

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

#4050
G

March 22, 2012

TO: Internal File

THRU: Steve Christensen, Permit Supervisor *S/CC*

FROM: April A. Abate, Environmental Scientist III and Team Lead *AAA 3/27/2012*

RE: Midterm Completion Response, Savage Services Corporation, Savage Coal Terminal, C/007/0022, Task ID #4050

SUMMARY:

In accordance with R645-303-211, the Division of Oil, Gas, and Mining (the Division) is required to review each active permit during its term. The Division received the Midterm completion response for the Savage Coal Terminal on March 15, 2012. This response review memo addresses the adequacy of the Permittee addressing the geology and hydrology requirements that were identified during the midterm review.

The following deficiencies were identified during the midterm review:

- **[R645-301-100]:** Ownership and Control meets the R645 Utah Coal Rules. If any known transfer of surface or mineral ownership has occurred, than an updated Plate 1-1 and updates to Table 1-1 should be submitted to the Division.
- **[R645-301-728 & -765]:** Currently, groundwater conditions at the site are monitored from two monitoring wells. One well CV-1-W, the French drain located near the northeast corner of the property and monitoring well S-2-GW near the southeast boundary of the property. Groundwater flow direction has been determined by previous studies to flow in a northeasterly direction. With the absence of data from groundwater monitoring well S-1-GW there is no groundwater delineation representative for the eastern boundary of the property. The Division recommends installing plugging S-1-GW in accordance with the -301.765 rule and installing a replacement well for S-1-GW.
- **[R645-301-728]:** The Probable Hydrologic Consequences (PHC) section of the Mining and Reclamation Plan should be updated to be more reflective of current operational conditions at the existing wash plant (as opposed to language in the

TECHNICAL MEMO

plan discussing the wash plant as proposed). The PHC also discusses refuse storage as being temporary, not to exceed one year from start up.

- **[R645-301-724.100]:** Groundwater water quality tables are summarized for each data point at/related to the site in Tables 7-4 through 7-14c. Water quality data from the French drain should be updated on Table 4a and a new table summarizing water quality data should be added for monitoring well S-2-GW.

Findings:

The Permittee indicated that no updates to the surface or mineral ownership had occurred since the last 5-year review and therefore no updates to Plate 1-1 and Table 1-1 were needed.

The Permittee has made a commitment to install a replacement well for S-1-GW at the request of the Division because it was not producing any useful groundwater data. The information for the installation of the well will be provided in a separate amendment to the Division before March 31, 2012.

The Permittee has replaced Chapter 7 with a new version of Chapter 7 where Tables 7-4, 7-4a and new Tables 7-4b and 7-4c are now included. Table 7-4 has been updated to reflect French drain results from 2007-2011 and revised summaries of the water quality data with the new information taken into account. The Permittee has also added Tables 4b and 4c for groundwater well S-2-GW for the period from 2007-2011.

The Permittee updated the Probable Hydrologic Consequences (PHC) to include updated language discussing current operations at the Savage coal terminal. The facility information and status of the refuse pile has been updated to reflect current conditions.

RECOMMENDATIONS:

The Permittee supplied the required information asked for by the Division. Midterm approval is recommended.