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WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

November 4, 2008

TO: Internal File

THRU: James D. Smith, Permit Supervisor *JDS 11/05/08*

FROM: *AAA* April A. Abate, Environmental Scientist II

RE: 2007, Fourth Quarter Water Monitoring, Plateau Mining Corporation (PMC), Willow Creek Mine, C/007/0038-WQ07-4, Task ID #2623

The Willow Creek Mine is in reclamation. The mines have been closed and sealed. The disturbed areas around the portals have been regraded and seeded. The most recent surface operations took place in Willow Creek Canyon, about a mile from the junction between U.S. Highway 6 and State Highway 191. The reclaimed area in Crandall Canyon is also part of the Willow Creek permit area.

There are no ground water sites monitored during the reclamation phase.

1. Was data submitted for all of the MRP required sites? YES NO

Under the reclamation plan, surface water monitoring is required for sites listed in Exhibit 7-3 and shown on Map 15.

Springs- There are no springs monitored during the reclamation phase.

Streams- There are six surface water-monitoring sites:
 B3N (Willow Creek above power plant),
 B-5 (Price River below processing plant above Willow Creek),
 B-6 (Price River above coal processing plant),
 B25 (Crandall Canyon Creek),
 B26 (lower reach of Crandall Canyon)
 B151 (Willow Creek 3 Miles Below Willow Creek Mine)

Sampling is conducted quarterly. PMC tries to monitor the sites within a two week period from March 15th, June 10th, September 5th and November 30th to attempt to collect data that coincides with first thaw, spring high flow, end of summer low-flow and last sample before freeze-up.

All required stream sampling locations were monitored for the quarter. Sites B25 and B26 were monitored in November 2007 and reported as having no flow. The reclamation sampling water quality list is presented in Section 13, p. 28 of the MRP. All required analytical parameters specified in the MRP were monitored during this quarter.

Wells- There are no operational monitoring wells.

UPDES- Two UPDES sites are monitored monthly in accordance with UPDES requirements at the Willow Creek Mine. Site 001 is the sedimentation pond and Site 002 is the temporary discharge in Crandall Canyon.

Data was submitted for both UPDES locations monthly during this quarter. No discharge was measured or reported from either UPDES location. Access was not available to Site 002 during the December 2007 sampling event.

2. Were all required parameters reported for each site? YES NO

Data were available for sampling locations B3n, B5, B6, and B151.

3. Were any irregularities found in the data? YES NO

Reliability Check	Site	Acceptable Range	Values
TDS/Conductivity	B151 B3N B5 B6	>0.55 & <0.75	1.34 1.18 1.04 1.09
Conductivity/Cations	B151 B3N B5 B6	> 90 & < 110	44 49 49 47
Cation/Anion Balance	B151 B3N B5 B6	>0.55 & <0.75	0.60 0.10 0.30 0.10

The Permittee should work with the lab to make sure that samples pass all quality checks so that the reliability of the samples does not come into question. These inconsistencies do not necessarily mean that a sample is wrong, but it does indicate that something is unusual. An analysis and explanation of the inconsistencies by the Permittee would help to increase the Division's confidence in the samples. The Permittee can learn more about these reliability checks and some of the geological and other factors that could influence them by reading Chapter 4 of *Water Quality Data: Analysis and Interpretation* by Arthur W. Hounslow.

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

Not specified in MRP. It should be updated at Mid-term or Five Year Renewal.

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

Follow up with mine operator to discuss data quality control checks.