

# Full Report

04/19/2010

**Item Number:** TX060032 **Last Updated:** 08/22/2006

**Event Type:** RLM - RADIOACTIVE MATERIAL REL.

**Event Cause:** BREACH OF SEALED SOURCE

**Event Date:** 06/29/2006 **Report Date:** 07/25/2006

### Licensee/Reporting Party Information:

Name: LETOURNEAU INC License Number: NON-LICENSE  
City: LONGVIEW State: TX Zip Code: 75606

### Other Information:

Reportable Event:	Y	Reciprocity:	NONE
Atomic Energy Act Material:	Y	Abnormal Occurrence:	N
Investigation:	Y	Send this Report to NRC:	Y
Consultant Hired:	N	Event Closed by State:	N

### Narrative:

LeTourneau, Incorporated, reported detecting radioactive material in their arc furnace ash (by-product of steel production referred to as K061). A radiation gate monitor alarmed at the Horsehead Resource Development Company in Rockwood, Tennessee, indicating the possible presence of radioactive material in the truck. The truck was returned to the LeTourneau facility, where it was isolated. On 7/24/2006, LeTourneau obtained the services of a consultant to identify the material in the truck. Surveys indicated the presence of Cs-137. After determining that the K061 in the truck was contaminated with Cs-137, a full survey of the furnace facility was performed and samples collected to quantify the activity. Exposure levels in the facility ranged from 50 to 3000 uR/hour. The highest radiation readings were in the ash hopper and silo. LeTourneau is collecting additional samples and the State of Texas Department of Health Services is investigating the incident. The time frame for the material in the truck was from 6/29/2006 (when the last shipment was made to Horsehead) to 7/10/2006 (when the truck alarmed the radiation monitors at Horsehead). The K061 could have contained material from a dozen or more of Letourneau's customers. At this time, Letourneau does not know where the Cs-137 activity came from. Letourneau plans to continue operations for a week and up to two additional truckloads of contaminated K061 waste may be generated. They plan to contract with Earth Tech (Texas licensee) to allow continued operation of the facility under their license. The delay is to allow time to stage all of the necessary equipment and personnel needed to perform the decontamination of the facility. Decontamination is scheduled to be complete in less than 90 days. Update 8/22/06 The furnace was shutdown on 8/6/06. Decontamination work began on August 7, 2006. Clean up and release of the furnace and fly ash system from the furnace head up to and including the bag house and replacement of all bag house filters was completed 8/13/06. The furnace returned to operation on 8/14/06. Fly ash is being collected and analyzed for Cs 137. The fly ash silo is currently bypassed and is being decontaminated, and surveyed for release. Latest fly ash sample indicated 40pCi/gm. This value is higher than expected due to reduced plant operation time creating limited fly ash production.

### Corrective Actions:

Action Number: Corrective Action:  
1 NEW EQUIPMENT OBTAINED

### Release of Material or Contamination Information:

Type or Release or Contamination:	Activity: Ci GBq	Radionuclide:	Effect of Release or Contamination:
SURFACE	UNKNOWN	CS-137	TEMPORARY RAD CONTROLS

### Source of Radiation:

**Source Number:** 1  
Form of Radioactive Material: UINKNOWN Radionuclide or Voltage (kVp/MeV): CS-137  
Source Use: UNKNOWN Activity: UNKNOW Ci GBq  
N  
Manufacturer: UNKNOWN  
Model Number: UNKNOWN  
Serial Number: UNKNOWN

### Reporting Requirements:

Reporting Requirement: 20.2203(a) - radiation exposures , releases or concentrations of radioactive material that exceed limits  
Mode Reported: Telephone

### References:

Reference Number:	Entry Date:	Coder Initials:	Type of Report:
I-83534	08/22/2006	AT	AGREEMENT STATE EVENT REPORT