WATER QUALITY
M E M O R A N D U M

Utah Coal Regulatory Program

April 4, 2005

TO: Internal File

THRU: Wayne Hedberg, Permit Supervisor

FROM: Steve Fluke, Reclamation Hydrogeologist

RE: 2004, Third Quarter Water Monitoring, West Ridge Resources, Inc., West Ridge Mine, C/007/0041-WQ04-3, Task ID #2209

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.

Resampling due date.

Five-year baseline resampling to occur at the time of the mid-term review. The next baseline resampling should be conducted by October 1, 2006.

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

Missing flow for stream site ST-10 and flow and oil and grease for stream site ST-5.

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

Of the eight monitored spring sites, four (SP-12, SP-13, SP-15, and WR-2) had parameter concentrations reported outside of two standard deviations. These were dissolved magnesium and hardness for SP-12; dissolved calcium, magnesium, chloride, and TDS for SP-13; conductivity for SP-15, and sulfate for WR-2. The concentrations reported did not exceed any regulatory limits.

Stream site ST-3 had parameter concentrations reported outside of two standard deviations including total hardness, dissolved calcium, and total iron. The concentrations reported did not exceed any regulatory limits.

5. Were DMR forms submitted for all required sites?

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

DMR data is submitted to the DOGM database. No flow was reported for UPDES site 001 (discharge from the sediment pond).

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

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

The reported concentration for TDS exceeded the 2000 lbs/day maximum for the months of July and September. No flow or oil and grease were reported for the months of August and September, respectively.

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

Springs

Continue monitoring parameters outside of two standard deviations for spring sites SP-12, SP-13, SP-15,and WR-2. Historically high measurements of the parameters are likely attributed to the ongoing drought in the region. Most of the springs monitored have a trend of increasing TDS concentrations since approximately 1999.

Have operator provide missing flow data for spring site S-80.

Streams

Continue monitoring parameters outside of two standard deviations for stream site ST-3 for trends.

Have operator provide missing flow for stream site ST-10 and flow and oil and grease for stream site ST-5.

Continue discussions with the permittee and mine hydrologist regarding whether the automatic sampling method for some of the stream sites can be improved upon. Implement a plan to have the automatic sampler collection and holding times reported to DOGM to aid in the evaluation of the analytical results. Although elevated concentrations of some parameters were reported for ST-5, the concentrations were consistent with previous reports.

Carbonate and bicarbonate concentrations for many of the sites are outside of two standard deviations because the laboratory is using a different analytical method based on calcium carbonate.

Discuss with Permittee the issue of TDS concentrations exceeding the daily maximum load for outflow UPDES #002. The increase load may be due to the outflow increasing to above 300 gpm, although exceedences have also occurred in the past. We may need to discuss with DWQ the need to update the mine's UPDES permit. In addition, have the mine submit missing flow and oil and grease data for August and September.

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