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OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Before Administrative Judges:
E. Roy Hawkens, Presiding Officer
Dr. Richard F. Cole, Special Assistant
Dr. Robin Brett, Special Assistant

In the Matter of:)	
)	
Hydro Resources, Inc.)	Docket No.: 40-8968-ML
P.O. Box 777)	
Crownpoint, NM 87313)	Date: May 6, 2005

**HYDRO RESOURCES, INC.'S RESPONSE IN OPPOSITION TO
INTERVENORS' WRITTEN PRESENTATION REGARDING
GROUNDWATER, GROUNDWATER RESTORATION AND FINANCIAL
ASSURANCE**

NOTICE OF ERRATA

Hydro Resources, Inc. (HRI), by its undersigned counsel of record, hereby submits this Notice of Errata for HRI's filing of April 21, 2005 entitled *Hydro Resources, Inc.'s Response in Opposition to Intervenor's' Written Presentation Regarding Groundwater, Groundwater Restoration and Financial Assurance* and its May 4, 2005 filing entitled *Submission of Index for Written Presentation Attachments*.

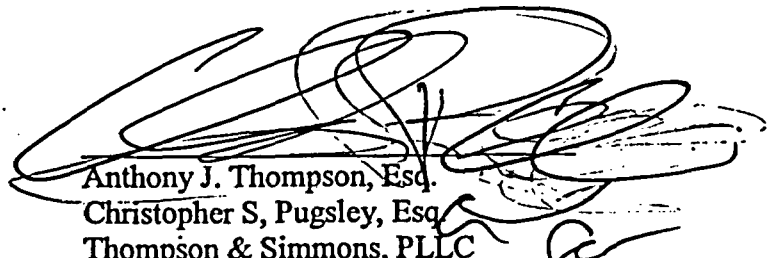
In this filing, HRI hereby submits two specific amendments to its attachments submitted as supporting documentation for the Affidavit of Mr. Mark S. Pelizza (Exhibit A). The following bullet points describe the additions to HRI's Exhibit A attachments.

- With respect to HRI's May 4, 2005 filing, the description of Attachment G to Exhibit A should be deleted and the following language should be added:

"Attachment G to Exhibit A presents excerpts of an affidavit submitted by Intervenor regarding the testimony of Richard Abitz. These excerpts are cited by Mr. Pelizza at ¶ 69 of Exhibit A."

- With respect to HRI's April 21, 2005 filing, an additional Attachment referenced at ¶ 251, 252, & 254 of Exhibit A should be added. This Attachment, hereinafter labeled Attachment W, includes excerpts from Section 2 of HRI's Crownpoint Restoration Action Plan (RAP) submitted to the Nuclear Regulatory Commission (NRC) Staff on November 19, 2001. These excerpts address RAP cost estimates for groundwater restoration at the CUP.

Respectfully Submitted,

A large, stylized handwritten signature in black ink, appearing to read 'AJT', is written over the typed name and address of Anthony J. Thompson.

Anthony J. Thompson, Esq.
Christopher S. Pugsley, Esq.
Thompson & Simmons, PLLC
1225 19th Street, NW
Suite 300
Washington, DC 20036
(202) 496-0780
(fax) (202) 496-0783
ajthompson@athompsonlaw.com
cpugsley@athompsonlaw.com

ATTACHMENT W

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2. Groundwater Restoration

2.1. Introduction

In addition to the regulatory guidance provided by NRC, HRI used historic and ongoing company experience with similar groundwater restoration operations in developing its budget model. Groundwater restoration costs are presented as a monthly restoration budget with cumulative total costs. This is an appropriate budget interval because ongoing operational cost such as labor, electricity, reagents, replacement equipment etc. are paid out of cash on a monthly basis. The duration of the restoration cost expenditure was based on the processing and circulation of 9 pore volumes of groundwater as required by license condition 9.5 surety requirement. Surety will be maintained at this level until the number of pore volumes required to restore the ground water quality of a production scale wellfield has been demonstrated as stated in COP Section 10.4.4.

The COP that was submitted in support of the HRI's License contemplated a number of methods for liquid waste treatment and disposal during ground water restoration. The costs that are presented in this budget assume the most conservative liquid waste treatment and disposal option; reverse osmosis treatment ("RO") and brine concentration ("BC"). It is conservative because it is authorized by the current license (other options would require additional licensing steps) and it is the most costly option. If HRI is to pursue one of the other treatment/disposal options described in the COP Revision 2.0 and it is approved in a future licensing action, then HRI will adjust the surety budget accordingly during the annual update review.

RO and BC will be used to treat water during production operations and be used for groundwater restoration conducted in the pilot demonstration and during concurrent restoration that will be ongoing with production activities. Because the cost of restoration equipment such as wellfield pumps, ponds, the RO unit, the BC unit, laboratory equipment, trucks, and field equipment must be incurred for production process operations, they are assumed to be operational capital and are not included as capital requirements in any of the RAP budget lines. NRC will be able to verify the availability of the restoration equipment during routine inspections.

The budget model described in this RAP used 2,102,609,094 gallons of water to size duration of the restoration program against the projected nominal equipment capacity. Rows 21-42 of the restoration budget is a monthly calculation of water treatment capacity that has been cumulated over the term of restoration and compared with the required nine pore volumes of treated water. It is nominal equipment design capacity that is needed to process the requisite gallonage that justifies the length (and cost) of groundwater restoration operations.

2.2. Reverse Osmosis Equipment Description

Reverse osmosis is a water treatment process whereby the majority of dissolved "ions" are filtered from the wastewater, and concentrated into a smaller concentrated brine volume. The resulting product water typically meets, or exceeds drinking water standards, and during restoration activities, is reinjected back into the wellfield further diluting the underground mining

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solutions toward baseline quality. For the purpose of this budget model, the concentrated brine stream, representing 20% of the feed volume will be disposed by brine concentration (a form of distillation).

Osmosis is a natural process that occurs in all living cells. With an appropriate semi-permeable membrane as a barrier to solutions of differing concentrations, naturally occurring osmotic pressure forces pure water from the dilute solution to pass through the membrane, and dilute the more concentrated solution. This process will continue until equilibrium exists between the two solutions.

Reverse osmosis (R.O.) is a reversal of the natural osmotic process. By confining a concentrated solution against a semi permeable membrane, and applying a reverse pressure on the concentrate greater than the naturally occurring osmotic pressure, water will move across the membrane ("product water"), and out of the original concentrate, resulting in an even more concentrated solution ("brine"). The membrane rejects the passage of the majority of the dissolved solids while permitting the passage of water.

