

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

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June 14, 2016

TO: Internal File

THRU: Steve Christensen, Permit Supervisor



FROM: Amanda Daniels, Hydrologist



RE: 2015 4th Quarter Water Monitoring, Hiawatha Coal Company (HCC), Hiawatha Mine, C/007/0011, Task ID #5041

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 – Mohrland Mine Portal and D002 – Mine Discharge to Miller Creek). As of February 11, 2013, the Division has deactivated outfall locations D010 – the North Fork Vent Portal 4 and D013 – King Water Tank Overflow. These locations are still permitted outfalls under the Department of Environmental Quality- issued UPDES permit. Point D010 is a discharge from the King 4 mine ventilation portal that is currently inactive and Point D013 is from an overflow pipe from the King 6 unused water tank in South Fork Canyon.

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?**

*Identify sites not monitored and reason why, if known:*

**Springs**

YES

NO

Not applicable. 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**

YES

NO

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**

YES  NO

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. 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 fourth quarter of 2015, monthly data from UPDES locations D001 and D002 were reported. Analytical data were collected from outfalls D001 and D002 on October 24, 2015.

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

**Springs** YES  NO

Not Applicable

**Streams** YES  NO

**UPDES** YES  NO

The flow rate of discharge from the Morhland portal discharge (UPDES D001) this quarter averaged 130 gallons per minute (gpm) while flow rates from the mine to Miller Creek (UPDES D002) were reported 130 gpm all three months. Oil and grease, total suspended solids (TSS), pH, 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

Following the Seeley wild fire in 2012, numerous mud slides have occurred at the surface facilities, due to the burn scar being located directly above the mine sites. This causes certain sampling events (specifically following storms) to report extremely high suspended solids. The Permittee is handling the mud slides to the best of their ability and will continue their approved sampling program.

**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.

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

No.

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

None.