



24 July 2008

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

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

**Tel: (307) 358-6541**  
**Fax: (307) 358-4533**  
**[www.cameco.com](http://www.cameco.com)**

RE: Permit to Mine No. 633; Release of Solutions Report

Dear Mr. Spackman:

As reported to Mr. Steve Ingle of Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD), Land Quality Division, and Mr. Doug Mandeville, NRC Project Manager, via e-mail and/or phone 18 July 2008, Power Resources, Inc. dba Cameco Resources had a release of production water at the Smith Ranch-Highland Uranium Project in Converse County, Wyoming. Approximately 2,887 gallons were released from Booster Station 5 on the SR1 to MU15 pipeline located in Wellfield 4.

An additional 12,770 gallons of solution was contained by and recovered from the Booster Station basement. The leak was detected at approximately 12:00 pm on 18 July 2008 by a Satellite Operator. The solution did not threaten nor enter the waters of the State. Fluid samples were not recovered. Soil samples were collected at representative areas at 0-2", 2-6" and 6-12" for analysis, and a gamma survey was performed across the spill area. The fluid is not considered hazardous material under RCRA and is not reportable under SARA.

The apparent cause of the leak was an overheated booster pump (P-404B) that melted a small hole in the polyethylene (HDPE) can which encases the pump. Constant circulation of water is necessary to keep the pumps from overheating. The pump problem/failure is currently being investigated. Cameco Resources may, or may not, be able to determine precisely why the pump failed. It is important to note that this type of pump/poly can failure has never occurred in the past at Smith Ranch-Highland Operations. Under the circumstances, it is unlikely that any preventative measure could be taken to anticipate pump failure.

Power Resource's Spill Committee meets monthly and after each spill to discuss preventive measures to minimize the potential of releases from Smith Ranch-Highland Operations, and to assess and make recommendations to potentially mitigate re-occurrences. The Spill Committee has not yet convened to discuss this spill, but will review the investigation with Committee members.

In accordance with Chapter IV, Section 4(a)(iv) of the Water Quality Division Rules and Regulations, attached is a report describing the release and the steps taken to prevent a recurrence of this nature. A field map is also included in this package.

Please call if me at (307) 358-6541 ext. 46 if you have any questions.

Sincerely,



John McCarthy

Manager-Environment, Health and Safety, RSO

Cc: Doug Mandeville – NRC Project Manager    C. Foldenauer    M. Bryson  
File HUP 4.3.3.1    File SR 4.6.4.2    File SR 4.6.4.4    S. Bakken  
B. Johnson    Tom Cannon    Joe Hunter – Water Quality Division

## **Attachment**

### **Power Resources, Inc Smith Ranch-Highland Uranium Project URANIUM IN SITU FLUID RELEASE REPORT**

#### **Production Fluids**

#### **A. DESCRIPTION OF THE EVENT AND MITIGATIVE ACTIONS TAKEN**

On 18 July 2008 at approximately 12:00 pm, a Satellite Operator reported a release of production fluid at a booster station (#5) northeast of Wellfield 4 (see attached map). Upon discovery of the leak, the wellfield was immediately shut down to control further loss of production solution.

An estimated 2,887 gallons of production fluid was released from the booster pump station with 12,770 gallons contained and recovered. As a result, 2,887 gallons were reported as released to the environment. The released fluid did not threaten nor enter waters of the state.

Fluid samples were not collected. Soil samples were collected from the affected surface at 0-2", 2-6" and 6-12" intervals, and a gamma survey was performed across the entire spill area.

The release occurred adjacent, and east-northeast of Wellfield 4, and affected approximately 0.18 acre.

#### **B. CAUSE OF THE RELEASE AND THE STEPS TAKEN TO PREVENT RECURRENCE**

##### **Cause**

The cause of the release was a failure of a poly can that encases a booster pump as a result of heat/pressure in the pump, and consequent melting of the polyethylene material of the can.

##### **Recurrence Prevention**

Cameco Resource's Spill Committee members will meet to discuss this spill and recommend any corrective actions that could be taken.

