

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

April 14, 2011

TO: Internal File

THRU: Joe Helfrich, Biologist and Team Lead 

FROM: James Owen, Reclamation Engineer 

RE: Permit Application, Carbon Resources LLC, Kinney #2, C/007/0047, Task #3779

SUMMARY:

On March 21, 2011, the Utah Division of Oil, Gas & Mining (DOG M) received a permit application revision that was meant to provide a response to deficiencies identified during the initial review of the permit application (Task # 3646, submitted October 4, 2010). The application was submitted by Carbon Resources, and was submitted for the purpose of permitting the Kinney No.2 Mine.

The following are deficiencies that were identified during the initial technical review:

- **R645-301-526.116.1;** The applicant must provide a detailed plan on the changes/work that will be done on Utah Highway SR 96 in connection with mine access. This plan must be presented along with the appropriate UDOT approval.
- **R645-301-522, -301-523, -301-521.100;** The applicant must update the information (the dates, in particular) that are outlined in the general coal development and production sequence located on pages 5-17, 5-19, and any other location where the sequence is describe in the permit application. Map 15, Mine Plan Layout & Production Schedule, must also be updated to reflect the appropriate projected development & production dates.
- **R645-301-525;** The applicant must provide a complete subsidence control plan. Specifically, the applicant must demonstrate how they will comply with each of the regulations within R645-301-525. This includes but is not limited to the following sub-deficiencies:
 - **R645-301-525.100;** As part of the subsidence control plan, the applicant must conduct and present the results of a pre-subsidence survey as well as provide a narrative indicating whether subsidence, if it occurred, could cause material damage or to diminish the value or reasonable foreseeable use of structures, resources, or water supplies. If the pre-subsidence survey described in R645-301-525.100 shows that no such structures or renewable resource lands exist, or no material damage or diminution could be caused in the event of mine subsidence, and if the Division agrees with such conclusion, no further information need be provided in the application under this section.

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- **R645-301-525.300, -301-525.490;** As part of the subsidence control plan, the applicant must include a narrative or description of the subsidence control methods that will be applied (some are described in R645-301-450 through R645-301-454). This may include such methods as 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.
- **R645-301-525.440, -301-252.490;** As part of the subsidence control plan, and non-dependent upon the results of the pre-subsidence survey, the applicant should include a description of the subsidence monitoring that will be conducted to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce, or correct material damage. This may include visual monitoring (using photography), elevation monitoring (using point surveys/GPS/elevation control points), aerial monitoring (using aerial surveys), etc. This monitoring will be used to demonstrate and prove whether or not subsidence is occurring using the mining/filling methods that are described in the permit application.
- **R645-301-525.500, -301-252.490;** As part of the subsidence control plan, the applicant must include a commitment to correct any material damage resulting from any subsidence caused to surface lands, to the extent technologically and economically feasible, by restoring the land to a condition capable of maintaining the value and reasonably foreseeable uses which it was capable of supporting before subsidence, and, to the extent required under applicable provisions of State law, either correct material damage resulting from subsidence caused to any structures or facilities by repairing the damage or compensate the owner of such structures or facilities in the full amount of the diminution in value resulting from the subsidence. Repair of damage includes rehabilitation, restoration, compensation, or replacement of damaged structures or facilities.
- **R645-301-525.500;** As part of the subsidence control plan, the application must include a commitment to mail a notification to all owners and occupants of surface properties and structures above the underground workings at least 6 months prior to mining, or within that period if approved by the Division. 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.
- **R645-301-512.250;** The applicant must have Maps 20 through 22 correctly certified. Figure 25 appears to have a copy of a professional engineer's certification but is unreadable due to its insufficient size. The Division recommends that the applicant follow the requirements detailed in State Rules R156-22-601 for seal requirements. Other forms of certification are acceptable.
- **R645-301-512.120, -301-121.200;** The applicant must remove any text within the permit application that states that no coal preparation or processing plant is planned for the mine. According to the definitions in the Administrative Introduction to the Utah Coal Mining Rules (R645-100), a "Coal Processing Plant" means any facility where coal is subjected to chemical or physical processing or the cleaning, concentrating, or other processing or preparation. Coal processing plant includes facilities associated with coal processing activities, such as but not limited to, the following: loading facilities, storage and stockpile facilities, sheds, shops, and other

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buildings; water treatment and water-storage facilities, settling basins and impoundments, and coal processing and other waste disposal areas. "Coal Preparation or Coal Processing" means the chemical and physical process and the cleaning, concentrating, or other processing or preparation of coal.

