

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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September 15, 2008

TO: Internal File

THRU: Joe Helfrich, Team Lead *JH*

FROM: Priscilla Burton, CPSSc, Environmental Scientist III, Team Lead *PWB by an*

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

### SUMMARY:

The Kinney #2 Mine plan application was received on February 19, 2008 (2008/Incoming/0002.pdf) with supplemental information received on June 13, 2008 (2008/Incoming/0004.pdf). The mine plan application was determined to be administratively complete on June 24, 2008 (2008/Outgoing/0005.pdf). The Division notified local, state, and federal governing agencies on June 25, 2008 (2008/Outgoing/0006.pdf). Val Payne, John Harja and Mike Mower of the Public Lands Policy Coordination Office (PLPCO) were included in the distribution. Carbon Resources, LLC provided public notice for the proposed mine on June 24, July 1, 8 and 15, 2008 in the Sun Advocate. In response to the public notice, the Division received one comment from the Center for Water Advocacy (2008/Incoming/0006.pdf). The commenter requested an informal conference. That conference is scheduled for September 30, 2008 at the Price Field Office. Email notification of the informal conference was sent to the Scofield Mayor, Carbon County Commissioners, the Price River Watershed Conservation District, Scofield Special Service District, MSHA's Price Office, and Utah State Parks.

The Division has one year to review the application and either write findings in support of permit issuance or in explanation of permit denial. As of this date, the application is not recommended for approval. The following deficiencies were noted with the application:

**R645-103-235**, The application must include a written waiver from the owner of each occupied dwelling within 300 ft of the disturbed area boundary, to allow coal mining and reclamation operations within 300 feet of the dwelling. [PB]

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- R645-300-113**, The Applicant must maintain current registration with the Utah Department of Commerce. Carbon Resources LLC registration lapsed on November 17, 2007. [PB]
- R645-300-114.400**, Corporate identification numbers for Western Reserve Coal Company, Inc. and WRCC, LLC. and Carbon Resources, LLC are required, are not confidential, and must be provided in the application. [PB]
- R645-300-141**, The application must provide the legal description of the land designated as permit area. Numerous errors in the legal description were noted in Section 2.1.5.1 for the permit area portion of the lease and these must be verified. [PB]
- R645-301-112**, The Applicant must disclose all company officers' names and addresses and telephone numbers along with their employer identification numbers. All those who own 10% or more controlling interest in the company must be disclosed. • Percent ownership of the officers in each company and percent ownership of parent companies within the organizational family tree must be disclosed. • For all officers and directors and members, the date their position was assumed must be provided. [PB]
- R645-301-112.700**, Prior to permit issuance, the application must provide MSHA numbers for mine associated structures. [PB]
- R645-301-112.800**, Map 4.5.1.2-2, Coal Regional Ownership Map, mis-represents the coal ownership by Carbon Resources, LLC, according to the legal description in Section 2.1.5.1. The legal description provided in Section 2.1.5.1 is for a much larger area than the 452.5-acre permit area shown on Map 4.5.1.2-2. All adjacent coal leases must be shown on Map 4.5.1.2-2. In addition, Map 4.5.1.2-2 must designate the separation between R. 6 E. and R. 7 E. [PB]
- R645-301-121.200**, The legend provided for Regional Land Use Map 3.4.1.4-1 provides a hatch marking for Bureau of Reclamation land, but Scofield Reservoir is not marked with this legend and the Scofield Lake State Recreation Area boundary should be marked on the Regional land Use Map 3.4.1.4-1. • The application should note the connection between Exhibit 1.2-1 photographs and the pre-mining site condition Map 4.5.1.2-4 that provides photograph locations. Likewise, the application should refer to Exhibit 1.2-1 on Map 4.5.1.2-4 for photographs of numbered locations shown on that map.[PB]
- R645-301-121.200 and R645-103-234.100**, Applicant states that they have obtained approval for access to SR 96, from Emery County, but the authority with jurisdiction over the State highway is the Utah Department of Transportation.

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The permit application must contain the approvals from Utah Department of Transportation. [PB]

**R645-301-121.200 and R645-301-526.210**, Section 4.5.2.3 refers to Section 4.7 for further information on the 50,000 gallon water tank and water system to be supplied by the Scofield Town. No further information was found in Section 4.7 with regard to the water system. Is this potable water? Is this water for dust control? Is there an agreement in place with the Town of Scofield?

**R645-301-221 and R645-301-121.100**, Please include in Exhibit 1.5-1, the original correspondence letter and map (if any) that was sent to the NRCS, so that the area reviewed by the NRCS is documented. [PB]

**R645-301-222 and R645-301-121.200**, Figure 1 must show the proposed disturbed area boundary and references to the acreage enclosed by the "proposed mine facilities area" in Section 4.2.2.2 and the "actual proposed disturbance" in Section 4.2.2.1 should agree with the proposed disturbed area boundaries shown on Figure 1. • Figure 1 Soils Map should be produced on a scale equivalent to other mine maps (scale of 1 inch equals 200 feet, with 2 ft. contours), such that it can be used for soil salvage during site construction (and so that the Division can read the symbols on the map!). • Figure 1 should illustrate the known locations of buried coal fines. [PB]

**R65-301-222.400**, Provide an estimate of productivity for each soil type or range type or vegetation type. [PB]

**R645-301-231.400**, The maximum dimensions of the soil stockpile are requested.

**R645-301-232.100**, A second soil stockpile is necessary to provide for salvage of all 68,092 cubic yards available from the site. This second stockpile would allow separation of undisturbed from previously disturbed soil and coal fines. In addition, a second stockpile would provide room for expansion, if needed. The Division notes that 0.1 acres of map Unit 3A was included in the total disturbed acreage (27.3 acres) on Figure 1. Map Unit 3A is on the west side of the highway (Telonis owned property) and might be evaluated for use as a stockpile location. [PB]

**R645-301-232.700**, Figure 1 should have a symbol for those areas considered too steep or otherwise unavailable for soil salvage. An estimate of acreage unavailable for soil salvage should be included in the narrative and in the Planned Disturbance Table on Figure 1. [PB]

