



Department of Environmental Quality

*To protect, conserve and enhance the quality of Wyoming's
environment for the benefit of current and future generations.*



Matthew H. Mead, Governor

Todd Parfitt, Director

March 10, 2014

Mr. Ken Garoutte
Manager, Safety, Health, Environment & Quality
Cameco Resources (Power Resources dba)
P.O. Box 1210
Glenrock, WY 82637

**RE: Cameco Resources, TFN 5 6/100, Approval of Form 1-UIC, Change No. 55,
Amendment No. 2, Consolidation of Permit 603 (Highland Uranium Project) to
Permit 633 (Smith Ranch Mines) & Amendment of Reynolds Ranch to Permit 633**

Dear Mr. Garoutte:

This letter approves the consolidation of Permit 603 into Permit 633 and the amendment of new lands (Reynolds Ranch) as reviewed by the Land Quality Division (LQD) staff. In addition, the permit has been updated according to the 2005 Chapter 11, Noncoal Rules and Regulations. This revision was processed as an Amendment and recorded as **Permit Change No. 55, Amendment No. 2.**

Amendments to Royal Bank of Canada Letter of Credit No. [REDACTED] and The Bank of Nova Scotia Letter of Credit No. [REDACTED] changing the permit number to read 633 have been accepted. The bonding aggregate for Permit 633 is now Two Hundred Fifty-Nine Million, Ninety Five Thousand, Two Hundred Dollars (\$259,095,200).

A tabulation of all former permit conditions associated with Permit 603 and Permit 633 Forms (i.e., Form 1, Form 1-UIC, Form 1(t) and Form 11) is summarized in a memo to LQD Records Manager, Ramona Christensen and enclosed for your use. These conditions are deemed *Satisfied* or *No Longer Applicable*. Further, the permitting action for combining and updating two historic permits and amending new lands has resulted in several issues that will need to be tracked for resolution. Therefore, ten (10) conditions have been added as Attachment 1 to Form 1-UIC with this approval. The conditions are also enclosed hereto as *Attachment 1- Special Conditions for Approval of TFN 5 6/100*.

Pursuant to W.S. § 35-11-415(b)(i) mine operators are required to post an entrance sign at each entrance clearly showing:

- 1 Operator name, address and telephone number,
- 2 Operator's local authorized agent,
- 3 The assigned Permit Number, Permit 633

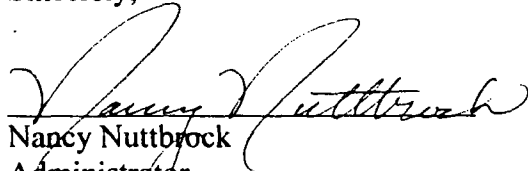
Therefore, Cameco Resources is required to post an entrance sign at the entrance to the Reynolds Ranch operations adjacent to Ross Road.



Please contact Ramona Christensen at ramona.christensen@wyo.gov or 307-777-7053 to arrange for you to incorporate these materials into Permit 633. The incorporation of this approval package must occur within thirty (30) days of the date of this letter. With the consolidation of Permits 603 into Permit 633, Permit 603 will not be terminated until satisfaction of Condition No. 7 regarding the determination of liabilities for historical mining disturbances. The permit files and volumes will remain in the District 1 Office for reference purposes only. No new changes will be processed for Permit 603. All TFN's that were previously assigned to Permit 603 will be brought forward to Permit 633 or terminated as specified in *Attachment 2- Status of Outstanding TFNs Associated with Permits 603 and 633 for Approval of TFN 5 6/100*. Following the satisfaction of Condition No. 7, Permit 603 will be terminated and any information related to Permit 603 that is determined by LQD to be no longer relevant will be archived and retained for 10 years following the termination of Permit 633.

If you have any questions, please contact Pam Rothwell at pam.rothwell@wyo.gov or 307 777-7048.