- **R645-301-528.320, -301-121.200;** Within Chapter 5 of the permit application, the applicant must refer to any "underground development rock" or "mine development rock" as either coal mine waste, underground development waste, or coal processing waste. According to the definitions in the Administrative Introduction to the Utah Coal Mining Rules (R645-100), "Coal Mine Waste" is divided into two categories: coal processing waste and underground development waste. "Coal Processing Waste" means earth materials which are separated from the product coal during cleaning, concentrating, or other processing or preparation of coal. "Underground Development Waste" means waste-rock mixtures of coal, shale, claystone, siltstone, sandstone, limestone, or related materials that are excavated, moved, and disposed of from underground workings in connection with underground coal mining and reclamation activities. The applicant must clearly define which material is which. The Division considers the rock materials that are encountered during mining operations that *are not* separated or "cleaned" from coal materials to be underground development waste and will be approved to be returned to designated areas underground. The Division considers the rock materials encountered during mining that *are* separated, cleaned, or processed in anyway through any type of coal preparation or coal processing plant, from coal materials to be coal processing waste and will be not be approved to be returned to designated areas underground unless the applicant can demonstrate compliance with R645-301-528.321, R645-301-536.520, R645-301-536.700, and R645-301-746.400. Any materials (high or low ash content) that are stockpiled and sold as combustible carbonaceous rock that can be classified as anthracite, bituminous, sub-bituminous, or lignite are considered coal.
- **R645-301-528.320;** The applicant states that underground development waste will be temporarily stored at an area on the load-out pad and that the area is capable on containing approximately 3,900 tons of material. The applicant must state the *maximum amount of time* that the material will remain on the load site. The Division needs this information so that there will be no confusion about what constitutes temporary storage. If the Division considers the maximum storage time to be greater that temporary status, the applicant must demonstrate compliance with all regulations in R645-301-536.
- **R645-301-536.510;** If the applicant wants to ship coal processing waste or underground development waste off site, 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. All pertinent details and information pertaining to a Letter of Intent for disposal with Arch Coal must be included in Chapter 5 of the permit application or referenced in the appropriate sections of Chapter 5 of the permit application
- **R645-301-524.240;** The applicant must include a commitment that in the event that surface blasting is required, the applicant will submit a certified blast design as an amendment to the generic blast plan provided. The applicant must commit to not blasting until the certified blast plan had been reviewed and approved by the Division.
- **R645-301-551;** As per MSHA 30 CFR 75.1711, the applicant must edit the plan for reclamation of mine openings to include a commitment to backfill all portal openings with a minimum of 25 feet of material. This backfill must be placed in addition to the portal seals that will be constructed. Map 17 should be edited to include a backfilled adit in final reclamation status.

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- **R645-301-512.130;** All reclamation maps should be properly certified. For example, Map 29, Mine Surface Facilities Area Post-Mining Topography, has not been properly certified.
- **R645-301-800;** The applicant must demonstrate compliance with all of the regulations pertaining to bonding at such a time as bond calculation and reclamation cost estimates can be evaluated based on the details within an approved permit application. All direct and indirect reclamation costs must be included for proper bond calculation. The Division will evaluate the bonding requirements after technical issues with the permit application have been addressed.

This technical memorandum will address and identify findings and provide a technical review of the engineering and bonding information submitted with the permit application revision. Specifically, this review will address the responses to the deficiencies listed above. This review is based on compliance with the permit application requirements as detailed in the Utah Coal Mining Rules sections R645-301-500 (engineering) and R645-301-800 (bonding).

