

**Cameco Resources
Crow Butte Operation**



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

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

December 21, 2016

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

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 Repair
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.

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. Please consider this letter as the new corrective action plan submission.

NM 5520



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Document Control Desk, Director
April 12, 2016
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Since the April 12, 2016 letter, the following actions were taken by CBO during the summer and late fall of 2016:

- 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 current waste flows, deep disposal well capacity, and capacity in Commercial Evaporation Ponds #1 and #3 did not have an impact on having Commercial Evaporation Pond #4 out of service during this time period.
- The pond continues to remain out of service.

CBO is currently reviewing a proposed design to repair the pond that would entail re-grading the bottom of the pond and relining it with two new HDPE liners. A new leak detection system would also be installed. This method of repair would leave the existing liners in place until the pond is ready for decommissioning. Once the design has been internally approved by Cameco the NRC will be notified.

If you have any questions, please feel free to contact me at (308) 665-2215 Ext 122.

Sincerely,
CAMECO RESOURCES
CROW BUTTE OPERATION

Bob Tiensvold
Restoration Manager

cc: Ron Burrows - NRC
CBO - File
cc: Nancy Harris - NDEQ Program Coordinator
CR - Electronic File