

February 20, 2003

TO: Internal File

THRU: Jim Smith, Team Lead

FROM: Wayne H. Western, Senior Reclamation Scientist.

RE: Mill Fork Lease Extension of the Deer Creek Mine, Energy West Mining, PacifiCorp, Deer Creek Mine, C/015/018-PM01I-3

SUMMARY:

The Mill Fork Lease contains approximately 5,563 acres and increases the Deer Creek Mine permit area to 24, 500 acres. Energy West acquired the lease on April 12, 1999. The Permit Application Package October 10, 2001. The Division found the PAP to be deficient and the Permittee last resubmitted the PAP on December 4, 2002.

Entry to the Mill Fork Lease from the existing permit area will be by entries in the Hiawatha Seam, advanced from the current permit area by way of Lease Modification #3, a 65.7-acre area that has been added to Lease U-06039 for this purpose. The only potential surface facility associated with this Mill Fork Lease permit extension is the possible ventilation breakout in Crandall Canyon, upstream of the existing Crandall Canyon Mine. The need for these portals will be evaluated and the design will be made based on future coal exploration. If these portals are needed, they will be permitted in a separate application. All currently planned coal mine operations in the Mill Fork Lease will be underground.

Coal will be mined in both the Blind Canyon and Hiawatha Seams. The Blind Canyon is to be mined first, accessed from the Hiawatha through rock slopes that are to be built within the Mill Fork Lease area. Total cumulative vertical extraction from both seams will not exceed 20 feet. The full extraction methods to be used are anticipated to cause subsidence that can be planned and controlled

TECHNICAL MEMO

TECHNICAL ANALYSIS:

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:

Drawing MFU-1837D identifies the proposed permit boundary, which is also identified as the lease area. The Mill Fork lease will be accessed from the Deer Creek Mine, which lies to the southeast. A 65.7-acre modification to lease U-06039 connects the Deer Creek Mine with the Mill Fork Lease area.

Subsidence may occur outside the permit area. Drawing MFS1866D shows that subsidence could occur outside the permit boundary but be confined to the Genwal Mine. The Division will allow subsidence to occur outside the permit boundary in this case because all subsidence will be confined to permitted lands.

Findings

The Permittee has submitted sufficient information in the PAP to address the Permit Area section.

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 affected area is usually considered by the Division to be the same as the total life of mine area. Since the total life of mine area is often difficult to predict, the Division usually allows the Permittee to give a best guess estimate.

The Mill Fork lease northern boundary is the Crandall Canyon mine so northern expansion is unlikely. The western boundary is near the Joes Valley Fault so western expansion is also unlikely. To the south is the existing Deer Creek mine. To the east is the South Crandall tract. Therefore, the Division will consider the permit area for the Mill Fork lease to be the same as the affected area.

Existing Structures and Facilities Maps

No surface structures exist or currently planned for the Mill Fork Lease area. However, the Permittee did make a statement that they are evaluating the possibility of new portals located at Crandall Canyon. This would require a separate permitting action and will not be approved under the C/015/018-PM01I (Mill Fork Lease).

Existing Surface Configuration Maps

Several maps show the existing surface configuration of the Mill Fork lease area, such as Drawing MFS1839D, Deer Creek Mine Mill Fork Lease ML-48258 Pre-Subsidence Survey Map. The map is at a scale of 1" = 1,000' and has 100 foot contours.

Existing surface configuration is portrayed in the Geologic Cross-sections, MFU-1829D and Geologic Formations Map, MFU-1823D. The characteristics of the drainage pattern are a result of the surface configuration on the plateau.

Mine Workings Maps

There has been some historic mining in the canyons east of the lease tract, but no mining has occurred within the Mill Fork Lease boundary. The Permittee has submitted maps showing the underground mine working associated with the Mill Fork Lease. The maps show active, inactive and abandoned underground mine workings of Genwal Coal Company, Skeen Mine, Helco Mine, Huntington #4 Mine, and the Deer Creek Mine.

The Permittee has given mine projection for the Blind Canyon and Hiawatha coal seam in the Mill Fork Lease. Map MFU-1840D gives the mining sequence for nineteen years in the Hiawatha Seam. These maps are projections and can change in the future due to ground condition, roof control, coal quality, mineable reserves and coal market.