The following deficiencies were identified after the review of the response was completed:

- **R645-301-528.320;** The applicant must change the text in the paragraph on page 5-70 that states that the "coal processing waste storage pile is shown as No.7 on map 13". It should be "No.38". Also, Map 13 should be corrected to include No. 38 depicted in the correct location, the No.18 that is incorrectly labeled must be removed, and the surface facilities list must provide the correct description of No.38.
- **R645-301-800;** The applicant must demonstrate compliance with all of the regulations pertaining to bonding at such a time as bond calculation and reclamation cost estimates can be evaluated based on the details within an approved permit application. All direct and indirect reclamation costs must be included for proper bond calculation. The Division will evaluate the bonding requirements after technical issues with the permit application have been addressed.

TECHNICAL ANALYSIS:

OPERATION PLAN

RELOCATION OR USE OF PUBLIC ROADS

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

Analysis:

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On page 5-37, within section 526.116.1 of the permit application, the applicant states that one public road passes through the permit boundary. Utah Highway SR 96 passes through the northwest corner of the permit boundary and is adjacent to the operations area. The highway is within 100 feet of operations.

Public notice was offered during two public notice and comment periods. The applicant states that no comments were received regarding the highway and Kinney No.2 Mine operations.

The applicant states that the new mine facilities access road will generally follow the alignment of the undeveloped dirt road which begins near the south end of the proposed operations on Highway 96.

The following deficiency was identified during the initial permit application review:

- *R645-301-526.116.1; The applicant must provide a detailed plan on the changes/work that will be done on Utah Highway SR 96 in connection with mine access. This plan must be presented along with the appropriate UDOT approval.*

In response to this deficiency, discussions with the Utah Department of Transportation (UDOT) were held and a plan for access to the mine was presented to and approved by UDOT. The "Intersection Design Approval" letter was included in Exhibit 4 of the response. The letter from UDOT states that the applicant must submit final, P.E. stamped plans along with an access application and that an Access Approval Permit will need to be obtained by the applicant prior to any construction.

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules. The Division expects the applicant to include of the UDOT Access Approval Permit for Highway 96 within Exhibit 4 of the permit application when it has been received.

COAL RECOVERY

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

Analysis:

The applicant lists as its project objectives: maximize recovery of available coal resource, optimize coal production efficiency and economics, facilitate potential development of nearby coal reserves, provide a safe healthy secure working environment, and minimize potential adverse environmental impacts. The applicant states that after its review and evaluation of

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possible alternative mining scenarios, that final mine plans were selected as the best combination of mine layout, mining method, and mining sequence in order to maximize the utilization and conservation of the coal, while utilizing the best technology currently available to maintain environmental integrity, so that re-affecting the land in the future through coal mining operations is minimized.

On pages 5-16 through 5-29, the applicant included a description of the measures to be used to maximize the use and conservation of the coal resources. This description includes coal recovery, mine development and sequence, use and conservation of coal resource, mining method, mining equipment and activities, projected annual coal production, support activities, pillar dimension details, and approach to old mine workings areas. The applicant will utilize room development mining methods as the primary coal extraction and production technique. The primary production equipment will include continuous miners, shuttle cars, LHD scoops, and roof bolters.

The following deficiency was identified during the initial permit application review:

- *R645-301-522, -301-523, -301-521.100; The applicant must update the information (the dates, in particular) that are outlined in the general coal development and production sequence located on pages 5-17, 5-19, and any other locations where the sequence is describe in the permit application. Map 15, Mine Plan Layout & Production Schedule, must also be updated to reflect the appropriate projected development & production dates.*

In response to this deficiency, Map 15 was revised to update the development and production schedule. Details of coal development and production sequence located on pages 5-18 through 5-21 were also updated.

