

WATER QUALITY MEMORANDUM

UTAH COAL REGULATORY PROGRAM

April 9, 2009

TO: Internal File

FROM: James D. Smith, Environmental Scientist *JS 04/09/09*

SUBJECT: 2008 Third Quarter Water Monitoring, CO-OP Mining Company, Bear Canyon Mine, C/015/0025, Ongoing Task ID # 3158

The monitoring plan is described on pages 7-48 through 7-60A of the MRP. It includes Tables 7-12 through 7-17.

This is the fourth quarter out of six that analysis for dissolved Pb has been missed at SBC-9A. (Analysis for dissolved Pb was done 4th Qtr 2008.)

1. **Were data submitted for all of the MRP required sites?**

In-mine YES NO

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. Analysis for dissolved Pb is to be done quarterly at SBC-9A.

Springs YES NO

Streams YES NO

UPDES YES NO

Only UTG040006-004 discharged in the third quarter 2008, and only during August. 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.

Wells YES NO

2. Were all required parameters reported for each site?

In-mine YES NO

Dissolved lead (Pb) was not reported for SBC-9A

Springs YES NO

SBC-16A July: baseline parameters were not reported;
16-8-18-4 July: flow not reported;
16-8-18-5 July: flow not reported;

Streams YES NO

FC-3 July: flow not reported;
FC-4 July: flow not reported.

UPDES YES NO

Wells YES NO

MW-114 August: Depth was not measured because the probe reel was broken;
MW-115 August: Depth was not measured because the probe reel was broken.

3. Were any irregularities found in the data?

Listed parameters were outside two standard deviations. An asterisk (*) indicates the parameter is not required.

In-mine YES NO

Dissolved Pb was not reported for SBC-9A

Springs YES NO

FC-2 August: field specific conductivity, total alkalinity;
FC-4 August: lab specific conductivity*;
SBC-3 August: K, Na, Cl, TDS, total cations*, and total anions*;
SBC-4 August: cation-anion percent difference;
SBC 12 July: field specific conductivity;
SBC-16B July: field pH, bicarbonate as CaCO₃, and total alkalinity;
SBC-16B August: Na and bicarbonate as CaCO₃;
SBC-18 July: field specific conductivity, Ca;
SBC-22 July: field specific conductivity, Ca, and total hardness;
SMH-2 July: field specific conductivity.

Streams YES NO

BC-1 August: oil and grease, bicarbonate as CaCO₃, total Fe, and settleable solids.

UPDES YES NO

UTG040006-004 August: TDS.

Wells YES NO

SDH-2 July and September: depth
SDH-3 July and September: depth

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 7.14). The next permit renewal date is November 02, 2010, so the baseline analyses should be done on samples collected in August 2010.

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

The Permittee needs to assure that the monitoring plan is followed. Analysis for dissolved lead at SBC-9A was missed this quarter and three of the five preceding quarters.

6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements? YES NO

Analysis for dissolved Pb was missed during the third quarter 2008 at SBC-9A; the time to submit this missing data for the third quarter 2008 has passed. This is the fourth quarter out of the last six in which analysis for dissolved Pb has been missed at SBC-9A.

Baseline parameters were not reported for SBC-16A for the month of July,

Depth at SDH-2 in July is reported as 68 feet, which is much more shallow than values reported during the months before and after. The Permittee needs to check the

field book to be sure that is a correct value.

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

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

YES NO

The following parameters were missed during the third quarter 2008:

- SBC-9A: dissolved Pb;
- SBC-16A July: all baseline parameters;
- 16-8-18-4 July: flow not reported;
- 16-8-18-5 July: flow not reported;
- FC-3 July: flow not reported;
- FC-4 July: flow not reported.