

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

July 1, 2004

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: James D. Smith, Senior Reclamation Specialist

RE: 2004 First Quarter Water Monitoring, Energy West Mining Company, Deer Creek Mine, C/015/0018-WQ04-1, Task ID # 1868

1. Were 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 resampling 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 does not have such a requirement.

Resampling Due Date

Renewal submittal due 10/07/00, renewal due 2/07/01. Baseline analyses were performed in 1996 and 2001 and will be repeated every 5 years, i.e., next baseline analyses will be in 2006.

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

4. Were irregularities found in the data? YES [X] NO []
Comments, including identity of monitoring site:

MAIN N MAIN E: field water temp (n = 41) was outside the two standard deviation range;

NEWUA METER-3: Ca (n = 20), sulfate (n = 33), and TDS (n = 33) were outside the two standard deviation range;

DCR04: field pH (n = 101) was outside the two standard deviation range;

DCR06: Cl (n = 72) was outside the two standard deviation range;

HCC01: DO (n = 85) and Na (n = 27) were outside the two standard deviation range;

HCC02: field pH (n = 91), DO (n = 84), Na (n = 27), and Cl (n = 78) were outside the two standard deviation range;

HCC04: DO (n = 85), Na (n = 27), and Cl (n = 79) were outside the two standard deviation range.

UPDES UT0023604-001 January: field conductivity (n = 148), Na (n = 78), Cl (n = 182), and bicarbonate (n = 165) were outside the two standard deviation range;

UPDES UT0023604-001 March: field conductivity (n = 148), K (n = 78), Na (n = 78), Cl (n = 182) and TDS (n = 191) were outside the two standard deviation range;

DCWR1: field pH (n = 43) and K (n = 28) were outside the two standard deviation range.

5. Were DMR forms submitted for all required sites?

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

Identify sites and months not monitored:

DMRs were submitted in electronic format (Adobe). DMR data were submitted to the DOGM database as operational parameters, not as DMR parameters.

6. Were all required DMR parameters reported?

YES [] NO [X]

Comments, including identity of monitoring site:

UPDES parameters that are not included in the parameter lists in the MRP (floating solids, sanitary waste, and visible foam) are not reported to either DOGM or Water Quality.

7. Were irregularities found in the DMR data? YES [X] NO []
Comments, including identity of monitoring site:

UPDES UT0023604-001 March: DMR TDS-Daily Max in lbs/day (n = 103) and DMR TDS 30-day Average in mg/L (n = 102) were outside the two standard deviation range. DMR TDS-Daily Max exceeded the UPDES loading limit of 2,000 lbs/day;

UPDES UT0023604-001 January: DMR TDS-Daily Max in mg/L (n = 109) was outside the two standard deviation range and exceeded the UPDES concentration limit of 5,000 mg/L;

UPDES UT0023604-002 January, February, and March: DMR 30-day Average Flow (n = 15) and DMR Daily Max (n = 15) were outside the two standard deviation range.

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

pH was outside two standard deviations for several sites. Improper calibration of the instruments is one possible cause, and the Permittee needs to calibrate the pH meters with every use.

Na and Cl were elevated at several sites. Road salting is obviously a possible source for these ions.