



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

CERTIFIED MAIL, RETURN RECEIPT : 7012 1640 0000 8427 5595

February 25, 2013

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

RE: TFN 3 2/290, Administrative Order Docket No. 3211-00, 3rd Quarter Progress Report for Injection Well Casing Leaks in Wellfields C, E & F, Permit 603, Cameco Resources (CR)

Dear Mr. Garoutte:

The Land Quality Division (LQD) has completed a technical review of the referenced report. Please provide **responses to the review comments enclosed with the next quarterly report and no later than March 31, 2013.**

The LQD has been expecting more thorough reporting of the results of the CLI for some time. The Quarterly Reports remain deficient of detail for an assessment of impacts. Therefore, CR is required to provide **the information noted in the additional comments enclosed with the next quarterly report and no later than March 31, 2013.**

Additionally, the LQD is concerned that CR has not reported information regarding potential impacts from additional investigation of casing leaks outside the areas defined in the referenced Administrative Order. If CR has not disclosed information of additional impacts, there is a potential of a violation of Chapter 11, Section 12(a)(i). CR must maintain full disclosure of environmental impacts for LQD's evaluation and assessment. According to the regulation, **any unreported additional impacts** that have been identified on Permits 603 or 633 must be reported to the LQD **within 24 hours of discovery.**

If you have any questions, please contact me at 777-7048.

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

ADMIN/OUTREACH	ABANDONED MINES	AIR QUALITY	INDUSTRIAL SITING	LAND QUALITY	SOLID & HAZ. WASTE	WATER QUALITY
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TFN 3 2/290, Administrative Order Docket No. 3211-00
Third Quarter Casing Leak Investigation Report
Cameco Resources, Permit 603
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Sincerely,

A handwritten signature in black ink that reads "Pam Rothwell". The signature is written in a cursive, flowing style.

Pam Rothwell
District 1 Assistant Supervisor
Land Quality Division

Enclosure

cc: Cameco Resources, Cheyenne, WY
Doug Mandeville, NRC

TFN 3 2/290, CASING LEAK INVESTIGATION, THIRD QUARTER 2012 REPORT

(ADMINISTRATIVE ORDER DOCKET 3211-00)

CAMECO RESOURCES PERMIT 603

INTRODUCTION

The Third Quarter 2012 Casing Leak Investigation Report was received by LQD on January 7, 2013. The report documents the status of the casing leak investigation in Mine Units C, E and F at Cameco Resources, Permit 603

The following is a review of the report and items that will be submitted with the Fourth Quarter Annual Casing Leak report. **Please provide responses to comments with the next quarterly report and no later than March 31, 2013.**

REPORT COMMENTS

1. Section 2.2 states that three new monitoring well clusters will be installed in the western portion of the F-Wellfield in areas where the MIT failure intervals cannot be determined. Please provide additional discussion regarding the scope and results to date, of the failed MIT investigation. **(SI)**
2. Water quality sampling results are presented in paper form. Please provide the water quality data in an Excel spreadsheet. **(SI)**
3. The conductivity values on the Appendix 2 sampling sheets are presented in mmhos/cm, but the legend indicates that the conductivity values are in μ mhos/cm. Please correct the legend or table. **(SI)**
4. The text states that the geologic cross sections show that the shallow sands are discontinuous. However, the cross sections show the sands as being fairly continuous. Please resolve this discrepancy. **(SI)**
5. The cross section maps in Appendix 2 need to identify the wells used in the cross sections. Please identify the wells used in the cross sections. **(SI)**
6. The title of the C-Wellfield South map in Appendix 2 states there are cross sections, but no cross sections are shown on the map or provided. Please correct the title of the C-Wellfield map. **(SI)**
7. All of the cross sections in Appendix 2 are marked "draft privileged and confidential". Please remove the statement from the cross section. **(SI)**

8. The sand interval symbol on the maps for the 146 Sand and 140 Sand appear identical. Please use a different symbol for each sand unit. **(SI)**

ITEMS TO BE SUBMITTED WITH THE FOURTH QUARTER REPORT

The LQD is dissatisfied with the lack of submittal of relevant details to objectively evaluate the extent of the impacts due to the casing failures. Although information has been provided regarding investigative procedure, little information has been disclosed in regard to results. The LQD expects full disclosure as the information becomes available. As stated in the Third Quarter Report, **LQD will require the following information with the next quarterly report and no later than March 31, 2013.**

- 1 Updated maps showing additional MIT well failures that occurred during the year and the stratigraphic interval where the failure occurred. **(SI)**
- 2 Maps with a full inventory of injection wells that have failed within the C, E, and F-Wellfields will be included. **(SI)**
- 3 As built survey data for new wells will be submitted. **(SI)**
- 4 The results of a full round of groundwater sampling will be conducted on all CLI monitoring wells. **(SI)**
- 5 Aquifer testing results will be presented. **(SI)**
- 6 Areas of potentially affected groundwater within the C, E and F wellfields may be presented. **(SI)**

RESULTS OF ADDITIONAL CASING LEAK INVESTIGATION

LQD is aware that areas outside the Administrative Order designation have been evaluated for potential casing leak impacts. The results of that investigation have not been shared with the LQD.

According to Chapter 11, Section 12(a), The operator shall: (i) Verbally report to the Administrator any noncompliance which may endanger public health or the environment, within 24 hours of the time the operator becomes aware of the occurrence, including: (A) Any monitoring or other information which indicates that any contaminant may cause endangerment to an Underground Source of Water (USW) or unauthorized zone; and (B) Any noncompliance with a permit or Research and Development Testing License or malfunction of the injection system which may cause fluid migration into, or between USWs or unauthorized zones.

If CR has failed to report impacts due to additional investigation of casing leaks outside the areas of the Administrative Order, a Notice of Violation may be issued. **Please provide all**

information resulting from the CLI investigations with the next quarterly report and no later than March 31, 2013. Any unreported impacts must be reported within 24 hours of discovery. (PCR)