

cc: Plankton, OSP  
L. Robinson, ASPO  
B. Smith, NMSS  
INERL

**EVENT REPORT COVER PAGE**

**AGREEMENT STATE**

**EVENT REPORT ID NO. KY - 00 - 002**

**(State/Yr./No.)**

**DATE** March 6, 2000

**TO** Paul Lehane  
**Director**

**(Office of State Programs)**

**SUBJECT** Department

**STATE** Reported by

00 MAR 13 PM 4: 08

OSP

**Signature and Title:**

*Victor D. Jellis*

Victor D. Jellis, Supervisor

Radioactive Materials Section

KY Radiation Health and Toxic Agents Branch

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-8 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 <b>University of Kentucky</b>		CITY AND STATE <b>Lexington, KY</b>		ORIGINAL ITEM NUMBER
TYPE OF LICENSE (i.e., Field Radiography, Private Practice Medical, etc.) <b>Broad Medical</b>		LICENSE NUMBER <b>202-049-22</b>		THIS ITEM NUMBER
ABNORMAL OCCURRENCE	FOLLOW-UP REPORT	ISOTOPE	TYPE OF ISOTOPE	DATE OF EVENT
<input type="checkbox"/> YES	<input type="checkbox"/> YES	<b>I-131</b>	<input checked="" type="checkbox"/> AEA MATERIAL	<b>January 12, 2000</b>
<input checked="" type="checkbox"/> NO			<input type="checkbox"/> ACCELERATOR PRODUCED	DATE OF THIS REPORT
			<input type="checkbox"/> NORM	<b>March 6, 2000</b>

AMOUNT OF RADIOACTIVE MATERIAL (If amount of material is below exempt quantity, do not complete this form)

<input type="checkbox"/> < 1 MILLICI	<input checked="" type="checkbox"/> 100 MILLICI - < 1 CI	<input type="checkbox"/> 10 CI - 100 CI	<input type="checkbox"/> UNKNOWN
<input type="checkbox"/> 1 MILLICI - < 100 MILLICI	<input type="checkbox"/> 1 CI - < 10 CI	<input type="checkbox"/> > 100 CI	

EVENTS INVOLVING OVEREXPOSURE

NUMBER OF OVEREXPOSURES <b>1</b>	TYPE OF INDIVIDUAL	EVENT LOCATION	DOSE TO		DOSE	RAD	REM
			WHOLE BODY	LENS OF EYE			
<input checked="" type="checkbox"/> EXTERNAL	<input checked="" type="checkbox"/> EMPLOYEE	<input type="checkbox"/> RESTRICTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	<b>100</b>		<input type="checkbox"/>
	<input type="checkbox"/> MINOR EMPLOYEE	<input checked="" type="checkbox"/> UNRESTRICTED AREA	<input type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/> EMBRYO/FETUS	<input type="checkbox"/> CONTROLLED AREA	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/> PUBLIC						
<input type="checkbox"/> INTERNAL							
<input type="checkbox"/> BOTH							

LEAKING SOURCE

LOST OR STOLEN MATERIAL

EVENT	EVENT LOCATION	PROBABLE DISPOSITION
<input type="checkbox"/> LOST	<input type="checkbox"/> FIXED SITE	<input type="checkbox"/> WELL LOGGING RECOVERED SOURCE
<input type="checkbox"/> FOUND	<input type="checkbox"/> TEMPORARY JOB SITE	<input type="checkbox"/> WELL LOGGING IRRETRIEVABLE SOURCE
<input type="checkbox"/> THEFT	<input type="checkbox"/> LICENSED VEHICLE	<input type="checkbox"/> COMMERCIAL WASTE
<input type="checkbox"/> THEFT, WITH FORCE	<input type="checkbox"/> COMMERCIAL CARRIER	<input type="checkbox"/> INCINERATOR
	<input type="checkbox"/> OTHER (Specify)	<input type="checkbox"/> SCRAP METAL

RELEASE OF MATERIALS

FORM	EVENT	LOCATION
<input type="checkbox"/> SOLID	<input type="checkbox"/> SPILL	<input type="checkbox"/> RESTRICTED AREA
<input type="checkbox"/> LIQUID	<input type="checkbox"/> TRANSPORTATION	<input type="checkbox"/> UNRESTRICTED AREA
<input type="checkbox"/> GAS	<input type="checkbox"/> OTHER (Specify)	<input type="checkbox"/> CONTROLLED AREA

EVENTS INVOLVING FACILITIES

<input type="checkbox"/> FIRE	<input type="checkbox"/> SPILL	<input type="checkbox"/> OTHER (Specify)
<input type="checkbox"/> DAMAGE TO DEVICE	<input type="checkbox"/> > 24-HOUR DENIAL OF ACCESS	
<input type="checkbox"/> EXPLOSION	<input type="checkbox"/> DAMAGE TO SAFETY EQUIPMENT	

EVENTS INVOLVING GAUGES		EVENTS INVOLVING RADIOGRAPHY	
TYPE	EVENT	LOCATION	EVENT
<input type="checkbox"/> GENERAL LICENSE	<input type="checkbox"/> SHUTTER	<input type="checkbox"/> FIXED	<input type="checkbox"/> SOURCE DISCONNECT
<input type="checkbox"/> EXEMPT	<input type="checkbox"/> MOISTURE/DENSITY GAUGE DAMAGE	<input type="checkbox"/> TEMPORARY JOB SITE	<input type="checkbox"/> SOURCE NOT RETURNED TO FULLY SHIELDED POSITION
<input type="checkbox"/> SPECIAL LICENSE	<input type="checkbox"/> LOST/STOLEN		<input type="checkbox"/> CABLE FAILURE
<input type="checkbox"/> FIXED	<input type="checkbox"/> OTHER (Specify)		<input type="checkbox"/> FAILURE TO FOLLOW PROCEDURES
<input type="checkbox"/> PORTABLE			

EVENT INVOLVING AN IRRADIATOR	MANUFACTURER	MODEL	SERIAL NUMBER
EVENTS INVOLVING TELETHERAPY			

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

See attached.

Kentucky Event Report No. KY-00-002

On January 12, 2000 a nuclear medicine technologist was assisting a physician at this facility in administering a 140 millicurie dose of iodine-131 to a patient for thyroid ablation. The dose was being administered through a feeding tube into an already existing stomach tube. When removing the feeding tube, iodine-131 was sprayed into the air, resulting in contamination of the technologist and some contamination of the physician. The physician was able to remove the contamination by washing the affected area.

After showering, the technologist's hands still showed some contamination of some areas of the fingers. Within two hours of the event, a KI blocking dose was administered to the technologist. A thyroid count was performed on January 13. Using NRC accepted methods, FGR Reports 11 and 12, the estimated internal doses were: thyroid, CEDE, 35 mrem; whole body, EDE, 5 mrem. The whole body badge was sent to the personnel monitoring service vendor. The reading indicated an 82 millirem to the whole body. The ring badge was grossly contaminated during the event and discarded.

Skin doses were calculated using VARSKIN. The total dose to the contaminated skin was estimated to be 100 rem over a period of 20 days.

The Nuclear Medicine Department has taken steps to stop future use of an external stomach tube for administering doses in order to prevent a reoccurrence of this event.