

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

January 2, 2007

TO: Internal File

THRU: Wayne Hedberg, Permit Supervisor, Project Manager *WH*

FROM: Karl R. Houskeeper, Environmental Scientist/Engineering, Team Lead *KRH/ryan*

RE: Midterm Permit Review, Sunnyside Cogeneration Association, Star Point Refuse, C/007/0042, Task ID #2620

SUMMARY:

The Star Point Refuse permit was issued on November 14, 2003 and expires on November 14, 2008. This memo is part of a midterm permit review and will evaluate the engineering section of the mining and reclamation plan (C/007/0042).

The permit area is a portion of the permit area that was originally under the Star Point Mine. The Star Point Mine has been reclaimed and remains under its original permit (C/007/0006). The Star Point Refuse permit (C/007/0042) is considered surface mining, since the refuse pile is being excavated and hauled to the cogeneration power plant located in Sunnyside, Utah. The refuse material is used as a fuel source to aid in the generation of electricity at the power plant.

TECHNICAL ANALYSIS:

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

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Analysis:

The buildings and structures were removed except for foundations and pads late 2005. The removal occurred because of vandalism activities where the buildings were being broken into and power pole transformers were being destroyed or stolen. Map 521.100a has been revised to show the changes to the surface facilities and the remaining foundations.

Findings

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

EXISTING STRUCTURES

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

Analysis:

Map 521.100a and Table 526.111a have been updated as part of the removal of the surface structures. The concrete pads still remain, but all other structures were demolished late 2005.

Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

RELOCATION OR USE OF PUBLIC ROADS

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

Analysis:

Carbon County Road 290 is within 100 feet of the coal mining and reclamation operations. This road is identified in the mining and reclamation plan and is shown on the Surface Facilities Map 521.100a.

Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

COAL RECOVERY

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

Analysis:

The mining activities consist of mining the refuse pile and using this material as a fuel source for the Sunnyside Cogeneration Power Plant. The coal refuse that is mined is shipped to Sunnyside where it is placed into a fluidized bed combustion boiler, which supplies steam to generate over 50 Mega Watts of electrical power. This process is two fold. First it allows the refuse pile to eventually be reclaimed to a condition and contours near to what the original use and contours were prior to mining activities. Second, the process is also maximizing the resource by utilization as a fuel supply to aid in the generation of electrical power.

Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

SUBSIDENCE CONTROL PLAN

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

Analysis:

Subsidence Control Plan

This operation is a surface operation. It differs from normal surface operations in the fact that the material being removed does not require the surface to be stripped to access the resource material. The resource material is a remnant or byproduct of underground coal mining operations. No subsidence will occur and therefore no subsidence plan is required.

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Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

SLIDES AND OTHER DAMAGE

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

Analysis:

The mining and reclamation plan contains a commitment to notify the Division of any slide or damage and to use whatever remedial action required too rectify the situation.

Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

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:

Road Classification System

Table 527.100a gives a list of the roads within the permit area along with their classification and usage. Section 527.210 gives more detail in a narrative format, including widths and gradients.

Plans and Drawings

The roads are shown on maps 534.100a through 534.100f. The roads are labeled G, H, K, L, M, and Haul Road. Roads M and K will be constructed in the future to access piles B and C and topsoil for reclamation, respectively.

Primary Road Certification

Map 534.100e is P.E. Certified, dated stamped, and signed by a P.E. in the State of Utah. This certification is for the Haul Road. The plan also contains drawings for primary roads M and K that have the appropriate designs and certification. These roads are to be constructed in the future.

Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

USE OF EXPLOSIVES

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

Analysis:

No blasting or explosives are to be used within the permit area.

Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

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:

Certification Requirements

All required maps are P.E. certified, stamped dated, and signed as required by the coal rules.

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Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

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:

The Star Point Waste facilities were disturbed by mining activities prior to the passage of SMCRA. The bonding scenario reclamation attempts to stabilize slopes, but does not approach the original contour. Final reclamation contours shown on map 542.200e are derived from a 1976 aerial survey of the refuse pile area. For the majority of the area, final reclamation will match the contours identified on map 542.200e, except in the disposal area where a natural appearing slope has been designed. To the maximum extent practical, the site will be graded and backfilled to achieve the assumed approximate original contour.

Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

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:

Reclamation

All private roads will be reclaimed after they are no longer needed for mining and reclamation operations.

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Findings:

Information provided in the mining and reclamation plan meets the minimum requirements of this section.

RECOMMENDATIONS:

It is recommended that the engineering section of the midterm permit review be approved.

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