Permit Area Boundary Maps

The permit area boundary is identified on several maps including maps MFU-1823D, MFU-1824D, MFU-1825D, MFU-1826D, MFU-1827D and MFU-1828D and MFU-1824D.

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Surface and Subsurface Manmade Features Maps

The Permittee has identified surface and subsurface man made features within, passing through, or passing over the proposed permit area - see Page 5-20 and 5-21 and Map MFS1839D.

Map MFU1840D shows that Genwal mine facilities are within 1,000 feet of the proposed permit area. The Permittee has identified the buildings that are in or within 1,000 feet of the proposed permit area. The buildings are the Genwal mine facility and are shown on Figure R645-301-500a of the PAP.

The Permittee has shown two gas wells, one of which is proposed. This is illustrated on several of the mine maps. The gas well in Section 23 in the Mill Fork Lease will not be undermined. Longwall mining between the years 2012-2016 will undermine the proposed gas well in Section 14. See map MFU1840D.

Surface and Subsurface Ownership Maps

The surface and subsurface ownership maps for the Mill Fork Lease are Drawings MFS1838D and MFU1837D respectively. The maps identify the ownership of both surface and coal rights.

Contour Maps

Several maps show the existing contours of the Mill Fork Lease area, such as Drawing MFS1839D, Deer Creek Mine Mill Fork Lease ML-48258 Pre-Subsidence Survey Map. The map is at a scale of 1" = 1,000 'and has 100 foot contours.

Findings:

The information provided in the PAP is considered adequate to meet the minimum requirements of the Maps, Plans and Cross-Sections of Resource Information section of the Coal Mining Rules.

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Analysis:

General

The Permittee plans to conduct only underground mining within the Mill Fork Lease in the near future. All coal will be shipped out of the mine by conveyor belt to the existing Deer Creek coal handling facilities. Men and some of the material will enter then mine through these facilities, and some of the equipment and material will enter the Deer Creek mine by the portal at Rilda Canyon. The Permittee has mentioned in the proposal that surface facilities may be constructed at Crandall Canyon. This would be a separate action and is not considered in this review.

The Permittee has submitted a local and regional description of the geology, including stratigraphy and structure. A list of boreholes was submitted in Appendix B. One representative lithologic log is presented in Appendix B. The Permittee submitted a generalized cross-sectional map, MFU 1829D, showing a cross-section of strata from north to south and east to west, but no detailed information is shown, like fence diagrams identifying changes in the stratigraphic column or location of ground-water bearing zones between drill sites. The drawing shows the Mill Fork Graben cutting the Blackhawk Formation on the geologic map, but in the Star Point Sandstone and Mancos Shale in the Cross-section.

The Mill Fork Lease encompasses an area of East Mountain. Its extent is shown on several maps in the Mill Fork tract submittal. Drawing MFU 48258 shows the lease in relationship to surface ownership. It lies between Huntington Canyon and Joes Valley. Genwal Resources, Inc. controls leases to the north associated with the Crandall Canyon Mine, and Energy West control leases to the south associated with the Deer Creek Mine. All planned mining activities in the Mill Fork Lease are underground. Coal extraction will take place in the Hiawatha (lower) and Blind Canyon (upper) coal seams. The extracted coal will be transported through mains to the Deer Creek Mine surface facilities.

Type and Method of Mining Operations

The Permittee will use continuous miner for development of longwall panels and main entry development. Longwall mining will be used to extract the majority of the coal from the Mill Fork Lease (Drawings MFU-1824D through MFU-1828D). This method yields high coal recovery and is safer than other mining methods for heavy ground cover. This is the same method being used at the Deer Creek mine today.

Most of the mining in the Blind Canyon seam will take place in the northwest half of the lease. Drawing MFU-1824D identifies the thickness of the overburden above the Blind Canyon coal seam. Overburden thickness in the area of mining ranges from 0 to 2,600 feet. Most of the overburden thickness is over 1,000 feet. The thinner overburden is in the northeast corner of the lease, at a side canyon of Crandall Canyon.

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Facilities and Structures

The Permittee has not proposed any new surface facilities on the Mill Fork Lease.

Findings:

The Permittee has met the minimum requirements of the Mining Operations and Facilities section of the R645 Coal Rules.

