

# WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

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January 21, 2009

TO: Internal File

THRU: James D. Smith, Permit Supervisor

FROM: April A. Abate, Environmental Scientist II

SUBJECT: 2008 Third Quarter Water Monitoring, Andalex Resources, Centennial Mine, C/007/0019, Task ID #2695

The Centennial Mine is currently in temporary cessation. No mining or coal processing activities currently take place there, nor is the site in active reclamation.

In June 2007, the Division of Oil, Gas, and Mining (the Division) conditionally-approved an amendment to revise the existing operational water monitoring requirements. JBR Environmental Consultants (JBR) of Sandy, Utah prepared a water monitoring plan on behalf of Andalex Resources, L.L.C. (the Permittee). The purpose of submitting the water-monitoring plan was to correct discrepancies identified by Division personnel within the MRP and revise the existing water monitoring operational requirements at the Centennial mine. Water-monitoring requirements are presently located in Sections 711.300 pages 7-2 through 7-10 and Appendix L of the MRP. Water sampling locations are shown on Figure IV-11.

The water monitoring plan prepared by JBR is intended to supercede the existing sections of the MRP pertaining to water monitoring. Currently, there is an outstanding amendment to finalize and implement the new water monitoring plan prepared by JBR by the end of 2008. To date, the Division has not been notified by the Permittee as to when this amendment will be finalized and when the new water monitoring plan will go into effect.

**1. Were data submitted for all of the MRP required sites?**

**Springs**

YES  NO

The only spring sampled during this quarter was the undeveloped spring sample below the stock pond (sample B351). All others were either inaccessible or not flowing.

**Streams**

YES  NO

None of the streams reported flow except for the following: Summit Creek (SC-1), Antone Creek (AC-1) and Left fork of Deadman Wash (18-3). All others stream sites were monitored in accordance with the existing water monitoring plan.

**Wells** YES  NO

Well #1 remains dry.

**UPDES** YES  NO

All UPDES locations were monitored monthly in accordance with the permit. No discharge from sample locations 001, 002, and 003 were reported for the third quarter of 2008. Data were submitted from sample location 004, Aberdeen Mine Discharge point. Discharge from this point was reported up through September 3, 2008. The discharge was reported to have ceased as of September 18, 2008.

**Pond** YES  NO

The stock watering pond, 31-1 sampling location was reported as not flowing during the third quarter of 2008.

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

**Springs and Pond** YES  NO

Total cations and anions were not reported for B351.

**Streams** YES  NO

**Wells** YES  NO

Not applicable this quarter.

**UPDES** YES  NO

**Pond** YES  NO

Not applicable this quarter.

**3. Were any irregularities found in the data?**

**Springs and Pond** YES  NO

**Streams** YES  NO

The Total Suspended Solids (TSS) value for sample 18-3 was outside of two standard deviations for this sampling period. TSS has shown a steady increase over the past three sampling events at this location. The Division will continue to monitor this trend.

Boron and TDS levels in 18-3 were also shown to exceed the numeric State of Utah water quality standards for water bodies classified for agricultural use. However, the Division recognizes that the water quality standards for TDS have been adjusted for certain water bodies within the Western Colorado River Watershed.

**Wells** YES  NO

Not applicable this quarter.

**UPDES** YES  NO

Similar TDS values were noted for UPDES sample 004 to that of the 18-3 stream sample. TDS averaged 1,517 milligrams per liter (mg/L) in the available data collected during the third quarter. The 30-day average discharge limitation under the mine UPDES Permit is 500 mg/L. However, the permit indicates that if each outfall cannot achieve a 30-day TDS average of 500 mg/L, then the Permittee is limited to one ton (2,000 lbs) per day as the sum from all outfalls. The Permittee is well within these requirements.

**Pond** YES  NO

Not applicable this quarter.

4. Did the Permittee make a timely submittal of all data, including initially missing data, and satisfactorily explain irregular data? YES  NO

Spring sample B351 was not sampled for total cations and anions for the third quarter.

5. Does the Mine Permittee need to submit more information to fulfill this quarter's monitoring requirements? YES  NO

See comment under item #4.

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

The Division has noted that there has been a data entry glitch in uploading the acidity parameter values into the database. The Division is in the process of attempting to correct this problem.

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

Stream sampling point locations 17-1, 17-2, 8-1, 25-2 and spring sampling location S25-1 were conditionally approved by the Division to be eliminated from the monitoring plan. The Permittee to date has not submitted the necessary paperwork to finalize the amendment and subsequently, the locations are still being sampled under the original water monitoring plan. When will the new water monitoring plan be finalized?