Post-mining solutions from a depleted mine area will be treated with an anti-scalent which is the only chemical pretreatment budgeted. The solution may next be bulk-filtered across sand filters to remove all solids greater than 30 microns. Cartridge filters will then filter out the remaining solids greater than 1 micron. The solution at this point is ready for the reverse osmosis process. To achieve reverse osmotic purification, the pretreated and filtered solution is pressurized and directed to the first step of a two-stage reverse osmosis process. Approximately 60 percent of the total feed volume will be converted to product or purified water in the first stage. The brine water of the first stage will then act as the feed for the second stage, which yields an overall product or purified to brine ratio of 4:1. The brine generated will be further treated and reduced by brine concentration.

The RO unit was sized to operate at a nominal⁵ capacity of 580 gallons per minute. This design rate has been utilized by URI at similar ISL facilities with excellent results. Additionally, the sizing is optimal because it will allow concurrent restoration to proceed at approximately the same rate production wellfields are depleted. (I.e. with mining and restoration going on concurrently restoration and mining will proceed at similar rates).

RO treatment operating and maintenance costs are included within the O & M budget in Attachment E-2-1.

2.3. Brine Concentrator Equipment Description

A brine concentrator will be used for final reduction of liquid waste. The RO reject stream will be treated with a vertical tube, falling film vapor compressor evaporator followed by a

⁵ RAP-U1's nominal capacity is an estimate. HRI will deal with capacity variances that result from equipment efficiency or downtime by increasing or decreasing the equipment size and possibly adjusting surge capacity. For example, if actual operating results indicate that R.O. equipment downtime is 5% then increasing the equipment design capacity from 580 gpm to 610 gpm would allow the average throughput to remain the same. At this stage it is impossible for HRI to anticipate and adjust for every operational variable that may arise in the future.

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steam driven rotary drum dryer to achieve zero liquid discharge (dry solids). The solids will be bulk stored and shipped to an 11.e.2-byproduct facility for disposal.

Brine concentration is a process that can process a waste stream into deionized water and solid slurry. Electrical utilities in the Four Corners area, and paper, and pulp companies have employed this technology for decades to handle their waste streams. The principle behind the process is based on the ideal Carnot cycle where an initial fixed volume of concentrated brine is heated to boiling temperature. The steam vapor created is mechanically compressed; resulting in a secondary steam vapor whose temperature is elevated (15-20 degrees) by the work energy used during compression. Distilled water is condensed from the secondary steam vapor onto internal heat exchangers. The heat loss during condensation is transferred to the circulating brine on the opposite side of the heat exchanger. The brine's temperature is raised, maintaining the internal boiling environment. This source of heat sustains the creation of primary steam used to feed the compressor. The cycle is continuous so long as energy is added at the compressor stage. The electrical power used in compressing, and elevating the temperature of the primary steam vapor produces distilled product water. The resultant hyper-concentrated brine allows solid precipitate in the form of common salts as determined by the solution's limits for solubility. Typically, for each 100 gallons of waste brine treated, 98 gallons of distilled water and 2 gallon of slurry solids are formed.

The BC was sized to accommodate the anticipated brine that the RO will produce.

BC costs are included within the O & M budget in Attachment E-2-1.

2.4. Pore Volumes and Flair

Restoration equipment capacity design coupled with timing of the restoration operations budgeted herein is a function of the quantity of water that will be processed during restoration that is calculated in this RAP by using the pore volume unit of measure. The term "pore volume" (PV) is a term of convenience that has been conceived by the ISL industry to describe the quantity of free water in the pores of a given volume of rock. The units are provided in gallons. PV's provides a unit of reference that a miner can use to describe the amount of circulation that is needed to leach an ore body, or describe the times water must be flowed through a quantity of depleted ore to achieve restoration. PV's provide a way that a miner can take small-scale studies, such as studies in the laboratory, and scale these studies up to field level or to compare pilot scale studies⁶ to commercial scale. Hence they provide a miner with an important technique for calculating ISL project economics and restoration costs.

PV's are calculated by determining the three dimensional volume of the rock (that is also the ore zone) and multiplying this number by the percent porosity. HRI used the "ore area" method to determine pore volumes⁷, where the extent of ore of given grade within a mine unit is

⁶ I.e. such as the Section 9 Pilot. See FEIS p. 4-37.

⁷ Different operators have used different methods to determine the volume of the ore zone. For example, some use the "pattern method" where pattern dimensions are used to determine the area of the ore and then the area is multiplied by screen thickness to determine the volume of rock in the five spot. The pore volume of the five spot is

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outlined and digitized to provide the ore area⁸. This area is then multiplied by the average ore thickness to provide the three dimensional volume of the ore that is to be leached. This volume is converted to a PV by multiplying the ore volume by the percent porosity and then converting to the units of measurement (i.e. gallons). Table 1 below shows the PV calculation for the Crownpoint location that was used as the assumption in the budget model.

Table 1 - Crownpoint Pore Volume Calculation

ZONE	Area (ft ²)	Tk (ft)	Vol (ft ³)	Por	gal/ft ³	PV (gal)	H-PIF	V-PIF	CPV (gal)	9 X CPV
EE/4										
UA	168,000	12	2,016,000	0.23	7.48	3,769,920	1.5	1.3	7,351,344	66,162,096
ULA	630,000	9.6	6,048,000	0.23	7.48	11,309,760	1.5	1.3	22,054,032	198,486,288
MLA	260,000	8.6	2,236,000	0.23	7.48	4,181,320	1.5	1.3	8,153,574	73,382,166
ULB	350,000	11.9	4,165,000	0.23	7.48	7,788,550	1.5	1.3	15,187,673	136,689,053
LB	182,000	9.8	1,783,600	0.23	7.48	3,335,332	1.5	1.3	6,503,897	58,535,077
UUC	675,000	7.6	5,130,000	0.23	7.48	9,593,100	1.5	1.3	18,706,545	168,358,905
MC	840,000	12.2	10,248,000	0.23	7.48	19,163,760	1.5	1.3	37,369,332	336,323,988
ULC	992,000	11.8	11,705,600	0.23	7.48	21,889,472	1.5	1.3	42,684,470	384,160,234
LLC	754,000	7.3	5,504,200	0.23	7.48	10,292,854	1.5	1.3	20,071,065	180,639,588
TOTALS	4,831,000		48,836,400			91,324,068			178,081,933	1,602,737,393
SW/4										
LA	308,000	8.8	2,710,400	0.23	7.48	3,068,448	1.5	1.3	9,883,474	88,951,262
ULB	270,000	6.2	1,674,000	0.23	7.48	3,130,380	1.5	1.3	6,104,241	54,938,169
LB	437,000	7.5	3,277,500	0.23	7.48	6,128,925	1.5	1.3	11,951,404	107,562,634
UUC	256,000	6.3	1,664,000	0.23	7.48	3,111,680	1.5	1.3	6,067,776	54,609,984
MC	465,000	12.7	5,905,500	0.23	7.48	11,043,285	1.5	1.3	21,534,406	193,809,652
TOTALS	1,736,000		15,231,400			28,482,718			55,541,300	499,871,701
G. Totals	6,587,000		64,067,800			119,806,786			233,623,233	2,102,609,094

Explanation of Headings:

Area - Area of cut off grade mineralization.
 Tk - Thickness of cut off grade mineralization.
 Por - Estimated porosity of the rock.
 PV - Straight pore volume without any correction.
 H-PIF - Horizontal pore volume increase factor.
 V-PIF - Vertical pore volume increase factor.
 CPV - Corrected pore Volume.

"Flare" factors or pore volume increase factors are multipliers that are commonly used by the ISL industry to account for leach solution outside of the specific boundaries of the calculated ore PV and are generally accepted increases⁹ that should be recognized in cost estimates. HRI

calculated by multiplying the volume of rock by the percent porosity and then converting to the units of measurement (i.e. gallons). The total PV of a mine unit is calculated by adding all the five spot patterns in the mine unit. This method works well for existing ISL operations where the ore had been fully delineated and wellfield installed such as the existing projects in Wyoming.

⁸ Future wellfield patterns will be constructed within the ore that is economic at the time. Patterns will be a subset of the overall "ore area".

⁹ Flare outside of the ore zone is the norm. In the subsurface water moves in a radial pattern from injector to extractor in its path across the target ore. By choosing patterns carefully flare is minimized. However, as an expected component of ISL mining the flare factors are included in the bonding calculation as a deliberate cost contingency. There is a limit on acceptable flare; the horizontal monitor wells. If fluid is detected in the horizontal monitor wells it is no longer simply flare but then becomes an excursion. An excursion requires immediate corrective action to draw it back to the mine zone or the bonding must be increased above the amount contemplated

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uses pore volume increase factors of 1.5 for horizontal and 1.3 for vertical¹⁰. Horizontal increase is calculated by multiplying the measured or mapped area of the ore, in plan, and multiplying the actual area by 1.5. This yields the affected horizontal area. Likewise, vertical increase is calculated by multiplying the measures average thickness of the ore by 1.3. This yields the affected vertical area. Multiplying the affected horizontal times the affected vertical by porosity provides the affected pore volume for the surety cost estimation. This number is in turn multiplied by 9 to determine water treatment and disposal volumes that are entered into the model to calculate costs. The 1.5 for horizontal and 1.3 for vertical pore volume increase factors have been calculated by URI engineers based on operating experience at other restoration demonstrations and commercial operations and have been adequate for monitoring and reporting restoration progress at other operations. During the Churchrock restoration demonstration that is described in LC 10.28, HRI will use these factors to measure the number of pore volumes that are processed during the restoration demonstration.

The methods utilized in this RAP and all three previous RAP's to calculate pore volume and adjusted pore volumes are consistent with the methods used for the Mobil Section 9 Pilot that was conducted approximately three miles northwest of the Crownpoint site, which in turn were the basis for the NRC evaluation in the FEIS, and are consistent with the methods used by HRI throughout the CUP licensing process, and for HRI's submittals during the Subpart L hearing. HRI methods to calculate pore volume and adjusted pore volumes, and the factors that were used were not generic or arbitrary, but rather were consistently proposed, evaluated, litigated and applied throughout the NRC licensing process and this Subpart L proceeding.

HRI presented the NRC with the Summary Report for the Mobil Section 9 In Situ Leach Pilot¹¹ as a part of the License Application support materials because the Pilot was a substantial field demonstration, and provided empirical results¹², for the ISL development that is proposed for the CUP. This Report was a compilation of the information from Mobil Oil Company's files and records that were developed when the Pilot was conducted. HRI utilized actual pattern dimensions and the actual number of gallons processed during the restoration to compile the summary report.

The cumulative restoration analyses in Attachment C of the Summary Report show that 59,173,469 gallons were circulated during restoration of the Section 9 Pilot, which equated to 16.7 adjusted pore volumes. It is from this data that NRC determined that after 8 - 10 pore

in this RAP to compensate for the increase in restoration cost. (See L.C. 10.13 which requires a bond increase if corrective action is not completed in 60 days)

¹⁰ Combined pore volume increase factor is 1.95.

¹¹ See Pelizza Affidavit January 19, 2001, Attachment 1.

¹² The Section 9 Pilot data provide actual ore zone dimensions and gallons processed so that actual pore volume can be processed. ENDAUM witness Lafferty Testimony May, 23 2001 ¶ 14 specifically recognizes the importance of knowing the quantity of water removed from the formation in calculating pore volumes ".... if the flair factor were increased, the number of pore volumes required should be decreased. This scenario may be true only if the total gallons of impacted groundwater were known." The value of the Section 9 Pilot, or any demonstration, is that it provides *known* variables to the equation that allows pore volume increase factors to be assigned. Given similar mining technology and geology, the pore volume increase factors from a demonstration, such as the Section 9 Pilot, can be applied to an analogous site such as the Crownpoint location.

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volumes that TDS concentrations and specific conductance had reached a point where little improvement was realized with additional effort¹³ and that the initial surety should be based on 9 pore volumes. Table 2 shows how the adjusted pore volume was calculated using the pattern area, screen thickness, porosity, a horizontal pore volume increase factor of 1.5, and a vertical pore volume increase factor of 1.3. The methods of pore volume analysis utilized in the Summary Report form the foundation of the NRC impact evaluation in Section 4.3.1 of the FEIS which ultimately resulted in the staff determination that 9 pore volumes would be required for surety calculations¹⁴. It is important that HRI continue to use the previously evaluated pore volume increase factors in the RAP, and in future restoration analyses for the NRC, so that can projected and actual performance and costs can be measured consistently.

Table 2 – Section 9 Pore Volume Calculation

ZONE	Pattern Area (ft ²)	Tk (ft)	Vol (ft ³)	Por	gal/ft ³	PV (gal)	H-PIF	V-PIF	CPV (gal)	Gallons Processed	CPV Processed
Single	40,488	24	971,712	0.25	7.48	1,817,101	1.5	1.3	3,543,347	59,173,469	16.69

Explanation of Headings:

Area - Area of cut off grade mineralization.
 Tk - Thickness of cut off grade mineralization.
 Por - Estimated porosity of the rock.
 PV - Straight pore volume without any correction.
 H-PIF - Horizontal pore volume increase factor.
 V-PIF - Vertical pore volume increase factor.
 CPV - Corrected pore Volume.