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- R645-301-234.210**, The application should explain how the soil stockpile will be separated from the bathhouse fill pad. [PB]
- R645-301-234**, The applicant commits to reporting final salvage volumes in an annual report (Section 4.4.2.1). This commitment should state that the mining and reclamation plan (MRP) will be amended with the as-built information on final soil salvage volumes, areas and recovery depths, as well. • The application should state the source, and describe the quality and quantity of the excavated material to be used as a base for the soil stockpile construction. [PB]
- R645-301-234.220 and R645-301-121.200**, The plan describes protection of the topsoil stockpile from Hwy 96 by means of a ditch and a berm. As illustrated on Map 4.7.2.1-2, the plan should clearly indicate that the ditch begins approximately 200 ft. from the southern end of the stockpile and that the main protection for salt loading at the southern end of the stockpile is the six foot fill. [PB]
- R645-301-241**, The topsoil sampling described in Sec. 5.2.2.3 is appropriate, but, the commitment should include a description of the analyses to be performed. [PB]
- R645-301-242.110 and R645-301-553.130**, Reclamation slopes will vary from 5h:1v to 0.5h:1v (Section 5.4.2.3, Backfilling and Grading to Establish Final Configuration). The geotechnical investigation in Exhibit 4.5.2.1-1 recommends construction of cutslopes no greater than 1.25h:1v or in the vicinity of B-B' no greater than 1.75h:1v. The geotechnical investigation does specify that cuts into competent sandstone may approach 0.5h:1v, but does not indicate fill slopes may approach this steepness. No specific recommendations for fill slopes were made, except that the sandy lean clay soils are collapsible and have a friction angle of 20 degrees. Map 4.7.2.9-1 shows reclamation contours. To facilitate the Division's understanding of where topsoil will be replaced, this map should also identify steep slope segments by their slope angle as well as those slopes which are pre-existing, pre-SMCRA remnants of previous mining. Topsoil should not be replaced on areas that are too steep. [PB]
- R645-301-244.100**, For those areas where discing the surface is not an option due to excessive slope, Section 5.2.2.4 must describe seeding, and mulch application immediately following topsoil application, regardless of season. • Section 5.2.2.4 must describe a method of soil stabilization for those areas where seeding does not immediately following topsoil application. • The plan should differentiate on a map, which slopes will be deep gouged as described in Section 5.3.2.2 and which will be disced as described in Section 5.2.2.4. [PB]

**R645-301-244.320**, The application must include a commitment to repair rills and gullies, including replacement of topsoil and reseeding or replanting, if necessary. [PB]

**R645-302-321**, The application should provide the name of the irrigation company or individual that owns the irrigation ditch running across the proposed mine site and the date the ditch was last used. • The application must describe agricultural activity (production quantities by crop type, animal units supported, etc.) for each agricultural land owner adjacent to the mine site. • The application must provide a map showing the adjacent agricultural lands, identifying subirrigated and irrigated lands, showing all irrigation ditches, and define the extent of the adjacent alluvial valley floor in Pleasant Valley. [PB]

**R645-301-422**, Prior to permit issuance, the application must include the Air Quality Approval Order. [PB]

**R645-301-624**, Table 3.6-2 provides some information on the acid forming potential for roof and floor, but it is not clear whether this is the acid/base potential of the rock or the acid forming potential of the sulfate in the rock or the base forming characteristic of the rock. This table must be supported by the analytical results accompanied by the name of the organization that analyzed the data (R645-301-131). According to R645-300-124.300, acid/toxic reporting on roof and floor is not confidential. • Table 3.6-3 does not provide the laboratory analysis for the parameters identified. Table 3.6-3 must be accompanied by the analytical results accompanied by the name of the organization that analyzed the data. According to R645-300-124.300, chemical characteristics of roof and floor are not confidential. • Section 4.7.2.1 states that "Analysis of both actual existing and potential future coal materials, including incidental roof and floor rock, are described in Section 3.6-3 Coal and Overburden/Interburden Characteristics." However, Section 3.6-3 does not discuss the characteristics of the coal currently buried on site. The plan must provide information on the characteristics of the buried waste that will be unearthed in the process of site development. [PB]

**R645-301-553.252**, A commitment to bury coal mine waste beneath four feet of cover is required. Section 5.4.2.3, Disposal of Mine Waste, and Non-Coal Waste is silent on this issue. [PB]

**R645-301-731.300 and R645-301-121.200**, The applicant should verify whether the statements made in Section 4.7.2.4 and Section 4.7.4.3 agree with other statements in the plan concerning blending of development waste with spec coal. •The application should include in Sections 4.7.2.4 and 4.7.4.3 a discussion of the information known about the chemical acid/toxic characteristics of the roof, floor, coal, and buried mine waste on site. [PB]

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**R645-301-731.300 and R645-301-536.320**, Provide a sampling plan to identify acid/toxic characteristics of waste stored on the surface. [PB]

**TECHNICAL ANALYSIS:**

**GENERAL CONTENTS**

**IDENTIFICATION OF INTERESTS**

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

**Analysis:**

The applicant has met the requirements to provide ownership and control information for the operation and surface lands affected in Chapter 1, Section 112. The applicant and operator is Carbon Resources, LLC, a limited liability company. The company was registered with the Utah Department of Commerce, but this registration expired on November 17, 2007 (<https://secure.utah.gov/bes/action>).

Carbon Resources, LLC corporate office is in Albuquerque, New Mexico. The telephone and address is provided. Only two company officers' names and addresses and their employer identification numbers have been provided. Percent ownership of the officers or of within the organizational family tree was not disclosed. Ronald C. Barker is the resident agent and is responsible for paying the Abandoned Mined Land royalty fee.

Surface and coal ownership are displayed on Map 4.5.1.2-1 and Map 4.5.1.2-2, respectively. Section 2.1.2.4 provides the names and addresses of the permit area surface owners. The permit area surface is owned by two parties: Carbon Resources LLC and the Evangelos George Telonis Trust, administered by Nick Sampinos. The Telonis surface has been leased to the applicant (Section 2.1.5.1 provides the Carbon County Recorder's book and page number).

