

**From:** "Oscar Paulson" <paulson@tribcsp.com>  
**To:** "Stephen Cohen" <SJC7@nrc.gov>  
**Date:** 10/03/2006 3:50:48 PM  
**Subject:** Excavation Progress - Kennecott- Doc. 40-8584

Stephen Cohen:

The following applies to the excavation:

#### 1. Excavation Progress

The Northern excavation extension was completed on Thursday, September 21, 2006. No detectable (by smell) hydrocarbons are present in accessible areas of the excavation extension. The highwall directly beneath the East wall of the Mill Building had two (2) kerosene seeps near the base as well as a length of sandstone smelling strongly of kerosene. These areas were sampled and surveyed. These cannot be excavated without jeopardizing the Mill Building. As per previous submittals these contaminated soils will be left in place and separated from the clean backfill by plastic sheeting. They will be remediated at final decommissioning. The two (2) seeps marked with red tags are shown in the attached \*.jpg file seep\_02.jpg.

Preliminary radium-226 results have not yet been received for the excavation bottom of the Northern extension of the planned excavation East of the East wall of the Mill Building. No kerosene was detected by smell in these samples and the preliminary radium-226 results are anticipated within a day or two.

#### 2. Contaminated Area Near TMW-111

One of these samples returned a result of 3,260 milligrams per kilogram diesel range Organics (DRO)/kerosene. The contamination around this sample only extended approximately two (2) feet back into the wall and was easily removed. However, additional contaminated coarse sand was discovered approximately six (6) feet above this sample location in the course of removing the contamination. This newly discovered contamination as well as the excavated portions of the highwall were sampled and the sample locations surveyed. None of the five (5) samples collected in this area exceed 561 milligrams per kilogram Diesel Range Organics (DRO) so no further excavation in this area is required.

Since no additional contaminated samples are currently known, so release of excavation equipment has begun. Two (2) Volvo haul; trucks, the service truck, the Cat 350 trackhoe and the Cat 980 loader have been released.

#### 3. Highwall Curtain/Fluid Collection

The exposed contaminated unexcavatable highwall beneath the tank slab and the Mill Building will have to be separated from the clean backfill by plastic liner. It is also planned to install a fluid collection pipe in a trench against the contaminated highwalls behind the plastic curtain to collect any surface runoff (from rainfall or snowmelt) that percolates down the contaminated side of the plastic curtain. This system will consist of a perforated polyethylene pipe in a gravel filled trench connected to a tee and a pipe to the surface to facilitate removal of any accumulated fluid by pumping. We have discussed this concept. This system will replace TMW-90 and TMW-105 the perched collection wells which were destroyed by the excavation. It will prevent any downward migrating rainfall or snowmelt contaminated by passing through kerosene contaminated soils beneath slabs from reaching groundwater.

#### 4. Radium-226 Contamination

Only two (2) grids composite samples to date have exhibited elevated radium-226 levels. Grid R-6 was above the limit and it was excavated down an additional two (2) feet and resampled. The preliminary sample results indicate that the final radium-226 result should be below the 16.4 picoCurie per gram limit. Grid N-5 also returned a result above the 16.4 picoCurie per gram limit. It was excavated an additional

two (2) feet and resampled. Preliminary results are not yet available for the second sample of Grid N-5.

#### 5. Potential for Treatment of Residual Kerosene Beneath Building Slabs

As discussed in my previous e-mail Kennecott Uranium company will not be pursuing any treatment of kerosene contaminated areas of the highwall due to the delay in backfilling that this work will cause.

#### 6. Excavation Map

An excavation contour with a supposed ten (10) meter by ten (10) meter sampling grid is attached as the \*.jpg file September\_22\_2006\_contours.jpg. The contours are as of Friday, September 22, 2006.

#### 7. Backfilling

Backfilling of the completed excavation is planned to be done with fill material excavated from the Ore Pad. Given the size of the excavation, this will cause a substantial (at least fifty (50) percent) reduction in the surface area of the Ore Pad. The only other proximate large volume of fill would be the reclaimed Overburden Pile, however removing fill from the Overburden Pile would entail disturbing the completed and released reclamation on it and then reclaiming it again after the required fill material has been removed.

The attached \*.jpg file OrePad\_02 shows (hatched area) the approximate area of the existing Ore pad that will be removed in the course of backfilling.

#### 8. Monitor Wells

The monitor wells within the excavation's footprint will have to be extended back to the backfilled surface. Prior to the start of backfilling, connections will have to be fitted to the tops of the wells in the excavation bottom and cemented in place. Polyethylene will be connected to the tops of these wells and extended to the surface as backfilling progresses.

Oscar Paulson  
Facility Supervisor

CC: <shelley@tribcsp.com>

**Mail Envelope Properties (4522BF08.534 : 19 : 50484)**

**Subject:** Excavation Progress  
**Creation Date:** 10/03/2006 3:54:06 PM  
**From:** "Oscar Paulson" <paulson@tribcsp.com>  
**Created By:** paulson@tribcsp.com

**Recipients**

nrc.gov  
 OWGWPO03.HQGWDO01  
 SJC7 (Stephen Cohen)

tribcsp.com  
 shelley CC

**Post Office**

OWGWPO03.HQGWDO01

**Route**

nrc.gov  
 tribcsp.com

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	5215	10/03/2006 3:54:06 PM
TEXT.htm	8228	
September_22_2006_contours.jpg		151954
seep_02.jpg	497290	
OrePad_02.jpg	104647	
Mime.822	1048439	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard





