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VIA US MAIL

Dianne R. Nielson, Ph.D.  
 Trustee for Natural Resources for the State of Utah  
 Office of the Governor  
 324 South State Street, Suite 500  
 Salt Lake City UT 84111

**Subject: Annual Report on Zone A Plant Operations and Acid Plume Extraction under NRD Consent Decree**

Dear Dr. Nielson:

Pursuant to Paragraph IX.C of the Agreement among the Trustee for Natural Resources for the State of Utah, Jordan Valley Water Conservancy District, and Kennecott Utah Copper Corporation, dated August 31, 2004 (Three-Party Agreement), Kennecott Utah Copper LLC<sup>1</sup> (KUC) submits its third Annual Report on the Operations of the Zone A Plant. KUC also operates the plant pursuant to the Project Agreement Between Kennecott Utah Copper Corporation and Jordan Valley Water Conservancy District (Project Agreement).

Additionally, KUC makes its annual reporting of water extracted from the core of the Zone A acid plume as required by Paragraph V.B of the August 1995 Consent Decree settling the State's Natural Resource Damage Claim against Kennecott Utah Copper Corporation (NRD Consent Decree).

The operating period for this report is June 1, 2008 to May 31, 2009.

**Treatment Plant Operation**

Table 1 reports monthly and annual operational metrics for the Zone A Plant during the reporting period. These data are discussed below.

*Volume of Delivered Water*

In the reporting period, KUC delivered 3,548 acre-feet to Jordan Valley Water Conservancy District (JWWCD; as measured by JWWCD at the Zone A Meter Station and reported to KUC.) Paragraph I.C.1 of the Three-Party Agreement requires the delivery of 3,500 acre-feet per year on a five-year rolling average. Direct compliance with this commitment cannot be measured until the end of the fifth year of operation (year 2011); nevertheless, the average annual delivery for the first three years of operation is 3,563 (Table 2).

<sup>1</sup> On May 1, 2009, Kennecott Utah Copper Corporation converted its business form from a Delaware corporation to a Utah limited liability company and in the process changed its name from "Kennecott Utah Copper Corporation" to "Kennecott Utah Copper LLC". Pursuant to the conversion provisions of the Utah Code that govern limited liability companies, the post-conversion company (Kennecott Utah Copper LLC) is the same entity as the pre-conversion company (Kennecott Utah Copper Corporation) and all of the company's obligations, liabilities, and duties (as well as its rights, property and assets) are unaffected and remain binding upon the post-conversion company. See Utah Code Ann. §§ 48-2c-1403(2) - (4).

