



December 30, 2011

Mr. Lowell Spackman, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

CAMECO RESOURCES
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CERTIFIED MAIL # 7011 0470 0000 7716 0232 RETURN RECEIPT REQUESTED

RE: East Evaporation Pond Leak, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit to Mine No. 633

Dear Mr. Spackman:

On June 20, 2011, Power Resources, Inc. d/b/a Cameco Resources (Cameco) provided written notification to the Wyoming Department of Environmental Quality, Land Quality Division and the Nuclear Regulatory Commission regarding a leak into secondary containment discovered on June 13, 2011 at the East Evaporation Pond. Cameco drained the pond to investigate the leak into secondary containment and repaired a tear in the primary liner on July 7, 2011. Following repairs, water was returned to the pond.

On August 15, 2011 water was again discovered in the East Evaporation Pond Sump. Verbal notification was made to the Wyoming Department of Environmental Quality, Land Quality Division and the Nuclear Regulatory Commission on August 16, 2011 with written notification following in the monthly report on August 31, 2011. The pond level was lowered for the second time to reexamine the primary liner. Another tear was discovered and repairs were made August 29, 2011. Following repairs, water was returned to the pond.

On November 4, 2011 water was again discovered in the East Evaporation Pond Sump. Verbal notification was made to the Wyoming Department of Environmental Quality, Land Quality Division and the Nuclear Regulatory Commission on November 7, 2011.

Samples were collected from the sump on November 4, 2011 and analyzed for chloride, specific conductance, uranium and bicarbonate. Results are provided in the table below. No samples were obtained between November 4, 2011 and December 14, 2011, as the sump remained dry. Samples will continue to be taken on a weekly basis when obtainable. Cameco no longer has the ability to complete sulfate analysis at our on-site lab. In the future, monthly samples obtained will also be sent to an external lab for analysis of sulfate per Permit 633 requirements. Cameco

would like to note that results for these analyses will take additional time to receive, often times 30 days or more. Sulfate determination for December has been sent to Energy Labs and results are pending.

Weekly Sample Results

Sample Date	Chloride (mg/L)	Conductivity (mS/cm)
06/15/2011	257	3194
06/20/2011	413	3645
08/15/2011	464	3647
08/16/2011	435	3924
11/04/2011	407	3869
12/14/2011	402	4133
12/28/2011	241	2439

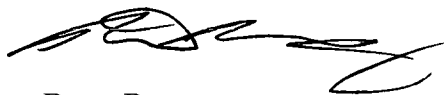
Monthly Sample Results

Sample Date	Chloride (mg/L)	Conductivity (mS/cm)	Bicarbonate (mg/L)	Uranium (mg/L)	Sulfate (ppm)
06/20/2011	413	3645	925	248	905
08/16/2011	435	3924	811	158	947
11/04/2011	407	3869	650	179	Not analyzed
12/14/2011	402	4133	759	276	Not analyzed
12/28/2011	241	2439	442	134	Analysis Pending

Work to find and repair any tear in the pond liner has been postponed due to weather. The snow and ice on the pond make it difficult to visually find tears at the present time. Additionally, in November Cameco concluded that there was a possibility the sump could have been collecting runoff water. The top of the liner was inspected and in November visible voids were found. Cameco repaired the roadway and sloped the road away from the pond. These repairs were made the week of December 12th, 2011. Attached are before and after photos. However, these repairs have not eliminated periodic water in the sump.

Routine monitoring will continue to be conducted and a monthly report will to be submitted until the basis for the water found in the sump is determined and successful abated. Please contact Ken Garoutte at (307) 358-6541 ext. 476 if you have questions.

Sincerely,



Brent Berg
General Manager

BB/vg

cc: File SR 4.3.3.1 File SR 4.3.3.4
Special Volume: Wellfield Release Reports, Evaporation Ponds, Spill Reports
Mr. Doug Mandeville – NRC (2 Copies) Certified Mail # 7011 0470 0000 7716 0249
Document Control Desk, NRC Certified Mail # 7011 0470 0000 7716 0256

cc: CR-Cheyenne



North side of pond looking East



North side of pond looking West