Section 2.1.2.4 provides the name and addresses of the owners of the coal to be mined. Within the permit area, the coal is owned by Carbon County, Carbon Resources LLC and by Peabody Natural Resources. The coal to be mined was subleased from Carbon County through Western Reserve Coal Inc. and through WRCC, LLC to Carbon Resource LLC (Section 2.1.5.1 provides the Carbon County Recorder's book and page number).

Adjacent surface and subsurface ownership is also shown on Map 4.5.1.2-1 and Map 4.5.1.2-2. The legal description provided in Section 2.1.5.1 indicates that coal leases subleased by Carbon Resources, LLC are on the west side of Scofield Reservoir (T 12 S., R. 6 E. Sec 24, 25, and 36). Only a portion of the lease description in Sec.2.1.5.1 is within the permit area. Federal and fee coal is adjacent. An interest in adjacent coal is described in Section 4.5.2.2. (See related request for information under Legal Description deficiencies R645-301-112.800 and R645-300-141.)

MSHA numbers for mine structures were not provided in the application. The application states that MSHA applications are pending.

**Findings:**

The information provided does not meet the requirements of the Regulations for Identification of Interests. Prior to approval, the following information must be provided, in accordance with:

**R645-300-113**, The Applicant must maintain current registration with the Utah Department of Commerce. Carbon Resources LLC registration lapsed on November 17, 2007. [PB]

**R645-301-112**, The Applicant must disclose all company officers' names and addresses and telephone numbers along with their employer identification numbers. All those who own 10% or more controlling interest in the company must be disclosed. • Percent ownership of the officers in each company and percent ownership of parent companies within the organizational family tree must be disclosed. • For all officers and directors and members, the date their position was assumed must be provided. [PB]

**R645-301-112.700**, Prior to permit issuance, the application must provide MSHA numbers for mine associated structures. [PB]

**VIOLATION INFORMATION**

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

**Analysis:**

Sections 2.1.2.3 and 2.1.2.4 of the application state that there are no violations, suspensions, revocations, or forfeitures on record for Carbon Resources, LLC or its affiliates.

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The Division can not complete a check of the Applicant Violator System without the corporate identification numbers for Western Reserve Coal Company, Inc. and WRCC, LLC. and Carbon Resources, LLC. The ID number for Carbon Resources, LLC was located in the confidential file. This information is not confidential and must be included in the application.

**Findings:**

The applicant has not met the requirements of the Rules for Violation Information. Prior to approval, the following information must be provided, in accordance with:

**R645-300-114.400**, Corporate identification numbers for Western Reserve Coal Company, Inc. and WRCC, LLC. and Carbon Resources, LLC are required, are not confidential, and must be provided in the application. [PB]

**RIGHT OF ENTRY**

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

**Analysis:**

The permit area surface is owned by two parties: Carbon Resources LLC (15.3 acres) and the Evangelos George Telonis Trust, administered by Nick Sampinos (437.2 acres) as described in Section 2.1.2. The applicant has surface right of entry to 38.1 acres as described in Sec. 2.1.5.1. Approximately twenty three acres (22.88 acres) of the Telonis surface has been leased to the applicant (Section 2.1.5.1 provides the Carbon County Recorder's book and page number).

The applicant also has underground right of entry to coal in T. 12 S., R. 6 E. ; T. 12 S., R. 7 E.; T 13 S., R. 6 E.; and T. 13 S., R. 7 E. Salt Lake Meridian (Sec. 2.1.5.1). Only a portion of the lease description in Sec.2.1.5.1 is within the 452.5 acre permit area.

**Findings:**

The information provided meets the requirements of the Regulations for Right of Entry.

**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:**

Public Lands Policy Coordinating Office (PLPCO) and State Historic Preservation Office (SHPO) were notified of the administrative completeness on June 25, 2008 (2008/Outgoing/0006.pdf).

The application provides a legal description for the coal leases acquired by Carbon Resources, LLC, but not the permit area in Sec. 2.1.5.1. The legal description provided in Section 2.1.5.1 is for a much larger area than the 452.5 acre permit area shown on Map 4.5.1.2-2, Coal Regional Ownership Map. Map 4.5.1.2-2 mis-represents the coal ownership by Carbon Resources, LLC, according to the legal description in Section 2.1.5.1. All adjacent coal leases must be shown on Map 4.5.1.2-2. In addition, Map 4.5.1.2-2 must designate the separation between R. 6 E. and R. 7 E. Numerous errors in the legal description were noted in Section 2.1.5.1 for the permit area portion of the lease and these must be verified. The application must provide a legal description for the permit area.

The land within the proposed permit area is all privately owned surface. A public road runs within 100 ft of the permit area, State Route 96. Operations within 100 feet of a public road, require a hearing in accordance with UAC Section 40-10-24-(4)(c), and a written finding must be made, that the interests of the public and the landowners affected will be protected. The Applicant states that they have obtained approval for access to SR 96, from the County. The permit application must contain the approvals from Utah Department of Transportation, the authority with jurisdiction over the public road.

The permit boundary appears to be within 300 feet of several town buildings Map 4.5.1.2-1. If so, the application must include a written waiver from the owners of all occupied buildings to allow mining and reclamation operations within 300 feet of their structures.

UAC Section 40-10-24(1)(a) restates SMCRA Section 522(a)(4) and 522(a)(5) which requires that on non-federal lands, the board and the division have an obligation to establish a planning process enabling objective decisions based upon competent and scientifically sound data and information as to which, if any, lands in the State are unsuitable for mining. Such determinations should be integrated with the land use planning processes at the local and state and federal levels. UAC Section 40-10-24(1)(c) describes the unsuitability criteria that must be balanced against the economic impact in a cost-benefit analysis. They include incompatibility with current land use plans; the affect on fragile or historic and cultural lands; the affect on aesthetic values and natural systems; the affect on renewable resource lands, in particular the water supply and aquifer recharge; and areas subject to flooding or unstable geology.

UAC Section 40-10-24(4) places prohibitions on mining in National Parks, designated Wild and Scenic Rivers, National Recreation Areas etc. Pertinent to this proposal is UAC,

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Section 40-10-24(4)(b) which prohibits adverse effects on historic sites unless approved jointly by the division and state or local agency with jurisdiction over the historic site.

