

**CAMECO RESOURCES
CROW BUTTE OPERATION**



**86 Crow Butte Road
P.O. Box 169
Crawford, Nebraska 69339-0169**

December 19, 2014

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Attn: Document Control Desk, Director
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Source Materials License SUA-1534
Response to License Condition 9.6

Dear Director:

By letter dated November 5, 2014, the U.S. Nuclear Regulatory Commission renewed Source Material License SUA-1534 issued to Crow Butte Resources, Inc., Crow Butte Uranium In-Situ Recovery Project, Dawes County, Nebraska (TAC J00555).

License Condition 9.6 states, "Release of surficially contaminated equipment, materials, or packages for unrestricted use shall be in accordance with the NRC guidance document "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," (the Guidelines) dated April 1993 (Adams Accession No. ML003745526), or in accordance with a suitable alternative program which shall be approved by NRC prior to any such release".

"The Guidelines of approved alternative program shall also apply to the removal of equipment, materials, or packages from restricted areas that have the potential for accessible surface contamination levels above background regardless of the intent to release these items for unrestricted use. The licensee shall document their surveys of equipment, materials, or packages prior to removing them from a restricted area".

Enclosed is a proposed alternative Controlled Release Survey Program (CRSP) for the Crow Butte Resources, Inc. operation. The alternative program allows for the *controlled* release of equipment, materials, or packages, including items in packages and resin trailers from a restricted area. The CRSP items will be maintained in the control of a

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CRSP trained and qualified employee until returned to a restricted area, installed, surveyed for unrestricted release by the RSO or a qualified HPT, or disposed of as 11e. (2) Byproduct waste.

If there are any further questions or concerns feel free to contact me at (308) 665-2215 ext. 112.

Sincerely,

A handwritten signature in black ink, appearing to read 'Doug Pavlick'.

Doug Pavlick
General Manager

Enclosure

cc: Deputy Director
Division of Decommissioning
Uranium Recovery and Waste Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop T-8F5
11545 Rockville Pike
Two White Flint North, Rockville, MD 20852-2738

CBO- File

ec: CR-Casper

Crow Butte Resources, Inc.
d/b/a Cameco Resources
Crow Butte Operation

CONTROLLED RELEASE SURVEY PROGRAM

December 19, 2014

CONTROLLED RELEASE SURVEY PROGRAM

1. Controlled Release Survey Program

The Controlled Release Survey Program (CRSP) will allow for the *controlled* release of equipment, materials, or packages, including items in packages and resin trailers from a restricted area. The CRSP items will be maintained in the control of a CRSP trained and qualified employee until returned to a restricted area, installed, surveyed for unrestricted release by the RSO or a qualified HPT, or disposed of as 11e.(2) byproduct waste.

Non-radiation staff trained and qualified in the CRSP will perform the controlled release surveys. The qualified CRSP employee will be qualified through a combination of education, facility specific experience and training specific to the risks associated with controlled release. The competency of the designee will be evaluated prior to qualification and continued competency will be maintained through refresher training and surveys in the field.

1.1. Program Qualifications and Training

Designated non-radiation staff must meet the general qualifications and training and specific CRSP training requirements to be qualified to perform controlled releases within the CRSP. Proficiency must be demonstrated prior to entering the CRSP and annually to maintain qualification.

1.1.1. General Qualifications and Training

- Education: a high school diploma or equivalent
- Six months work experience in a uranium recovery facility, including procedures that involve health physics, industrial safety or industrial hygiene at a uranium recovery facility.
- New Employee Radiation Safety Training

1.1.2. Training

CRSP training will be conducted by an RSO or a qualified HPT. Employees must demonstrate competency with an 80% passing test grade covering the following topics:

- Appropriate Use of the Controlled Release Survey Program
- Contamination Control
- Action Limits
- Allowable Limits

- Survey Locations
- Pre-survey inspections
- Decontamination of Items
- Proper use of survey instruments
 - Alpha Surveys (Ludlum Model 177 and 43-5 probe or equivalent)
 - Beta Surveys (Ludlum Model 2224-1 and 43-93 or equivalent)
- Marking and Tagging
- Logging
- Release of resin trailers
- Security
- Recordkeeping

1.1.3. Demonstration of Proficiency

Initial proficiency will be determined by performing a minimum of six (6) controlled release surveys under the supervision of the RSO or a qualified HPT. The supervised surveys will be documented with signatures of the RSO or a qualified HPT and the trainee.

