Cameco

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

Tel: (307) 358-6541
Fax: (307) 358-4533
www.cameco.com

February 18, 2009

Mr. Lowell Spackman, District I Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
122 W. 25th Street
Cheyenne, WY 82002

RE: Highland Uranium Project, Permit to Mine No. 603, Excursion at Monitor Well IM-10

Dear Mr. Spackman:

In accordance with NRC License Condition No. 11.5 and Section 8.4 of the approved Operations Plan for the Highland Uranium Project, Power Resources, Inc. d/b/a/ Cameco Resources (CR) is providing written notification that Monitor Well IM-10 appeared to be on excursion status February 13, 2009. Two of the three parameters (chloride and alkalinity) exceeded the UCL, thus defining an excursion.

Monitor Well IM-10 is on a bi-monthly sampling schedule and the analytical results of February 12, 2009 for the routine sample taken on February 11, 2009 indicated an exceedance in two of the three approved UCLs.

Following discovery of the February 12, 2009 exceedance, CR collected a confirmation sample from the well and analyzed it with a quality assurance duplicate on February 13, 2009. Results of the laboratory analyses confirmed the well to be on excursion.

Sample Date	**Chloride (mg/L)**	**Alkalinity (mg/L $CaCO_3$)**	**Conductivity (µMhos/cm)**
	UCL 17	**UCL 211**	**UCL 928**
2/13/09	23	225	779
2/11/09	21	226	757

Monitor Well IM-10 is located in Mine Unit-I and depicted on the attached map. Well IM-10 will also be added to CR's site status map and included in the annual report.

Injection wells in the vicinity of the excursion have been shut off and are depicted in blue on the attached map. This well configuration has been in place for the past two months. CR's hydrologist will examine the balance and flows to further optimize the available well resources. A groundwater flow model of the mine unit is being designed to show the direction of flow using

particle tracking. Additionally, the hydrologist will examine the sampling pumping rate and duration and apply this data to the model to assist in determining potential causes and corrective actions. The model can also be used to simulate optimal pumping and injection rates to prevent excursions.

If you have questions, please call me at (307) 358-6541, Ext. 462

Sincerely,

Krista Wenzel
Manager-Environment, Health and Safety

Atta: Map

cc: T. Cannon
T. Hewitt
S. Bakken
File HUP 4.6.4.1
D. Mandeville, USNRC (2 copies)

WATER WELL

HEADER HOUSE I-1

HEADER HOUSE I-2

HEADER HOUSE I-3

HEADER HOUSE I-4

HEADER HOUSE I-5

HEADER HOUSE I-6

5450

5500

23 24

26 25

MINE UNIT
DRILL PATTERN

IP-XXX PRODUCTION WELL

II-XXX INJECTION WELL

IM-XX MONITOR WELL

IX-XX SHUT OFF WELL

EXCURSION WELL

FENCE

PIPELINE

POWERLINE

Scale in Feet

0 200 400 800

N

REVISIONS

NO.	DATE	BY

CAMECO

Cameco Resources
SMITH RANCH – HIGHLAND OPERATION
P.O. Box 1210
Glenrock, WY 82637 Telephone: (307) 358-6541

MINE UNIT I

FSCM NO: DWG NO: CURRENT REV

PAPER SIZE: 11X17

C:\DOCUMENTS AND SETTINGS\NICHOLAS HOWELL\DESKTOP\I RING_BASE.DWG