Lands to be disturbed by coal mining and reclamation are not "unsuitable" as defined by 40-10-24(4) of the Act. Coal mining and reclamation operations would not adversely affect the publicly owned Scofield State Park or Scofield town buildings placed on the National Register of Historic Places (R645-103-236). A mitigation plan will be developed for the adverse effect on three eligible historic sites within the disturbed area (2008/Incoming/0007.pdf).

The Center for Water Advocacy in their letter received August 18, 2008, requested and informal conference on unsuitability issues. An informal conference is scheduled for September 30, 2008 at the Price Field Office (2008/Outgoing/0007.pdf).

Commenters may file an unsuitability claim under R645-103-237, for the proposed permit area. However, under R645-103-431.600, the Division may decide not to process the part of the pertaining to lands to which an administratively complete permit application has already been received. A petitioner must meet an "injury in fact" test as described by R645-103-421 and provide a description of the impact of the designation (R645-103-422.300 and R645-103-422.800). Petitioners should also keep in mind the criteria for designating land as unsuitable (R645-103-320).

**Findings:**

A public road runs adjacent to the permit area. UAC Section 40-10-24-(4)(d), requires an opportunity for public hearing.

**R645-300-141**, The application must provide the legal description of the land designated as permit area. Numerous errors in the legal description were noted in Section 2.1.5.1 for the permit area portion of the lease and these must be verified. [PB]

**R645-301-112.800**, Map 4.5.1.2-2, Coal Regional Ownership Map, mis-represents the coal ownership by Carbon Resources, LLC, according to the legal description in Section 2.1.5.1. The legal description provided in Section 2.1.5.1 is for a much larger area than the 452.5 acre permit area shown on Map 4.5.1.2-2. All adjacent coal leases must be shown on Map 4.5.1.2-2. In addition, Map 4.5.1.2-2 must designate the separation between R. 6 E. and R. 7 E. [PB]

**R645-301-121.R645-103-234.100**, Applicant states that they have obtained approval for access to SR 96, from Emery County, but the authority with jurisdiction over the State highway is the Utah Department of Transportation. The permit application must contain the approvals from the Utah Department of Transportation. [PB]

**R645-103-235**, The application must include a written waiver from the owner of each occupied dwelling within 300 ft of the disturbed area boundary, to allow coal mining and reclamation operations within 300 feet of the dwelling. [PB]

## PERMIT TERM

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

### Analysis:

The permit term of five years is requested. The applicant has not requested a longer term, but has projected a twenty year life of mine (Section 4.5.2.2). The mining sequence is shown on Map 4.5.1.2-5 for the 452.5 acre permit area. Table 4.5-1 of the application describes the development five entries and mining of 671,863 tons of coal from the Hiawatha seam, using a continuous miner, during the first five year permit term. An annual tonnage rate of 180,000 to 490,000 tons/year (0.18 to 0.49 million tons) of coal for the first permit term is stated in Section 4.5.2.2.

### Findings:

The information provided meets the requirements for a five-year mining permit.

## PUBLIC NOTICE AND COMMENT

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

### Analysis:

Carbon Resources, LLC provided public notice for the proposed mine on June 24, July 1, 8 and 15, 2008 in the Sun Advocate. In response to the public notice, the Division received one comment from the Center for Water Advocacy (2008/Incoming/0006.pdf). The commenter requested an informal conference. That conference is scheduled for September 30, 2008 at the Price Field Office.

The Governor's Resource Development Coordinating Council also had a public/agency comment period which ended August 22, 2008. The RDCC has not yet provided comments to the Division.

### Findings:

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The information provided by the Applicant has met the requirements for public notification. The Division is attempting to fulfill its requirement to include the public in the permitting process.

**FILING FEE**

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

**Analysis:**

This \$5.00 fee was paid with the application (2008/Incoming/0001.pdf).

**Findings:**

The Applicant has met the requirements of the filing fee.

**PERMIT APPLICATION FORMAT AND CONTENTS**

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

**Analysis:**

A notarized statement of the mine permit application's veracity and accuracy from Clay Wisdom, the Chief Financial Officer for Carbon Resources, LLC accompanied the application in the cover letter (2008/Incoming/0002.pdf).

**Findings:**

The information provided is in a format prescribed by the Division and meets the requirements of R645-301-121.300. Elsewhere in this technical analysis, the Division makes requests for further information or requests clarification.

**REPORTING OF TECHNICAL DATA**

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

**Analysis:**

The soils analytical data is accompanied by the names of the individuals or firms responsible for collection and/or analysis of the data.

**Findings:**

The information provided meets the requirements of the regulations.

**COMPLETENESS**

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

**Analysis:**

The Kinney #2 Mine plan application was received on February 19, 2008 (2008/Incoming/0002.pdf) with supplemental information received on June 13, 2008 (2008/Incoming/0004.pdf). The mine plan application was determined to be administratively complete on June 24, 2008(2008/Outgoing/0005.pdf). The Division notified local, state, and federal governing agencies on June 25, 2008 (2008/Outgoing/0006.pdf). Val Payne, John Harja and Mike Mower of the Public Lands Policy Coordination Office (PLPCO) were included in the distribution.

**Findings:**

The Applicant has met the completeness requirements.

**ENVIRONMENTAL RESOURCE INFORMATION**

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

**GENERAL**

Regulatory Reference: 30 CFR 783.12; R645-301-411, -301-521, -301-721.

**Analysis:**

The mine site is located on a sagebrush, grass and aspen vegetated hillside at 7,800 ft. elevation (Map 3.2.1.2-1). State highway 96 runs along the western boundary of the permit area. The town of Scofield is within 1,000 ft of the permit boundary (Map 4.5.1.2-1). Approximately 1,200 ft west, Mud Creek flows past the town of Scofield (Map 3.7.2.1-1) and into Scofield State

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Recreation area approximately 3,000 ft. north of the proposed permit area (USGS Scofield Utah topographic map and Map 3.4.1.4-1).