EXISTING STRUCTURES:

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

Analysis:

The Permittee listed the existing structures in the PAP on Page 5-20 and 5-21. The structures listed include one operating gas well and two gas pipelines, two power transmission lines, one radio repeater station and two roads. Additional structures in the Mill Fork Lease area include the US Forest Service road #244 and transmission lines in the southwest corner of the lease.

The information listed in section R645-301-526 of the PAP is for surface structures in existing disturbed areas. The reader is instructed to refer to Volume 5, maps 3-9 and 3-9a for information about other existing structures in the permit area.

Findings:

The information provided in the proposal is considered adequate to meet the requirements of the existing structures section of the regulations.

COAL RECOVERY

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

Analysis:

The Permittee will be using longwall mining for the main extraction of coal in the Mill Fork Lease. Continuous miners will be used for development of longwall panels and main entries. This is the current method of mining at the Deer Creek and in the Carbon and Emery

Counties. This method of mining yields the highest safety and coal recovery possible for underground coal mining.

The Division relies on SITLA and BLM to evaluate the coal recovery plan. Both agencies have reviewed the coal recovery plan and found that the maximum amount of economically recoverable coal will be produced. The Division has reviewed the mine plan and concurs with the findings.

Findings:

The information provided in the proposal is considered adequate to meet the requirements of the coal recovery 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:

Renewable Resources Survey

The Permittee has identified manmade features and renewable resources in the Mill Fork lease area. The manmade features in the area include unimproved roads, trails, a gas well and pipelines and power transmission lines. However, no non-commercial buildings or occupied residential dwellings and related structures were shown to exist in the area. The renewable resources include springs, water seeps, grazing land, timber and wildlife. State appropriated water rights are part of the renewable resources in the area.

R645-301-525.130 requires that the Permittee to conduct a survey of the quantity and quality of all State-appropriated water supplies that could be contaminated, diminished, or interrupted by subsidence within the permit and adjacent areas. The Permittee conducted the survey by assessing the State of Utah Water Right's database.

In the tables in hydrology section of the MRP the Permittee list the water rights and owners within the affected area. A detailed print out of water rights is located in Appendix C of the MRP. Unless otherwise stated the Division will assume that the quality and quantity of water associated with each water right as that listed in the printout from Water Rights in Appendix C of the MRP.

The subsidence survey conducted by the Permittee shows renewable resources exists within the Mill Fork affected area. Therefore, the Permittee must provide the Division with a subsidence control plan.

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Subsidence Control Plan

The subsidence control plan must address each of the following elements:

- A description of the method of coal removal. The Permittee will use longwall mining exclusively for production mining. The size of the panels, sequence and timing are shown on Drawing MFU1840D (Hiawatha Mine Plan) and Drawing MFU1841D (Blind Canyon Mine Plan.) Development mining in the Hiawatha Seem is scheduled to occur in 2003 and terminate in 2021. Development mining in the Blind Canyon seam should begin in 2006 with rock slopes from the Hiawatha seam to the Blind Canyon seam and terminate in 2017. Panel lengths will vary from 600 feet to 1,000 feet.
- A map of underground workings which describes the location and extent of areas in which planned-subsidence mining methods will be used and which includes all areas where measures will be taken to prevent or minimize subsidence and subsidence related damage and where appropriate, to correct subsidence-related material damage. Drawing MFS1866D the areas where planned subsidence will occur. The drawing shows two areas one based on a 15 degree angle-of-draw and the other based on a 0 degree angle-of-draw. The drawing only shows the mine workings for the Hiawatha Seam. See Drawing MFU1841D for the Blind Canyon Mine Plan. The main areas that are protected from subsidence are the gas well and the rock slopes between the seams.

The Section 522 of the MRP the Permittee states that the western extent of subsidence will be governed by a 22 degree angle-of-draw because of the Joes Valley Fault. This is a USFS requirement. The gas well will be protected by a 15 degree angle-of-draw. In general, the Division assumes that a 15 degree angle-of-draw is adequate for most underground mines.

If the Permittee uses a 15 degree angle-of-draw the only subsidence that is scheduled to occur outside the permit boundary will be along the northern boarder next to the Genwal mine. The Genwal mine is also conductioning longwall mining in the area and the Genwal mine could cause some subsidence in the Mill Fork area. Because all subsidence would be confined to permitted areas the Division will allow each mine to subside outside of their respective permit boundaries.

The Permittee believes that no subsidence will occur outside the permit boundary because the angle-of-draw will be much less than 15 degrees. The Permittee makes these claims based on annual subsidence surveys.

- A description of the physical conditions, such as depth of cover, seam thickness, and lithology, which affect the likelihood or extent of subsidence and subsidence-related

damage. That information was given in the geology section of the MRP and is considered adequate.

- A description of monitoring, if any, needed to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce, or correct material damage. The Permittee committed to monitor subsidence with aerial photography. This method has been effective in the past and is currently being used by the Permittee.
- A detailed description of the subsidence control measures that will be taken to prevent or minimize subsidence and subsidence-related damage, including, but not limited to: backstowing or backfilling of voids; leaving support pillars of coal; leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving the coal in place; and, taking measures on the surface to prevent material damage or lessening of the value or reasonably foreseeable use of the surface. The main concerns with subsidence damage are the Joes Valley Fault, the gas well and the escarpments. The Joes Valley Fault will be protected with a 22 degree angle-of-draw, the gas well and rock tunnels will be protected with a 15 degree angle-of-draw. The panels will be laid out to minimize damage to the escarpments. In addition, the Permittee will leave a 400-foot barrier between the most northern panel and the permit boundary. This should minimize and adverse effects on the Genwal mine.
- A description of the anticipated effects of planned subsidence, if any. On Figure R645-301-500d the Permittee shows the anticipated subsidence trough. The maximum amount of subsidence is expected to be 5 feet. Drawing MFS1866D shows the areas where subsidence should occur. .
- A description of the measures to be taken to mitigate or remedy any subsidence-related material damage to, or diminution in value or reasonably foreseeable use of the land, or structures or facilities to the extent required under State law. In order to restore any land affected by operations to a condition capable of supporting the current and postmining land uses stated herein, the Permittee will replace water (including State Appropriated Water Supplies) determined to have been lost or adversely affected as a result of Permittee's mining operations if such a loss or adverse impact occurs prior to final bond release. The water will be replaced from an alternative source in sufficient quantity and quality to maintain the current and postmining land uses as stated herein.

In Table MRHT-2 Mill Fork Spring and Seep Survey 2000-2002, the Permittee lists the surface and groundwater rights. In addition the Permittee lists the mitigation alternatives for groundwater as: A) Rehabilitate spring source utilizing BTCA, B) Transfer water rights to adjacent groundwater sources, C) establish permanent groundwater collection and distribution system and D) in the case of disturbance to Little Bear Spring the Permittee will follow a negotiated mitigation agreement. The Permittee reserves the right

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to use any of the first three methods to replace all groundwater sources. The fourth method will only be used in connection with Little Bear Spring. For mitigation of surface water rights the Permittee proposes the following: A) Rehabilitate stream utilizing BTCA, B) Transfer Water Rights to adjacent groundwater sources and C) Establish permanent groundwater collection and distribution systems.

Forest Service Comments

The Division reviewed the USFS comments about subsidence issues for the Mill Fork lease. Those issues can be divided into two groups: protecting structures and commitments to repair damage. The USFS want the Division require the Permittee to take action to protect the powerline and gas well in the Mill Fork lease area.

The protected areas are outlined in R645-301-525.200. The protected areas include:

- Public buildings and facilities.
- Churches, schools and hospitals.
- Impoundments with 20 acre-feet or more capacity.
- Aquifer or body of waters that is a significant source of a public water supply.

The powerline and gas well are not considered protected structures. The Division cannot prohibit subsiding under those structures.

The USFS wants the Division to require the Permittee to make specific commitments to repair or replace damages to structures. The requirements for repair of subsidence related a structure is in R645-301-525.500. The requirements are that if subsidence causes damage the Permittee will repair the damage. Requiring specific commitments for specific structures is not needed.

Performance Standards For Subsidence Control

The basic performance standard for subsidence control is that the Permittee shall comply with all provisions of the approved subsidence control plan. The Division will monitor the Permittee to insure that all mining is conducted in accordance with the MRP. If subsidence causes material damage the Division will take steps to insure that the land is restored to a condition capable of maintaining the value and reasonably foreseeable uses which it was capable of supporting before subsidence. Repair of damage includes rehabilitation, restoration, or replacement of damaged structures or resources.

