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WATER QUALITY MEMORANDUM
Utah Coal Regulatory Program

August 29, 2009

TO: Internal File

THRU: James Smith, Permit Supervisor DS 09/08/09

FROM: David Darby, Senior Environmental Scientist DD by SAS

RE: 2007, 1st Quarter Water Monitoring, Canyon Fuel Company (CFC), LLC, Dugout Mine, C/007/0039-WQ07-1, Task ID #3177

1. Was data submitted for all required sites?

Canyon Fuel Company is conducting mining operations in Dugout Canyon. Mining is progressing north and eastward under the Book Cliffs. Several springs are located in the canyons. Operations are also taking place at a fan portal in Pace Canyon and a refuse pile in the valley below Dugout Canyon. This report is based on data complied in file O:\0070039.dug\WaterQuality\datacheck2005.xls.

Table 7-4 identifies the ground water monitoring (frequency) plan for wells and springs. Table 7-4 also identifies the parameters that will be monitored. Appendix 7-6 of the MRP identifies the UPDES sites, and current status monitoring parameters, discharge limits and monitoring frequency. Table 7-5 identifies the surface water program and water quality parameters that will be monitored.

The Protocols set forth in Table 7-4 and 7-5 will be followed during years of normal precipitation as defined in the PHC. During non-normal (wet, 110% of normal or dry, 70% of normal) years, defined by the NRCS snow pack, March 1, selected surface and groundwater sites will be monitored weekly from April 1 through August 31.

Springs Springs in the operational and post-mining groundwater monitoring program include SC-65, SP-20, SC-14, SC-100, SC-116, 200, 203, 227, 259, 259A, 260, 321, 322 and 324. Locations of these springs are noted on Plate 7-1.

YES [X] NO [ ]

Springs 200, 227, SC-100 and MD-1 reported no flow (data). Springs 203, 259, 259A, 260, SC-100, SC-116, SC-14, SC-65 and SP-20 were not monitored, because

no access could be gained because of deep snow. Complete data were submitted for the other springs including flow measurements.

Streams Surface Water sites DC-1, DC-2, DC-3, DC-4, DC-5, PC-1a, PC-2, RC-1 and Fan (a new site on Pace Creek) are monitored for flow and chemistry once each calendar quarter, except during wet or dry years.

YES [X] NO [ ] Data were reported for all monitoring sites.

Stream sites DC-1, DC-3, PC-2, RC-1, SS-1 and SS-2 reported no flow. Table shows all parameters were reported for monitored streams.

Wells Wells DH-1, DH-2, DH-3, GW-10-2 and GW-11-2 will be monitored quarterly for water levels, only DH-1 is monitored for water quality, annually.

YES [ ] NO [X] Water levels were measured in all wells. Water quality data were reported for well DH-1.

Water level data were collected for all wells. No water quality data were reported.

UPDES There are six discharge sites under two UPDES permits issued for disturbed area and mine water discharges into Dugout (UTG 040020) and Pace Canyon (0025593) Creeks by the Utah Division of Water Quality, as indicated in Appendix 7-6. The permits identify the maximum discharge levels for specified constituents, allowed for the creeks. Mine water is currently pumped directly into the Dugout Creek (001). Disturbed runoff is directed to the sedimentation pond that can discharge to the Dugout Creek (002). Discharge Site 003 is a discharge from the 30,000 gallon water tank and Site 004 is the discharge from thr waste rock area. Mine water will be pumped to Pace Creek (005) out the Fan Portal. Disturbed area runoff from Pace Canyon will be directed to a catch pond, as it overflows it will flow to Pace Creek (006).

YES [X] NO [ ]

Site 001 ranged between 705 to 770 gallons per minute. The required parameters were monitored. Sites 002, 003, 004, 005 and 006 did not discharge during the month.

2. Were all required parameters reported for each site?

Springs YES [X] NO [ ] The required parameters were reported when flow was present.

Streams YES [X] NO [ ] The required parameters were reported when flow was present.

Wells YES [X] NO [ ]

UPDES YES [X] NO [ ] The required parameters were reported when discharges took place.

3. Were irregularities found in the data?

Springs YES [ ] NO [X] .

Zero flow at DC-1 looks a bit unusual, the last measurement in October was 220 gpm and the next measurement in March was 810 gpm.

Streams YES [ ] NO [X]

Wells YES [ ] NO [X]

UPDES YES [ ] NO [X]

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

Resampling due date is July 2014

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

None.

Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements? [ ] Yes [X] No

A copy of the data file will be e-mailed to the Mine Operator and DOGM Mine Inspector identifying any missing and irregular data.

6. Follow-up from last quarter, if necessary.
Did the Mine Operator submit all the missing and/or irregular data (datum)?

This report and the previous report were delayed to process mine permits.