#3910
OK

WATER QUALITY
M E M O R A N D U M
Utah Coal Regulatory Program

March 20, 2012

TO: Internal File

THRU: Steve Christensen, Permit Supervisor SCC

FROM: April A. Abate, Environmental Scientist III AAA 3.26.2012

RE: 2011 3rd Quarter Water Monitoring, Hiawatha Coal Company (HCC), Hiawatha Mine, C/007/0011, Task #3910

HCC has supplied schedules for water monitoring and parameter reporting in Tables 7-12 through 7-17, in the Mining and Reclamation Plan (MRP), updated on October 11, 2011. Water monitoring locations can be found on Plates 7-1 and 7-2 in the Hiawatha MRP. The Hiawatha mine holds Utah Discharge Elimination System (UPDES) Permit #UT0023094. A total of 13 outfalls are permitted at the site. Two of these outfalls discharge consistently (D001 and D002).

The Hiawatha Mine is currently in temporary cessation. There is currently no underground mining taking place.

1. Was data submitted for all of the MRP required sites? YES ☒ NO ☐

Identify sites not monitored and reason why, if known:

Springs

Currently, no spring locations are monitored. Hiawatha will resume monitoring of the springs listed on Table 7-17 two years prior to the start up of any underground mining activities.

Streams

HCC monitors 10 stream locations at/near the mine site, ST-1, ST-2, ST-2B, ST-3, ST-3A, ST-3B, ST-4, ST-4A, ST-4B, and ST-5. HCC currently monitors field parameters of streams on a monthly basis from May through August and the month of October. Operational sampling occurs in April and September (Tables 7-13).

UPDES

There are a total of 13 UPDES sample locations listed in Permit #UT0023094 for the Hiawatha Mine used to establish discharge quality. UPDES locations are monitored quarterly according to permit. The UPDES locations D003 through D013 listed in the current UPDES

permit typically do not discharge. The current permit is due to expire in December 2014. All UPDES sample locations are outlined below:

Pond No.	Location
D001	Mohrland Portal
D002	Overflow at Hiawatha
D003	Upper Coal Storage Yard
D004	North of Slurry Pond No. 1
D005	East of Slurry Pond No. 4
D006	North East of Slurry Pond No. 5
D007	South East of Slurry Pond No. 5
D008	Middle Fork Mine Yard
D009	South Fork Mine Yard
D010	King Mine 4 Discharge
D011	South Fork Truck Loading Facility
D012	Mohrland Pipeline Drain
D013	King 6 Water Tank Overflow

During the third quarter of 2011, locations D003 through D013 did not report any flow data. Monthly data from UPDES locations D001 and D002 were reported this quarter. Analytical data were collected from outfalls D001 and D002 on September 29 and 30, 2011.

2. Were all required parameters reported for each site?

Springs YES ☐ NO ☐

No springs are currently required to be sampled in the Hiawatha monitoring plan.

Streams YES ☐ NO ☒

Operational sampling data were provided for stream locations ST-1, ST-2, ST-2B, and ST-5 for the 3rd quarter of 2011 collected in the month of September. All other stream locations did not report any flow in September. During the 3rd quarter of 2011, average flow data from the streams were as follows:

Sample ID	Description	Flow average in gpm
ST-1	R FK OF N FK MILLER CREEK	32
ST-2 & 2B	L FK OF N FK MILLER CK	113
ST-3, 3A & 3B	MDL FK MILLER CK-CONFL W/N FK MILLER CREEK	70
ST-4	S FK MILLER CREEK-NR CONFL W/NORTH FORK	54
ST-5	MILLER CREEK-BL CONFLUENCE OF SOUTH FORK	375

UPDES YES ☒ NO ☐

The flow rate of discharge from the Morhland portal discharge (UPDES D001) this quarter averaged 262 gpm while flow rates from the mine to Miller Creek (UPDES D002) were reported at 130 gpm all three quarters. Total Dissolved Solids (TDS), oil and grease, total suspended solids, and total iron were all either not detected, or within the acceptable UPDES permit limits.

3. Were irregularities found in the data?

Springs YES ☐ NO ☐

Not applicable

Streams YES ☐ NO ☒

UPDES YES ☐ NO ☒

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

No baseline sampling obligations are stipulated in the Hiawatha MRP.

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

Hiawatha has reportedly resolved their right-of-entry access issue with the surface landowner and will be able to resume water monitoring at locations that were previously inaccessible.

6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements?

No. Data cannot be collected because the quarter is over.

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

NOV 10095 was issued to Hiawatha Coal Company on March 23, 2011 for failure to submit timely 3rd quarter water sample data within the required three month period. These data were due to the Division water quality database for uploading on December 31. 2011 but were not submitted until after March 7, 2011.