

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

April 28, 2006

TO: Internal File

THRU: Pamela Grubaugh-Littig, Permit Supervisor, Task Manager

FROM: Peter H. Hess, Environmental Scientist/Engineering, Team Lead

RE: REVISIONS TO PLATE 1-4, Canyon Fuel Company, LLC, Dugout Canyon Mine, C/007/039, Task ID #2419

SUMMARY:

The Permittee submitted an application to the Division on December 29, 2005 to permit two additional degasification wells in Section 20 of T13S, R13E of the SITLA lease addition (Task ID #2408). The Division initiated review of this application.

On January 24, 2006, the Permittee submitted a second application (Task ID #2419) to the Division to update Plate 1-4, DUGOUT CANYON MINE PERMIT AREA. The submitted revision entails showing the location of wells G-11 and G-12 on the permit area map.

On March 3, 2006, the Division returned a response to the Permittee relative to the Task ID #2408 application, which contained ten deficiencies. The Permittee responded to these deficiencies on March 15, 2006.

The Division's review of the Permittee's response to **R645-301-512.110, -301-521, 525.420** has determined that the response is adequate and that the requirements of the aforementioned rules have adequately been addressed. There have been no changes to the proposed well locations. Therefore, it is recommended that the Task ID #2419 application, Revisions to Plate 1-4, DUGOUT CANYON MINE PERMIT AREA, be approved.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

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

TECHNICAL MEMO

PERMIT AREA

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

Analysis:

The Permittee's application Task ID #2419 consists of a minor revision to the already approved Plate 1-4. The minor revision adds the proposed location of degasification wells G-11 and G-12. The depicted, proposed well locations are adjacent to Pace Creek, in Section 20, T13S, R13E.

The deficiency response generated by the Division and forwarded to the Permittee on March 3, 2006 contained ten deficiencies. One of those (**R645-301-512.110, -301-521, 525.420**) was relative to the need for a description as to how the Permittee has determined the locations of the proposed wells G-11 and G-12. The Division requested more information as to how degasification well locations are selected. The Division is also concerned about the usable life of proposed wells based on whether the wells are located in the tension / compression zone which is adjacent to the head gate abutment, or if the wells are located mid-face, etc. Surface access may be the only consideration determining well location, and the DOGM needed more information as to how well locations are determined. The Task ID #2408 deficiency also needed to know what area of the Mine these wells are proposed to intercept.

The approval of revised Plate 1-4 (Task ID #2419) was determined to be directly related to the adequacy of the response received for Task ID #2408.

The Permittee's March 15, 2006 response included a map of the Gilson seam workings at the Dugout Canyon Mine. The locations of the surface installations for degasification wells G-11 and G-12 are depicted on the surface topography adjacent to the Pace Creek drainage. As can be determined from the mine workings map as well as submitted text, the locations of G-11 and G-12 are determined primarily from ease of surface access (they will be located on or immediately adjacent to a road which is in place on surface owned by the heirs of the Thayn Trust). G-11 and G-12 vent methane gas from the gob area of longwall panel #5 (GIL-5 Panel). The surface locations of G-11 and G-12 are above the bleeder entries that will also return methane and coal dust contaminated air to the mine fans as the coal is extracted.

Figure 1-1, (Task ID #2455) shows the locations of the proposed well sites. As discussed on page 5-10 of that submittal, proposed well sites are selected on the following criteria:

- 1) Topography;
- 2) Proximity to the mining area;

TECHNICAL MEMO

- 3) Existing access versus new access;
- 4) Slope of the proposed site;
- 5) The potential for meeting reclamation requirements;
- 6) Required drilling method.

Figure 1-1 is P.E. certified by Mr. Layne Jensen, Utah registered professional engineer (3/15/2006 certification date).

The map of the Dugout Canyon Mine Gilson seam workings is P.E. certified by Mr. Dave Spillman, Manager of Technical Services for the Permittee (3/13/2006 certification date).

The finding made in Task ID #2455 relative to the Permittee's March 15, 2006 response to **R645-301-512.110** and **R645-301-521, 525.420** indicates that there has been no change in the proposed well locations for G-11 and G-12.

Findings:

The application adequately meets the requirements relative to depiction of the permit area for the Dugout Canyon Mine. The proposed revision to Plate 1-4 does not affect this.

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

Plate 1-4, DUGOUT CANYON MINE PERMIT AREA, has received a previous approval from the Division as it includes all current lease additions that have been proposed for underground coal extraction activities. Thus, the area that will be affected by these coal extraction activities is accurately depicted. Plate 1-4 met the minimum requirements of this section prior to the Task ID #2419 application.

Permit Area Boundary Maps

The revised Plate 1-4, DUGOUT CANYON MINE PERMIT AREA, as received relative to Task ID #2419, contains one revision that is relative to the proposed well locations for degasification wells G-11 and G-12. There is no change to the already approved permit boundary, which includes the latest lease addition, (SITLA lease addition, Task ID #2181,

TECHNICAL MEMO

DOGM approval June 24, 2005). A determination has been made by the DOGM prior to the Task ID #2419 application that Plate 1-4 has met the minimum regulatory requirements for permit boundary maps.

Well Maps

Plate 1-4, Dugout Canyon Mine Permit Area, as received on January 24, 2006 (Task ID #2419) depicts the proposed well locations for degasification wells G-11 and G-12. According to the minimum regulatory requirements established under R645-301-323, -301-411, -301-521, -301-622, -301-722, and -301-731, *location, and depth if available, of gas and oil wells within the proposed permit area and water wells in the permit area and adjacent areas* must be shown. Thus, the Permittee is attempting to meet the requirement showing location of the proposed wells. Well depths are not depicted. However, based on other information provided within the MRP, (coal seam floor elevations, seam thickness), and the fact that the wells are drilled to a depth approximately twenty-five feet above the coal seam roof horizon, these can be determined.

The proposed well locations for wells G-11 and G-12 are directly related to the Task ID #2455 application, which remains in the review process, and has yet to receive Division approval.

Findings:

The approval of the Task ID #2419 application is recommended. The Division has confirmed that the well locations depicted in TASK ID #2419 and Task ID #2455 are identical.

The Task ID #2419 application meets the minimum regulatory requirements of this section.

OPERATION PLAN

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

Plate 1-4, Dugout Canyon Mine Permit Area, has received a previous approval from the Division as it includes all current lease additions that have been proposed for underground coal extraction activities. Thus, the area that will be affected by these coal extraction activities is accurately depicted. Plate 1-4 met the minimum requirements of this section prior to the Task ID #2419 application.

Certification Requirements

Plate 1-4, Dugout Canyon Mine Permit Area as received relative to Task ID #2419, contains a Utah professional engineers certification from Mr. Layne D. Jensen, P. E., dated and signed on January 9, 2006.

Findings:

The application meets the minimum regulatory requirements of these sections of the R645 Coal Mining Rules.

RECOMMENDATIONS:

The locations proposed for degasification wells G-11 and G-12 in Task ID #2419 concur with those that are shown relative to Task ID #2455. Task ID #2419, **REVISIONS TO PLATE 1-4** should be approved.