Sincerely,



Nancy Nuttbrock
Administrator
Land Quality Division

NN:PR:DH

Enclosures: Form I-UIC
Attachment 1 Special Conditions
Attachment 2 Status of TFNs
Memo to Ramona Christensen

cc: Ramona Christensen (w/att)
District I (w/att)
Kevin Frederick, DEQ/WQD (w/att)
Cameco Resources, Cheyenne (w/att)
Doug Mandeville, Cameco Resources (w/att)
Wendy Chung, EPA (w/att)
Wyoming State Engineers Office (w/att)
Matt Clark, BLM/CFO (w/att)

NOTE: DO NOT MODIFY THIS FORM. Submit three (3) completed copies, one of which must be an original. Do not make corrections to this form after printing. Forms bearing strikeouts, ink changes, etc will not be accepted.

**STATE OF WYOMING
DEPARTMENT OF ENVIRONMENTAL QUALITY
LAND QUALITY DIVISIONS
APPLICATION FOR
IN SITU PERMIT TO MINE
OR AMENDMENT TO AN IN SITU PERMIT TO MINE**

1. (a) Name, mailing address and telephone number of applicant:

Name: Power Resources, Inc. d.b.a. Cameco Resources Telephone: 307-316-7600 Fax: 307-635-9949
2020 Carey Avenue, Suite 600; Cheyenne, WY 82001

(b) If the applicant is a partnership, association, x corporation or limited liability company, the names and addresses of all managers, partners and executives directly responsible for operations in this State:

Name: Brent Berg Address: 2020 Carey Avenue, Suite 600; Cheyenne, WY 82001
 Title: Acting President

Date of Appointment: 11/5/2013 Phone No. 307-316-7600

Name: Josh Leftwich Address: 2020 Carey Avenue, Suite 600; Cheyenne, WY 82001
 Title: Director Safety, Health, Environment & Quality

Date of Appointment: 09/07/2010 Phone No. 307-316-7600

Name: Miriam Whatley Address: 2020 Carey Avenue, Suite 600; Cheyenne, WY 82001
 Title: Permitting Manager

Date of Appointment: 06/29/2009 Phone No. 307-316-7600

Name: Address: ; Cheyenne, WY

Title: Phone No.

Date of Appointment: 09/07/2010

2. Name, address, and telephone number of the agent or person to whom any notice under the provisions of Wyoming Environmental Quality Act or Rules and Regulations adopted thereunder may be sent:

Name: Josh Leftwich Telephone: 307-316-7600 Fax: 307-635-9949
2020 Carey Avenue, Suite 600; Cheyenne, WY 82001

3. Attach the following information as part of the specific appendices:

(a) APPENDIX "A"

Names and addresses of surface and mineral owners of record within the proposed permit (amendment) area.

(b) APPENDIX "B"

(i) Names and last known addresses of the owners of record of the surface rights of the lands immediately adjacent to the proposed permit (amendment) area.

(ii) Names and last known addresses of any other persons within one-half (1/2) mile having a valid legal estate of record.

(iii) For surface coal mining operations, the names and last known addresses of coal ownership immediately adjacent to the proposed permit (amendment) area.

NOTE: Appendices "A" and "B" shall each be accompanied by maps showing the ownership locations required by the respective appendices. Mapping of (b)(ii) is not required.

(c) APPENDIX "C"

(i) All lands to be included in the proposed permit (amendment) area shall be tabulated by legal subdivision, section, township, range, county, and municipal corporation, if any, and the number of acres for each subdivision listed.

(ii) Lands which are to be part of the proposed permit (amendment) area, for which no right to mine is claimed shall be identified in item (c)(i) above as such and tabulated separately listing the number of acres for each legal subdivision.

(iii) Lands which are located within other permit or license areas shall be identified and a copy of the agreement with the other permittee(s) shall be attached as part of this application.

(iv) An original USGS topographic map, clearly outlining and identifying the lands to be within the proposed permit areas, shall be provided. Photo copies or other similar copies are not acceptable unless prior approval is obtained from the Land Quality Division.

