

**Cameco Resources
Crow Butte Operation**



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

**(308) 665-2215
(308) 665-2341 – FAX**

October 5, 2017

USPS PRIORITY MAIL
SIGNATURE CONFIRMATION

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

Commercial Evaporation Pond #4 Liner Replacement
Source Materials License SUA-1534
Docket Number 40-8943

Dear Director:

On April 12, 2016, Cameco Resources – Crow Butte Operation (CBO) submitted a corrective action plan for repairing/replacing the upper liner in Commercial Evaporation Pond #4.

The letter indicated that it was CBO's intent during 2016 to replace the Commercial Evaporation Pond #4 liner through the following process:

- Continue to pump any accumulated precipitation into Commercial Evaporation Pond #3 and remove the sludge from the floor of the pond as it becomes exposed.
- Remove and replace the upper liner once the water and sludge have been removed from the pond.
- Currently there is no indication that there is any damage to the lower liner. If the lower liner is damaged during the replacement of the upper liner, the damaged area will be repaired.
- Due to the pond being taken out of service and the lack of water in the pond; suspend the underdrain sampling requirements as described in Section 2.2.5 of the Evaporation Pond Onsite Inspection Program (February 1996 revision). Sampling will resume once the pond has been repaired and put back into services.
- Continue to collect quarterly water samples from the pond monitor wells.
- Return the pond back to service in Q4 of 2016.
- Current waste flows, deep disposal well capacity, and capacity in Commercial Evaporation Ponds #1 and #3 will not have an impact on having Commercial Evaporation Pond #4 out of service during this time period.

NM5520

CROW BUTTE OPERATION



Document Control Desk, Director
October 5, 2017
Page Two

The letter also stated that if CBO was unable to complete the repairs in 2016, a new corrective action plan would be submitted to the NRC.

By letter dated December 21, 2016, CBO submitted a new corrective action plan. Below is a summary of CBO's corrective actions.

Since the April 2016, the following actions were taken by CBO:

- Removed all the water and sludge from the pond.
- Continued the underdrain sampling requirements as described in Section 2.2.5 of the Evaporation Pond Onsite Inspection Program (February 1996 revision).
- Conducted material testing of the upper liner.
- Reviewed options for pond repair.
- Continued to collect quarterly water samples from the pond monitor wells.
- The waste flows, deep disposal well capacity, and capacity in Commercial Evaporation Ponds #1 and #3 have not been impacted by having Commercial Evaporation Pond #4 out of service during this time period.
- Revised the Evaporation Pond Onsite Inspection Program (October 5, 2017) to allow the pond to be taken out of service so that the liner could be replaced.

CBO is currently working with contractors to re-grade the bottom of the pond and install two new HDPE liners with a new leak detection system. The repairs are scheduled to begin the week of October 16, 2017, with completion of the project the week of December 4, 2017. Currently Commercial Evaporation Ponds #1 and #3 are operating at 45% of capacity and the combine waste flow to the deep disposal wells is at 300 GPM. If necessary, adjustments to the production flow will be made to minimize the amount of waste flow going to the ponds and the deep disposal wells.

If you have any questions, please feel free to contact me at (308) 665-2215 Ext 114.

Sincerely,
CAMECO RESOURCES
CROW BUTTE OPERATION

Larry Teahon
SHEQ Manager

cc: NRC Deputy Director
CBO - File
ec: Amanda Jones – NDEQ Program Coordinator
Kory Winters – NDEQ Field Office
CR – Electronic File