

**United States Environmental Protection Agency**  
**Region IV**  
**POLLUTION REPORT**

**Date:** Monday, September 27, 2010

**From:** David Andrews, OSC

**Subject:** Radiological Survey & Final Dross Evaluation  
Smokey Mountain Smelters  
1508 Maryville Pike, Knoxville, TN  
Latitude: 35.9191830  
Longitude: -83.9264810

<b>POLREP No.:</b>	7	<b>Site #:</b>	A4MD
<b>Reporting Period:</b>		<b>D.O. #:</b>	00088
<b>Start Date:</b>	6/8/2010	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	6/8/2010	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>	TND098071061	<b>Contract #</b>	EPS40704
<b>RCRIS ID #:</b>			

**Site Description**

See POLREP #1 for site description and background information.

**Current Activities**

June 14 - August 4, 2010 - Scrap metal from the building demolition was cut and shipped off to Tennessee Metal. 40-truck loads totaling approximately 583 scrap tons of metal has been recycled with a recovered cost of \$71,938.00.

August 16 – 24, 2010 - the demolition non-recyclable structural debris was shipped off-site for disposal to Chestnut Ridge Landfill (Sub-Title D). 63-truck shipments totaling 433-tons were logged on non-hazardous manifests..

August 24 -27, 2010 - EPA Environmental Response Team (ERT) conducted a radiological assessment of the site after concerns over elevated readings from two ERRS worker's thermoluminescent dosimetry (TLD) badges workers for the month of July work period. Upon notification of the July TLD results, and per the site Health and Safety Plan, the OSC halted site operations (Aug 23) and ERT mobilized a Certified Health Physicist (CHP) and contractor support to address the concerns through radiological screening of the site and collecting samples to be evaluated at the RERT (Montgomery, AL). Additionally, and per the HASP, the two ERRS workers were rotated off the SMS site and reassigned to other removal projects in Region 4. The July TLD results (July 5 to Aug 4) reported approximately half of the (quarterly) dose equivalent permissible limit for the ERRS workforce as established in the site-specific HASP (1250 millirem). ERT did not identify any areas of concern at levels above background (50 microR/hr) in the work zone(s). The results mirrored the July 2007 radiological screening by ERT and REAC that identified the fire-brick (smelter ovens) as a source for elevated readings as well as the northeast corner of the property near a rail spur. ERT issued all site personnel electronic radiological dosimeters (EPD) to be worn for the remainder of the removal and site work. The data from the July TLD badges was also brought into question due to the results of the control ("blank") badge indicated that it was exposed and the type of TLD (worn as a ring on the fingers) that is susceptible to perspiration which can impact the TLD film.

On two separate load-out dates (August 10-11 and September 15-16, 2010) 18-test loads (Approx 270 tons) from the saltcake waste-piles on the property and the aluminum smelter waste formerly located under the cover of the building was evaluated for possible aluminum recovery by Tennessee Aluminum Processors in Mt Pleasant, TN. The yield of the aluminum recovery was not enough to outweigh the process cost for recycling the waste material. Transportation was also a major factor in the consideration. This leaves only land fill (Sub-Title D) under a special waste provision by TDEC as the remaining option for the waste piles on the site.

September 22, 2010 : Final Rule No. 50 and Smokey Mountain Smelters is amongst six (6) sites added to the National Priorities List (NPL).

**Planned Removal Actions**

Continue to relocate and stage the smelter waste (saltcake) from the waste piles on the property to the concrete footprint of the former building.

**Key Issues**

None at this time.

[response.epa.gov/SMS](http://response.epa.gov/SMS)