Notification

At least 6 months prior to mining, or within that period if approved by the Division, the underground mine operator shall mail a notification to all owners and occupants of surface property and structures above the underground workings. The notification shall include, at a minimum, identification of specific areas in which mining will take place, dates that specific areas will be undermined, and the location or locations where the operator's subsidence control plan may be examined. The Division will monitor the Permittee with respect to notification.

Findings:

The information provided in the subsidence control plan is considered adequate to meet the requirements of this section.

SLIDES AND OTHER DAMAGE

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

Analysis:

There should be no slides occurring in the Mill Fork lease area because all mining activities are underground. If slides would occur, it would most likely be caused by subsidence. The area where slides would most likely occur is along the escarpments. The remedy for these slides would fall under the subsidence mitigation plan.

The Permittee has a plan in place to notify the Division should a slide occur and what action is needed to protect the public.

Findings:

The Permittee has met the minimum requirements of the slides and other damage 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.

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Analysis:

Road Classification System

No roads will be built. All access to the Mill Fork Lease will be from underground. Ventilation portals may be built in Crandall Canyon but that would be handled by a separate amendment.

Findings:

The Permittee has met the minimum requirements of the road system and other transportation facilities section of the regulations.

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

Disposal of noncoal waste will not change because there will be no breakout in the Mill Fork Lease. Noncoal waste materials will be removed either from the Deer Creek's mine portals or from Rilda Canyon portal.

Coal Mine Waste

Coal mine waste will be removed as stated in the approved MRP. The coal mine waste will either be placed underground or shipped to the waste rock disposal site (refuse pile.)

Refuse Piles

No new refuse piles will be associated with the Mill Fork Lease.

Impounding Structures

No additional impoundment structures will be associated with the Mill Fork Lease.

Excess Spoil:

No excess spoil will be generated from mining activities. Underground development waste generated from the Mill Fork lease will be not be classified as excess spoil.

Findings:

The Permittee has met the minimum requirements of the spoil and waste materials section of the regulations.

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, -300-148, -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:

Discharges Into An Underground Mine

There are no mine openings in the Mill Fork Lease area. The only potential mine opening associated with this permit extension is possible ventilation breakout in Crandall Canyon, upstream of the existing Crandall Canyon Mine. The need for these portals will be evaluated and the design will be made based on future coal exploration. If these portals are needed, they will be permitted in a separate application. All currently planned coal mine operations in the Mill Fork Lease will be underground.

Gravity Discharges From Underground Mines

There are no mine openings in the Mill Fork Lease area. The only potential mine opening associated with this permit extension is the possible ventilation breakout in Crandall Canyon, upstream of the existing Crandall Canyon Mine. The need for these portals will be evaluated and the design will be made based on future coal exploration. If these portals are needed, they will be permitted in a separate application. All currently planned coal mine operations in the Mill Fork Lease will be underground.

Impoundments

No impoundments are planned for the Mill Fork Lease area. Coal mining operations in the Mill Fork Lease should have no impact on existing structures in the permit and adjacent areas.

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Ponds, Impoundments, Banks, Dams, and Embankments

No ponds, impoundments, banks, dams, or embankments are planned for the Mill Fork Lease area. Coal mining operations in the Mill Fork Lease should have no impact on existing structures in the permit and adjacent areas.

Findings:

The Permittee has submitted sufficient information to address the minimum Hydrologic Information requirements for this section.

SUPPORT FACILITIES AND UTILITY INSTALLATIONS

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

Analysis:

No new surface support facilities or utility installations will occur because of the Mill Fork lease.

Findings:

The Permittee met the minimum requirements for the support facilities and utility installations section of the regulations.

SIGNS AND MARKERS

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

Analysis:

No new signs or markers will be needed because of the Mill Fork lease.

Findings:

The Permittee met the minimum requirements for signs and markers 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

No explosives will be used on the surface as part of the Mill Fork lease.

Findings:

The Permittee met the minimum requirements of the use of explosive section of the regulations.

