

CAMECO RESOURCES

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

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August 25, 2010

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

CERTIFIED MAIL #70101060000021397566 - RETURN RECEIPT REQUESTED

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

Dear Mr. Spackman:

On July 21, 2010, Power Resources, Inc. d/b/a Cameco Resources (CR) provided written notification to Wyoming Department of Environmental Land Quality Division and the Nuclear Regulatory Commission regarding a leak discovered on July 20, 2010 in the East Evaporation Pond Sump. The pond liner breach was found and repaired.

During verification of the repair a minimal amount of seepage into the sump was noted; however, the sump level was below six inches. CR therefore has continued to lower the pond level to investigate the liner for possible additional repairs. Weekly and monthly samples were collected from the sump in July and August. Sampling results are provided in the tables below. No samples were collected during the four weeks between sampling events due to a lack of water. A monthly report will continue to be submitted until the repairs are complete.

Weekly Sample Results

Sample	Chloride	Conductivity (mS/cm) 4025 4140	
Date	(mg/L)		
8/24/2010	562		
7/20/2010	752		

Monthly Sample Results

Sample Date	Chloride (mg/L)	Conductivity (mS/cm)	Bicarbonate (mg/L)	Uranium (mg/L)	Sulfate (ppm)
8/24/2010	562	4025	1109	387	925
7/20/2010	752	4140	738	312	975

Please contact me at (307) 358-6541 ext. 474 if you have questions.

Sincerely,

Arrel

Angelo Kallas Safety, Health, Environment, and Quality (SHEQ) Manager

AK/dk

cc: J. Brister T. Cannon Mr. Doug Mandeville – NRC Project Manager (2-copies) File SR 4.3.3.1 File SR 4.3.3.4

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