HRI has presented similar pore volume estimates during the license application review process. Specifically, in response to NRC Request for Further Information, Question 59, August 15, 1996, pertaining to Ground water Consumption, HRI supplied NRC with a pore volume calculation for the Crownpoint site that was similar to the one presented in the RAP Section 2.a^{15,16}. Consistent with the methodology used throughout the Crownpoint Project Licensing process, HRI utilized the ore body outline, not pattern dimensions, to determine the affected surface area and used a horizontal increase factor of 1.5. These were the same values utilized by NRC to conduct the evaluation of water consumption in the FEIS¹⁷. HRI's proposed pore volume increase factors are consistent with those, which had been systematically evaluated in the FEIS¹⁸. The FEIS has been found to be adequate for the purpose of licensing the Crownpoint Uranium Project.¹⁹

In summary, HRI correctly used the same methods to calculate adjusted pore volumes in the RAP cost estimate because they were the same as those that NRC reviewed in HRI submittals,

¹³ See FEIS p. 4-40

¹⁴ See FEIS p. 4-40

¹⁵ Based on professional judgment, HRI increased the estimated porosity from .21 in Q/59 to .25 in the RAP. This resulted in a more conservative estimate in the RAP. All other factors are the same.

¹⁶ See RAI Q1/59.

¹⁷ See FEIS pp. 4-57 through 4-60.

¹⁸ FEIS p. 4-122 used a combined horizontal and vertical pore volume increase factor of 1.95. I.e 1.3 (HDF) x 1.5 (VDF) = 1.95.

¹⁹ See COMMISSION CLI-01-04.

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that NRC used in the FEIS impact evaluation, and that was placed into evidence by the HRI in the course of the Subpart L hearing process.

As an additional test for reasonableness of HRI's cost estimate, Table 3 below compares important project variables for PRI's Highland Uranium Project in Wyoming²⁰ against similar project variables for HRI's Crownpoint project²¹. Table 3 brings into context the comparative size, and corresponding scope of reclamation, of the two projects. In this table the actual surety amount for PRI are shown against the proposed surety amount from this RAP-CP. Reviewing the data in Table 3 in the context of number of wells, throughput, and number of satellite locations, the PRI Highland project exceeds the size of the HRI Crownpoint project. The PRI Highland and HRI Crownpoint wellfield pattern size and duration of operation are comparable. The PRI Highland adjusted pore volume is 20% greater than that estimated by HRI for the Crownpoint site²². In the comparative measures of \$/acre wellfield, or \$/pound produced, PRI proposed surety amount exceeds that of HRI. In the comparative measures of water process cost in \$/ m gal., HRI's and PRI's²³ proposed surety amount are essentially the same. The Table 3 information provides strong evidence that the costs estimates for the HRI Crownpoint location are consistent the PRI Highland costs that the Intervenor's experts argue should serve as a reasonable example.

Table 3 – Comparison of Key Project Variables and Reclamation Costs

Project Variables	PRI ²⁴	HRI Crownpoint
Number of wells (all)	~4141	~1014
Acres of wellfield patterns	~189	~181 ²⁵
Years of operation	13	15
Cumulative production (mm lbs. U ₃ O ₈)	~13	~15
Nominal throughput (gallon per minute)	9000	4000
Number of satellites	3 ²⁶	1
Number of pore volume's used in surety estimate	6	9
Size of adjusted restoration volume (billion gallons)	~2.71	~2.10
Comparative PV size (mm gal.) /acre wellfield	14.3	11.6
Restoration estimate (~mm \$)	\$21.12	\$16.39
Comparative \$/acre wellfield	\$111,751	\$93,370
Comparative \$/pound produced	\$1.63	\$1.09
Comparative process cost \$/ m gal.	\$7.79	\$7.81

²⁰ See Testimony of April Lafferty, May 23, 2001 ¶ 11.

²¹ Mr. Ingle Testimony of December 19, 2000, p. 31 states "there is considerable relevant and analogous uranium ISL restoration experience in Wyoming to draw from to develop credible cost estimates".

²² As stated in 5 above, it is anticipated that if HRI was to use wellfield patterns rather than ore boundary areas then the pore volume and adjusted pore volumes would be smaller and more proportional to PRI when compared to well field pattern acreage.

²³ Dr. Abitz Testimony dated May 23, 2001 continues to describe reasons to use unit groundwater costs from the Fernald site. It is more appropriate to use a similar NRC licensed ISL facility.

²⁴ Actual from information provided by PRI staff.

²⁵ Estimated from COP 2.0, Figure 1.4-3.

²⁶ PRI costs include the D & D of the also include the mother plant. HRI mother plant D & D costs are included in the Churchrock Section 8 RAP.

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2.6. Ground Water Quality

Once the economic recovery limit of a mine area is reached, lixiviant injection is stopped, and the affected ground water is treated (restored) to return the quality of water to regulatory standards. Water quality will be reclaimed to the criteria of L.C. 10.21. The limited water quality data from the Crownpoint site suggests that the water good and meets drinking water quality standards for all parameters except uranium related radionuclides.²⁷ The Unit 1 site monitor well data²⁸ from the same ore zone aquifer 2 to 3 miles to the west of the Crownpoint location is more extensive, and provides a good picture of radionuclide concentrations in water that is interstitial to roll front uranium mineralization. A thorough characterization of the premine groundwater will be conducted at the Crownpoint location as required by L.C.'s 10.21 & 10.22 and it will be this characterization that provides the baseline against which restoration will be measured.

LC 9.14 States: "Prior to injection of lixiviant, the licensee shall obtain all necessary permits and licenses from the appropriate regulatory authorities". At the Crownpoint location this provision requires that HRI acquire an Underground Injection Control Permit and an Aquifer Exemption²⁹ through the USEPA. Aquifer Exemption is a regulatory device of the USEPA that is used to designate aquifers or portions of aquifers as "exempt" because they are mineralized and producible of minerals in commercial quantities and are not currently or likely to be in the future sources of drinking water. HRI has not acquired either of these authorizations for the Crownpoint location at this time but will be required to do so by NRC before operations begin.

