WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

September 21, 2018

TO:

Internal File

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THRU:	Steve Christensen, Permit Supervisor					
FROM:	Keenan Storrar, Hydrologist					
RE:	First Quarter 2018 Water Monitoring, Hiawatha Coal Company (HCC), Hiawatha Mine, C/007/0011, Task ID #5709					
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?						
Identi	fy sites not monitored and reason why, if known:					
Springs	YES NO NA NA					
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 startup 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 is						

required for April and September. All data for stream sample locations was provided for second

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quarte	er.					
UPDI	ES	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. D001 D002 D003 D004 D005 D006 D007 D008 D009 D010 D011 D012 D013	Location Mohrland Portal Overflow at Hiawatha Upper Coal Storage Yard North of Slurry Pond No. 1 East of Slurry Pond No. 4 North East of Slurry Pond No. 5 South East of Slurry Pond No. 5 Middle Fork Mine Yard South Fork Mine Yard King Mine 4 Discharge South Fork Truck Loading Facility Mohrland Pipeline Drain King 6 Water Tank Overflow				
	Monthly data UPD	ES locations D001 and D002 are reported for this quarter.				
2.	Were all required	parameters reported for each site?				
Sprin	gs	YES NO NO				
	Not Applicable					
Strea	ms	YES 🖂 NO 🗌				

The flow rate of discharge from the Morhland portal discharge (UPDES D001) this quarter averaged 116 gallons per minute (gpm) while flow rates from the mine to Miller Creek (UPDES D002) averaged 130 gpm. Oil and grease, total suspended solids (TSS), total dissolved solids (TDS), pH, and total iron were either not detected, or within the acceptable UPDES permit limits.

YES NO NO

3. Were irregularities found in the data?

UPDES

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Springs		YES	NO 🗌			
	Not applicable					
Stream	ms	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.					