



**Smith Ranch - Highland  
Uranium Project**  
P. O. Box 1210  
Glenrock, Wyoming USA 82637  
Casper: 307-235-1628  
Douglas: 307-358-6541  
Fax: 307-358-4533

February 12, 2003

Mr. John Wagner, Cheyenne Office Program Manager  
Land Quality Division  
Wyoming Department of Environmental Quality  
Herschler Building  
122 West 25th Street  
Cheyenne, WY 82002

RE: Permit to Mine 633  
In Situ Uranium Wellfield Release Report  
3-5 Area

Dear Mr. Wagner:

As reported to Mr. Steve Ingle of your staff on February 10, 2003, Power Resources, Inc. (PRI) had a release of wellfield production fluid occur at the Smith Ranch Project in Converse County, Wyoming. The release resulted from the failure of a crimp ring on a premanufactured hose at a production well in Wellfield No. 3. The release occurred on February 9, 2003 and consisted of natural ground water to which oxygen and carbon dioxide had been added for the purpose of recovering natural uranium. This water typically contains concentrations above background of uranium, radium, and selenium. The released fluid is not considered a hazardous material under RCRA, nor is it reportable under SARA.

In accordance with Chapter IV, Section 4(a)(iv) of the Water Quality Division Rules and Regulations, attached please find a report describing the release and the steps taken to prevent a recurrence.

If you have any questions, or need additional information, please call me at (307)358-6541 (ext. 62).

Sincerely,

A handwritten signature in cursive script that reads 'W.F. Kearney'.

W.F. Kearney  
Manager-Health, Safety  
& Environmental Affairs

WFK/ksj

cc: S.P. Collings, R. Knode, M.D. Bryson, S.A. Bakken, File SR-4.4.1.1  
Mr. Dan Gillen, Chief FCLB, USNRC  
Mr. Charles Cain, USNRC Region IV



## ATTACHMENT

### POWER RESOURCES, INC. SMITH RANCH – HIGHLAND URANIUM PROJECT URANIUM IN SITU WELLFIELD FLUID RELEASE REPORT

#### FAILURE OF A PREMANUFACTURED HOSE AT WELL 3P-113

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

At approximately 6:00 pm on February 9, 2003 a Satellite Operator discovered fluid leaking from Well 3P-113 in Wellfield No. 3. The well was immediately shut-in and the source of the leak investigated. It was determined that a crimp ring on a premanufactured hose had failed and allowed the release of production fluid. The well was repaired using a new hose with a different type of hose connection and put back into service.

The release occurred in the NE ¼, SW ¼, Section 26, T36N, R74W and affected approximately 0.01 acres. The released fluid flowed into a dry draw, immediately adjacent to the well, where it ponded and soaked into the ground. The fluid did not exit the fenced wellfield area. Approximately 500 gallons of production fluid were released. All fluid soaked into the ground before it could be recovered. The production fluid contained approximately 2 mg/L of natural uranium. The attached map shows the location and extent of the spill.

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

###### Cause

The spill resulted from the failure of a crimp ring on the end of a premanufactured hose at a production wellhead. An investigation revealed that the hose was similar to ones that had been replaced at the Highland Uranium Project several years ago due to failure of the crimp rings. It was the same type of hose that had resulted in the January 11, 2003 release from a nearby well. Unfortunately, the new replacement hoses had just been received at the site and all wells containing the “problem” hoses had not yet been retrofitted. All wells at this area were retrofitted with the new hoses on February 10, 2003.

###### Recurrence Prevention

To prevent a recurrence of this type of spill, all hoses with similar style crimp rings that are still in service at the Smith Ranch Project will be replaced by hoses that have banded end connections. Over the past several years, PRI has observed a notable decrease in spills associated with premanufactured hoses at the Highland Uranium Project after the hoses with this style crimp rings were replaced.

