRP

In order to provide access to drainage and sediment control structures, soil/substitute stockpiles, and monitoring sites, a temporary road accessing Sediment Pond 1 will remain during the bonding period as shown on Map 4.2.9-1, Mine Surface Facilities Area Postmining Topography & Interim Drainage Control Map. Removal and reclamation of this road will occur following the extended liability period and determination of final bond release for the mine surface facilities areas. The sediment pond will also be removed and the area reclaimed at the end of the extended liability period.

If the road is to be reclaimed it must be reclaimed during the liability period. The general sequence of reclamation is to backfill the area and establishes vegetation so that sediment ponds are not longer needed.

Retention

The Applicant must specifically state what roads will be retained.

Findings:

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The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-542.600, The Applicant must revise the road reclamation plan so that all roads not to be retained as part of the postmining land use will be removed during the bond liability period. The Permittee must also state what roads if any will be retained as part of the postmining land use. [whw]

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

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

Analysis:

Affected Area Boundary Maps

The Applicant met the requirements of this section. The Applicant gave the Division several maps that show the affected area (permit boundary) such as Map 4.5.1.2-1, Regional Surface Ownership Map.

Bonded Area Map

The Applicant met the requirements of this section. The Applicant gave the Division several maps that show the bonded area such as Map 4.7.2.9-1.

Reclamation Backfilling And Grading Maps

The Applicant did not meet the requirements of this section. The Applicant must provide the Division with maps that show the final reclaimed surface. Map 4.7.2.9-1 does not show the final surface configuration.

Final Surface Configuration Maps

The Applicant did not meet the requirements of this section. The Applicant must provide the Division with maps that show the final reclaimed surface. Map 4.7.2.9-1 does not show the final surface configuration.

Reclamation Surface And Subsurface Manmade Features Maps

The Applicant did not meet the requirements of this section. The Applicant did not provide the Division with a map that showed the final surface and subsurface manmade features.

Certification Requirements.

The Applicant did not meet the requirements of this section. A registered professional engineer did not certify the reclamation maps and cross sections.

Findings:

The information in the application is not considered adequate to meet the minimum requirements of this section of the regulations. Before approval, the Applicant must provide the following information:

R645-301-512.130, The Applicant must have all reclamation maps and cross sections certified by a registered professional engineer. [whw]

R645-301-542.200, The Applicant must have provide the Division with maps and cross section that show final reclamation. Map 4.7.2.9-1 does not show the site after final reclamation. The pond, which is scheduled for removal, is shown. In addition, the Applicant must show identify what surface and subsurface manmade features will remain after final reclamation. [whw]

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

General

In Section 6.1.3 of the MRP, the Applicant stated that they would obtain a bond after the Division approved the MRP but before the Division issued the permit. The Division will evaluate the bonding requirements after most of the technical deficiencies have been addressed.

Form of Bond

In Section 6.1.3 of the MRP, the Applicant stated that they would obtain a bond after the Division approved the MRP but before the Division issued the permit. The Division will

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evaluate the after most mining and reclamation plan has been approved but before the permit is issued.

Determination of Bond Amount

In Section 6.1.4 of the MRP, the Applicant stated that they would develop a reclamation cost estimate after the initial technical reviews have been completed. The Division often allows applicants to submit the reclamation cost estimate after the initial technical reviews have been completed because the bond must be based on the approved plan.

Terms and Conditions for Liability Insurance

In Section 6.2 of the MRP, the Applicant stated that they would have an insurance policy issued that meet the Division's requirements.

Findings:

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

RECOMMENDATIONS:

The Division should not approve the application until all of the above mentioned deficiencies have been mentioned.