If initial proficiency is not demonstrated, re-evaluation may be allowed by performing additional surveys. The additional controlled release surveys will be supervised by the RSO and proficiency must be demonstrated to the satisfaction of the RSO.

1.1.4. Maintaining Qualification

To maintain designation in the CRSP, annual radiation safety refresher training will be completed along with an 80% passing test grade. A minimum of two (2) supervised controlled release surveys will be performed annually and documented under the direct supervision of the RSO or a qualified HPT.

1.1.5. Training Documentation

Training documentation will include new employee radiation safety training, CRSP training, training tests, evaluation surveys, maintenance surveys and re-evaluation surveys, if necessary. Training documentation will be maintained by the RSO.

1.2. Controlled Releases

1.2.1. Controlled Release of Equipment, Materials or Packages

The elements of the CRSP for controlled release of equipment, materials or packages are presented below.

Applicability	<ul style="list-style-type: none"> • The Controlled Release Survey Program (CRSP) will allow for the <i>controlled</i> release of equipment, materials, or packages, including items in packages and resin trailers from a restricted area. • The CRSP items will be maintained in the control of a CRSP trained and qualified employee until returned to a restricted area, installed, surveyed for unrestricted release by the RSO or a qualified HPT, or disposed of as 11e.(2) byproduct waste. • Not required for small personal items or notebooks.
Appropriate Use	<ul style="list-style-type: none"> • CRSP will not be used casually – equipment, materials, or packages available outside the restricted area should be accessed even when inconvenient.
Condition of Item	<ul style="list-style-type: none"> • The surface of each item or package containing an item must be free of surficial dirt, debris, grease, oil, loose paint or other material that could become detached. • When the item is difficult to clean or survey, it must be placed in an appropriately sealed container that can be surveyed for release.
Criteria	<ul style="list-style-type: none"> • The action limit will be a total activity of 750 dpm/100cm² in order to moderate the potential for exceeding the removable release limits located in Table 2 of Regulatory Guide 8.30. • If this action limit is exceeded the item or package will be decontaminated and resurveyed. If the limit is exceeded upon resurvey, the CRSP requires approval from a member of the radiation safety staff prior to removing the item from the restricted area.
Tracking	<ul style="list-style-type: none"> • Controlled released item(s) or package(s) will be marked/tagged. • Items assigned controlled release status will be logged. • Markings/tags may only be removed when the item or package is returned to a restricted area, or released for unrestricted use by the RSO or a qualified HPT, installed, or properly disposed of as 11e.(2) Byproduct waste.

1.2.2. Controlled Release of Resin Trailers

The elements of the CRSP for Resin Trailers to be released from a satellite facility are presented below.

Appropriate Use	<ul style="list-style-type: none">• For the transportation of loaded and unloaded resin between the satellite facility and the Central Processing Plant where they will re-enter a restricted area.
Condition of Trailer	<ul style="list-style-type: none">• Pre-trip tractor and trailer inspection• The resin trailer must be free of surficial dirt, debris, grease, oil, loose paint or other material that could become detached.
Criteria	<ul style="list-style-type: none">• Pre-trip gamma and alpha surveys• Alpha activity <2200 dpm/100cm² above background• If alpha activity is >2200 dpm/100cm² above background clean contaminated area(s) and resurvey• If alpha activity cannot be cleaned below this level contact a member of radiation safety staff to perform a smear (removable) survey with the same action level
Tracking	<ul style="list-style-type: none">• Transportation Survey Form