C0150075
Outgoing
#3829
OK

OGMCOAL - Fwd: 2nd Quarter 2011 Water Quality Report

From: April Abate
To: OGMCOAL@utah.gov
Date: 2/1/2012 8:25 AM
Subject: Fwd: 2nd Quarter 2011 Water Quality Report
Attachments: 01052012.pdf; April Abate.vcf; April Abate.vcf

April A. Abate
Environmental Scientist III
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84114-5801
T: 801.538.5214
M: 801.232.1339
Starting Tuesday, September 6, 2011, our agency hours will be
8am-5pm, Monday-Friday.
>>> April Abate 2/1/2012 8:04 AM >>>
Hi Jaren,

I am finally getting around to getting this report to you. Sorry for the delay. Hope things are going well down there!
Regards,
April

April A. Abate
Environmental Scientist III
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84114-5801
T: 801.538.5214
M: 801.232.1339
Starting Tuesday, September 6, 2011, our agency hours will be
8am-5pm, Monday-Friday.

#3829

WATER QUALITY MEMORANDUM
Utah Coal Regulatory Program

January 5, 2012

TO: Internal File

FROM: April A. Abate, Environmental Scientist III AAA 1-4-2012

THRU: Steve Christensen, Permit Supervisor SCC

SUBJECT: 2011 2nd Quarter Water Monitoring, Bear Canyon Mine, C/015/0025, Task ID # 3829

The monitoring plan is described on pages 7-48 through 7-60A of the MRP. It includes Tables 7-12 through 7-17. The mine is now operating under a permit held by Castle Valley Mining, LLC.

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

In-mine YES ☐ NO ☒

A total of two in-mine samples are listed in the Bear Canyon water monitoring plan: SBC-9A and SCC-3. The Mohrland Portal, sample SCC-3 is sampled for field parameters only in May, August and October of each year. The Hiawatha Seam sample, SBC-9A is sampled for operational parameters in February, May, August, and October (quarterly). SCC-3 - Mohrland Portal sample was sampled for field parameters in June 23, 2011. In-mine sample SBC-9A was sampled on June 23, 2011.

Springs YES ☐ NO ☒

Most of the spring samples in and around the Bear Canyon mine are sampled for field, or either operational or expanded list parameter once every five years prior to permit renewal. Active springs requiring operational parameter sampling during the months of February, May, August, and October include: SBC-4 Big Bear Springs, SBC-5-Birch Spring, SBC-17 (16-7-24-4). SBC-14 requires operational monitoring in May, August and October only. Currently active springs requiring field parameter only measurements during the months of May, August and October include: SBC-15, SBC-16, SBC-16A, SBC-16B.

During the 2nd quarter, the required springs SBC-4, SBC-5, and SBC-17 were monitored during the month of June. SBC-14 was not monitored for operational parameters. The operator reported that muddy conditions made it difficult to collect a sample.

Streams YES ☐ NO ☒

Active stream samples required for quarterly operational monitoring include: BC-1, BC-2, BC-3, BC-4, CK-1, CK-2. Stream location FC-1 is sampled for field parameters only during the months of May, August and October. Stream location CK-2 has not been sampled since 2007, but it is listed as an active monitoring location on Table 7-14.

UPDES YES ☒ NO ☐

Five stations are monitored for the Bear Canyon UPDES permit on a monthly basis. None of these stations reported any monthly flow data from the five stations during the 2nd quarter of 2011 with the exception was discharge point UTG040006-004 - Mine Water to Bear Canyon Creek, which reported monthly discharges during the 2nd quarter of 2011. Flow from this point averaged this quarter at 52 gallons per minute (gpm) and TDS concentrations averaged 1,925 mg/L. The Bear Canyon UPDES permit requires that if one outfall cannot meet the 30-day average of 500 mg/L at a discharge point then the sum of all permitted outfalls must meet 2,000 lbs per day limit. The Permittee is meeting their required TDS permit loading limits of under 2,000 lbs/day during the 2nd quarter.

Wells YES ☒ NO ☐

Three wells are monitored at the mine. SBC-3 (Creek Well) is monitored for operational parameters on a quarterly basis. MW-1 and MW-117 are gauged for depth to water level only during the 2nd, 3rd and 4th quarters. SB-3 was monitored as required for operational parameters during this quarter.

2. Were all required parameters reported for each site?

In-mine YES ☒ NO ☐

Springs YES ☒ NO ☐

Streams YES ☐ NO ☒

Stream location CK-2 has not been sampled since 2007, but it is listed as an active monitoring location on Table 7-14.

UPDES YES ☒ NO ☐

3. Were any irregularities found in the data?

In-mine YES ☐ NO ☒

Springs YES ☐ NO ☒

Streams YES ☐ NO ☒

All stream samples for total dissolved solids detections during this quarter were well below the state water quality standards of 1,200 mg/L. Total iron appears to be elevated in stream sample BC-1 which is upstream of all mining activity. The source of the iron from the upstream location is not clear.

CK-1 and CK-2 are the upstream and downstream locations for Cedar Creek located just outside the northeast portion of the permit boundary. According to the database, CK-2 has not been sampled since 2007 but is supposed to be sampled for operational parameters on a quarterly basis.

UPDES YES ☐ NO ☒

Mine water from Bear Canyon Creek at Outfall 004 was the only point that discharged this quarter. Mine water has been consistently discharging from this location since May 2009.

Wells YES ☐ NO ☒

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. The parameters are referred to as the "Expanded List" in Tables 7-13 and 7-17 of the MRP. Permit renewal date was November 02, 2010.

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

Verify the locations of CK-1 and CK-2.

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.

None.

O:\015025.BCN\Water Quality\WG3829.doc