



Rio Tinto Energy America  
Kennecott Uranium Company  
PO Box 1500  
Rawlins, Wyoming 82301-1500  
(307) 324-4924

October 3, 2006

Bill  
Mr. Keith McConnell, Deputy Director  
Decommissioning & Uranium Recovery Licensing Directorate  
U.S. Nuclear Regulatory Commission  
Mail Stop T-7E18  
Washington, DC 20555-0001

Dear Mr. McConnell:

**Subject: Sweetwater Uranium Project – Docket Number 40-8584  
Source Material License #SUA-1350**

**Request for Amendment to Final Design – Volume IV – Part 2, Mill  
Decommissioning Addendum to the Existing Impoundment Reclamation  
Plan (Referenced in License Condition 9.10) – Additional Information**

Kennecott Uranium Company submitted the above amendment request on May 12, 2004. It was followed by additional submittals dated July 22, 2004, December 15, 2004 and January 18, 2005. The excavation work described in these submittals is complete, barring any analytical data yet to arrive exceeding the referenced standards for the excavation.

The following additional information is being submitted:

### Seepage Collection System

In the course of the excavation work the two (2) shallow (perched) monitor wells used to recover fluids perched on a clay layer approximately forty (40) feet below surface were destroyed. The destruction of these wells was planned and discussed in the December 15, 2004 submittal, which states:

*“...they will be destroyed during the excavation process and not replaced.”*

These two (2) wells collected seepage from rainfall and snowmelt that seeped from the surface down to the clay at forty (40) feet below surface at the planned excavation bottom. This surface seepage flowed through kerosene contaminated materials.

The excavation highwalls beneath the slab supporting the clarifier and beneath the east wall of the Mill Building have kerosene contamination in them. This material will not be removed until final decommissioning since doing so would jeopardize the integrity of the respective foundation slabs. This issue was addressed in the amendment request when it was stated that *“The exposed contaminated high wall shall be covered with liner material of at least six-(6) mil thickness and held in place by backfill.”*

In addition to doing the above and given the planned destruction of TMW-90 and 105, Kennecott Uranium Company is planning to install perforated pipe at the bottom of the excavation against the highwalls beneath foundation slabs behind (on the contaminated side) of the liner material. Kennecott Uranium Company believes that this is a prudent approach since it would allow for the collection and removal of any potentially contaminated seepage that might accumulate behind and run down the contaminated side of the liner curtain.

Kennecott Uranium Company plans to use perforated six (6) inch diameter polyethylene pipe for the collection system and to connect it to a vertical six (6) inch polyethylene pipe extending to the surface to allow any seepage to be removed with a pump. Kennecott Uranium Company plans to bed the perforated pipe in gravel to maximize collection efficiency. Installation of this system is not required by the current plan, but is work Kennecott Uranium Company is volunteering to perform in the interest of long term groundwater protection.

This item was discussed with Stephen Cohen of your staff in telephone conversations on Tuesday, September 26 and Tuesday, October 3, 2006, and in an e-mail dated Sunday, September 24, 2006 3:57 PM.

#### **Final Cleaning of Areas Surrounding the Excavation and Travel/Haulage Ways**

With the exception of several grids that probably are exhibiting contamination by naturally occurring uranium and its decay products, Kennecott Uranium Company believes that the excavation is complete. Given the onset of winter weather Kennecott Uranium Company wants to backfill the excavation as rapidly as possible. Certain areas around the excavation were used by haul trucks as haulage ways and by other equipment as travel ways. The equipment is being washed, scanned and released for unrestricted use. Kennecott Uranium Company plans to scrape three (3) to six (6) inches of soil off of these haulage and travel ways and place that material in the tailings impoundment to insure that no inadvertent contamination is present in these areas. Given the short duration of time that these areas were used by trucks and equipment removal of this amount of surface material should assure that any inadvertent contamination from equipment tires, etc. has been removed.

Placement of soils and rubble in the tailings impoundment was addressed in the May 12, 2004 amendment request when it stated:

#### **4. Waste Disposal**

*The excavation process will remove concrete (from the existing basin's sides), pipe, soils and miscellaneous debris. These materials shall be placed in the tailings impoundment on site. The licensee is allowed to place site generated byproduct material in the tailings impoundment under license condition 10.6, which states in part: During any period of mill standby, the licensee shall not add tailings or other solid wastes to the tailings impoundment, except byproduct material in the form of debris generated by routine site maintenance.*

*Placement of these materials shall be performed under Section IV DSOP-1 Green Mountain Ion Exchange Waste Disposal*

This item was discussed with Stephen Cohen of your staff in telephone conversations on Tuesday, September 26 and Tuesday, October 3, 2006, and in an e-mail dated Tuesday, September 26, 2006 1:52 PM.

This letter was prepared at the request of Stephen Cohen in a telephone conversation on Tuesday, October 3, 2006. If you have any questions please do not hesitate to contact me.

Sincerely yours,

A handwritten signature in cursive script that reads "Oscar Paulson". The signature is written in black ink and is positioned above the printed name and title.

Oscar Paulson  
Facility Supervisor

cc: Stephen Cohen (2 copies)  
Director, DRSS, Region IV  
John Lucas - RTEA