Form 1 UIC, Rev. 6/00

Page 1 of 6

Initial JB

Date 11.8.13

Permit No. 633-A2

Temporary Filing No. 56/1000



Page 2

11-12-2013

(d) APPENDIX "D"

This appendix shall include a description of the land which shall include: Soils, vegetation, wildlife, and surface hydrologic information consistent with the extent and nature of the proposed surface disturbance including descriptions of the soil, indigenous wildlife, natural gamma radiation background for lands to be impacted by radioactive materials, the vegetative cover, meteorological information and a description of any surface water and adjudicated water rights within the proposed permit area or on adjacent lands; a description of the general geology including geochemistry and lithology of the permit area; a characterization of the production zone and aquifers that may be affected including applicable hydrologic and water chemistry data to describe the projected effects of the mining activities.

(e) APPENDIX "E"

A map or maps with the boundary of the proposed permit (amendment) area clearly outlined and identified showing:

- (i) The lands to be affected by the mining;
- (ii) The drainage area within and surrounding the proposed permit (amendment) area;
- (iii) The location and names, where known, of all roads, railroads, public or private rights-of-way and easements, utility lines, lakes, streams, creeks, springs, and other surface water courses, oil wells, gas wells, and water wells;
- (iv) An outline of the probable limits of all areas previously disturbed or to be disturbed by underground or subsurface mining, whether active or inactive, on or immediately adjacent to the proposed permit (amendment) area;
- (v) The names, last known addresses and boundary lines of the present surface landowners and occupants on the adjacent land to be affected;
- (vi) The location, ownership, and uses of all buildings on, or on lands adjacent to, the land to be affected;
- (vii) Information presented as part of APPENDIX "D" when necessary for clarification.

4. (a) Mineral(s) to be mined: Uranium

5. Estimated dates of commencement and termination of the proposed operation:

Start of Operation: 1988 Termination of Operation: 2048

6. The total number of acres in the proposed permit (amendment) area and an estimate of the total number of acres to be affected by the operation.

Permit Acres	Approved Acreage to Affect
Original Permit <u>16,200</u>	Original Permit <u>500</u>
Approved Amendments <u>526.89</u>	Approved Amendments <u>204.45</u>
This Application <u>23,183.46</u>	This Application <u>2,035.05</u>
Total Acres <u>39,910.35</u>	Total Acres <u>2739.50</u>

7. The name, if any, by which the permit (amendment) lands or any part thereof are known: Smith Ranch-Highland Uranium Project

8. The nearest town or city: Douglas, Wyoming

9. A filing fee of \$100.00 (\$200.00 for amendments) plus \$10.00 for each acre in the request permit (amendment) area. For any single permit (amendment) the maximum fee shall not exceed \$2,000.00.

10. For coal mining operations:

(a) Each application shall contain the additional information as required in Chapter 3, Section 3 of the Land Quality Division Coal Rules and Regulations;

(b) A certification that the applicant has a public liability insurance policy in force for the proposed mining and reclamation, as required by W.S. §35-11-406(a)(xiii) and Land Quality Division Coal Rules and Regulations Chapter 12, Section 2.(i) and (j);

(c) Right of entry to or inspection of any operation, premises, records or equipment shall not require advance notice;

(d) A sworn statement that the applicant has paid the reclamation fee for this and all coal mining operations under the jurisdiction of P.L. 95-87 as required by Title IV of that law;

(e) A listing of all notices of violations required by W.S. §35-11-406(a)(xiv).

