

From: "Oscar Paulson" <paulson@tribcsp.com>
To: "Stephen Cohen" <SJC7@nrc.gov>
Date: 5/3/06 5:22PM
Subject: Water Consumption within the Restricted Area -*Kennecott- 40-8584*

Stephen Cohen:

Thank you for the prompt reply to my previous e-mail. The results of five (5) breathing zone samples for excavation workers have been received to date. The results are on the attached Microsoft Excel (*.xls) file breathing_zone_samples.xls. The airborne concentrations are all very low. There were no radium-226 results above any given sample's Lower Limit of Detection (LLD). Other concentrations are low. The average concentrations shown on the sheet are very conservative since sample results below the Lower Limit of Detection (LLD) for a given radionuclide were not included in the average concentration for that radionuclide. Only sample results above the Lower Limits of Detection (LLDs) were used in the averages.

Given the very low radionuclide concentrations observed to date, it would seem reasonable to allow the consumption of drinking water within the restricted area. We discussed this issue during your site visit and I thought that this breathing zone sample data would be of use.

Oscar Paulson
Facility Supervisor

CC: "Randy Archer" <rarcher@bresnan.net>, "Randy and Linda" <rarcher@tcinc.net>, "Linda Archer" <larcher@bresnan.net>, <shelley@tribcsp.com>

Mail Envelope Properties (44591EF2.575 : 16 : 9589)

Subject: Water Consumption within the Restricted Area
Creation Date: 5/3/06 5:34PM
From: "Oscar Paulson" <paulson@tribcsp.com>

Created By: paulson@tribcsp.com

Recipients

nrc.gov

OWGWPO01.HQGWDO01
 SJC7 (Stephen Cohen)

tribcsp.com
 shelley CC

bresnan.net
 larcher CC (Linda Archer)
 rarcher CC (Randy Archer)

tcinc.net
 rarcher CC (Randy and Linda)

Post Office

OWGWPO01.HQGWDO01

Route

nrc.gov
 tribcsp.com
 bresnan.net
 tcinc.net

Files	Size	Date & Time
MESSAGE	1059	05/03/06 05:34PM
TEXT.htm	1844	
breathing_zone_samples.xls	18432	
Mime.822	30634	

Options

Expiration Date: None
Priority: Standard
Reply Requested: No
Return Notification: None

Concealed Subject: No
Security: Standard

Kennecott Uranium Company
 Sweetwater Uranium Project
 Catchment Basin Excavation
 Breathing Zone Samples

Sample Number	Date	Task	Individual	Volume (milliliters)	Sample Lower	Natural Uranium	Thorium-230	Radium-226	Natural Uranium	Thorium-230	Radium-226
					Limit of Detection (LLD) (microCurie per milliliter)						
1	01-Mar-06	Truck Driver	[REDACTED]	1.22E+06	8.20E-15 ND	5.79E-13 ND	5.74E-14 ND	ND	ND	2.895 ND	0.957 ND
2	08-Mar-06	Loader Operator	[REDACTED]	9.33E+05	1.09E-14	7.17E-14 ND	ND	ND	0.359 ND	ND	ND
3	09-Mar-06	Truck Driver	[REDACTED]	6.27E+05	1.62E-14	2.50E-14 ND	ND	ND	0.125 ND	ND	ND
4	15-Mar-06	Truck Driver	[REDACTED]	8.01E+05	1.27E-14	1.32E-14 ND	ND	ND	0.066 ND	ND	ND
5	20-Mar-06	Loader Operator	[REDACTED]	1.52E+06	6.69E-15						
Average:				1.020E+06		1.722E-13	5.740E-14 ND		0.861	0.957 ND	

Notes: All results listed on the laboratory reports as being less than the specific sample's Lower Limit of Detection (LLD) are listed on this sheet as ND (non-detect).
 The averages are conservative in that non-detect readings were not included in the averages.
 Air sample results to date show that the excavation workers are unlikely to receive in excess of 10% of the applicable ALI thus individual monitoring of intakes is not required.

Derived Air Concentrations Used

	microCurie per milliliter
Natural Uranium	2.00E-11 Year
Radium-226	3.00E-10 Week
Thorium-230	6.00E-12 Year

OAP:5/3/06
 breathing_zone_samples.xls