

#3504
&

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

May 5, 2010

TO: Internal File

THRU: Daron Haddock, Team Lead *DH*

FROM: April A. Abate, Environmental Scientist II *AAA* 5-17-2010

RE: Skyline Winter Quarters Ventilation Facility, C/007/005, Task ID #3504

SUMMARY:

On March 24, 2010 the Division of Oil, Gas and Mining (the Division) received a response to Task # 3463 pertaining to an amendment to construct a ventilation shaft facility located within the Winter Quarter Canyon section of the Skyline mine permit.

The following deficiencies pertaining to geology requirements provided in the Utah R645-301.600 Coal Mining Rules and 30 CFR Section 75 – Mandatory Safety Standards for underground coal mines were identified under the original task submittal #3463:

[R645-301.624.220]: Please provide additional information addressing whether or not chemical analysis for acid-toxic-forming, or alkalinity producing materials is necessary for the rock material produced from the installation of the shaft and decline slope and escape way boreholes. The Division understands that prior baseline chemical analysis has been performed on rock strata from other areas of the mine. However, please provide more information or a justification on whether or not the geology in this area is variable enough to warrant any new/additional chemical analysis.

[R645-301.631]: Given that a mine water discharge is possible at reclamation, it is the opinion of the Division that the vertical shaft requires a stable, backfill material in addition to the 6-inch cap. This measure would provide the necessary stability to seal the shaft. Additionally, materials have the propensity to settle in underground openings, especially when compounded in with an underground source of water expected to discharge from the sealed openings. This mine water discharge has the potential to soften and undermine the backfill material, which can contribute to material settling. Please address the type of material that will be used to backfill the shaft and a plan to monitor and prevent any potential settling of the shaft. This memo will address the adequacy of the response to the above-listed deficiencies.

TECHNICAL MEMO

Analysis:

[R645-301.624.220]: The Permittee provides a sampling plan detailed in Section 4.4.5 of the MRP for acid and toxic-forming materials and specifically addresses the material generated from the Winter Quarters Ventilation facility on page 4-30. Waste rock generated from the boreholes during construction will be used to construct the facility pad itself. Excess material will be hauled to the waste rock site in Scofield. The sampling protocol currently in place of one sample per every 2,000 tons will then apply. During reclamation of the shaft and decline slopes, any additional rock material needed will then come from the waste rock site.

[R645-301.631]: the Permittee provides a more detailed description of the materials to be used in backfilling the decline slope and ventilation shaft during reclamation in Section 4.9 on page 4.65(a) of the MRP. The placement of the backfill material was designed to minimize the accumulation of gas and flooding of groundwater. The Permittee also provides Figures 4.9-B and 4.9-C showing the depths and extent of each time of material to be used in the backfilling.

RECOMMENDATIONS:

The Permittee has addressed the above deficiencies and the application meets the R645 Utah coal rules. The amendment is recommended for approval.