

# WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

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December 1, 2003

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: Gregg A. Galecki, Reclamation Hydrologist III

RE: 2003 Second Quarter Water Monitoring, Canyon Fuel Company, LLC, Dugout Mine, C/007/0039-WQ03-2, Task ID #1777

- 1. Was data submitted for all of the MRP required sites?** YES [ x ] NO [ ]  
*Identify sites not monitored and reason why, if known:*

- 2. On what date does the MRP require a five-year re-sampling of baseline water data.**  
*See Technical Directive 004 for baseline resampling requirements. Consider the five-year baseline resubmittal when responding to question one above. Indicate if the MRP dose not have such a requirement.*

**Re-sampling due date**

Baseline sampling was conducted at the required sites during the 3<sup>rd</sup> quarter 2002.

- 3. Were all required parameters reported for each site?** YES [ x ] NO [ ]  
*Comments, including identity of monitoring site:*

Of the 25 total samples required for sampling, all sites were accessible and were sampled.

- 4. Were irregularities found in the data?** YES [ x ] NO [ ]  
*Comments, including identity of monitoring sites:*

Water quality in MD-1 (Old Johnson mine / Gilson seam) has changed significantly since spring 2002 when they started pumping the old workings. Dissolved Magnesium, Dissolved Sodium, Chloride, Sulfate and TDS have all increased since pumping began. However, flow is often reduced significantly since the site was thought to primarily be recharged from the old mine workings. This condition continues to be monitored.

**5. Were DMR forms submitted for all required sites?**

*Identify sites and months not monitored:*

1<sup>st</sup> month, YES [ x ] NO [ ]  
2<sup>nd</sup> month, YES [ x ] NO [ ]  
3<sup>rd</sup> month, YES [ x ] NO [ ]

**6. Were all required DMR parameters reported?**

YES [ x ] NO [ ]

*Comments, including identity of monitoring sites:*

**7. Were irregularities found in the DMR data?**

YES [ ] NO [ x ]

*Comments, including identity of monitoring sites:*

UPDES site 001 (Mine Discharge) discharged a total of five (5) times during the quarter. Of the five discharge events, two exceeded the 2,000 lb/day total limit on Total Dissolved Solids (TDS); April 11 with 2,753 lbs and June 25 with 5,294 lbs, respectively. On the April 11 discharge, the concentration of TDS was 2071 mg/l with a flow of 70 gpm. On the June 25 discharge, the concentration of TDS was 1558 mg/l with a flow of 275 gpm, which created the excessive loading. As with site MD-1, this is discharge related to draining of the Gilson seam (Old Johnson Mine). The Gilson seam is thought to be recharged slowly from groundwater, however the workings have sporadically flooded to the point requiring emergency discharging of the water due to safety concerns. In both April and June, a letter was sent to DWQ prior to discharging indicating that the discharges were necessary for safety reasons. The flooding of the Gilson seam is a situation that continues to be monitored.

**8. Based on your review, what further actions, if any, do you recommend?**

No further action is necessary for the 2003 2nd Quarter Water Monitoring data.