2.7. Groundwater Restoration Budget Line Item Assumptions

HRI used historic and ongoing company experience with similar ISL uranium recovery and groundwater restoration operations in developing its budget model. For example because URI, HRI's sister company is currently reclaiming two other commercial ISL mines, HRI drew on this experience to aid in sizing labor requirements, maintenance needs and other cost categories that may not be apparent to someone without similar "hands on" experience. Unit labor costs are

²⁷ FEIS p. 3-31.

²⁸ RAP-U1 § 2.6.

²⁹ 40 CFR 146.4 states: "An aquifer or a portion thereof which meets the criteria for an "underground source of drinking water" in § 146.3 may be determined under 40 CFR 144.8 to be an "exempted aquifer" if it meets the following criteria:

- (a) It does not currently serve as a source of drinking water; and
- (b) It cannot now and will not in the future serve as a source of drinking water because:
 - (1) It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible.
 - (2) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;
 - (3) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or
 - (4) It is located over a Class III well mining area subject to subsidence or catastrophic collapse;..."

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the same as what was provided to NRC as part of the license review of the overall project.³⁰ In addition HRI used actual costs estimates from the region for utilities, and other materials that will be used in reclamation.

The assumptions that were used in the groundwater restoration budget (See Attachment E-2-1) are as follows:

Salaries

For the purpose of the Financial Assurance Plan, HRI assumed employment of technical professionals whose expertise is needed on a limited basis during the restoration mode. Anticipated positions are listed in the Restoration Budget rows 1-15. However, to justify their full time status and utilize their time on the job, it is assumed that they are required to provide a multitude of services, i.e., every employee will be wearing multiple hats. As such, individual job descriptions are difficult. For example, in the restoration mode, a qualified geologist will be required to verify the configuration of restoration patterns to assure efficient results. While this task requires unique geological expertise, the time commitment by the geologist to this task may only be several hours per week. Therefore, to maximize the use of the geologist time, he or she will be assigned to many other tasks for which he or she will be qualified such as lab analyst, well sampler, and plant operator. HRI also plans to maintain several other technical disciplines on staff such as radiation safety specialist, and engineers. In the restoration mode they will also perform their primary function and a number of secondary roles.

Reflecting the very broad nature of each full time employee's job at the CUP during the restoration mode, the following is a summary of each position that is budgeted in the Financial Assurance Plan. Anticipated salaries that were used in the budget are within Attachment E-2-4.

Operations Manager. In Charge of all aspects of day-to-day activities and planning for Crownpoint Uranium Project D & D. Responsible for interface with accounting services including coding and approval of all invoices, monthly cost analysis, restoration report generation, and employee relation responsibilities.

Environmental Manager. Responsible for the radiation health and safety, environmental compliance and quality assurance program at the Crownpoint Uranium Project. Supervise the Radiation Safety Officers to ensure that all radiation safety, environmental compliance and permitting/licensing programs will be conducted in a responsible manner and in compliance with all applicable regulations and permit/license conditions. Serve as Company liaison with regulatory agencies over the term of the restoration activity.

Radiation Safety Officer. Responsible for compliance with all USNRC, and MSHA rules and regulations at the CUP. Also responsible for assistance with laboratory analysis, vehicle safety, reporting and public information.

³⁰ See RAI Q1/8 - Feb. 19, 1996.

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Chemist. Responsible for maintaining day to day analytical services including operational and environmental. In this capacity the chemist will assure that proper chemical parameters are reported to operations for the water treatment processes. He will be responsible for performing analysis of all routine environmental samples such as monitor wells.

Senior Geologist. Responsible for evaluation of logs and other well data and its interpretation as it pertains to restoration activities. Performs all monitor well sampling duties and when possible, helps with wellfield construction as well as Smeal pump hoist operation. Duties include drafting and ACAD operator for mapping needs. Provides weekend call-out and rotating operator duties as needed.

Wellfield Foreman. Responsible for Wellfield operation and construction as it pertains to restoration. Helps with monitor well sampling and backup pump hoist operator.

Wages-Direct

Electrician. Responsible for performing day to day electrical maintenance and repair services. Performs restoration operator duties on a rotating basis.

Plant Operator. Performs restoration operator duties on a regular basis. This would include the operations of all water treatment equipment including the reverse osmosis unit and brine concentrator.

Truck driver. Provides CDL driver duties. Will serve as backhoe operator and have operator duties on a rotating basis.

Wellfield Operator. Perform wellfield restoration operator duties on a regular basis and rotations with the Plant Operator.

Pump Hoist Operator. Responsible for the running of pumps in and out of the hole as required by restoration activities. Other duties include the operation of the backhoe and labor necessary for field construction.

Insurance-Workman's Compensation

Estimate based on projected compensation expenses and prevailing rates.

Payroll Taxes

Estimate based on projected compensation expenses and prevailing rates.

Medical Insurance

Estimate based on headcount and historic premium rates.

November 19, 2001

401K Contributions

The 401(k) Contribution cost codes represent HRI-funded contributions under the 401(k) - the retirement savings plan for HRI employees. The 401 (k) Contribution portion is made concurrent with each bi-weekly payroll period as a component of each eligible employee's total compensation.

Telephone/Telegraph

Estimated average costs of regular telephone service, cellular telephone service, and fax line service and internet line service at all CUP locations.

Postage/Freight

Estimated average cost of all types of mail service.

Copy Equipment

Estimate average cost for operation of all types of copy and fax equipment at all CUP locations.

Other Equipment & Rental

This covers the rental of equipment and miscellaneous equipment average costs. As applied in these estimates, it would include office machine rental, water machines for potable water, etc.

Office Supplies

Estimated average costs of office supplies such as paper, pens, etc.

Office Equipment Maintenance

Estimate average cost for maintenance for all types of office equipment at all CUP locations.

Data Processing

Estimated average cost for outside data processing.

Maps

Estimated average cost of plotting and reproducing maps for routine operations and reports.

November 19, 2001

Drafting & Printing

Estimated average for outside computer automated drawing services for report preparation.

Transportation - Air & Car

Estimated average for airplane tickets and auto rental.

Meals

Estimated average for travel related meals.

Misc. Travel Expense

Estimated average for travel related expenses such as hotels.

Env-Depreciable Equipment

Replacement equipment and calibration costs. This would include survey and sample equipment and routine calibration and service.

Env-Operational Analyses

This cost code is reserved for outside analysis

Environmental -- Miscellaneous

As the name suggests, any environmental related item not specifically addressed in the other codes 090 through 098. Miscellaneous items may include sample bottles, filters, reagents, calibration, etc.

Safety

This is for costs associated with safety supplies for the employees. Items charged to this cost code would include safety boots, safety glasses, potable water, protective gloves, safety goggles etc.