There area 17 abandoned mine portals known in the immediate area (Map 3.7.2.1-1), mining the Columbine, the UP and the Hiawatha seams (Map 3.7.2-1 and Map 3.4.1.4-2). The proposed mine will re-affect a site that was reclaimed by the Division in 1986 (AMR\007\904, Scofield project). The pre-mining site condition is illustrated with photographs displayed in Exhibit 1.2-1 and the locations of the photographs are noted on Map 4.5.1.2-4, although the connection between exhibit and map is not noted on the Map or in the Exhibit.

The current and post mining land use is undeveloped rangeland (wildlife) and livestock pasture (grazing). The average annual precipitation is 14.5 inches (Table 3.7.4.2-1), based upon historic data recorded at the Clear Creek and Scofield dam sites (section 3.7.4).

**Findings:**

The information provided does not meet the requirements of the Rules for general resource information. Prior to approval please correct the following in accordance with:

**R645-301-121.200**, The legend provided for Regional Land Use Map 3.4.1.4-1 provides a hatch marking for Bureau of Reclamation land, but Scofield Reservoir is not marked with this legend and the Scofield Lake State Recreation Area boundary should be marked on the Regional land Use Map 3.4.1.4-1. • The application should note the connection between Exhibit 1.2-1 photographs and the pre-mining site condition Map 4.5.1.2-4 that provides photograph locations. Likewise, the application should refer to Exhibit 1.2-1 on Map 4.5.1.2-4 for photographs of numbered locations shown on that map.[PB]

**SOILS RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

**Analysis:**

Section 4.2.2.2 describes a 36.7 acre “proposed mine facilities” area. Section 4.2.2.1 describes the “actual proposed disturbance” as 27.3 acres. According to the soil survey map, Figure 1 in Exhibit 3.1.1.3-1, a total of 27.3 acres will be disturbed and 68,000 cubic yards may be recovered. The soil survey map, Figure 1 in Exhibit 3.1.1.3-1, must show the proposed disturbed area boundary. There is an estimated 12,000 cubic yards of coal fines buried in within the disturbed area (Section 3.1.1.5). Figure 1 should illustrate the known locations of buried coal fines.

The Order I soil survey in Exhibit 3.1.1.3-1 includes field description of soil pits, laboratory analysis of samples taken by horizon, and a soil map (Figure 1). The soil survey classifies the soil into five map units: DA (0 – 20% slopes previously disturbed land); DB (20 – 50% slopes previously disturbed land); 2A (Typic Argixeroll-Typic Haploxeroll complex, 0 – 35% slopes); 1B (Typic Argicryoll Consociation (35-70% slopes); 2B Typic Argixeroll Consociation (35 – 70 % slopes). These map units are described and representative pedons are provided for each unit. The acreage and volume of soil disturbance within each soil type is itemized in Figure 1.

Exhibit 3.2 provides total living cover estimates for both the disturbed (40% ) and undisturbed (64%) vegetation types, but productivity estimates were not provided with either the soils or vegetation information.

Previously disturbed soil, topsoil and subsoil will be salvaged for use in reclamation, no borrow soils will be needed.

### **Findings:**

The information provided does not meet the requirements for baseline soil survey information as required by the R645 Coal Rules. Prior to approval, please provide the following information in accordance with,

**R645-301-222 and R645-301-121.200**, Figure 1 must show the proposed disturbed area boundary and references to the acreage enclosed by the “proposed mine facilities area” in Section 4.2.2.2 and the “actual proposed disturbance” in Section 4.2.2.1 should agree with the proposed disturbed area boundaries shown on Figure 1. • Figure 1 Soils Map should be produced on a scale equivalent to other mine maps (scale of 1 inch equals 200 feet, with 2 ft. contours), such that it can be used for soil salvage during site construction (and so that the Division can read the symbols on the map!). • Figure 1 should illustrate the known locations of buried coal fines. [PB]

**R65-301-222.400**, Provide an estimate of productivity for each soil type or range type or vegetation type. [PB]

## **ALLUVIAL VALLEY FLOORS**

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**Analysis:**

**Alluvial Valley Floor Determination**

The "possible" alluvial valley floor is discussed in Section 7.11. The existence of an alluvial valley floor with irrigated pastures and areas of subirrigation along Mud Creek in Pleasant Valley below the Utah No. 2 Mine (now the reclaimed White Oak Load Out) was previously established by the Division (1984 Technical Analysis of the Valley Camp Mine, ACT/007/001, and Valley Camp MRP Map R645-301-411.100 Premining Land Use Map).

Regional Surface Geology Map 3.6-1 illustrates Mud Creek flowing through alluvial sediments adjacent to the mine site permit area. Map 3.2.1.2-1 identifies many acres of pastureland between Hwy 96 and the railroad tracks. The proposed site is situated in an area that has been zoned agricultural (Map 3.4.1.4-1). Facilities area map 4.5.1.2-4 illustrates the location of an irrigation ditch on the proposed mine site. Although the irrigation ditch is in disuse, as described in Section 7.11, mine cross sections A-A' on Map 4.5.2.3-1A show the irrigation ditch will be culverted during mining and restored after mining, indicating an existing use for the ditch.

A comment was received during the public comment period that adequate information was not available in the application to ensure protection of renewable resource lands. In accordance with R645-302-321, the application must include a description of the agricultural activity (production quantities by crop type, animal units supported, etc.) for each agricultural land owner adjacent to the mine site. The application should provide the name of the irrigation company or individual that owns the irrigation ditch running across the proposed mine site and the date the ditch was last used. This application must provide a map showing the adjacent agricultural lands, identifying subirrigated and irrigated lands, showing all irrigation ditches, and define the extent of the adjacent alluvial valley floor in Pleasant Valley.

**Applicability of Statutory Exclusions**

None.

**Findings:**

The information provided did not meet the requirements of Alluvial Valley Floor determination. Prior to approval, the application must provide the following in accordance with:

**R645-302-321**, The application should provide the name of the irrigation company or individual that owns the irrigation ditch running across the proposed mine site and the date the ditch was last used. • The application must describe agricultural activity (production quantities by crop type, animal units supported, etc.) for each

agricultural land owner adjacent to the mine site. • The application must provide a map showing the adjacent agricultural lands, identifying subirrigated and irrigated lands, showing all irrigation ditches, and define the extent of the adjacent alluvial valley floor in Pleasant Valley. [PB]

## **PRIME FARMLAND**

Regulatory Reference: 30 CFR 785.16, 823; R645-301-221, -302-270.