**Table 1 Zone A Plant Operation Metrics**

	Units	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Year
<b>Drinking Water Production</b>														
Delivered (JVVCD Meter)	acre-feet	288.1	303.6	306.4	293.6	307.6	268.2	291.5	270.5	299.2	263.5	316.7	339.5	3,548
Total Plant (KUCC Meter)	acre-feet	284.2	300.1	303.5	289.3	302.9	266.5	288.8	289.3	296.0	281.5	313.9	326.6	3,543
<b>Feed Water</b>														
Rack 3 Feed	acre-feet	182.2	195.2	196.7	184.1	193.9	171.9	179.1	190.1	182.1	169.0	194.2	201.6	2,240
Rack 4 Feed	acre-feet	181.5	188.0	194.3	189.4	190.3	171.5	195.8	183.2	182.2	175.1	194.5	201.6	2,247
Blend Water Feed	acre-feet	27.9	30.0	30.7	28.2	29.2	25.9	28.4	28.4	30.8	29.1	32.6	34.5	356
Total Feed Water	acre-feet	391.6	413.2	421.7	401.7	413.4	369.3	403.3	401.7	395.1	373.2	421.3	437.7	4,843
<b>Permeate Production</b>														
Rack 3 Permeate	acre-feet	129.0	139.1	139.6	131.6	137.8	122.2	127.3	135.2	134.8	124.9	143.1	148.9	1,614
Rack 4 Permeate	acre-feet	127.9	133.3	137.3	134.4	134.4	121.7	138.2	129.9	134.6	128.9	142.6	148.3	1,612
Total Permeate	acre-feet	256.9	272.4	276.9	266.0	272.2	243.9	265.5	265.1	269.4	253.8	285.7	297.2	3,225
<b>Recovery</b>														
Permeate	%	70.6%	71.1%	70.8%	71.2%	70.8%	71.0%	70.8%	71.0%	74.0%	73.8%	73.5%	73.7%	71.9%
Plant (KUCC Meter/Feed)	%	72.6%	72.6%	72.0%	72.0%	73.3%	72.2%	71.6%	72.0%	74.9%	75.4%	74.5%	74.6%	73.1%
Overall (JVVCD Meter/Feed)	%	73.6%	73.5%	72.7%	73.1%	74.4%	72.6%	72.3%	67.3%	75.7%	70.6%	75.2%	77.6%	73.3%
<b>Availability</b>														
Rack 3 Downtime	Hours	17.5	12.1	7.1	30.4	10.8	75.9	63.7	32	0.6	115.4	5.2	1.3	372
Rack 4 Downtime	Hours	20.6	33	16.1	10.7	11.6	77	0.2	57.1	0.4	93	5.7	1.3	327
Rack 3 Availability	%	98%	98%	99%	96%	99%	89%	91%	96%	100%	84%	99%	100%	96%
Rack 4 Availability	%	97%	96%	98%	99%	98%	89%	100%	92%	100%	88%	99%	100%	96%
Combined Availability	%	97%	97%	98%	97%	98%	89%	96%	94%	100%	86%	99%	100%	96%
<b>Specific Conductance</b>														
Feed Water	µS/cm	2667	2654	2703	2712	2727	2723	2727	2705	2608	2615	2598	2579	2669
Permeate	µS/cm	34	32	31	32	32	35	34	36	34	33	35	34	33
Product Water	µS/cm	376	376	380	380	380	380	382	379	381	381	380	380	380

Table 1 also presents total plant production (KUC meter), feed volumes, permeate production, and recovery statistics. The difference between the total plant production and the volume of water delivered reflects in-plant water use and inherent variability in metering flow. There are no specified performance criteria for these metrics and values are reported for information only.

**Table 2 Annual Water Deliveries (JVWCD Meter)**

Year Ending	Acre Feet	Rolling Average
May 31, 2007	3,843	
May 31, 2008	3,299	3,571
May 31, 2009	3,548	3,563

*Quality of Delivered Water*

Paragraph 4.5 of the Project Agreement requires that KUC provide Treated Water, defined in Paragraph 1.39 as water with concentrations of sulfate less than 250 mg/l and total dissolved solids (TDS) less than 250 mg/l. Table 3 presents laboratory results of TDS in monthly grab samples during the reporting period. (It is chemically impossible for the sulfate concentration to exceed the TDS concentration; thus, compliance with the TDS criterion assures compliance with the sulfate criterion.) Grab sample results are below 250 mg/l TDS for all samples except two.

Table 3 also reports laboratory specific conductance measurements corresponding to each TDS measurement. KUC notes that on the two occasions TDS laboratory measurements exceeded 250 mg/l, there was not a corresponding spike in grab sample specific conductance, which is a function of TDS. Likewise, examination of plant records (available for review upon request) indicate that specific conductance, measured twice daily at the Zone A Plant, did not vary on the days of the grab sample collection compared with other days during those months. KUC concludes that the laboratory TDS measurements for the grab samples in August and September are not representative of Zone A product Water quality, but are attributable to the inherent variability in measuring TDS is very clean water.

