

TECH MEMORANDUM

Utah Coal Regulatory Program

February 17, 2009

TO: Internal File

THRU: Dave Darby, Lead *DD*

FROM: Ingrid Wieser, Environmental Scientist II *IW 4/30/09*

RE: Midterm Permit Review, Hidden Splendor Resources, Horizon Mine, C/007/0020, Task ID # 3076.

SUMMARY:

On October 27, 2008, the Division notified Hidden Splendor Resources Inc. of the commencement of the midterm permit review for Horizon Mine. The Division included the following items in the review:

1. A review of the mine plan to ensure that the requirements of all permit conditions, division orders, notice of violation abatement plans, and permittee initiated plan changes are appropriately incorporated into the mine plan document.
2. A review to ensure that the mine plan has been updated to reflect changes in the Utah Coal Regulatory Program that have occurred subsequent to permit approval (example: compliance with U.S. Fish and Wildlife Department - Colorado River Endangered Fish Recovery Program).
3. A review of the applicable portions of the permit to ensure that the mine plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.
4. An AVS check to insure that Ownership and Control information is current and correct, verify compliance status of unabated enforcement actions, determine status of any outstanding finalized penalties, and verify that there are no demonstrated patterns of violation.

5. A review of the bond to ensure that it is in order and that the cost estimate is accurate and is escalated to the appropriate current-year dollars.
6. A review of the mining and reclamation plan for compliance with operator commitments related to variances or special permit conditions (including but not limited to subsidence control/monitoring plans and reporting requirements, variances to AOC, experimental practices, electronic database water monitoring reporting, raptor surveys, revegetation test plots, etc.).
7. The Division may conduct a technical site visit, in conjunction with the assigned compliance inspector, to document the status and effectiveness of operational, reclamation, and contemporaneous reclamation practices.

OPERATION PLAN

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

Endangered and Threatened Species

The USFWS has determined that water consumption due to mining activities could adversely affect the critical habitat of endangered fish species of the Colorado Basin. The USFWS considers the following as a consumptive source: Evaporation from ventilation, coal preparation, sediment pond evaporation, subsidence on springs, alluvial aquifer abstractions into mines, postmining inflow to workings, coal moisture loss and direct diversions. The Permittee is required to calculate estimated water consumption in acre-feet per year based on these sources.

Appendix 7-9 of the MRP volume 3 is the estimated water usage for Horizon Mine. The Permittee included the following sources in the calculation based on a production of .7 Million tons per year and 2 CM crews.

- Continuous Miner Section: 10.4 ac.ft.
- Longwall Section: 0
- Conveyor belts: 8.3 ac ft
- Outby Mine Use: 5 ac ft
- Surface or UG shop: .4 ac ft
- Coal Preparation: 0
- Bathhouse: 2.1 ac ft
- Surface facilities: 1.7

TOTAL: 27 acre-feet per year

Of the 27 acre-feet, the Permittee states that only 9.5 acre-feet are used above ground. The remaining 7.5 acre feet are used underground and will seep back into the mine workings; therefore, it does not contribute to the water consumption.

The Projected Underground Water Evaporation is included in Appendix 7-9 but the results are indicated in Gallon per minute units. The average water evaporation from ventilation is 5.66 gallons/ min. This calculates to 9.12 acre-feet per year.

Chapter 7 page 7-72 in the Probable Hydrologic Consequences section, the Permittee lists sources of water consumption and estimated water consumption figures. The average moisture content of the Hiawatha coal seam is 7.99 % and the maximum production of the mine is 700,000 tons/year. This calculates to 41 acre-feet/year.

The total water consumption listed by the permittee is 60 acre/ft per year.

On page 7-76 of Chapter 7, the Permittee states that any groundwater encountered and consumed underground, and water used to operate machinery is in accordance with two water rights held by the company. However, State appropriated water rights do not have any bearing on the depletion calculations for the Colorado River Fish Program.

Page 7-77 of the MRP indicates that subsidence will not affect springs within the permit and adjacent areas.

There has been no significant change in the mine, and therefore no significant change in water consumption, since the Division approved the 60 acre-feet consumption. The Permittee does not need to recalculate water consumption.

Findings:

Information provided in the Mining and Reclamation Plan is adequate to meet the regulations.

RECOMMENDATIONS:

Approve the Midterm Review.

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