Form 1 UIC, Rev. 6/00

Page 2 of 6



Page 3

Initial PD
Date 11.10.13

Permit No. 633-42
Temporary Filing No. 56/100



11. Plan or plans of the applicant, including maps, for the proposed mining operation and the reclamation of all affected lands as required by W.S. §35-11-428 and Chapter XI of the Land Quality Division Noncoal Rules and Regulations and Chapter 18 of the Land Quality Division Coal Rules and Regulations.
12. The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit, to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

FINAL SWORN STATEMENT OF APPLICANT

State of WY

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County of Laramie

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I Brent Berg being duly sworn on my oath that I am the applicant (or President or Vice President if the applicant is a corporation) for the foregoing mining permit update; that I have read the said application and fully know the contents thereof; that I further agree to be bound by all of the terms and conditions of the original permit and any amendments, revisions, or renewals thereof and accept all unfulfilled reclamation liabilities of the permit; that all statements contained in the permit update application are true and correct to my best knowledge and belief; by execution of this statement I certify that Power Resources, Inc. d.b.a. Cameco Resources, applicant, or entities controlled by or under common control with the applicant has the right and power by legal estate owned to mine from the land for which this permit update is desired; that applicant or entities controlled by or under common control with the applicant has not forfeited, or is not involved in forfeiture proceedings for, a bond posted for reclamation purposes; and if a surface coal mining application, that applicant or entities controlled by or under common control with the applicant has paid the reclamation fees for this and all coal mining operations under the jurisdiction of P.L. 95-87 as required by Title IV of that law; and that applicant or entities controlled by or under common control with the applicant has not had any Federal or State coal mining permits suspended or revoked in the five years preceding the date of this application; and by completion and submission of this application, hereby give consent to allow the Director, the Administrator and/or his authorized representatives, at reasonable times and upon presentation of appropriate credentials, to enter upon and have access to any and all lands covered by this permit and amendments thereto and to inspect and copy any records or documents, obtain or monitor any samples or sampling, for any activities associated with the operation and permit.

Dated this 8th day of Nov, 2013.

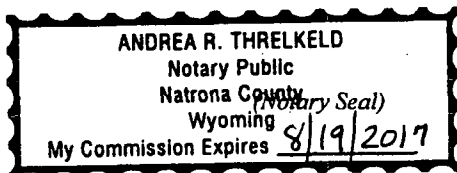
Signature

Name (Printed or typed) Brent BergTitle Acting President

(Corporate Seal)

The foregoing instrument was acknowledged before me by Brent Berg this 8th day of November, 2013.

Witness my hand and official seal.

Andrea R. Threlkeld
(Notary Public or Secretary if a Corporation)ANDREA R. THRELKELD
(Name printed or typed)My Commission Expires: 08/19/2017

Form 1 UIC, Rev. 6/00

Page 3 of 6

Initial BBDate 11.8.13Permit No. 633-A2Temporary Filing No. 56/100

Print Page 4, no user input needed

THE STATE OF WYOMING

DEPARTMENT OF ENVIRONMENTAL QUALITY

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This is to certify that I have examined the foregoing application and do hereby grant the same subject to the following limitations and conditions:

This permit/amendment grants only the right to affect the lands described in Appendix "C" of the application.

For purposes of Wyoming's UIC Program:

a. All reports required by this permit and other requested information shall be signed by the person who signed the Final Sworn Statement or his duly authorized representative. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by the person who signed the Final Sworn Statement;
- (2) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
- (3) The written authorization is submitted to the Administrator. If an authorization is no longer accurate because a different individual has responsibility for the overall operation of the facility, a new authorization must be submitted to the Administrator prior to, or together with any reports or information to be signed by an authorized representative.

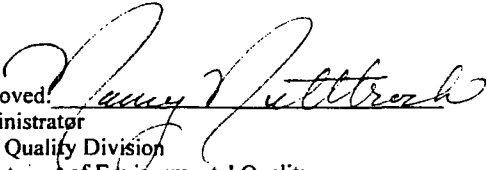
b. In addition to the requirements of W.S. §35-11-430(b), the permittee shall retain copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the report or application.