**Table 3 Zone A Plant Product Water Quality**

Sample Date	TDS (mg/l)	Specific Conductance (µS/cm)
6/19/2008	248	347
7/18/2008	248	394
8/21/2008	270	406
9/18/2008	256	400
10/22/2008	224	408
11/20/2008	242	406
12/18/2008	224	416
1/21/2009	230	396
2/19/2009	248	402
3/19/2009	244	390
4/16/2009	232	395
5/21/2009	240	417

As noted above KUC measures specific conductance at the Zone A Plant twice daily. Table 1 reports average monthly specific conductance based on these readings. These monthly averages are very little over the reporting period, indicating a consistent TDS of water delivered to JWCD.

#### *Period of Operation*

The Zone A Plant operated at 96% availability during the reporting period. This availability conforms to the requirement under Paragraph 4.10a of the Project Agreement, which specifies that planned shutdowns not exceed 35 days per year (90% availability). Several shutdowns lasting more than 24 hours occurred, as described below:

- July 2008, due to the replacement of a feed water pump VFD, the plant operated at half capacity for just over one day
- September 2008, plant operated at half capacity for about one day due to a wash being performed on one of the membrane racks
- November 2008, the plant was shutdown for just over three days for JWCD to make a pipe tie-in
- December 2008, plant operated at half capacity for about four days due to water rights constraints
- January 2009, plant operated at half capacity for just over two days due to a wash being performed on one of the membrane racks
- March 2009, the plant was shutdown for three and half days for JWCD to make a pipe tie-in

KUC did not invoke *force majeure* at any time during the reporting period.

#### *Division of Drinking Water Permit Compliance*

KUC maintained full compliance with its permit issued by the Division of Drinking Water for the Zone A Plant.

#### *Modifications*

No significant equipment or operating modifications were made at the plant during the reporting period.

#### *Jordan Valley Water Conservancy District Relations*

KUC received no negative reports from JWCD regarding operation of the plant or water quality. KUC participated in quarterly Oversight Committee meetings with JWCD as prescribed in Paragraph 3 of the Project Agreement, during which plant operation results were presented and evaluated. The Zone A Plant management and operators have developed direct relationships with their counterparts at JWCD, allowing efficient communication of matters affecting day-to-day plant operations to JWCD.

#### *Community and Media Relations*

KUC received no negative reports, either directly or through JWCD, regarding quality or taste from JWCD customers receiving water from the plant. KUC did not receive any notice of potential third party impacts to water quality or quantity in Zone A or quality in Zone B and no matters were referred to the informal independent review process.

KUC continued to provide tours of the plant during the reporting to outside groups as requested. KUC received no media inquiries about the plant during the reporting period.

#### *Outlook for Next Reporting Year*

KUC anticipates no constraint on continued delivery of high-quality water in the next reporting year. No significant modifications or operational changes are planned.

**Acid Plume Core Extraction**

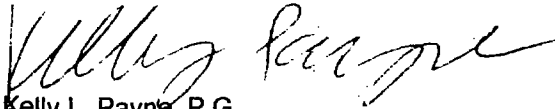
Paragraph V.B of the NRD Consent Decree requires that KUC extract a minimum of 400 acre-ft per year on a five-year rolling average from the acid plume. Table 4 reports the annual, cumulative, and 5-year rolling average acid plume extraction. KUC is in full compliance with extraction requirements of the NRD Consent Decree.

**Table 4 Acid Plume Extraction (acre-feet)**

Year Ending	Well ECG1146	Well BSG1201	Well BSG2784	Total Extracted	Cumulative Extracted	5-Year Rolling Average Extracted
5/31/2005	1,468	1,372		2,840	7,726	
5/31/2006	1,522	1,293		2,815	10,540	
5/31/2007	1,474	984		2,458	12,998	
5/31/2008	1,034	1,024	39	2,096	15,094	
5/31/2009	1,138	912	756	2,806	17,900	2,603

If you should have any questions regarding the content of this report, do not hesitate to contact me at 569-7128.

Regards,



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- cc: Paula Doughty, KUC (via email)  
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