5517.4 X

M-406

ATION  
HEADER 2

Not To Scale <sup>X</sup> 5459.6

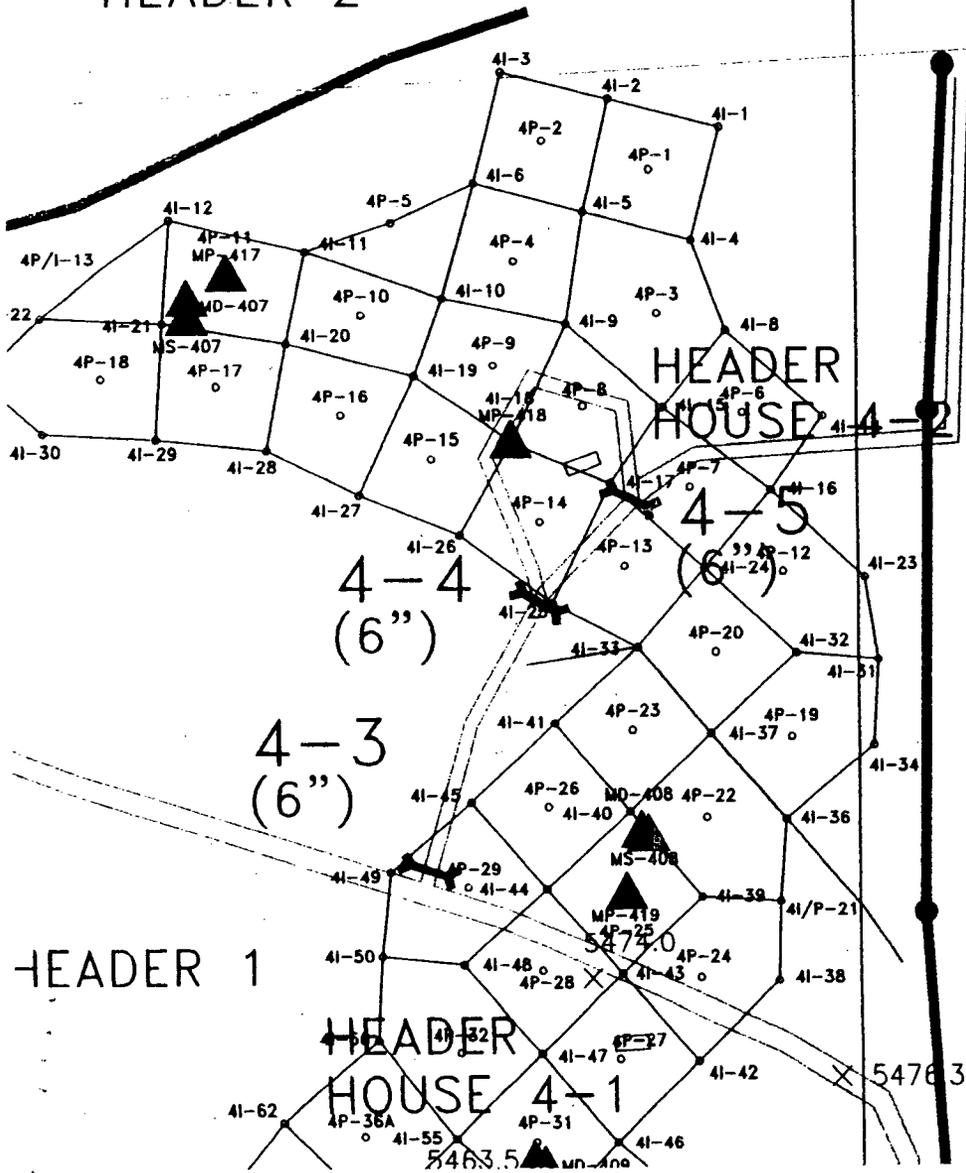
Booster #5

5466.9 X-404

386' Long

Average 20' wide

7720 sqft



M-403

5427.1 X

5457.2 X

5427.8 X

M-402

5476.3 X

5427.7

M