### **Analysis:**

The application includes a non-prime farmland determination by the NRCS in Exhibit 1.5-1). The correspondence between applicant and NRCS was not disclosed. To make a finding, the Division must know what lands the NRCS was asked to evaluate.

The land has historically been used for agriculture and remnants of a diversion ditch exist within the permit area (Map 4.5.1.2-4). The land has also been historically used for mining and was reclaimed by the Division under the Scofield Abandoned Mine Reclamation project (AMR/007/904).

### **Findings:**

The information provided does not meet the requirements for baseline soil survey information as required by the R645 Coal Rules. Prior to approval, please provide the following information in accordance with,

**R645-301-221 and R645-301-121.100**, Please include in Exhibit 1.5-1, the original correspondence letter and map (if any) that was sent to the NRCS, so that the area reviewed by the NRCS is documented. [PB]

## **OPERATION PLAN**

### **AIR POLLUTION CONTROL PLAN**

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

### **Analysis:**

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The Applicant is required to obtain an Air Quality Approval Order prior to receiving a permit to mine. The first step in acquiring an Air Quality Approval Order is to file a Notice of Intent with the Utah Division of Air Quality (DAQ). The Permit Application Package indicates that Carbon Resources, LLC provided the DAQ with a Notice of Intent (NOI) in February 2008 (Exhibit 2.1.3-1).

A comment was received during the public comment period that adequate information was not available in the application to ensure compliance with SMCRA and the Clean Air Act. Section 4.4.1.2 of the application describes the Scofield area as an attainment area for the primary pollutant standards as defined by the National Ambient Air Quality Act. As such, federal air emission requirements are not applicable.

Dust control practices are summarized in Section 4.4.1.2 and described in more detail in Section 4.4.2.1 and in Section 4.5.2.3 (see Surface Coal Haulage System, and Loadout Facilities headings) and in the Notice of Intent. The site will operate 24 hours a day, 7 days a week, producing 3,000,000 tons of coal per year. The surface conveyance system will handle 1,000 tons per hour. There will be two 17,000 ton coal stockpiles (spec and non-spec), a 3,900 ton waste rock storage pile (Section 4.5.2.1), two 50 ton silos for loading coal trucks. The operation will use enclosed conveyors, fabric filters (bag house and vent filters), water sprays, and a telescoping discharge chute for dust control. Based on these controls, the site will generate 44 tons of fugitive dust and 19 tons of non-fugitive PM<sub>10</sub> sized particles. (The dust calculations do not include the future 20,000 ton stockpile and rail loading facility.)

**Findings:**

The application contains a description of the Notice of Intent filed the Utah Department of Environmental Quality.

**R645-301-422**, Prior to permit issuance, the application must include the Air Quality Approval Order.[PB]

**TOPSOIL AND SUBSOIL**

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

**Analysis:**

**Topsoil Removal and Storage**

Section 4.4.2.1 describes soil salvage practices and refers to Figure 1 of Exhibit 3.1.1.3-1 for volumes and recovery zones. This figure shows a total of 68,092 cubic yards available from

the 27.3 acres disturbed area. However, the capacity of the soil stockpile is 54,760 cubic yards. So, the plan states that soil salvage will end when the stockpile capacity is achieved. The Division recommends that a second soil stockpile be utilized to provide for salvage of all 68,092 cubic yards available from the site. This second stockpile would allow separation of undisturbed topsoil/subsoil from the salvaged disturbed soil and coal fines. In addition, a second stockpile would provide room for expansion, if needed. The Division notes that 0.1 acres of map unit 3A is included in the total disturbed acreage, it is on the west side of the highway (Telonis owned property) and would make a good location for a second soil stockpile.

Most of the soil (40,460 cubic yards) will come from 20 acres of previously disturbed lands, and most of the previously disturbed soil (38,859 cubic yards) comes from Map Units DA-3, DB-2, DB-4, and DB-5. Based upon the soil survey, the plan calls for soil removal to a depth of three feet, all of which will be stockpiled in one location. Topsoil and subsoil from undisturbed slopes will contribute 27,396 cubic yards from 6.94 acres (Map Units 1B, 2A, and 2B) to the stockpile. Steep areas will not have topsoil salvaged. Figure 1 should have a symbol for those areas considered too steep or otherwise unavailable for soil salvage. An estimated acreage for areas unavailable for soil salvage should be included in the narrative and in the Planned Disturbance Table on Figure 1.

The Plan describes avoidance of buried coal and separation of coal fines from salvaged soil, if the buried coal is greater than six inches deep (Section 4.2.2.1). There is an estimated 12,000 cubic yards of coal fines buried in within the disturbed area (Section 3.1.1.5). A deficiency was written under R645-301-222 to illustrate the known locations of buried coal fines on the soil survey.

Section 4.4.2.1 states that a qualified reclamation specialist/soil scientist will be on site to direct the soil salvage, since the area was previously disturbed and pockets of buried coal will complicate the soil salvage. The applicant commits to reporting final salvage volumes in an annual report. The Division requests that final recovery depths are placed into the mining and reclamation as well as the annual report.

The soil stockpile will be located as shown on Map 4.5.1.2-3. The stockpile will be located adjacent to the State highway 96 (Section 4.2.2.3). The soil will be protected from highway road salt by a ditch, a berm and by a six foot excavated material base. The maximum outslope will be 2h:1v. Maximum dimensions of the pile should be provided. Berms and ditches will protect the stockpile from water erosion, described in Section 4.7. (As illustrated on Map 4.7.2.1-2, the plan should clearly indicate that the ditch begins approximately 200 ft. from the southern end of the stockpile and that the main protection for salt loading at the southern end is the six foot fill base.) Surface roughening and a temporary seed mixture of wheatgrasses, bluegrass and Utah Sweetvetch (Table 5.3.2.3-1) will also afford erosion protection on the 2h:1v outslope of the pile.