Findings:

The proposed coal development, production, and mining sequence details have been updated appropriately. Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

SUBSIDENCE CONTROL PLAN

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

Analysis:

There was not a complete subsidence control included with the initial submittal. The following deficiencies were identified during the initial permit application review:

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- **R645-301-525;** *The applicant must provide a complete subsidence control plan. Specifically, the applicant must demonstrate how they will comply with each of the regulations within R645-301-525. This includes but is not limited to the following sub-deficiencies:*
 - **R645-301-525.100;** *As part of the subsidence control plan, the applicant must conduct and present the results of a pre-subsidence survey as well as provide a narrative indicating whether subsidence, if it occurred, could cause material damage or to diminish the value or reasonable foreseeable use of structures, resources, or water supplies. If the pre-subsidence survey described in R645-301-525.100 shows that no such structures or renewable resource lands exist, or no material damage or diminution could be caused in the event of mine subsidence, and if the Division agrees with such conclusion, no further information need be provided in the application under this section.*
 - **R645-301-525.300, -301-525.490;** *As part of the subsidence control plan, the applicant must include a narrative or description of the subsidence control methods that will be applied (some are described in R645-301-450 through R645-301-454). This may include such methods as 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.*
 - **R645-301-525.440, -301-252.490;** *As part of the subsidence control plan, and non-dependent upon the results of the pre-subsidence survey, the applicant should include a description of the subsidence monitoring that will be conducted to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce, or correct material damage. This may include visual monitoring (using photography), elevation monitoring (using point surveys/GPS/elevation control points), aerial monitoring (using aerial surveys), etc. This monitoring will be used to demonstrate and prove whether or not subsidence is occurring using the mining/filling methods that are described in the permit application.*
 - **R645-301-525.500, -301-252.490;** *As part of the subsidence control plan, the applicant must include a commitment to correct any material damage resulting from any subsidence caused to surface lands, to the extent technologically and economically feasible, by restoring the land to a condition capable of maintaining the value and reasonably foreseeable uses which it was capable of supporting before subsidence, and, to the extent required under applicable provisions of State law, either correct material damage resulting from subsidence caused to any structures or facilities by repairing the damage or compensate the owner of such structures or facilities in the full amount of the diminution in value resulting from the subsidence. Repair of damage includes rehabilitation, restoration, compensation, or replacement of damaged structures or facilities.*
 - **R645-301-525.500;** *As part of the subsidence control plan, the application must include a commitment to mail a notification to all owners and occupants of surface properties and structures above the underground workings at least 6 months prior to mining, or within that period if approved by the Division. 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.*

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In response to these deficiencies, the following changes were made to the permit application:

Renewable Resources Survey

Map 1A, 7, 8, 10, 13, 28 and 31 shows the location and type of structures and renewable resource lands that subsidence may materially damage. The maps are located in Exhibit 3. During the Cultural Resource/Pre-Subsidence survey, no structures were found above planned underground mining areas. There are no aquifers or bodies of water that serve as a significant water source for any public water supply system.

Subsidence Control Plan

A subsidence control plan was added in the appropriate section of chapter 5 of the permit application. The applicant states that methods used to control subsidence may include backfilling voids, leaving support pillars of coal, and leaving areas where no coal is extracted.

To document whether or not subsidence occurs, the applicant commits to conduct a subsidence monitoring program including installation of monitoring points above mining areas. Figure 40 was added to the permit application to depict the Subsidence Monitoring Plan. The applicant states that monuments will be installed prior to mining consisting of 3/4 inch rebar driven a minimum of 3 feet into the ground and topped with plastic caps. High precision GPS survey shots will be made on each monument prior to mining, and once each year for the first 5 years. After the first 5 years, the monuments will be surveyed every other year. Control monuments will be established outside the subsidence zone to use as baseline control for the subsidence monuments, Control monuments will be calibrated to the Scofield Cemetery US Geodetic Survey control point to ensure accuracy and consistency. Visual inspections will be conducted with the subsidence surveys. The results of the survey will be provided to DOGM yearly with the annual report.

Performance Standards For Subsidence Control

The applicant commits to correct any material damage resulting from subsidence cause to surface lands, to the extent technologically and economically feasible by restoring the land to a condition capable of maintaining the value and reasonably foreseeable uses. The applicant will either correct material damage resulting from subsidence or compensate parties in the full amount of diminution in values resulting from subsidence.

Notification

The application includes a commitment to mail a notification to all owners and occupants of surface property and structures above the underground workings at least 6 months prior to

mining. The notification includes, 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.

