



# Department of Environmental Quality



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

Matt Mead, Governor

John Corra, Director

May 2, 2011

**Certified Mail** 7008 0500 0000 5500 8088

Ms. Dawn Kolkman  
Cameco Resources, Inc.  
PO Box 1210  
Glenrock, WY 82637

**Subject: Self-Identified Violation, Missed Uranium Analyses  
Cameco Resources, Permits 603, Letter of Conference and Conciliation**

Dear Ms. Kolkman:

The Land Quality Division (LQD) received notification from Cameco Resources (CR) on March 8, 2011, stating that water quality samples had not been analyzed for uranium in six wells monitored for restoration. LQD discovered an additional well also had not been sampled for uranium through review of the Fourth Quarter 2010 Monitoring Report. The sampling failure is a violation of Permit 603, Section 4.6 and Chapter 11, Section 15(b). LQD will require action as a result of the violation as described below and in the enclosed assessment.

Cameco Resources mining operation is being conducted under the permit provisions for non-coal operations required by the *Wyoming Environmental Quality Act (WEQA)* and the *Wyoming DEQ/LQD Noncoal Rules and Regulations (WR&R)*. Therefore, under the "Conference and Conciliation" provisions of the WEQA § 35-11-701(c), the following actions will be required by the District I Office **within 30 days of receipt of this letter.**

**According to the LQD Noncoal Rules and Regulations, Chapter 11, Section 15, (b) "All chemical analyses submitted to the Administrator in accordance with a valid permit...shall include...Quarterly monitoring reports shall include, at a minimum...the results of monitoring..."** In addition the monitoring requirements (required under Chapter 11, Section 14 (a)) as described in Permit 603, Section 4.6 of the Reclamation Plan, commits to track the progress of restoration with the MP-Wells which are sampled every two months for conductivity, chloride and uranium. As a result of the failure to analyze the sample for uranium in seven MP-Wells, CR must:

- 1 Provide a detailed report to LQD summarizing the cause of the missed uranium analyses with a discussion of the steps that will be taken to prevent any future recurrence of this or similar sampling violations. The discussion should detail the**

Herschler Building • 122 West 25th Street • Cheyenne, Wyoming 82002 • <http://deq.state.wy.us>

<b>ADMIN/OUTREACH</b> (307) 777-7937 FAX 777-3610	<b>ABANDONED MINES</b> (307) 777-6145 FAX 777-6462	<b>AIR QUALITY</b> (307) 777-7391 FAX 777-5616	<b>INDUSTRIAL SITING</b> (307) 777-7369 FAX 777-5973	<b>LAND QUALITY</b> (307) 777-7756 FAX 777-5864	<b>SOLID &amp; HAZ. WASTE</b> (307) 777-7752 FAX 777-5973	<b>WATER QUALITY</b> (307) 777-7781 FAX 777-5973
---	--	--	--	---	---	--



**typical steps of water quality sampling and analysis from the beginning of a sampling event through the analyses and reporting of the data.**

- 2 Provide the analytical data report from the official testing laboratory confirming the sampling data did not include uranium testing for the seven wells in question.**
- 3 Provide a Permit Revision (Permits 603 & 633) which sufficiently describes the procedures and methods used for sample collection, preservation, and quality control of water quality chemical analyses as required in Chapter 11, Section 15. The description should include the steps taken by the field and laboratory staff.**
- 4 Submit the report and Permit Revision within 30 days of receipt of the Letter of Violation.**

If you have questions, please contact me at [pam.rothwell@wyo.gov](mailto:pam.rothwell@wyo.gov) or 777-7048.

Sincerely,



Pam Rothwell  
District 1 Assistant Supervisor  
Land Quality Division

Encl

cc: Joe Brister, Cameco Resources, Cheyenne, w/attach.  
Doug Mandeville, Nuclear Regulatory Commission, w/attach.

## SELF-IDENTIFIED VIOLATION, MISSED URANIUM ANALYSES

### PERMIT 603, HIGHLAND URANIUM PROJECT, CAMECO RESOURCES

#### SUMMARY

On March 8, 2011 LQD received correspondence from Cameco Resources (CR) identifying a permit violation at their Highland Permit. CR stated that water samples from Wells EMP-18, 20, 23, 28, 30A and 31 were not sampled for uranium during the December 27, 2010 sampling event as required by Section 4.6 Operational Monitoring of Permit 603 Reclamation Plan. The violation was identified on March 7, 2011 approximately three months after it occurred. The purpose for sampling the MP-Wells is to track the active restoration progress in the wellfield.

#### ASSESSMENT OF VIOLATION

The LQD is aware that restoration sampling for EMP-Wells began in December 2010 as indicated in the *Fourth Quarter 2010 Monitoring Report*. The missed uranium samples were the first samples of the restoration sampling events. In addition to the wells listed in the letter received on March 8, 2011, it is noted that EMP-19 also was not sampled for uranium. The next sampling event for these wells should have occurred in late February 2011. As the error was not identified until early March 2011, it is not known if uranium was tested in the February samples. The First Quarter 2011 Monitoring Report is due and should identify any additional missed samples.

In this specific instance, the reviewer finds that it is unlikely that the missed samples will affect the overall tracking of the active restoration progress nor will it affect the determination if best practicable technology is used for groundwater restoration of the wellfield.

However, CR is fortunate that the missed samples did not result in adverse impacts. The amount of monitoring required on the SHRUP mine site is significant and requires a high level of oversight to ensure minimal missed events and timely response, should it occur. Recurrence of the incident has potential for significant consequence and will not be tolerated. **Therefore, a *Letter of Conference and Conciliation* is recommended with the following requirements.**

**According to LQD Noncoal Rules and Regulations, Chapter 11, Section 15, (b) "All chemical analyses submitted to the Administrator in accordance with a valid permit...shall include...Quarterly monitoring reports shall include, at a minimum...the results of monitoring... In addition the monitoring requirements (required under Chapter 11, Section 14 (a)) as described in Permit 603, Section 4.6 of the Reclamation Plan, commits to track the progress of restoration with the MP-Wells which are sampled every two months for conductivity, chloride and uranium. As a result of the failure to analyze the sample for uranium in seven MP-Wells, CR must:**

- 1 Provide a detailed report to LQD summarizing the cause of the missed uranium analyses with a discussion of the steps that will be taken to prevent future recurrence of this or similar violations. The discussion should detail the typical**

**steps of water quality sampling and analysis from the beginning of a sampling event through the final data analyses and reporting of the data.**

- 2 Provide the analytical data report from the official testing laboratory confirming the sampling data did not include uranium testing for the seven wells in question.**
- 3 Provide a Permit Revision (Permits 603 & 633) which sufficiently describes the procedures and methods used for sample collection, preservation, and quality control of water quality chemical analyses as required in Chapter 11, Section 15. The description should include the steps taken by the field and laboratory staff.**
- 4 CR must submit the report and Permit Revision within 30 days of receipt of the Letter of Violation.**