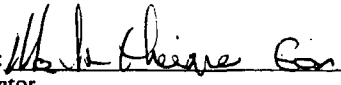
c. The permittee is required to conduct operations in accordance with terms and conditions of the approved permit. The permittee is required at all times to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve permit compliance. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures.


d. The permittee shall monitor the operation in accordance with the plan approved in the permit. Results of the monitoring program shall be reported quarterly to the administrators. Results of mechanical integrity and other periodic tests required by the Administrator shall be reported with the first quarterly report following the completion of the test.

Additional special conditions and limitations are as follows:

SEE ATTACHMENT NO. 1 (ATTACHMENT 1-SPECIAL CONDITIONS FOR APPROVAL OF TFN 5 6/100)

Approved: 
Administrator
Land Quality Division
Department of Environmental Quality


Approved: 
Administrator
Water Quality Division
Department of Environmental Quality

Approved: 
Director
Department of Environmental Quality

Effective Date:

March 10, 2014




11.8.13

633-A2

56/100

ATTACHMENT 1 – SPECIAL CONDITIONS FOR APPROVAL OF TFN 5 6/100

The permit actions under TFN 5 6/100 include: 1) Update Permit 633 to comply with LQD Noncoal Rules & Regulations, Chapter 11(2005 edition), 2) Combination of Permits 603 and 633 (i.e., the Amendment of Permit 603 to Permit 633) and 3) Amendment of new lands (i.e., Reynolds Ranch). The following are Special Conditions to be placed on Form 1-UIC:

Special Conditions

- 1 The Environmental Protection Agency (EPA) has provided an interim decision regarding the request for a modified aquifer exemption for the existing wellfields and a new aquifer exemption for a new amendment. Cameco Resources will continue to operate under the approved aquifer exemption boundaries only and will not mine in the new amendment until EPA issues a final decision for concurrence with the proposed exemptions.
- 2 Cameco Resources will have adequate surety, as reviewed and approved by LQD, necessary to cover the groundwater restoration costs for proposed mining in the Reynolds Amendment area prior to injection of lixiviant to begin mining.
- 3 Cameco Resources will provide verification to the LQD which satisfies the waste disposal capacity for new mining activities in the Reynolds Amendment area prior to injection of lixiviant to begin mining. The information will be submitted and formally reviewed by LQD for approval to begin mining in the amendment area.
- 4 Cameco Resources will not conduct surface disturbance on Federal lands for the construction of pipeline or other mine related disturbances associated with Deep Disposal Well No. 7 until a plan has been submitted for review and approved by BLM and the LQD.
- 5 Cameco Resources will complete the requirements for a Minor permit revision within 365 days of approval of Form 1, addressing the 40 Acre Amendment required by the Settlement Agreement for Notice of Violation Docket No. 4998-12.
- 6 Cameco Resources will complete the requirements for Non-Significant permit revisions within 365 days of approval of Form 1, addressing the following:
 - A. Surface Owner Consent where the surface owner is different than the mineral owner. If the required consents are not submitted, the permit revision will propose the removal of the acres lacking consent;
 - B. Horizontal Boundary of the Aquifer Exemption Must Be within the Permit Boundary;
 - C. Update Appendix D5 with All Drill Holes Abandoned thru the Date of Approval including an updated table and map for, 1) the Reynolds Amendment area previously drilled under Drill Notification 236 and, 2) drill hole activity completed on Permits 603 and 633;
 - D. Baseline Requirements for the Incidental Boundary Revision for Change No. 52-R9. No surface disturbance is allowed until the baseline is approved;
 - E. Water Used in Mining and Reclamation Operations required by the Settlement Agreement for Notice of Violation Docket No. 4998-12;
 - F. Baseline Gamma Surveys for Operational Wellfields;
 - G. Historic Drill Hole Search, Scope of Work;
 - H. Well Covers/Caps required by the Settlement Agreement for Notice of Violation Docket No. 4998-12;
 - I. QA/QC Program for Ground Water Monitoring (Letter of Conference and Conciliation);
 - J. Flare Factor Study;
 - K. Radium Pond Remediation Scope of Work including a schedule of approximate dates for remediation
Courtesy copies will be sent to the NRC;
 - L. Renovation and Use of the Highland Plant; if, start-up is planned prior to 365 days; the revision will be completed before start-up of the facility;
 - M. Groundwater Restoration Limitations using the approved restoration methods to support the approved restoration water balance and approved restoration schedule;
 - N. Class I Non-Hazardous Deep Injection Well Application request for commitment for courtesy copies of correspondence to WQD regarding deep disposal information.
- 7 Cameco Resources will review the permit records for historical mining disturbances which overlap the combined permit areas of Permits 603 and 633 (i.e., annual reports, correspondence files, any retained historical records) for potential outstanding liabilities. These disturbances include at a minimum, 5RD, 13RD, Permit 304C and Permit

