

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

April 18, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: Steve Fluke, Reclamation Hydrogeologist

RE: 2004, Second Quarter Water Monitoring, Canyon Fuel Company, SUFCO Mine, C/041/0002-WQ04-2, Task ID #1938

1. Was data submitted for all of the MRP required sites? YES [X] NO []

2. On what date does the MRP require a five-year resampling of baseline water data.

The MRP does not require a five-year resampling of baseline water data.

Resampling due date.

Not specified.

3. Were all required parameters reported for each site? YES [X] NO []

Additional stream and spring monitoring stations have been added to the East Fork of Box Canyon as part of a mitigation plan for undermining the stream channel with panels 3LPE and 4LPE. These monitoring stations, intended to more carefully document the effects of subsidence on the hydrologic balance and state appropriated water rights on the East Fork of Box Canyon, also include existing quarterly stream and spring monitoring stations (Pines 106 and Pines 214). The data collected at the additional monitoring stations are submitted and reviewed separately from the quarterly water monitoring data as outlined in the MRP (Appendix 3-10). Only the quarterly monitoring stations are reviewed as part of this memo.

4. Were irregularities found in the data? YES [X] NO []

Springs

Concentrations of dissolved calcium for Pines 100 and TDS for Pines 214 were reported above two standard deviations.

Streams

Concentrations of dissolved potassium, total alkalinity, and total manganese for Pines 106 and conductivity for Pines 408 were reported above two standard deviations.

5. Were DMR forms submitted for all required sites?

1st quarter, 1st month, YES [X] NO []
2nd month, YES [X] NO []
3rd month, YES [X] NO []

DMR forms are submitted to DOGM and the data submitted to the DOGM database. All required UPDES sites were monitored. For all three months, no flow was reported for UPDES site 001 and no exceedences were reported to UPDES sites 002 and 003. The May DMR reported that UPDES site 003 passed the test for acute whole effluent toxicity for fathead minnows.

6. Were all required DMR parameters reported? YES [X] NO []

UPDES site 002

No oil and grease was reported in the database for May 26 and no settleable solids were reported in the database for June 9. However, the DMR submitted to the Division reported maximum concentrations for these parameters at <2 mg/L and <0.1 mg/L, respectively, for the two monthly sampling events.

7. Were irregularities found in the DMR data? YES [] NO [X]

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

It is likely that the effects of the continued drought have caused an increase in concentrations of parameters at Pines 100 and Pines 106. Continue monitoring these sites and review data for possible trends.

The undermining of the East Fork of Box Canyon has damaged spring Pines 214 and portions of the stream channel as evidenced by measured flow and increased conductivity at stream site Pines 408. The mitigation of the effects of subsidence on the stream channel is ongoing as outlined in the mitigation plan presented in Appendix 3-10 of the MRP.

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