

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

October 7, 2003

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: James D. Smith, Senior Reclamation Specialist

RE: 2003 Second Quarter Water Monitoring, CO-OP Mining Company, Bear Canyon Mine, C0150025, Task ID #1656

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

SBC-11 has not been not accessible since early January because of a roof fall in the Hiawatha workings of Mine #1. SBC-9A has replaced SBC-11 for monitoring water in this section of the #1 Mine. The Permittee needs to enter "no access" for SBC-11 because it is still in the monitoring plan in the MRP.

- 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 07/02/00, renewal due 11/02/00. Baseline parameters are to be taken in August of year 5 prior to each permit renewal (Table 7.1-8). Baseline parameters were measured August 2000 and included with the Third Quarter 2000 data submittal. Next baseline analysis will be in August 2005.

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

SBC-17: lab specific conductivity was not reported.

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

BC-1 June: dissolved oxygen (n = 93) was outside the two standard deviation range;

BC-2 June: water temperature (n = 135) was outside the two standard deviation range;

MH-1: water temperature (n = 23) was outside the two standard deviation range;

FC-1: water temperature (n = 15) was outside the two standard deviation range;

SBC-14: flow (n = 22) was outside the two standard deviation range;

SBC-16: field conductivity (n = 9) and water temperature (n = 9) were outside the two standard deviation range;

SBC-17: sulfate (n = 10) was outside the two standard deviation range;

SMH-2: flow (n = 31) was outside the two standard deviation range;

SBC-3: Ca (n = 33) and K (n = 33) were outside the two standard deviation range;

UPDES UTG040006 –004 April: water temperature (n = 225) was outside the two standard deviation range;

UPDES UTG040006 –004 May: water temperature (n = 225) and field pH (n = 225) were outside the two standard deviation range.

5. Were DMR data 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:

Data were submitted electronically.

- 6. Were all required DMR parameters reported?** YES [] NO [X]
Comments, including identity of monitoring site:

Data were submitted electronically, and DMR parameters that are not included in the parameter lists in the MRP (visible sheen, floating solids, or visible foam and sanitary waste) are not reported.

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

UPDES UTG040006 –004 April: water temperature (n = 225) was outside the two standard deviation range;

UPDES UTG040006 –004 May: water temperature (n = 225) and field pH (n = 225) were outside the two standard deviation range.

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

Cation-anion balance values were not reported for SBC-14, SBC-17, SBC-3, and SBC-9A. On checking the monitoring plan in the MRP, the ground-water parameter list (Table 7.1-7) doesn't list cation-anion balance; however, this parameter is in the surface-water parameter list. A deficiency has been included in the TA for C/015/025 AM03A - Reformat and Digitization - to correct this. The lab should be routinely calculating cation-anion balance as a part of their quality control, and the Permittee needs to instruct the lab to always include the results in their reports.

SBC-11 has not been not accessible since early January because of a roof fall in the Hiawatha workings of Mine #1 (it has been replaced by SBC-9A). The Permittee needs to enter "no access" for SBC-11 because it is still in the monitoring plan in the MRP.

Because of the number of water temperatures that were outside the two standard deviation range, the thermometer should be checked for accuracy.

Other irregularities in the water-quality parameters do not appear significant and no further action is recommended other than watching for possible trends.