Backhoe

All backhoe rental and maintenance such as oil changes, and repairs would be charged to this account

Misc. Chemicals

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The major charge to this cost code during restoration is anti-scalent for the RO.

Utilities - Electric, Wellfield

Calculated electrical cost for operating the pumps and other equipment in the wellfield. The basis for these costs is shown in Attachment E-2-2.

Utilities - Electric, Brine Concentrator

Calculated electrical cost for operating the brine concentrator. The basis for these costs is shown in Attachment E-2-2.

Utilities - Electric, Plant and RO

Calculated electrical cost for operating the plant, reverse osmosis unit, and other office lighting and electrical needs. The basis for these costs is shown in Attachment E-2-2.

Submersible Pumps

Estimated average maintenance and replacement costs for submersible pumps that are used in extraction wells.

Submersible Motors

Estimated average maintenance and replacement costs for submersible pump electric motors that are used in extraction wells.

Field Piping & Valves

Estimated average maintenance and replacement costs for the various fittings, valves, glues etc. that is used in wellfield operations.

Meters

Estimated average maintenance and replacement costs for wellfield meters.

Misc. Field

The major charge to this cost code during restoration is PPE, rags, solvents and other miscellaneous field needs.

Handtools

Estimated average handtool replacement costs

November 19, 2001

Plant Piping & Valves

Estimated average maintenance and replacement costs for the various fittings, valves, glues etc. that is used in plant operations.

Plant Brine Concentrator Inst.

A cost code to charge anticipated brine concentrator instrument replacement.

Pumps

Estimated average maintenance and replacement costs for pumps that are used in the water treatment plant.

Plant Electrical

Estimated average electrical maintenance and replacement costs for water treatment plant operations.

Filters

Estimated average filter and filter media replacement costs and maintenance costs for filtration equipment for water treatment plant operations.

Evaporation Ponds

A cost code to charge anticipated maintenance costs for pond liner repairs and maintenance.

Roads

A cost code to charge anticipated maintenance costs for road maintenance.

Gas, Oil, and Grease

Equipment fuel costs and lubrication.

Disposal - BC Solids

Ongoing operational cost of disposing salt residue from brine concentrator. The basis for these costs is shown in Attachment E-2-2.

November 19, 2001

RO Unit

A cost code to charge anticipated reverse osmosis unit repair, maintenance and instrument replacement.

Lab Supplies

Estimated average costs of analytical laboratory supplies such as reagents, filters, glassware, etc.

RO Membrane

Average replacement costs of reverse osmosis unit membranes.

Field Equip. Repairs & Maint.

A cost code to charge anticipated maintenance costs for large field equipment such as the pump host equipment, generators, and trucks.

Vehicle Repairs & Maint.

A cost code to charge anticipated maintenance costs for road vehicles such as pick up trucks and company autos.

Vehicles -- Pickups

The estimated average cost for the major repair of a company pickup truck.

Vehicles - Tractors & Trucks

The estimated average cost for the major repair of a large trucks or trailers.

Vehicles - Automobiles

The estimated average cost for the major repair of a company car.

Minus contingency/profit, the total cost for groundwater restoration and post restoration management is projected to be \$10,890,592.

November 19, 2001

**ATTACHMENT E-2-1
GROUNDWATER RESTORATION BUDGET**

September 19, 2004

[illegible]

CROWNPOINT SEC. 24 GROUNDWATER RESTORATION AND DECOMMISSIONING COSTS COSTS ASSOCIATED WITH RO AND BRINE CONCENTRATION OPERATION AND MAINTENANCE

November 18, 2004

	02	03	04	05	06	07	08	09	10	11	12	13	14	15
1 Operations Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2 Environmental Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3 Radiation Officer	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4 Chemist	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5 Electrician	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6 Plant Operator	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7 Forklift Operator	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8 Person	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9 Truck Driver	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10 Wellfield Operator	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11 Power Plant Operator	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12 Senior Geologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	11	11	11	11	11	11	11	11	11	11	11	11	11	11
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21	600	600	600	600	600	600	600	600	600	600	600	600	600	600
22	404	404	404	404	404	404	404	404	404	404	404	404	404	404
23	116	116	116	116	116	116	116	116	116	116	116	116	116	116
24	25,801,300	24,220,600	26,801,300	25,220,600	26,801,300	25,220,600	26,801,300	25,220,600	26,801,300	25,220,600	26,801,300	25,220,600	26,801,300	25,220,600
25	20,712,800	18,712,800	20,712,800	18,712,800	20,712,800	18,712,800	20,712,800	18,712,800	20,712,800	18,712,800	20,712,800	18,712,800	20,712,800	18,712,800
26	6,176,340	4,844,190	6,176,340	4,844,190	6,176,340	4,844,190	6,176,340	4,844,190	6,176,340	4,844,190	6,176,340	4,844,190	6,176,340	4,844,190
27														
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29	126	126	126	126	126	126	126	126	126	126	126	126	126	126
30	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5
31	8,861,000	8,220,000	8,861,000	8,220,000	8,861,000	8,220,000	8,861,000	8,220,000	8,861,000	8,220,000	8,861,000	8,220,000	8,861,000	8,220,000
32	8,098,800	4,738,700	8,098,800	4,738,700	8,098,800	4,738,700	8,098,800	4,738,700	8,098,800	4,738,700	8,098,800	4,738,700	8,098,800	4,738,700
33	111,800	104,600	111,800	104,600	111,800	104,600	111,800	104,600	111,800	104,600	111,800	104,600	111,800	104,600
34														
35	1,483,877,884	1,488,088,394	1,483,877,884	1,488,088,394	1,483,877,884	1,488,088,394	1,483,877,884	1,488,088,394	1,483,877,884	1,488,088,394	1,483,877,884	1,488,088,394	1,483,877,884	1,488,088,394
36	6.30	6.28	6.30	6.28	6.30	6.28	6.30	6.28	6.30	6.28	6.30	6.28	6.30	6.28
37	25,778,000	24,146,400	25,778,000	24,146,400	25,778,000	24,146,400	25,778,000	24,146,400	25,778,000	24,146,400	25,778,000	24,146,400	25,778,000	24,146,400
38	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11
39	634,818,000	604,827,300	634,818,000	604,827,300	634,818,000	604,827,300	634,818,000	604,827,300	634,818,000	604,827,300	634,818,000	604,827,300	634,818,000	604,827,300
40	2.72	2.62	2.72	2.62	2.72	2.62	2.72	2.62	2.72	2.62	2.72	2.62	2.72	2.62
41	1,406,008,384	1,401,814,884	1,406,008,384	1,401,814,884	1,406,008,384	1,401,814,884	1,406,008,384	1,401,814,884	1,406,008,384	1,401,814,884	1,406,008,384	1,401,814,884	1,406,008,384	1,401,814,884
42	6.29	6.18	6.29	6.18	6.29	6.18	6.29	6.18	6.29	6.18	6.29	6.18	6.29	6.18
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**CROWNPOINT SEC. 24 GROUNDWATER RESTORATION AND DECOMMISSIONING COSTS
COSTS ASSOCIATED WITH RO AND BRINE CONCENTRATION OPERATION AND MAINTENANCE**

