

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

May 20, 2005

TO: Internal File

THRU: Pamela Grubaugh-Littig, Permit Supervisor

FROM: James D. Smith, Environmental Specialist, Team Lead

RE: Permit Boundary Expansion, Hidden Splendor Resources, Inc., Horizon Mine, C/007/0020, Task ID #2249

SUMMARY:

Initial Submittal	May 19, 2004	Assigned Task # 1933	May 21, 2004
		Tech Memo	September 2, 2004
		TA	September 21, 2004
Response to # 1933	January 13, 2005	Assigned Task # 2115	January 14, 2005
		Tech Memo	March 4, 2005
		Deficiency list	March 9, 2005
Response to # 2115	April 7, 2005	Assigned Task # 2215	April 8, 2005
		Tech Memo	May 6, 2005
		Deficiency list	May 6, 2005
Response to # 2215	May 12, 2005	Assigned Task # 2249	May 16, 2005
		Tech Memo	May 20, 2005

Hidden Splendor Resources (HSR) submitted an amendment to the Horizon Mine MRP on May 21, 2004. This amendment will increase the permitted acreage from 711 acres to 1,577 acres. The additional acreage is the part of federal lease UTU-74804 that lies north of Beaver Creek. There are also some minor changes to the surface facilities. This is a significant revision of the mine plan.

The Horizon Mine permit area includes federal coal lease UTU-74804 (1,272 acres) and fee coal owned by Hidden Splendor Resources (305 acres). Hidden Splendor Resources has been the owner and operator of the Horizon Mine since March 2003, when it acquired the rights to the Horizon Mine from Lodestar Energy, Inc. through the US Bankruptcy Court for the Eastern District of Kentucky.

TECHNICAL MEMO

Lodestar Energy, Inc. received a permit to expand mine operations into the 406 acres of Federal Lease UTU-74804 located south of Beaver Creek in 2001. Knowledge of the hydrology north of Beaver Creek was not sufficient to allow permitting of the entire federal lease at that time.

Steve and Pete Stamitakis own the surface surrounding Beaver Creek. They have written the Division to express concerns about loss of water in streams and springs due to mining and surface disturbance from subsidence (letter received August 20, 2004). They have expressed the same or similar concerns in the past, but no claim of damage to water resources has been substantiated or pursued.

TECHNICAL ANALYSIS:

OPERATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Water Replacement

Under R645-301-525.480 and R645-301-731.530, there needs to be a plan in the MRP, before any damage actually occurs, to repair damage to surface facilities and promptly replace state-appropriated water supplies. In Section 7.1.6 the Permittee has made the following commitments:

The Permittee will replace the water supply of any land owner if such a water supply proves to be contaminated, diminished or interrupted as a result of the mining operations. First, a determination will be made by the Division in accordance with R645-301-731.800 as to whether or not the water supply in question has been contaminated, diminished, or interrupted as determined from baseline hydrologic and geologic information. Then, in accordance with Regulation R645-301-525.510, Horizon Mine will correct any material damage resulting from subsidence caused to surface lands (which includes water rights), to the extent technologically and economically feasible, by restoring the land to a condition capable of maintaining the value and reasonably foreseeable usus [sic]

TECHNICAL MEMO

that it was capable of supporting before subsidence damage. Negotiations will be held with the water right holders to determine the best plan of action and implementation of water replacement.

Specific methods to promptly replace a water supply impacted by mining operations would include (but not be limited to): repair or replacing a pond damaged by mining operations, hauling water by truck to replace water impacted by mining operations, drilling a new water well, or transfer of water rights to the damaged party.

In section 3.4.8.2 is the following statement regarding long-term mitigation:

...Should a substantial inflow of groundwater occur, mitigation measures may include: attempts to seal off the inflow, increased monitoring efforts, lining of the stream bed through the affected area if it is determined to be surface water, and replacement of lost water if the groundwater does not rebound. Replacement of water lost due to mining is addressed in 7.1.6.

An extended mitigation plan will be enacted should a measurable impact occur to surface water due to mining activity. The mitigation plan will be correlated with Water Rights and UDOGM.

The Permittee's water-replacement commitments address elements of both R645-301-731.530 and R645-301-525.480, but the Permittee's commitments to replace water supplies and the methods described to carry out such replacement are sufficient to meet the requirements of the Coal Mining Rules. R645-301-731.530 requires replacement of state-appropriated water supplies irrespective of land ownership, so if a state-appropriated water supply that does not belong to a surface owner were to be affected, the Permittee is still obligated to replace that water supply under R645-301-731.530.

Findings:

Operation Plan Hydrologic Information is adequate to meet the requirements of the Coal Mining Rules.

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:

Mine Workings Maps

TECHNICAL MEMO

The mine-workings map, Plate 3-3, shows the projected angle-of-draw and the positions of the bounding faults of the graben. Plates 3-9 and 3-10 show the location and extent of known workings of active, inactive, or abandoned underground workings, including openings to the surface, within the permit and adjacent areas; also, areas within these mines that have been second mined. No previously surface-mined areas are known to exist within the permit area.

Findings:

The information contained in this section of the proposed amendment is adequate to meet the requirements of the regulations.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

The CHIA was updated when the south part of Federal Lease UTU-74804 was added to the permit in 2001. That revision included assessment of the entire federal lease UTU-74804. The Division is updating the CHIA for this significant revision, but major changes are not anticipated.

Findings:

The Division will update the CHIA as needed for this permit extension, a significant revision to the mine plan.

RECOMMENDATIONS:

This amendment to the MRP should be approved.