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

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:

The following deficiency was identified during the initial permit application review:

R645-301-512.250; The applicant must have Maps 20 through 22 correctly certified. Figure 25 appears to have a copy of a professional engineer's certification but is unreadable due to its insufficient size. The Division recommends that the applicant follow the requirements detailed in State Rules R156-22-601 for seal requirements. Other forms of certification are acceptable

In response to this deficiency, Maps 20 through 25 have been certified. Figure 25 has been certified by a registered P.E.

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

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:

The following deficiencies were identified during the initial permit application review:

- *R645-301-512.120, -301-121.200; The applicant must remove any text within the permit application that states that no coal preparation or processing plant is planned for the mine.*

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According to the definitions in the Administrative Introduction to the Utah Coal Mining Rules (R645-100), a "Coal Processing Plant" means any facility where coal is subjected to chemical or physical processing or the cleaning, concentrating, or other processing or preparation. Coal processing plant includes facilities associated with coal processing activities, such as but not limited to, the following: loading facilities, storage and stockpile facilities, sheds, shops, and other buildings; water treatment and water-storage facilities, settling basins and impoundments, and coal processing and other waste disposal areas. "Coal Preparation or Coal Processing" means the chemical and physical process and the cleaning, concentrating, or other processing or preparation of coal.

- **R645-301-528.320, -301-121.200;** *Within Chapter 5 of the permit application, the applicant must refer to any "underground development rock" or "mine development rock" as either coal mine waste, underground development waste, or coal processing waste. According to the definitions in the Administrative Introduction to the Utah Coal Mining Rules (R645-100), "Coal Mine Waste" is divided into two categories: coal processing waste and underground development waste. "Coal Processing Waste" means earth materials which are separated from the product coal during cleaning, concentrating, or other processing or preparation of coal. "Underground Development Waste" means waste-rock mixtures of coal, shale, claystone, siltstone, sandstone, limestone, or related materials that are excavated, moved, and disposed of from underground workings in connection with underground coal mining and reclamation activities. The applicant must clearly define which material is which. The Division considers the rock materials that are encountered during mining operations that are not separated or "cleaned" from coal materials to be underground development waste and will be approved to be returned to designated areas underground. The Division considers the rock materials encountered during mining that are separated, cleaned, or processed in anyway through any type of coal preparation or coal processing plant, from coal materials to be coal processing waste and will be not be approved to be returned to designated areas underground unless the applicant can demonstrate compliance with R645-301-528.321, R645-301-536.520, R645-301-536.700, and R645-301-746.400. Any materials (high or low ash content) that are stockpiled and sold as combustible carbonaceous rock that can be classified as anthracite, bituminous, sub-bituminous, or lignite are considered coal.*
- **R645-301-528.320;** *The applicant states that underground development waste will be temporarily stored at an area on the load-out pad and that the area is capable on containing approximately 3,900 tons of material. The applicant must state the maximum amount of time that the material will remain on the load site. The Division needs this information so that there will be no confusion about what constitutes temporary storage. If the Division considers the maximum storage time to be greater that temporary status, the applicant must demonstrate compliance with all regulations in R645-301-536.*
- **R645-301-536.510;** *If the applicant wants to ship coal processing waste or underground development waste off site, 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. All pertinent details and information pertaining to a Letter of Intent for disposal with Arch Coal must be included in Chapter 5 of the permit application or referenced in the appropriate sections of Chapter 5 of the permit application.*

In response to these deficiencies, Section 538.320 of the permit application was modified to include a description of three classes or categories of waste that will be brought out of the

mine. The applicant changed references refer to any "underground development rock" or "mine development rock" as either coal mine waste, underground development waste, or coal processing waste. Language was changed to indicate that no washing plant is planned for the mine. A Coal waste handling schematic, Figure 41, page 5-74, was included to depict and define how waste will be handled. Coal processing waste will not be returned to underground areas. Only underground development will be returned to underground areas. Waste stored on site will be allowed to stay in place for a maximum of two years before being returned to underground areas or being re-evaluated by Division staff. Coal processing waste will be sold to Arch coal. The applicant commits to include a copy of the agreement letter with Arch Coal in Exhibit 3, Confidential Information.

