



CAMECO RESOURCES
Smith Ranch-Highland
Operation
Mail:
P.O. Box 1210
Glenrock, WY
82637 USA

November 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

Tel: (307) 358-6541
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CERTIFIED MAIL # 7011 0470 0000 7716 0539 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 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 along with the results of the samples taken in June and August. No samples have been obtained since the November 4, 2011 leak was discovered due to the sump remaining dry.

FSMEDO

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

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

The pond level is currently being lowered to again, reexamine the primary liner. At this time no tear has been exposed. However, a tear was discovered at a level higher than the water level. This tear is scheduled for repair the week of December 5th, 2011. Additionally, Cameco has concluded that there is a possibility the sump could be collecting runoff water and considering that a tear in the liner may not be the cause of water in the sump. Cameco has inspected the top of the liner on the roadway side of the pond embankment and visible voids were found. Cameco will repair the roadway and slope the road away from the pond to ensure that runoff is not the cause of water in the sump. These repairs are scheduled for the week of December 5th, 2011.

Routine monitoring will be conducted and a monthly report will continue 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
Mr. Doug Mandeville – NRC (2 Copies) Certified Mail # 7011 0470 0000 7716 0546
Document Control Desk, NRC Certified Mail # 7011 0470 0000 7716 0553

ec: CR-Cheyenne