



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Office of the Governor

DIANNE R. NIELSON, Ph.D.
Energy Advisor

RECEIVED

SEP 10 2008

DEQ
Environmental Response & Remediation

September 10, 2008

Kelly Payne, P.G.
Principal Advisor, Closure & Remediation
Kennecott Utah Copper Corporation
P.O. Box 6001
Magna, Utah 84044-6001

RE: Kennecott Utah Copper Corporation's (Kennecott) letter entitled *Annual Report on Zone A Plant Operations and Acid Plume Extraction Under NRD Consent Decree*, dated July 31, 2008.

Dear Mr. Payne:

As the State Trustee for Natural Resource Damages, I have received the above referenced annual report which covers the operational period between June 1, 2007 and May 31, 2008. The Division of Environmental Response and Remediation (DERR) has also completed a review of this report and recommended some changes in future reporting. Please direct your attention to the attached comments. Kennecott has satisfactorily reported on the operational history of the Zone A reverse osmosis treatment plant and acid water extractions for the second year of operations.

If you have any questions, please do not hesitate to call Douglas Bacon at (801)536-4282.

Best regards,

Dianne R. Nielson, Ph.D.
Trustee for Natural Resource Damages
State of Utah

Enclosure(s)

cc: Richard Sprott, Executive Director, Department of Environmental Quality
Brad T. Johnson, Director, Division of Environmental Response & Remediation
Fred Nelson, Utah Attorney General Office
Douglas Bacon, Division of Environmental Response & Remediation
Mark Attencio, Jordan Valley Water Conservancy District

SCANNED

**Comments by the State of Utah Trustee for Natural Resource Damages –
Kennecott’s July 31, 2008 NRD Annual Report**

Operations

- 1) Section – Quality of Delivered Water, 2nd paragraph after Table 3, page 3: The text states “KUCC also assesses compliance with the TDS criterion through real-time measurement of the specific conductance of the product water.” Kennecott notes that specific conductance is a surrogate for TDS and operations at the Zone A Plant target a specific conductance level that assures that TDS concentrations are at 250 mg/l or less. A review of the data provided in Table 3 does find Kennecott in compliance with the TDS restriction for product water. However, UDEQ warns against using only specific conductance measurements to attest compliance of the TDS criterion. A correlation check (see enclosure No. 2) between the TDS and Specific Conductance data documented a poor correlation, R^2 , value of 0.6764, between these two data sets even though current data trends show that TDS concentrations are low when Specific Conductance concentrations are low. Compliance with the TDS criterion should be based upon the analysis of wet chemistry data provided by the analysis of grab samples during the reporting period.

Acid Plume Extractions

- 1) After review of Table 4, which documents the volume of water extracted at the three acid wells For the five-year period of May 31, 2004 to May 31, 2008, the Trustee agrees that Kennecott exceeded the minimum extraction rate, having extracted on average 2,405 acre-feet per year over the past five years. Please note that in future submissions UDEQ would appreciate a running tally of compliance with the “per year”, rolling average extraction rate. For example, if such running tally was tracked this year then the column labeled “5-Year Rolling Average Extracted” would have listed 2,194 ac-ft for the year ending “5/31/2007”. The tally should not be cumulative, but should represent the average extraction rate for each year of the five-year period.

Sample Date	TDS (mg/l)	Specific Conductance (µS/cm)
11/26/2007	170	335
10/23/2007	216	389
10/26/2007	216	382
12/13/2008	216	366
10/24/2007	220	393
9/25/2007	224	384
1/17/2008	226	407
5/22/2008	226	403
10/25/2007	228	403
4/17/2008	232	387
2/20/2008	234	403
3/27/2008	238	398
10/25/2007	250	392

Calculations -	
R ²	0.67637612

Fig. 1 - Correlation Between Specific Conductance versus TDS

