

2/16/00 SP04  
Event Rpt Dist  
cc: Perkins, OSP  
L Rakovan, ASPO

**Event Reporting Handbook**

**EVENT REPORT COVER PAGE**

**AGREEMENT STATE**

**EVENT REPORT ID NO.**  KY - 00 - 001   
(State\Yr.\No.)

**DATE:** February 8, 2000

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

**SUBJECT:** Lost Source

**STATE:** