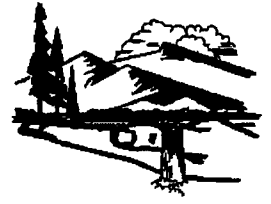




# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Matt Mead, Governor

John Corra, Director

August 10, 2011

Mr. Thomas McLaughlin  
Project Manager, ExxonMobil Highland Reclamation Project  
NRC  
Office of Federal and State Materials and Environmental Management Programs  
Washington, DC 20555-0001

RE: Review of License Amendment Request for ExxonMobil Highland Reclamation Project, License No. SUA-1139, *Wyoming, UMTRA Title II Disposal Site*

Dear Mr. McLaughlin:

The Wyoming Department of Environmental Quality, Water Quality Division, Groundwater Pollution Control Section (GPC) reviewed the *Highland Uranium Mine and Millsite, request for Amendment to Radioactive Materials License SUA-1139, Application to Amend Existing Alternate Concentration Limits*, dated May 2011, submitted to the NRC on May 12, 2011.

The report requests an amendment providing NRC approval of "site and constituent-specific alternate concentrations limits (ACL), including the establishment of a new point of compliance (POC) and points of exposure (POE) of 11e.(2) byproduct material constituents seeping into site groundwater from ExxonMobil's reclaimed uranium mill tailings impoundment to the "Southeast Drainage"(i.e., site areas to the south and east of the tailings impoundment) and with a POE and "alternative" for 11e.(2) byproduct material constituents that have seeped to the Highland Pit Lake to the west of the tailings impoundment".

GPC is primarily responsible for the Title II elements of the amendment application, in this case, the southeast drainage, with the WDEQ, LQD maintaining primary responsibility for areas administered under the LQD permit. GPC's review not intended to replace the full technical review performed by the NRC.

Following review of the amendment application and discussion with the NRC, GPC concerns with the amendment application include the following:

- It is unclear whether adequate substantiation is provided regarding the origin and genesis of 11e.(2) byproduct material and whether 11e.(2) materials have impacted the Highland Pit Lake, and, in a related regard, whether the Highland Pit Lake should be considered for inclusion in a revised long-term surveillance boundary (LTSB).
- With regard to the proposal to include the Highland Pit Lake within the LTSB, issues with the WDEQ, LQD must be been fully resolved prior to proposing such an inclusion.

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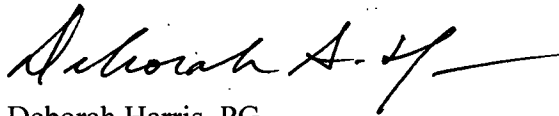


- It may be appropriate for the WDEQ, WQD, Surface Water Division to be given the opportunity to provide input into the process pertaining to the Highland Pit Lake.
- The amended/revised groundwater monitoring plan does not appear to be adequate to monitor groundwater moving away from the tailings impoundment in all directions.
- The applicant does not appear to provide substantiation for the levels of increases requested in the ACLs, i.e. proposed uranium ACL increase of 100 times from 0.03 mg/L to 3 mg/L in Well 175, on Page ii of the Executive Summary. Then, Well 175 is no longer proposed as a POC well.

If the NRC approves the amendment, GPC suggests a rigorous groundwater monitoring program to prevent any offsite migration of impacted groundwater. In addition, rigorous enforcement of the implementation of institutional controls over any approved LTSB is necessary. Any amendment approval should provide provisions for mitigation/remediation if these amended ACLs are exceeded rather than entertaining additional amendments to increase the ACLs or change the LTSB.

I look forward to working with you on this site. You may contact me at (307)335-6980 if you have any questions regarding this letter or the concerns identified in the letter.

Sincerely,



Deborah Harris, PG  
Wyoming Department of Environmental Quality  
West District Supervisor  
Groundwater Pollution Control Program

cc: Mr. Paul Michalak, U.S.NRC, Office of Federal and State Materials and  
Environmental Management Programs, Washington, DC 20555-0001  
Mr. Kevin Frederick, Groundwater Program Manager, WQD Cheyenne  
Mr. Mark Moxley, WDEQ, LQD, Lander  
Mr. Lowell Spackman and Steve Engle, WQD, LQD, Cheyenne  
File (2): ExxonMobil, Highland / Chron