Cameco

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February 23, 2011

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington DC, 20555-1001

RE: Reply to Notice of Violation
NRC Inspection Report 040-08964/10-002
Source Material License SUA-1548, Docket Number 40-8964

Please find below Power Resources, Inc. d/b/a/ Cameco Resources (CR) reply to the Notice of Violation issued by the Nuclear Regulatory Commission (NRC) to Power Resources, Inc. on December 17, 2010. This response is being provided in accordance with 10 CFR 2.201.

If you have questions, please contact me at (307) 316-7588.

Sincerely,

Josh Leftwich
Director, Radiation Safety & Licensing

cc: T. Cannon
B. Kluchewski
D. Mandeville, USNRC (2 copies)
US NRC
Attn : Mr. Jack Whitten
Arlington, TX 76011-4125

A. Faunce
J. McCarthy
S. Bakken
File SR 4.6.4.1

IE07
R6 IR

Summary of Violation

During an NRC inspection conducted on August 24-26, 2010, one violation of NRC regulations was identified. The violation was identified as a Severity Level IV and is listed below:

10 CFR 71.5(a) requires that a licensee who transports license material outside of the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation in CFR 49 Parts 170 through 189.

49 CFR 173.441(a) requires, in part, that each package of radioactive material offered for transport must meet certain radiation levels on the external surfaces of the package.

49 CFR 173.433(a) requires, in part, that the level of non-fixed (removable) radioactive contamination on external surfaces of each package offered for transport may not exceed the limits set forth in Table 9 of this part.

Contrary to the above, on July 3, 2010, the licensee failed to demonstrate that packages used for shipment of radioactive material met applicable regulatory requirements.
Specifically, The licensee transported over public highway water filters and trash classified as 11e.(2) by product material from Satellites SR-2 and SR-1 to the Central Processing Plant without conducting contamination or radiation surveys on the packages.

In addition, on August 6, 2010, the licensee failed to demonstrate that a package used for shipment of radioactive material met applicable regulatory requirements. Specifically, the licensee transported over public highways radium-226 contaminated filters, which are classified as 11e.(2) by product material, to an analytical laboratory without conducting contamination or radiation surveys on the packages.

Cameco Resources Response

Reason for the Violation

As stated above, on July 3, 2010, the packaged filters and contaminated materials were transported to the Central Processing Plant (CPP) 11e.(2) byproduct bin for approved off site disposal. Furthermore, air filter samples were released for outside analysis on August 6, 2010. Both were released without conducting contamination or radiation surveys.

Corrective Actions

The Health Physics Manual (Vol. 4 of the SHEQ Management System) will be revised to state the following:

5.8 Equipment and Material Release

"USNRC regulations require that all materials, equipment and samples used or obtained in restricted areas or potentially contaminated with radioactive material be surveyed before release from the premises to ensure that radioactive contamination release levels are not exceeded. The alpha survey is the primary survey method used to determine surface contamination from uranium and uranium daughter products. The beta-gamma survey is also used to identify contaminated material. The beta-gamma survey is necessary when the equipment or material requiring release is irregular in shape(s) and does not readily allow scanning with an alpha detector, or the potential contamination could be covered by an alpha absorbing material such as dust, dirt or paint."

5.8.1 Allowable Limits for Removable to Unrestricted Areas

Release of equipment, materials, or packages from the restricted area shall be in accordance with the NRC Regulatory Guide 8.30 *Health Physics Surveys in Uranium Recovery Facilities* and the NRC *Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material*, (Annex B) dated May 1987. Annex B requires that reasonable decontamination efforts be made to eliminate residual contamination. Contamination on interior surfaces (e.g., piping or ductwork) may be determined by making measurements at access points if these locations are representative of the contamination levels on all surfaces. Surfaces of premises, equipment, or scrap that cannot be surveyed due to size, shape, or accessibility shall be considered contaminated in excess of the limits.

Annex B specifies contamination limits for specific radionuclides. The pertinent limits for use at uranium recovery facilities are summarized in Table 5-1, which is excerpted from Regulatory Guide 8.30. The limits are specified for average, maximum and removable contamination levels. Average contamination levels should not be averaged over an area greater than one square meter. The maximum contamination levels apply to areas that are less than 100 cm^2. Compliance with the removable contamination limits is determined by performing smear surveys.

Table 5-1
Surface Contamination Levels for Uranium Daughters on Equipment To Be Released for Unrestricted Use, on Clothing, and on Nonoperating Areas at UR Facilities*

Average**	5,000 dpm alpha per 100 cm^2	Average over no more than 1m^2
Maximum**	15,000 dpm alpha per 100 cm^2	Applies to an area of not more than 100 cm^2
Removable	1000 dpm alpha per 100 cm^2	Determined by smearing with dry filter or Soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the smear

*These values are taken from Regulatory Guide 1.86, "Termination of Operating Licenses for Nuclear Reactors", and from "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct Source, or Special Nuclear Material," Division of Fuel Cycle and Material Safety, USNRC, Washington DC 20555, August 1987.

**The value includes both fixed and removable contamination.

(The contamination levels in Table 2 are given in units of dpm/100 cm^2 because this is the minimum area typically surveyed. When performing a smear or wipe test, the area should roughly approximate 100 cm^2. However, there is no need to be precise about the area to be smeared.)

The surface contamination levels contained in Table 5-1 for natural uranium and associated daughter products are used when surveying any materials potentially contaminated with yellowcake, production fluid, or injection fluid.

Laboratory samples transported for analysis will comply with 49 CFR 173.421 and 173.422 and will require the following:

- Packages will not exceed the radiation limit of 0.5 mRem/hr (0.005 mSv/hr).
- The loose alpha contamination will not exceed 22 dpm/cm^2 at the beginning of transport.
- The shipping container will have a UN-2910 sticker on the outside and a "Radioactive" sticker conspicuously posted on the inside of the package.

Date Full Compliance will be Achieved

Full compliance will be achieved by March 31, 2011 or when the recently ordered UN-2910 stickers arrive. Until that time all transported offsite laboratory samples will be surveyed for release and a "Radioactive" sticker conspicuously posted on the inside of the package.

Full compliance for the transporting 11e.(2) byproduct was address in Vol. III of the SHEQ Management System, SOP 2774 "Hauling Contaminated Trash on Site" was achieved 9/21/10 with the approval of the SOP by the RSO and General Manager.