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Map 4.5.2.3-1A Mine Facilities Area PreMining, Mining & Post Mining Cross Sections illustrates the topsoil stockpile in cross section. The stockpile will be constructed against natural slope and along with the office pad fill slope, extend above the natural ground a distance of twenty feet. The stockpile will take a trapezoidal shape against the slope, with an average width of twenty-five feet against the slope. The top of the pile will be a level, and will be fifty feet above the toe of the stockpile. The stockpile will cover 2.1 acres and contain 54,760 cubic yards (Section 4.5.2.3).

**Findings:**

The information provided in the application does not meet the requirements of the R645 Coal Rules for Soils Handling Operation Plan. Prior to approval, please provide the following, in accordance with:

**R645-301-232.700**, Figure 1 should have a symbol for those areas considered too steep or otherwise unavailable for soil salvage. An estimate of acreage unavailable for soil salvage should be included in the narrative and in the Planned Disturbance Table on Figure 1. [PB]

**R645-301-231.400**, The maximum dimensions of the soil stockpile are requested.

**R645-301-232.100**, A second soil stockpile is necessary to provide for salvage of all 68,092 cubic yards available from the site. This second stockpile would allow separation of undisturbed from previously disturbed soil and coal fines. In addition, a second stockpile would provide room for expansion, if needed. The Division notes that 0.1 acres of map Unit 3A was included in the total disturbed acreage (27.3 acres) on Figure 1. Map Unit 3A is on the west side of the highway (Telonis owned property) and might be evaluated for use as a stockpile location. [PB]

**R645-301-234**, The applicant commits to reporting final salvage volumes in an annual report (Section 4.4.2.1). This commitment should state that the mining and reclamation plan (MRP) will be amended with the as-built information on final soil salvage volumes, areas and recovery depths, as well. • The application should state the source, and describe the quality and quantity of the excavated material to be used as a base for the soil stockpile construction. [PB]

**R645-301-234.210**, The application should explain how the soil stockpile will be separated from the bathhouse fill pad.[PB]

**R645-301-234.220 and R645-301-121.200**, The plan describes protection of the topsoil stockpile from Hwy 96 by means of a ditch and a berm. As illustrated on Map

4.7.2.1-2, the plan should clearly indicate that the ditch begins approximately 200 ft. from the southern end of the stockpile and that the main protection for salt loading at the southern end of the stockpile is the six foot fill. [PB]

## 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:

#### General

#### Acid- and Toxic-Forming Materials and Underground Development Waste

Section 4.7.2.4 and Section 4.7.4.3 indicate that the rules pertaining to acid/toxic forming materials do not apply to this mine. Section 3.6.3 refers to Exhibit 9 for roof and floor rock analysis. This information could not be found in the plan (see deficiencies written under R645-301-624.310 *et seq*). Table 3.6-2 provides some information on the acid forming potential for roof and floor, but it is not clear whether this is the acid/base potential of the rock or the acid forming potential of the sulfate in the rock or the base forming characteristic of the rock. This table must be supported by the analytical results accompanied by the name of the organization that analyzed the data (R645-301-131). Table 3.6-3 does not provide the laboratory analysis for the parameters identified. Table 3.6-3 must be accompanied by the analytical results accompanied by the name of the organization that analyzed the data. According to R645-300-124.300, chemical reporting on roof and floor is not confidential.

Section 4.7.2.1 states that "Analysis of both actual existing and potential future coal materials, including incidental roof and floor rock, are described in Section 3.6-3 Coal and Overburden/Interburden Characteristics." However, Section 3.6-3 does not discuss the characteristics of the coal currently buried on site.

Section 4.5.2.3, in the Mine Development subheading, contains information on development rock produced from portal development and from room and pillar mining. The plan does not include sampling of the rock as it is produced or as it is stockpiled in the 3,900 ton stockpile on site. Section 4.5.2.3 mentions several disposal options for the development waste: Blend with spec coal, return to underground, stockpile on-site, loaded in haul trucks (stated on page 4.5-46 under Surface Coal Haulage System, Section 4.5.2.3). The plan states that development waste will not be processed. The plan describes conveyance of the rock to the primary crusher building (pg. 4.5-42), but continues on to state that the rock will bypass the

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crusher. The applicant should be mindful that if the rock is passed through the crusher and coal is physically separated from the rock, this physical preparation of the rock would create coal processing waste and therefore the requirements of R645-301-536.700 would apply.

Section 5.4.2.3, Disposal of Mine Waste, and Non-Coal Waste does not provide any information on reclamation of coal mine waste. Section 5.4.2.3, Backfilling and Grading to Establish Final Configuration, does states that solid waste will be covered with four feet of suitable material. A commitment to cover acid/toxic forming material with four feet of cover is requested.

**Findings:**

**R645-301-624**, Table 3.6-2 provides some information on the acid forming potential for roof and floor, but it is not clear whether this is the acid/base potential of the rock or the acid forming potential of the sulfate in the rock or the base forming characteristic of the rock. This table must be supported by the analytical results accompanied by the name of the organization that analyzed the data (R645-301-131). According to R645-300-124.300, acid/toxic reporting on roof and floor is not confidential. • Table 3.6-3 does not provide the laboratory analysis for the parameters identified. Table 3.6-3 must be accompanied by the analytical results accompanied by the name of the organization that analyzed the data. According to R645-300-124.300, chemical characteristics of roof and floor are not confidential. • Section 4.7.2.1 states that "Analysis of both actual existing and potential future coal materials, including incidental roof and floor rock, are described in Section 3.6-3 Coal and Overburden/Interburden Characteristics." However, Section 3.6-3 does not discuss the characteristics of the coal currently buried on site. The plan must provide information on the characteristics of the buried waste that will be unearthed in the process of site development. [PB]

**R645-301-731.300 and R645-301-121.200**, The applicant should verify whether the statements in Section 4.7.2.4 and Section 4.7.4.3 agree with other statements in the plan concerning blending of development waste with spec coal. •The application should include in Sections 4.7.2.4 and 4.7.4.3 a discussion of the information known about the chemical acid/toxic characteristics of the roof, floor, coal, and buried mine waste on site. [PB]

