



Rio Tinto Energy America
Kennecott Uranium Company
PO Box 1500, 42 Miles NW of Rawlins
Rawlins, Wyoming 82301-1500
Tel: (307) 324-4924 Fax: (307) 324-4925

8 October 2008

Mr. Keith I. McConnell, Deputy Director
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
11545 Rockville Pike, Mail stop T7-E18
Rockville, Maryland 20852

Dear Mr. McConnell:

**Subject: Docket Number 40-8584 Source Material License SUA-1350
Corrected Pages 2007 ALARA Report**

Kennecott Uranium Company received a letter dated September 12, 2008 (please see attached) from Landauer, Inc. stating that some previously provided Radtrak detector (airborne radon monitor) reports were incorrect. One (1) of the corrected readings was for a Radtrak detector installed during the third quarter of 2007 in the Mill Building beneath CCD #1. Data from this Radtrak monitor is included in the facility's Annual ALARA Report. Due to this change two (2) revised pages for the 2007 Annual ALARA Report for 2007 are being submitted with this cover letter, as well as a letter of explanation from Mark Salasky of Landauer, Inc. regarding the initial erroneous results.

Kennecott Uranium Company regrets any inconvenience this error may have caused. If you have any questions please do not hesitate to contact me.

Sincerely yours,
A handwritten signature in black ink, appearing to read "Oscar Paulson".

Oscar Paulson
Facility Supervisor

cc: James Webb – Project Manager
Director – USNRC DMSS, Region IV (w/o enc.)
Darryl Maunder - RTEA

LANDAUER

September 12, 2008

Dear Customer,

As a result of a routine internal quality assurance review, we have discovered an over-reporting in the calculation of some of the Radtraks reported. A thorough internal investigation was performed by radiation safety personnel. Upon the conclusion of the internal investigation, we recalculated the levels and issued corrected reports.

Please find attached a corrected Radtrak radon detector report(s). We apologize for any inconvenience this issue may have caused. If you have any questions, please feel free to contact our customer service department at (800) 528-8327, or (708) 755-7000.

Thank you for your understanding in this matter.
Sincerely,

Mark Salasky

Mark R. Salasky, CHP
Health Physics Manager
Landauer, Inc.

Memorandum

Oscar Paulson
Facility Supervisor
Kennecott Uranium Company

17 February 2008

Radon Monitoring File

Subject: Radon Daughter Monitoring Assessment REVISED 10/08/08

In 2007 radon daughter monitoring was conducted on June 24 to 25 and December 5 to 12, 2007.

At least twelve (12) locations throughout the mill and three (3) locations around the IX were sampled for radon daughters. In addition, locations in the Security Trailer and Administration Building were sampled for radon daughters. Radon daughter concentrations (in working levels) were at low levels, ranging from ND to 0.008 WL in the Ion Exchange area (average: 0.004) and 0.004 to 0.027 WL in the Mill Building (average: 0.012). The ventilation fan operated continuously in the Solvent Extraction (SX) Building. Radon levels varied in the SX building from 0.014 to 0.03 WL, averaging 0.028 WL in June 2007 and 0.020 WL in December 2007. Radon concentrations have not exceeded the 0.08 WL thresholds in the SX Building which would require weekly monitoring. The fan continues to be effective in controlling radon daughter concentrations.

Radon daughter concentrations were measured in June and December 2007 in the Security Trailer to assist in determining an equilibrium factor for the area, for use in calculating dose to the nearest resident.

Radon daughters were sampled and analyzed using the modified Kusnetz method.

Two (2) RadTrak radon monitors were placed above and beneath the Number 1 Counter-Current Decantation (CCD) tank in the Mill during all four quarters of 2007 to monitor radon levels associated with the used ion exchange resin stored in the Number 1 CCD tank. Radon concentrations below the tank varied from 1.2 to **3.7** pCi/L. Radon concentrations on top of the tank varied from 2.1 to 3.8 pCi/L. These values are at background levels since upwind radon concentrations for the facility varied from 3.4 to 3.9 pCi/L during the second half of 2007, as shown in the table below:

2007 Radon Concentrations

Quarter	Bottom of CCD#1 (pCi/L)	Top of CCD#1 (pCi/L)	Upwind (Background) (pCi/L)
1 st	2.7	3.8	16.9 ¹
2 nd	1.2	2.1	No data ¹
3 rd	3.7	2.8	3.9
4 th	3.1	2.6	3.4
Average	2.7	2.8	3.7

¹ Horse damaged Upwind RadTrak monitor – data not used in average. Please see First Half 2007 40.65 Report.

Notes: 1. Radon daughter concentrations at the top and bottom of CCD#1 were low, ranging from 0.005 to 0.021 WL.

A history of the RadTrak results and the radon daughter sampling results is included on the attached tables entitled "Stored Resin RadTrak Monitoring Results" and "Stored Resin Radon Monitoring Results".

Oscar A Paulson
Oscar Paulson

**Kennecott Uranium Company
Sweetwater Uranium Project
Stored Resin**

Stored Resin RadTrak Monitoring Results

Date	RadTrak Results	
	Top	Bottom
	(pCi/l)	(pCi/l)
2 nd Quarter 1998	1.9	2.0
3 rd Quarter 1998	2.3	2.1
4 th Quarter 1998	1.7	1.8
1 st Quarter 1999	3.3	3.3
2 nd Quarter 1999	2.3	2.5
3 rd Quarter 1999	2.3	2.9
4 th Quarter 1999	4.8	4.5
1 st Quarter 2000	2.7	2.7
2 nd Quarter 2000	2.2	3.3
3 rd Quarter 2000	2.8	3.2
4 th Quarter 2000	3.9	4.7
1 st Quarter 2001	2.9	5.2
2 nd Quarter 2001	1.0	1.5
3 rd Quarter 2001	2.0	2.5
4 th Quarter 2001	2.5	3.4
1 st Quarter 2002	2.8	2.6
2 nd Quarter 2002	1.8	2.2
3 rd Quarter 2002	2.9	2.3
4 th Quarter 2002	2.7	4.7
1 st Quarter 2003	2.5	2.8
2 nd Quarter 2003	2.0	3.2
4 th Quarter 2003	3.5	3.3
1 st Quarter 2004	2.9	3.5
2 nd Quarter 2004	1.2	2.4
3 rd Quarter 2004	2.2	2.7
4 th Quarter 2004	3.2	3.4
1 st Quarter 2005	2.1	2.8
2 nd Quarter 2005	1.8	3.2
3 rd Quarter 2005	3.0	3.5
4 th Quarter 2005	3.2	3.5
1 st Quarter 2006	3.0	3.0
2 nd Quarter 2006	2.0	2.7
3 rd Quarter 2006	2.4	2.7
4 th Quarter 2006	3.5	3.7
1 st Quarter 2007	3.8	2.7
2 nd Quarter 2007	2.1	1.2
3 rd Quarter 2007	2.8	3.7
4 th Quarter 2007	2.6	3.1
Average	2.6	3.0
Standard Deviation:	0.8	0.9