

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

February 22, 2018

Mr. Larry Reimann Manager Compliance & Licensing Cameco Resources Smith Ranch-Highland P.O. Box 1210 Glenrock, WY 82637

RE: 2016-2017 Annual Report Review and Request for Additional Information, Cameco Resources, Ruth ISR Project, Permit No. 631

Dear Mr. Reimann:

The Wyoming Department of Environmental Quality/Land Quality Division (LQD) has reviewed the 2016-2017 Annual Report for Cameco Resources' Ruth ISR Project, Permit No. 631. The enclosed memorandum provides LQD's review comments which request revisions to the annual report. Please provide LQD with responses to the subject comments. Once adequate responses are received, review of the 2016-2017 Annual Report may completed and closed out.

If you have any questions, please contact me at 307-675-5619 or at luke.mcmahan@wyo.gov.

Sincerely,

I. MML

Luke McMahan, P.G. Project Geologist WDEQ-LQD District 3

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Attachment: 2016-2017 Annual Report Review Memorandum

cc: LQD Cheyenne (w/ attachment) Mr. Doug Mandeville, U.S. NRC, MS T-8F5, 11545 Rockville Pike, Rockville, MD 20852 (w/ attachment)





2016-2017 Annual Report Review Memorandum

TO: File: PT631, Cameco Resources, Ruth ISR Project, 2016-2017 Annual Report

FROM: Luke McMahan, Project Geologist, District III

DATE: February 22, 2018

SUBJECT: Permit No. 631, Ruth ISR Project, 2016-2017 Annual Report Review

DISCUSSION:

This memorandum presents my review comments for the Cameco Resources, Ruth ISR Project 2016-2017 Annual Report. The Report was received by LQD District III on December 22, 2017 under cover letter dated December 18, 2017 from Mr. Larry Reimann of Cameco Resources. The Report covers the activities at the Ruth ISR Project from the period of December 27, 2016 through December 26, 2017. The following comments have been provided to Cameco under cover letter dated February 22, 2018 and request Cameco to revise the surety estimate provided with the annual report so that LQD may complete the review. The LQD In Situ Annual Report Format (ISARF July 2013) along with LQD Guidelines for Reclamation Performance Bond Calculations (GL12 and GL12A) were utilized in reviewing the contents of this Annual Report.

REVIEW COMMENTS:

- The three (3) existing monitoring wells located at the Ruth Project are listed as artesian in Table 1 of the Report. Additionally, past inspections have observed two of the existing monitoring wells, 8M20 and 13-1M20, exhibiting artesian flow. Per LQD Guideline 12, Appendix L, the appropriate abandonment cost for artesian wells is \$10.00 per foot. Please revise this reclamation cost for monitoring well abandonment (Table 3, Surety Estimate, Page 9) to account for plugging and abandonment of artesian wells.
- 2. The Ruth Surety Estimate applies Miscellaneous Costs at 28.4% of the calculated bond amount (10% contractor profit & overhead + 18.4% contingency). Based on the estimated reclamation cost for the project and comparison of that cost with LQD Guideline 12, Appendix S and LQD Guideline 12A, Section V, it appears the Miscellaneous Costs (contractor profit & overhead + contingency) should have a total between 30% and 31%. Please update the Surety Estimate (Table 3, Surety Estimate, Page 1) to reflect the appropriate Miscellaneous Costs in accordance with LQD Guideline 12 and LQD Guideline 12A.

3. Please update Section 5, Page 3 of the Ruth Annual Report text to reflect the changes associated with Comments #1 and #2 of this memorandum.

SUMMARY:

In accordance with the comments listed above, revisions to the 2016-2017 Annual Report are required in order for LQD to complete the review. Please provide an updated electronic copy of the Annual Report which reflects the revisions resulting from the comments provided in this memorandum.

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