November 18, 2004

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**CROWNPOINT SEC. 24 GROUNDWATER RESTORATION AND DECOMMISSIONING COSTS
COSTS ASSOCIATED WITH RO AND BRINE CONCENTRATION OPERATION AND MAINTENANCE**

Worksheet: 05.2004

Period	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225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CROWNPOINT SEC. 24 GROUNDWATER RESTORATION AND DECOMMISSIONING COSTS
COSTS ASSOCIATED WITH RO AND BRINE CONCENTRATION OPERATION AND MAINTENANCE

November 12, 2004

[illegible]

**CROWNPOINT SEC, 24 GROUNDWATER RESTORATION AND DECOMMISSIONING COSTS
COSTS ASSOCIATED WITH RO AND BRINE CONCENTRATION OPERATION AND MAINTENANCE**

November 18, 2004

[illegible]

**CROWNPOINT SEC. 24 GROUNDWATER RESTORATION AND DECOMMISSIONING COSTS
COSTS ASSOCIATED WITH RO AND BRINE CONCENTRATION OPERATION AND MAINTENANCE**

November 18, 2001

Cost	21	22	23	24	25	26	27	28
1 Operations Manager	1	1	1	1	1	1	1	1
2 Environmental Manager	1	1	1	1	1	1	1	1
3 Facilities Officer	1	1	1	1	1	1	1	1
4 Chemist	1	1	1	1	1	1	1	1
5 Electrician	1	1	1	1	1	1	1	1
6 Plant Operator	1	1	1	1	1	1	1	1
7 RO Plant Operator	1	1	1	1	1	1	1	1
8 Truck Driver	1	1	1	1	1	1	1	1
9 Wellhead Operator	1	1	1	1	1	1	1	1
10 Pump Head Operator	1	1	1	1	1	1	1	1
11 Operator Overlight	1	1	1	1	1	1	1	1
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D & D COSTS ARE ITEMIZED ON A TASK BASIS

November 19, 2001

ATTACHMENT E-2-2
BUDGET CALCUALTION AND BACKUP

—
Labor Rates
Electrical Usage
Solid Production

November 19, 2001

LABOR SUMMARIES

	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9	Salaried	Operations Manager	1	-			\$120,000		\$120,000	\$10,000
10	Salaried	Environmental Manager	1	-			\$105,000		\$105,000	\$8,750
11	Salaried	Accounting Manager					\$105,000		\$105,000	\$8,750
12	Salaried	Accountant					\$65,000		\$65,000	\$5,417
13										
14	Salaried	Plant Superintendent					\$85,000		\$85,000	\$7,083
15	Salaried	Plant Engineer					\$45,000		\$45,000	\$3,750
16	Salaried	Radiation Officer	1	-			\$30,000		\$30,000	\$2,500
17	Salaried	Chemist	1	-			\$46,000		\$46,000	\$3,833
18	Salaried	Plant Foreman					\$28,000		\$28,000	\$2,333
19	Salaried	Maintenance Foreman					\$28,000		\$28,000	\$2,333
20	Wage	Lab Technicians				\$9.62	-		\$20,000	\$1,667
21	Wage	Secretary				\$9.62	-		\$20,000	\$1,667
22	Wage	Electrician	1		\$14.43		-		\$30,000	\$2,500
23	Wage	Apprentice Electrician			\$12.01		-		\$24,000	\$2,000
24	Wage	Plant Operator	1		\$11.54		-		\$24,000	\$2,000
25	Wage	Assistance Plant Operator			\$11.54		-		\$24,000	\$2,000
26	Wage	Dryer Operator			\$11.54		-		\$24,000	\$2,000
27	Wage	Maintenance			\$11.54		-		\$24,000	\$2,000
28										
29										
30	Salaried	Wellfield Superintendent					\$41,200		\$41,200	\$3,433
31	Salaried	Drilling Engineer					\$40,500		\$40,500	\$3,375
32	Salaried	Foreman	1	-			\$28,000		\$28,000	\$2,333
33	Wage	Truck Driver	1		\$11.54		-		\$24,000	\$2,000
34	Wage	Electrician			\$14.43		-		\$30,000	\$2,500
35	Salaried	Data Entry Clerk					\$20,000		\$20,000	\$1,667
36	Wage	Secretary					\$20,000		\$20,000	\$1,667
37	Wage	Logger			\$12.01		-		\$24,000	\$2,000
38	Wage	Wellfield Operators	1		\$11.50		-		\$23,820	\$1,985
39	Wage	Assistant Wellfield Operator			\$11.50		-		\$23,820	\$1,985
40	Wage	Balancer			\$11.50		-		\$23,820	\$1,985
41	Wage	Environmental Sampler			\$11.50		-		\$23,820	\$1,985
42	Wage	Pump Hoist Operators	1		\$11.50		-		\$23,820	\$1,985
43	Wage	Backhoe Operator			\$10.49		-		\$21,819	\$1,818
44	Wage	Maintenance			\$11.50		-		\$23,820	\$1,985
45	Wage	Casing Crew			\$11.50		-		\$23,820	\$1,985
46										
47										
48	Salaried	Chief Engineer					\$66,000		\$66,000	\$5,500
49	Salaried	RESERVOIR ENGINEER					\$60,000		\$60,000	\$5,000
50	Salaried	Senior Geologist	1	-			\$58,000		\$58,000	\$4,833
51	Salaried	Geologist					\$48,800		\$48,800	\$4,067
52	Salaried	Logging Supervisor					\$35,000		\$35,000	\$2,917
53	Wage	Secretary					\$20,000		\$20,000	\$1,667
54	Wage	Surveyor			\$12.02		-		\$25,000	\$2,083
55	Wage	Assistant Surveyor			\$12.02		-		\$25,000	\$2,083
56	Wage	Logger			\$10.49		-		\$21,819	\$1,818

Total #

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**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:
E. Roy Hawkins, Presiding Officer
Dr. Richard F. Cole, Special Assistant
Dr. Robin Brett, Special Assistant**

In the Matter of:)
Hydro Resources, Inc.) Docket No.: 40-8968-ML
P.O. Box 777)
Crownpoint, NM 87313) Date: May 6, 2005
_____)

CERTIFICATE OF SERVICE

THIS IS TO CERTIFY that a copy of the foregoing Hydro Resources, Inc.'s Response in Opposition to Intervenor's Written Presentation Regarding Groundwater, Groundwater Restoration and Financial Assurance, Notice of Errata in the above-captioned matter has been served upon the following via electronic mail and U.S. First Class Mail on this 6th day of May, 2005.

