#3839
OK

# WATER QUALITY
# MEMORANDUM
## Utah Coal Regulatory Program

January 11, 2012

TO: Internal File

THRU: Steve Christensen, Permit Supervisor SKC

FROM: April A. Abate, Environmental Scientist III 1-11-2012

RE: 2011 2nd Quarter Water Monitoring, Hiawatha Coal Company (HCC), Hiawatha Mine, C/007/0011, Task #3839

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 a 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**

HCC monitors six springs at the minesite: SP-2, SP-4, SP-5, SP-11, SP-12 and SP-13. Operational sampling was established in the MRP as two times per year, for spring sites, in June and October. A recent amendment approved by the Division on October 11, 2011 allowed these spring locations to be suspended from the sampling plan until two years prior to underground mining resuming.

**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. Operational sampling occurs in April and September (Table 7-16).

**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 second 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 April 29, 2011.

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

**Springs** YES ☐ NO ☒

No data from the springs were collected during the 2nd quarter 2011. Data from springs have not been collected since October 2009. The Permittee has cited the reason for not obtaining access to these springs is a Right-of-Entry issue with the land surface owner.

**Streams** YES ☐ NO ☒

Operational sampling data were not provided for stream locations ST-2, ST-2B, ST-3A, ST-3B for the 2nd quarter of 2011. Average flows from the streams were as follows:

During the second quarter, average flow data from the streams are as follows:

| Sample ID | Description | Flow range in gpm |
|---|---|---|
| ST-1 | R FK OF N FK MILLER CK | 60 -168 |
| ST-2 | L FK OF N FK MILLER CK-AB KING 4 VENT PO | 1108 |
| ST-2B | L FK N FK MILLER CK-BTN DIVERSION P & J | 1243 - 3186 |
| ST-3 | MDL FK MILLER CK-CONFL W/N FK MILLER CRE | 0 - 451 |
| ST-3A | MDL FK MILLER CK-AB MIDDLE FK PORTALS | 54 - 322 |
| ST-4 | S FK MILLER CK-NR CONFL W/NORTH FORK | 0 |
| ST-4A | S FK MILLER CK-AB S FK PORTAL | 0 -536 |
| ST-4B | S FK MILLER CK-BL S FK SED POND | 0 - 343 |
| ST-5 | MILLER CK-BL CONFLUENCE OF SOUTH FORK | 308 - 4676 |

**UPDES** YES ☒ NO ☐

The flow rate of discharge from the Morhland portal discharge (UPDES D001)" this quarter ranged from 280-532 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 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?**

None of the springs were sampled during the 2nd quarter of 2011 due to Right-of-Entry access issues. This has led to a full two year gap in data from springs in the permit area. Stream data was not collected at locations from the stream that runs alongside Middle Fork road one of the principal roads into the mine surface facilities for the same reason. The Division views this as being out of compliance with the requirements of the mining and reclamation plans (MRP) water monitoring requirements.

**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 10091 was issued to Hiawatha Coal Company on November 29, 2011 for failure to collect the required water sample data from ST-2, ST-2B, ST-3A, ST-3B and all spring locations for the period ending October 2010.

No sampling requirements are required from the above-cited locations during the first quarter of each year, but operational parameters are required during the month of April for the stream locations and in June for all spring locations.

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