**R645-301-731.300 and R645-301-536.320**, Provide a sampling plan to identify acid/toxic characteristics of waste stored on the surface. [PB]

**R645-301-553.252**, A commitment to bury coal mine waste beneath four feet of cover is required, a suggested location is in Section 5.4.2.3, Disposal of Mine Waste, and Non-Coal Waste. [PB]

## RECLAMATION PLAN

### TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

#### Analysis:

##### Redistribution

Reclamation slopes will vary from 5h:1v to 0.5h:1v (Section 5.4.2.3, Backfilling and Grading to Establish Final Configuration). The geotechnical investigation in Exhibit 4.5.2.1-1 recommends construction of cutslopes no greater than 1.25h:1v or in the vicinity of B-B' no greater than 1.75h:1v. The geotechnical investigation does specify that cuts into competent sandstone may approach 0.5h:1v, but does not indicate fill slopes may approach this steepness. No specific recommendations for fill slopes were made, except that the sandy lean clay soils are collapsible and have a friction angle of 20 degrees. Map 4.7.2.9-1 shows reclamation contours. To facilitate the Division's understanding of where topsoil will be replaced, this map should also identify steep slope segments by their slope angle as well as those slopes which are pre-existing, pre-SMCRA remnants of previous mining. Topsoil should not be replaced on areas that are too steep.

The final reclamation contours are shown on Map 4.7.2.9-1 with contours shown on Maps 4.5.2.3-1A through -1D. Locations of reclamation contours are shown on Surface Facilities Map 4.5.1.2-3.

Prior to topsoil placement, graded slopes will be treated with "finely chopped native hay" and then deep ripped (Sec. 5.2.2.2). This hay will be applied at a rate of 2.0 tons/acre (Section 5.3.2.2 Seedbed Preparation). Tractor scrapers or wheel loaders and trucks will be used to recover material stored in the stockpile and transport the material to the graded slopes.

A uniform thickness of 14.9 inches will be replaced on the graded surface. Soil replacement thickness will be checked visually (Section 5.2.2.2). After soil placement, soils will be sampled and analyzed, with 1 sample taken per four acres (Section 5.2.2.3). The sampling commitment is appropriate, but, the commitment should include the analysis to be performed.

Section 5.3.2.2, Seeding, describes deep gouging of the replaced topsoil. This will blend the 14 inches with the graded subsoil. Seeding will occur after topsoil placement, within 2

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to 6 weeks, and soil will be disced to prepare the seedbed (Section 5.2.2.4). Autumn is the preferred seeding time (Sec. 5.2.2.1). The plan should differentiate on a map, which slopes will be deep gouged and which will be disced.

Reseeded areas will be mulched with 2 tons/acre straw or native hay crimped into the soil.

**Findings:**

The information provided in the application does not meet the requirements of the R645 Coal Rules for Soils Redistribution Plan. Prior to approval, please provide the following, in accordance with:

**R645-301-241**, The topsoil sampling described in Sec. 5.2.2.3 is appropriate, but, the commitment should include a description of the analyses to be performed. [PB]

**R645-301-242.110 and R645-301-553.130**, Reclamation slopes will vary from 5h:1v to 0.5h:1v (Section 5.4.2.3, Backfilling and Grading to Establish Final Configuration). The geotechnical investigation in Exhibit 4.5.2.1-1 recommends construction of cutslopes no greater than 1.25h:1v or in the vicinity of B-B' no greater than 1.75h:1v. The geotechnical investigation does specify that cuts into competent sandstone may approach 0.5h:1v, but does not indicate fill slopes may approach this steepness. No specific recommendations for fill slopes were made, except that the sandy lean clay soils are collapsible and have a friction angle of 20 degrees. Map 4.7.2.9-1 shows reclamation contours. To facilitate the Division's understanding of where topsoil will be replaced, this map should also identify steep slope segments by their slope angle as well as those slopes which are pre-existing, pre-SMCRA remnants of previous mining. Topsoil should not be replaced on areas that are too steep. [PB]

**R645-301-244.100**, For those areas where discing the surface is not an option due to excessive slope, Section 5.2.2.4 must describe seeding, and mulch application immediately following topsoil application, regardless of season. • Section 5.2.2.4 must describe a method of soil stabilization for those areas where seeding does not immediately follow topsoil application. • The plan should differentiate on a map, which slopes will be deep gouged as described in Section 5.3.2.2 and which will be disced as described in Section 5.2.2.4. [PB]

**CONTEMPORANEOUS RECLAMATION**

**Analysis:**

**General**

Section 5.1 describes contemporaneous reclamation practices for exploration activity.

**Findings:**

Information provided meets the requirements of the Coal Rules.

**STABILIZATION OF SURFACE AREAS**

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

**Analysis:**

Stockpiled topsoil and subsoil will be bermed and seeded. The stockpile will cover 2.1 acres (Section 4.5.2.3, Soil Stockpiles).

Section 5.3.2.2 describes interim reclamation of roadcuts, ditches, sedimentation pond embankments, soil stockpiles to control erosion. Section 4.5.2.3 emphasizes all road cut and fill slopes and excavated slopes will be stabilized with an interim vegetation mix.

Road PR-1 will be paved from Hwy 96 to the shop/warehouse (Section 4.5.2.3, Roads). Other roads will be watered or be treated with dust suppressants and a 15 mph speed limit will be imposed (Sec. 4.4.2.1 and Exhibit 2.1.3-1).

Final reclaimed areas will be deep gouged with native hay, seeded and top dressed with 2 tons/acre straw crimped into the soil (Section 5.2 and 5.3). Section 5.0. states the post mining land use is wildlife and watershed. A commitment for the treatment of rills and gullies R645-301-244.320 was not found.

**Findings:**

The information provided in the application does not meet the requirements of the R645 Coal Rules for Soil Stabilization. Prior to approval, please provide the following, in accordance with:

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**R645-301-244.320**, The application must include a commitment to repair rills and gullies, including replacement of topsoil and reseeding or replanting, if necessary.  
[PB]

**RECOMMENDATIONS:**

The application is not recommended for approval at this time.