Administrative Judge,
E. Roy Hawkins
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Mail Stop T-3 F23
Washington, DC 20555
Email: erh@nrc.gov

Administrative Judge
Richard F. Cole, Special Assistant
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Mail Stop T-3 F23
Washington, DC 20555
Email: rfcl@nrc.gov

Office of the Secretary
Attn: Rulemakings and
Adjudications Staff
U.S. Nuclear Regulatory
Commission
Mail Stop: OWFN-16 C1
Washington, DC 20555
Email: hearingdocket@nrc.gov

Mark S. Pelizza, President
Uranium Resources, Inc.
650 S. Edmonds Lane
Lewisville, TX 75067
Email: mspelizza@msn.com

Jep Hill, Esq.
Jep Hill and Associates
P.O. Box 30254
Austin, TX 78755
Email: jep@jephill.com

Administrative Judge, Robin Brett
2314 44th Street, NW
Washington, DC 20007
Email: rbrett@usgs.gov

Louis Denetsosie, Attorney General
Steven J. Bloxhalm, Esq.
Navajo Nation Department of Justice
P.O. Box 2010
Window Rock, AZ 86515

William Zukosky
DNA-Peoples' Legal Services, Inc.
201 East Birch Avenue, Suite 5
Flagstaff, AZ 86001-5215
Email:
wzukosky@dnalegalservices.org

Adjudicatory File
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Mail Stop: T- 3F23
Washington, DC 20555

David C. Lashway, Esq.
Hunton & Williams, LLP
1900 K Street, N.W.
Washington, DC 20037
Email: dlashway@hunton.com

Geoffrey H. Fettus
Natural Resources Defense Counsel
1200 New York Avenue, NW
Suite 400
Washington, DC 20005
Email: gfettus@nrcdc.org

Office Manager
Eastern Navajo-Diné Against
Uranium Mining
P.O. Box 150
Crownpoint, New Mexico 87313

W. Paul Robinson
Chris Shuey
Southwest Research and
Information Center
P. O. Box 4524
Albuquerque, NM 87106

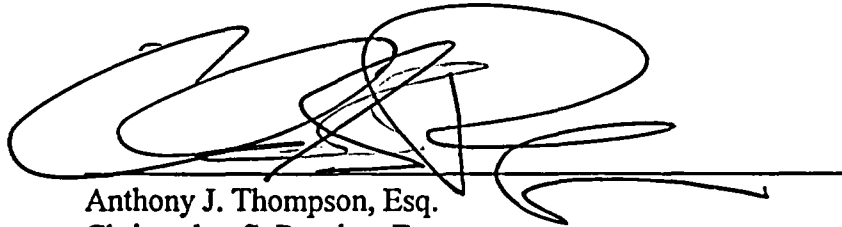
Eric Jantz, Esq.
Douglas Meiklejohn, Esq.
Heather L. Green
New Mexico Environmental Law
Center
1405 Luisa Street, Suite 5
Santa Fe, NM 87505
Email: ejantz@nmelc.org
Email: meikljhn@nmelc.org
Email: Hgreen@nmelc.org

Laura Berglan
DNA-People's Legal Services, Inc.
P.O. Box 765
Tuba City, AZ 86045
Email:
lberglan@dnalegalservices.org

Atomic Safety and Licensing Board
Panel
U.S. Nuclear Regulatory
Commission
Mail Stop: T-3 F23
Washington, DC 20555

Office of Commission Appellate
Adjudication
U.S. Nuclear Regulatory
Commission
Mail Stop: O-16G15
Washington, DC 20555-0001

John T. Hull, Esq.
Tyson Smith, Esq.
U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop: O-15D21
Washington, DC 20555
Email: jth@nrc.gov
Email: TRS1@nrc.gov

A large, stylized handwritten signature in black ink, likely belonging to Christopher S. Pugsley, is positioned above the contact information for his firm.

Anthony J. Thompson, Esq.
Christopher S. Pugsley, Esq.
Thompson & Simmons, PLLC.
1225 19th Street, N.W., Suite 300
Washington, DC 20036
Telephone: (202) 496-0780
Facsimile: (202) 496-0783
Email: ajthompson@athompsonlaw.com
Email: cpugsley@athompsonlaw.com

THOMPSON & SIMMONS, PLLC.

1225 19th Street, N.W., Suite 300
Washington, D. C. 20036
202.496.0780/202.496.9111
Fax: 202.496.0783

440 Meadow Street,
Waterbury, Connecticut 06702

ANTHONY J. THOMPSON
ajthompson@athompsonlaw.com
Admitted in D.C. and Virginia

CHARLES T. SIMMONS
csimmons@athompsonlaw.com
Admitted in CT and D.C.

CHRISTOPHER S. PUGSLEY
cpugsley@athompsonlaw.com
Admitted in MD

May 6, 2005

BY ELECTRONIC MAIL AND U.S. FIRST CLASS MAIL

U.S. Nuclear Regulatory Commission
Office of the Secretary
Attn: Rulemaking and Adjudications Staff
Mail Stop: OWFN-16C1
Washington, DC 20555

Re: In the Matter of: Hydro Resources, Inc.
Docket No: 40-8968-ML

Dear Sir or Madam:

Please find attached for filing Hydro Resources, Inc.'s Response in Opposition to Intervenor's Written Presentation Regarding Groundwater, Groundwater Restoration and Financial Assurance, Notice of Errata in the above-captioned matter. Copies of the enclosed have been served on the parties indicated on the enclosed certificate of service. Additionally, please return a file-stamped copy in the self-addressed, postage prepaid envelope attached herewith.

If you have any questions, please feel free to contact me at (202) 496-0780.
Thank you for your time and consideration in this matter.

Sincerely,



Anthony J. Thompson, Esq.
Christopher S. Pugsley, Esq.
Thompson & Simmons, PLLC.
Counsel of Record to HRI

Enclosures

(hydro resourcesCOVERLETTTER 5-06-05.doc)