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Technical Analysis and Findings

Utah Coal Regulatory Program

October 18, 2017

PID: C0070013
TaskID: 5550
Mine Name: HORSE CANYON MINE
Title: REMOVAL OF IPA #3

Operation Plan

Hydrologic General

Analysis:

The application meets the State of Utah R645 requirements for Hydrologic: General.

The Permittee met all previous deficiencies regarding the 731.200 for updating the monitoring narrative to reflect current active and suspended monitoring locations. The Permittee has updated the narrative to ensure the number of groundwater sampling locations is corrected cited, as well as, active and abandoned site status are now correctly cited i.e. L-12-G and L-20-G

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Hydrologic Ground Water Monitoring

Analysis:

The amendment meets the State of Utah R645 requirements for Groundwater Monitoring.

The Permittee has updated the Groundwater Monitoring plan presented in Table 7-3 to indicate the suspension of water monitoring at IPA #3, and to indicate the well has been sealed in Fall 2017. This change to the monitoring plan is consistent with language in the MRP for monitoring of IPA #3 to continue until mining renders them unusable. Mine plan projections provided by the Permittee indicate IPA #3 to be intersected by mining in early 2018. 1 / 3 The well is screened below the coal seam in the Sunnyside Sandstone member of the Blackhawk Formation, Mesaverde Group. On page 13 of Volume 6, Chapter 7, this unit though saturated does not meet the R645-100-200 rules to be classified as an aquifer. The water in the Sunnyside Sandstone saturated unit is not developed for a specific use nor does the strata transmit sufficient water to supply water sources. In addition, there is no discharge from this unit along faults, fractures, or adjacent canyons. The CHIA finds that strata in the Mesaverde group has very slow movement with no discharge occurring anywhere in the cumulative impact area. However, monitoring of water levels in the Sunnyside Sandstone will henceforth continue with the use of IPA #1 and IPA#2. IPA #2 is located within the mains and will be in place to monitor water levels without potential to be intersected by mining at a future date. Due to the unlikely diminution or interruption of State-appropriated water in the permit or adjacent areas based on these assessment, sealing of IPA #3 is appropriate. The two IPA wells to remain will allow for continued monitoring of the Sunnyside Sandstone for R645-301-724.100.

The Monitoring Plan Table 7-3 has been updated to meet the previous deficiency and now reflects the current frequency and status of all monitoring stations.

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Maps Monitoring and Sampling Locations

Analysis:

The amendment meets the State of Utah R645 requirements for Maps Monitoring and Sampling Locations.

The amendment is presented to remove IPA #3 from monitoring. The Permittee has corrected the maps to address the previous deficiency. The permittee now provides updated maps to indicate the removal of IPA #3 on Plate 7-4, with monitoring locations marked as Suspended or Active matching the operational monitoring plan outlined in Table 7-3 of the MRP. The Permittee also updated Plate 7-1 to include all monitoring locations, including L-11-G and L-12-G.

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Reclamation Plan

Hydrological Information Reclamation Plan

Analysis:

The amendment meets the State of Utah R645 requirements for Hydrological Information Reclamation Plan.

The permittee proposes to seal well IPA #3 prior to interception by mining in early 2018. The Permittee plans to reclaim this mine according to DOGM Performance Standards as cited on Page 90 of Volume 6, Chapter 7, Hydrology. Also, the permittee will ensure the permanent closure of the monitoring well to be in accordance with the requirements of "Administrative Rules for Water Well Drillers", State of Utah, Division of Water Rights. The State Approved well driller will also follow the requirements for well abandonment found in 43 CFR 3484.1(a).

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