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:

Affected Area Maps

The Division usually considers the affected area to be equivalent to the permit boundary. Several maps show the permit boundaries including Drawing MFU1840D, Deer Creek Mine Mill Fork Lease ML-48258 Hiawatha Mine Plan.

Mining Facilities Maps

There will be no changes to the current support facilities map because all mining activities will be underground using existing facilities. All maps are P.E. certified.

The only potential surface facility associated with this permit extension is the possible ventilation breakout in Crandall Canyon, upstream of the existing Crandall Canyon Mine. The location for these portals is shown on Drawing MFU1841D in Section 500 of the Mill Fork Lease PAP. These locations are preliminary, and the need for the portals will be evaluated and the design will be made based on future coal exploration. If these portals are needed, they will be permitted in a separate application (PAP, section R645-301-623.200). All currently planned coal mine operations in the Mill Fork Lease will be underground.

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Mine Workings Maps

The Permittee has submitted maps showing the underground mine working associated within the Mill Fork Lease. The maps show active, inactive and abandon underground mine workings of Genwal Coal Company, Skeen Mine, Helco Mine, Huntington #4 Mine, and the Deer Creek Mine.

The Permittee has given mine projection for the Blind Canyon and Hiawatha coal seam in the Mill Fork Lease. Maps MFU-1840D and MFU1841D give the mining sequence for nineteen years in the Hiawatha Seam. These map are projected and can change in the future due to ground condition, roof control, coal quality, mineable reserves, and coal market. Maps are P.E. certified.

Certification Requirements

All maps and cross-sections that are required to be certified have been certified.

Findings:

The Permittee has met the minimum regulatory requirement for supplying the Division with operations maps, cross-sections, and plans.

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:

Because no surface disturbance is planned for the Mill Fork area, the Permittee does not have to address the AOC section for the Mill Fork amendment.

Findings:

The Permittee met the minimum requirements of the approximate original contour 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

Because no surface disturbance is planned for the Mill Fork area, the Permittee does not have to address the backfilling and grading section for the Mill Fork amendment.

Findings:

The Permittee met the minimum requirements of the backfilling and grading section of the regulations.

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 Permittee has not proposed any new mine opening on the Mill Fork Lease or a change in the mine opening closure plan.

Findings:

The Permittee met the minimum requirements of the mine opening section of the regulations.

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:

No new roads or road reclamation plans are associated with the Mill Fork Lease.

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Findings:

The Permittee met the minimum requirements of the road systems and other transportation facilities section of the regulations.

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 Division usually considers the affected area to be equivalent to the permit boundary. Several maps show the permit boundaries including Drawing MFU1840D, Deer Creek Mine Mill Fork Lease ML-48258 Hiawatha Mine Plan.

Bonded Area Map

The bonded area is usually the same as the disturbed area. Because no new surface disturbance is planned for the Mill Fork Lease area, the bonded area map will not change.

Reclamation Backfilling And Grading Maps

Because no new surface disturbance will occur with the Mill Fork Lease no backfilling or grading on the Mill Fork Lease will be needed.

Reclamation Facilities Maps

No new surface facilities will be associated with the Mill Fork Lease.

Final Surface Configuration Maps

No surface structures or facilities will be developed for the Mill Fork Lease. Therefore, no new disturbed areas will be created. Because subsidence will take place, the final surface elevations will be shorter. The Division usually is not concerned with the surface configuration after subsidence has taken place.

Reclamation Monitoring and Sampling Location Maps

Elevations and locations of monitoring stations used to gather data on water quality and quantity are on Plate 1; Drawing MFS1830D – Hydrologic Map; and Drawing MFS1839D - Pre-subsidence Survey Map.

Findings:

Maps, plans, and cross sections of reclamation operations for the Mill Fork Lease are considered adequate to meet the requirements of the Coal Mining Rules.

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

General

No additional bonding will be required because the Mill Fork Lease will be only underground mining. No surface disturbance has been proposed in the PAP.

Terms and Conditions for Liability Insurance

The Deer Creek mine has liability insurance and will provide coverage for the Mill Fork Lease.

Findings:

The Permittee has met the minimum requirements of the bonding and insurance section of the regulations.

RECOMMENDATIONS:

The Division should not approve the Mill Fork Lease application until SITLA and the BLM have completed the plan of operation so that the Division will have the information to evaluate the coal recovery plan.