230C. Cameco Resources will complete a new Non-Significant permit revision addressing Reclamation of Historical Disturbances. The revision to the Reclamation Plan will include discussion of the remaining reclamation associated with historic mining disturbances including groundwater restoration and/or surface reclamation. The revision will include an updated water balance, restoration schedule and surety estimate to account for any groundwater restoration and surface reclamation that remains due to historical disturbances. The permit revision will be completed within two years of approval of Form 1.

- 8 Cameco Resources will work to accelerate progress with the groundwater restoration for potential shallow groundwater contamination resulting from operational failures. These failures to date, include:
- well failures in Mine Units C, E, and F identified in the Administrative Order on Consent, Docket No. 3211-00 issued on August 9, 2000.
 - well failures not included in the Administrative Order on Consent but identified by analysis of recognized trends of failed mechanical integrity tests.
 - unresolved well excursions that may have intercepted mine impacted groundwater from zones contaminated by well failures (Excursion FM-009, NOV Docket No. 5131-13).
 - potential contamination resulting from leakage from Purge Storage Reservoir No. 2

To facilitate the requirement to accelerate the restoration of potential groundwater contamination, Cameco Resources will:

- A. Consult with DEQ/Water Quality Division (WQD) regarding restoration of potential contamination of non-exempt aquifer(s) within 90 days of approval of Form 1.
 - B. Finalize the characterization of potential contamination for areas that have sufficient monitoring data and submit remediation plans by September 30, 2014 to restore potential contaminated groundwater. The plans will discuss at a minimum, wells, infrastructure, processing facilities, waste disposal, water balance and surety needed to remediate the contamination. The method of recovering the mining fluid must also be addressed in the proposal. A remediation schedule with specific target dates must be included which reflects timely restoration of the potential groundwater restoration for shallow aquifer contamination. The restoration plans shall be submitted to the LQD with a courtesy copy of the cover letter and the proposal sent to the Nuclear Regulatory Commission (NRC). LQD will conduct a formal review of the proposed remediation plan in cooperation with the NRC.
 - C. Commit dedicated resources as described in the remediation plan which will be reported in the itemized 2015 Annual Report surety estimate.
 - D. Provide all Quarterly Reports for TFN 3 2/290 (Administrative Order on Consent) within 30 days of the end of each quarter, including responses to LQD review comments. Respond to future LQD reviews for TFN 3 1/251 within 60 days.
 - E. Continue with reviews of TFN 5 4/260 & TFN 3 1/251 in cooperation with the Nuclear Regulatory Commission (NRC). Courtesy copies to the NRC of all correspondence related to remediation of PSR-2 will be given to the LQD.
- 9 Cameco Resources will provide responses to outstanding Annual Report reviews (Permits 603 and 633) within 120 days of approval of Form 1. Cameco Resources shall provide responses to all future Annual Report reviews within 60 days of receipt of the LQD review or provide a written request for the delay.
- 10 The approval of the TFN 5 6/100 will not automatically supersede requested or proposed text changes reviewed under open TFN reviews addressing outstanding compliance issues (i.e., Letters of Conference and Conciliation (LCC) and Notices of Violation (NOV)). The active reviews for these issues will continue under the respective reviews for TFNs and Settlement Agreements for the NOVs.