



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

June 16, 2017

TO: Internal File

THRU: Steve Christensen, Permit Supervisor 

FROM: Arati Umarvadia, Hydrologist 

RE: 2016 4th Quarter Water Monitoring, Hiawatha Coal Company (HCC), Hiawatha Mine, C/007/0011, Task ID #5385

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 the 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 2016 monthly data from UPDES locations D001 and D002 were reported. Analytical data were collected from outfalls D001 and D002 on October 31, 2016.

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 145 gallons per minute (gpm) while flow rates from the mine to Miller Creek (UPDES D002) averaged 189 gpm. Oil and grease, total suspended solids (TSS), total dissolved solids (TDS), 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.