

August 20, 2003

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: James D. Smith, Senior Reclamation Specialist

RE: 2003 First Quarter Water Monitoring, CO-OP Mining Company, Bear Canyon Mine, C/015/025-WQ03-1

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

Several sites do not require a report in the first quarter.

SBC-11 was not accessible after early January because of a roof fall in the Hiawatha workings of Mine #1: a “no access” entry has not been made in the database for the quarterly report.

(Data were submitted for 9A, but the “snapshot” window of the Division database is not showing this site; Dana Dean is working on that problem.)

**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 [ ] NO [X]

*Comments, including identity of monitoring site:*

SBC-14, SBC-17, SBC-3, SBC-9A, and BC-1; cation-anion balance was not reported.

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

*Comments, including identity of monitoring site:*

BC-1: Ca (n = 32), Mg (n = 33), Na (n = 34), K (n = 33), and dissolved oxygen (n = 33), were outside the two standard deviation range;

SBC-14: field conductivity (n = 20) was outside the two standard deviation range;

SBC-17: Ca (n = 8) was outside the two standard deviation range;

UPDES UTG040006 –004 February: field conductivity (n = 222) was outside the two standard deviation range;

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

1<sup>st</sup> month, YES [X] NO [ ]

2<sup>nd</sup> month, YES [X] NO [ ]

3<sup>rd</sup> month, YES [X] NO [ ]

*Identify sites and months not monitored:*

At UPDES UTG040006 –002, -003, -006, and –007, the February reports were dated March 4.

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

*Comments, including identity of monitoring site:*

DMR parameter values have not been entered in the database.

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

*Comments, including identity of monitoring site:*

**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, SBC-9A, and BC-1. 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. BC-1 is a surface-water site, so this parameter should have been reported for BC-1. The lab should be calculating cation-anion balance as a part of their quality control, and the Permittee needs to instruct the lab to include the results in their reports.

The Permittee needs to enter DMR parameter values into the database.

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