

# WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

---

April 15, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: James D. Smith, Environmental Scientist

RE: 2004 Fourth Quarter Water Monitoring, CO-OP Mining Company, Bear Canyon Mine, C/015/0025, Task # 2202

The monitoring plan is described in Section 7.2.5, including Tables 7.1-6, 7.1-7, 7.1-8, 7.1-9, 7.2-4, and 7.2-5 of the MRP.

**1. Were data submitted for all required sites?**

<b>Springs</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
<b>Streams</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
<b>Wells</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
<b>UPDES</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
<b>In-mine</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

SBC-11 has not been not accessible since early January 2003 because of a roof fall in the Hiawatha workings of Mine #1. SBC-9A replaced SBC-11 for monitoring water in this section of the #1 Mine; however, additional roof falls made Mine #1, including SBC-9A, inaccessible. The pipe that carries the water out of the mine to the culinary water supply is now the location for water quality and quantity monitoring, and SBC-9A has been retained as the name for this sampling site.

**2. Were all required parameters reported for each site?**

DMR parameters that are not included in the operational parameter lists in the MRP - such as sanitary wastes, visible foam, and floating solids - are not reported in the electronic submittal to the Division. Operational monitoring values are reported for UPDES flow, TDS, TSS, pH, and total iron.

**Springs** YES  NO

**Streams** YES  NO

BC3: sulfate was not marked on the lab sheet so the lab did not do the analysis.

**Wells** YES  NO

**UPDES** YES  NO

**In-mine** YES  NO

**3. Were irregularities found in the data?**

**Springs** YES  NO

The following parameters were outside two standard deviations:

SBC12: field conductivity (n = 34).

SBC15: water temperature (n = 25).

SBC17: field conductivity (n = 16).

SMH1: field conductivity (n = 40).

SMH2: field conductivity (n = 37).

SMH3: field conductivity (n = 36).

SMH4: field conductivity (n = 37).

**Streams** YES  NO

**Wells** YES  NO

**UPDES** YES  NO

**In-mine** YES  NO

SBC9A: field conductivity (n = 8) and flow (n = 8) were outside two standard deviations.

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

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.

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

The majority of the field conductivity readings were outside two standard deviations: the Permittee needs to check the calibration of the instrument.

- 6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements?**  Yes  No

**7. Follow-up from last quarter, if necessary.**

In the third quarter of 2004, five sites had water temperatures that were outside the two standard deviation range. This quarter, only one site registered a temperature outside two standard deviations; this is taken to indicate that procedures, probably including checking accuracy of the thermometers, have been improved.

**8. Did the Mine Operator submit all the missing and/or irregular data (datum)?**

NA