From: James Owen
To: ghuntbbc@aol.com
CC: OGMCOAL
Date: 12/29/2010 8:19 AM
Subject: KN2 Engineering/Bond Review
Attachments: KN2 - JCO.doc

Greg,

I hope this email finds you having had a Merry Christmas and looking forward to a Happy New Year!

On business matters, I have completed my technical review (Engineering & Bonding) of the Kinney #2 Permit Application . I have attached a word document (KN2-JCO.doc) to this email. The document lists the deficiencies I have identified. I believe that I have 17 deficiencies total. The majority of them are minor changes, corrections, and commitments. The deficiencies relating to the two topics we discussed over the phone (subsidence control and coal mine waste) are more in depth, but are only so because they include useful information, Division considerations, administrative definitions, etc.

Please feel free to review my deficiencies and call me to discuss any or all of them. If I can provide more clear information in terms of the required changes, please don't hesitate to tell me . If there are any mistakes I have made or if I have misinterpreted any of the information in the permit application feel free to discuss that with me as well. Please do not submit any changes, alterations, or amendments to any section to the application until after a complete official deficiency letter is sent for all areas of technical review. This email is simply meant to provide a heads up....

Best Wishes,

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- **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, <u>if it occurred</u>, 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.

- **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 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 demonstrate that the blast plan (Exhibit 15, Kinney No. 2 Mine Blasting Plan) was prepared and signed by a certified blaster.

- **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.

- **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.