

6/18/97 EVENT RIDS DIST  
SPD4

Event Reporting Handbook

**EVENT REPORT COVER PAGE**

**AGREEMENT STATE**

**EVENT REPORT NO.** KY - 97 - 01

**DATE:** June 11, 1997

**TO:** Paul Lohaus  
**Deputy Director**  
**Office of State Programs**

**SUBJECT:** Incident - Kentucky Electric Steel

**STATE:** Kentucky

**Signature and Title:** Vicki D. Jeffs

Vicki D. Jeffs, Supervisor

Radioactive Materials Unit

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## EVENT REPORT

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 1 HOUR. THIS INFORMATION IS REQUESTED TO ASSESS MATERIALS EVENTS AND EVALUATE ACTIONS NECESSARY TO PREVENT THEIR RECURRENCE. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0178), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE Kentucky Electric Steel		CITY AND STATE Ashland, KY		ORIGINAL ITEM NUMBER	
TYPE OF LICENSE (i.e., Field Radiography, Private Practice Medical, etc.) Fixed gauge*		LICENSE NUMBER KRML No. 201-130-57		THIS ITEM NUMBER	
ABNORMAL OCCURRENCE	FOLLOW-UP REPORT	ISOTOPE	TYPE OF ISOTOPE		DATE OF EVENT
YES	YES	Cesium-137	<input checked="" type="checkbox"/> AEA MATERIAL <input type="checkbox"/> ACCELERATOR PRODUCED <input type="checkbox"/> NORM		April 29, 1997
NO					DATE OF THIS REPORT June 11, 1997**
AMOUNT OF RADIOACTIVE MATERIAL (If amount of material is below exempt quantity, do not complete this form)					
< 1 MILLICI	100 MILLICI - < 1 CI	10 CI - 100 CI	UNKNOWN		
1 MILLICI - < 100 MILLICI	1 CI - < 10 CI	> 100 CI			
EVENTS INVOLVING OVEREXPOSURE					
NUMBER OF OVEREXPOSURES	TYPE OF INDIVIDUAL	EVENT LOCATION	DOSE TO	DOSE	RAD
SOURCE OF RADIATION	EMPLOYEE	RESTRICTED AREA	WHOLE BODY		
EXTERNAL	MINOR EMPLOYEE	UNRESTRICTED AREA	LENS OF EYE		
INTERNAL	EMBRYO/FETUS	CONTROLLED AREA	EXTREMITY		
BOTH	PUBLIC		SKIN		
			ORGAN		
LEAKING SOURCE					
LOST OR STOLEN MATERIAL					
EVENT	EVENT LOCATION	PROBABLE DISPOSITION			
LOST	FIXED SITE	WELL LOGGING RECOVERED SOURCE	UNKNOWN		
FOUND	TEMPORARY JOB SITE	WELL LOGGING IRRETRIEVABLE SOURCE	OTHER (Specify)		
THEFT	LICENSED VEHICLE	COMMERCIAL WASTE			
THEFT, WITH FORCE	COMMERCIAL CARRIER	INCINERATOR			
	OTHER (Specify)	SCRAP METAL			
RELEASE OF MATERIALS					
FORM	EVENT	LOCATION			
SOLID	SPILL	RESTRICTED AREA			
LIQUID	TRANSPORTATION	UNRESTRICTED AREA			
GAS	OTHER (Specify)	CONTROLLED AREA			
EVENTS INVOLVING FACILITIES					
FIRE	SPILL	<input checked="" type="checkbox"/> OTHER (Specify)			
DAMAGE TO DEVICE	> 24-HOUR DENIAL OF ACCESS				
EXPLOSION	DAMAGE TO SAFETY EQUIPMENT				
EVENTS INVOLVING GAUGES					
TYPE	EVENT	EVENTS INVOLVING RADIOGRAPHY			
GENERAL LICENSE	SHUTTER	LOCATION	EVENT		
EXEMPT	MOISTURE/DENSITY GAUGE DAMAGE	FIXED	SOURCE DISCONNECT		
SPECIAL LICENSE	LOST/STOLEN	TEMPORARY JOB SITE	SOURCE NOT RETURNED TO FULLY SHIELDED POSITION		
FIXED	OTHER (Specify)		CABLE FAILURE		
PORTABLE			FAILURE TO FOLLOW PROCEDURES		
EVENT INVOLVING AN IRRADIATOR		MANUFACTURER		MODEL	
EVENTS INVOLVING TELETHERAPY				SERIAL NUMBER	

ABSTRACT (Include the cause of the event(s) and licensee corrective action. May be continued on the reverse side)

\* This facility has a license for a fixed gauge; however, they are a steel melting facility. Activities authorized by the license were not involved in the incident.  
 \*\* Notification of this event was made to the NRC Operations Center on April 30, 1997.  
 See attachment for description of event.



CABINET FOR HEALTH SERVICES  
COMMONWEALTH OF KENTUCKY  
FRANKFORT 40621-0001

DEPARTMENT FOR PUBLIC HEALTH

MEMORANDUM

TO: Incident File

FROM: Vicki D. Jeffs, Supervisor ✓  
Radioactive Materials Unit

SUBJECT: Kentucky Electric Steel

DATE: June 9, 1997

On April 29, 1997 the Radiation Control Program received notification from DES that Kentucky Electric Steel (KES) had notified their agency of a railcar that had tripped the radiation monitor at the site. The car was filled with baghouse dust. Initial surveys detected radiation levels above background in the baghouse. Radiation levels above background were not detected anywhere else on the site. The melt shop and baghouse had been shut down. A consultant, SEG, from Knoxville, TN had been called in to assess the situation. No exposures to employees and no releases to the environment occurred as the result of this incident.

Confirmation was received from the site that apparently a cesium-137 source had been melted in the furnace. Because most of the scrap received by KES is in the form of shredded scrap and from over 20 suppliers, the origin of the source could not be traced.

SEG, on behalf of KES, submitted a site plan for cleaning up the contamination based on U.S. Nuclear Regulatory Commission Regulatory Guide 1.86. The plan was reviewed and approved by Radiation Control. A site visit was made by RCP personnel to verify the extent of the contamination. Clean up operations began on May 3. Site visits were also conducted by RCP personnel to provide oversight of the decontamination operations.

KES was granted approval on May 7 to resume operations in the melt shop areas after review of surveys results. Actual operations began approximately May 10. Other areas were released as surveys were reviewed and determined to meet the proposed clean up limits. All remaining areas had been released for unrestricted use as of May 19. Confirmatory analyses of swipes and dust samples were performed by the Radiation Laboratory.

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The facility was shut down for a total of twelve (12) days. As of this date, an estimate of the activity of the source involved has not been made. The facility has spoken to three (3) possible disposal facilities but has not made final plans for disposal. The facility has been provided with NRC's Final Staff Technical Position for Disposition of Cesium-137 Contaminated Emission Control Dust and Other Incident-Related Material. Long-term storage of the waste has also not yet been addressed in any licensing action. The facility has been asked to provide an up-to-date progress report on this issue.

The facility is also looking at improvements or changes in the current system of monitors. A consulting company has been called in to assist KES in this review.