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February 6, 2018.

Mr. Dominick Orlando, Senior Project Manager
Materials Decommissioning Branch
Division of Decommissioning, Uranium Recovery and Waste Programs
Office of Nuclear Material Safety and Safeguards
U.S. NRC
Mail Stop T-8F5
Washington D.C. 20555-0001

**RE: License SUA-442, Docket No. 40-6622
Response to Inquiry Regarding Disposal of Byproduct Material**

Dear Mr. Orlando,

On January 23, 2018 you requested information regarding ongoing disposal of byproduct material at the Shirley Basin site. In response, please find below each of the pertinent license conditions followed by a description of how we are complying with the condition.

LC 46A: Disposal of up to 10,000 cubic yards of byproduct material per year from generators other than in situ leach facilities is authorized provided that written approval is obtained from the NRC for each specific generator prior to disposal. Information submitted in support of a specific disposal request shall include the physical, radiological, and chemical characteristics of the byproduct material and shall address potential impacts to the tailings reclamation plan.

Disposal of byproduct from in situ leach facilities does not require specific authorization from the NRC.

Compliance with LC46A: Since acquiring the facility in 2013, only byproduct material from in situ leach facilities has been placed in the tailings. While there is no restriction on volume for in situ leach byproduct material, the annual disposal rate since 2013 has been relatively small with no foreseeable plans to substantially increase the volume.

LC 46B: All contaminated equipment shall be dismantled, crushed, or perforated to minimize void spaces. Barrels containing materials other than soil or sludges shall be emptied into the disposal area and the barrels crushed. Barrels containing soil or sludges shall be verified to be full prior to disposal. Barrels not completely full shall be filled with tailings or soil.

Compliance with LC 46B: Pathfinder Mines Corp has agreements in place with all companies who send material to Shirley Basin for disposal. The agreements specifically call out the requirements of this license condition. Only on rare occasions do companies send waste packaged in drums since this method is relatively expensive compared to simply placing the waste in a sealed roll-off container. In the rare instances where drums are received, the drums are either opened prior to disposal to verify voids are filled or are placed in the disposal pit and crushed with heavy equipment to ensure there are no voids.

LC 46C: No material other than soils shall be buried closer than 100 feet from the centerline of Tailings Dam No. 5. The material shall be covered with clean fill material within 30 days of disposal.

Compliance with LC 46C: Since 2013, all waste has been placed in pond #3 which is substantially greater than 100 feet from the tailings dam. The contract operator has been working at the site for several decades and is well versed by training and procedures in the requirement to keep materials buried to prevent the spread of contamination. Materials are routinely covered within 30 days.

LC 46D: Written procedures shall be established to describe the inspection and disposal of byproduct material. The procedures shall assign specific responsibilities for all activities, including program oversight.

Compliance with LC 46D: Longstanding written procedures are in place and are reviewed during safety meetings from time to time.

LC 46E: All disposal activities shall be documented. The documentation shall include descriptions of the byproduct material and the disposal locations, as well as all actions required by this condition.

Compliance with LC 46E: All shipments of waste are accompanied by a description of the material including chemical analysis, type of waste, and volume. The waste is placed in pits identified by number and shown on a map. The pit number is then written on the shipping papers so the location of the waste can be found in the future if necessary.

Regards,



Mr. John W. Cash
President

Cc: NRC Document Control
Mrs. Theresa Horne, Ur-Energy Littleton Office