Findings:

Contents and information provided are not sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules. The following deficiency was identified:

- **R645-301-528.320;** The applicant must change the text in the paragraph on page 5-70 that states that the "coal processing waste storage pile is shown as No.7 on map 13". It should be "No.38". Also, Map 13 should be corrected to include No. 38 depicted in the correct location, the No.18 that is incorrectly labeled must be removed, and the surface facilities list must provide the correct description of No.38.

USE OF EXPLOSIVES

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

Analysis

The following deficiency was identified:

- **R645-301-524.240;** *The applicant must include a commitment that in the event that surface blasting is required, the applicant will submit a certified blast design as an amendment to the generic blast plan provided. The applicant must commit to not blasting until the certified blast plan had been reviewed and approved by the Division.*

In response to this deficiency, the applicant committed to submit specific blast design information to the Division prior to any blast. Language was changed to indicate that the blast plan included with the plan is an example of the general blast plan and not a specific blast design.

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Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

RECLAMATION PLAN

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:

In the initial submittal, the applicant stated that five main portals would be constructed. These opening will be permanently sealed on completion of mining. The plan states that portals will be sealed and stabilized by constructing a concrete block wall, at a minimum of 25 feet in-by the portal opening. Further casing and sealing details are located on page 5-92 of the permit application. The following deficiency was identified:

- *R645-301-551; As per MSHA 30 CFR 75.1711, the applicant must edit the plan for reclamation of mine openings to include a commitment to backfill all portal openings with a minimum of 25 feet of material. This backfill must be placed in addition to the portal seals that will be constructed. Map 17 should be edited to include a backfilled adit in final reclamation status.*

In response to this deficiency, Map 17 was revised to include 25 feet of backfill from the portal seals to the portal face-up. The corresponding text, on page 5-80 was revised to include a commitment to backfill the portals for a minimum of 25 feet from the portal seal to the portal face-up.

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

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:

Maps with the following information were included in the permit application: affected area (permit boundary), bonded area, final reclamation contours, final surface configuration, and reclamation surface features. The following deficiency was identified:

- *R645-301-512.130; All reclamation maps should be properly certified. For example, Map 29, Mine Surface Facilities Area Post-Mining Topography, has not been properly certified.*

In response to this deficiency, Map 29 and (new) Map 29A were certified by a Registered Professional Land Surveyor.

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

The following analysis was done during the initial review: In chapter 8 of the permit application, the applicant states that the bond amount will depend on the requirements of the approved permit and reclamation plan. Bond reclamation calculations do not accompany the permit application. The applicant will obtain and post a bond after the Division approves its permit application but before the division issues a permit. The Division will evaluate the bonding requirements after technical issues with the permit application have been addressed. The following deficiency was identified:

- *R645-301-800; The applicant must demonstrate compliance with all of the regulations pertaining to bonding at such a time as bond calculation and reclamation cost estimates can be evaluated based on the details within an approved permit application. All direct and indirect reclamation costs must be included for proper bond calculation. The Division will evaluate the bonding requirements after technical issues with the permit application have been addressed.*

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Findings:

No additional bonding information has been formally submitted at this time. Therefore, contents and information provided are non sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules. The following deficiencies have been identified:

- **R645-301-528.320;** The applicant must change the text in the paragraph on page 5-70 that states that the "coal processing waste storage pile is shown as No.7 on map 13". It should be "No.38". Also, Map 13 should be corrected to include No. 38 depicted in the correct location, the No.18 that is incorrectly labeled must be removed, and the surface facilities list must provide the correct description of No.38.
- **R645-301-800;** The applicant must demonstrate compliance with all of the regulations pertaining to bonding at such a time as bond calculation and reclamation cost estimates can be evaluated based on the details within an approved permit application. All direct and indirect reclamation costs must be included for proper bond calculation. The Division will evaluate the bonding requirements after technical issues with the permit application have been addressed.

RECOMMENDATIONS:

Division approval should not be granted until the above mentioned deficiencies have been addressed.