

SUA-1534 , 040-08943

**CAMECO RESOURCES  
CROW BUTTE OPERATION**



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

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

**TO: Robert J. Evans**

**DATE: March 14, 2016**

**SUBJECT: Response regarding Crow Butte Pond #4 as discussed during the  
March 10<sup>th</sup> NRC inspection close out meeting.**

Dear Mr. Evans,

Please consider the following bullet points while presenting this issue to your management team. If you have any questions please do not hesitate to contact me.

- On May 23, 2014 Colorado Linings were on site and performed a pond inspection on all ponds and completed several small liner repairs.
- A potential leak on Pond #4 was noted on May 28, 2014 during routine inspection as required by SUA-1534 Amendment No. 26, License Condition 11.4 (Dated 11-12-13).
- Ron Burrows of the NRC was notified through a voicemail on May 29, 2014 of the potential leak as required by License Condition 12.2 of SUA-1534, Amendment 26 (Dated 11-12-13).
- Per License Condition 12.2 of SUA-1534 Amendment No. 26 (Dated 11-12-13), a written report was submitted by a letter dated June 26, 2014 to the NRC that contained details on the pond leak, corrective actions taken, results achieved, and a path forward for correcting the pond leak.
- Colorado Linings was consulted on methods of liner testing as visual inspections were ineffective in locating any issues in the Pond #4 liner.
- In July 2014, Pond #4 was taken out of service and the contents were transferred to Pond #3 to allow for a better assessment of the liner. During the second half of 2014 and the first half of 2015 several extensive pond inspections were performed and small repairs were made as necessary, but no significant liner breaches were identified.
- During the first half of 2015, snow melt and rainwater accumulated in the pond causing the underdrain levels to rise, indicating that the previous repairs had not been successful.
- On September 23, 2015, Colorado Liners again inspected and attempted to make repairs to the liner. It was decided at this time that the liner needed to be replaced.
- Work to identify the potential source of the leak in Pond #4 was conducted throughout 2014 and 2015 as noted in the Annual Evaporation Pond Inspection Report dated October 13, 2015.

## **CROW BUTTE RESOURCES, INC.**



- 
- On February 25, 2016, a Memo to file was written stating that sampling of the Leak Detection System as required by Section 2.2.5 of the Evaporation Pond Onsite Inspection Program (February 1996 revision) had been suspended. The suspension was a result of the lack of water in Pond #4 causing the underdrain water quality to vary significantly making the underdrain sample constituents a poor indicator of water movement. The intent of the memo was to document and identify the data gap that occurred as a result of not being able to test the water quality of the underdrains. This action had no impact on the environment and the pond continues to remain out of service.
  - CBO continues to collect quarterly water samples of the pond monitor wells. The data indicates there has been no impact to the lower liner.
  - Liner replacement work for Pond #4 was put into the Capital Plan for 2016.
  - Within the next 30 days, CBO will submit a corrective action plan to the NRC detailing CBO's path forward to mitigate the liner repair in Pond #4.

Sincerely,

Bob Tiensvold  
Mine Manager  
Cameco Resources-Crow Butte Operation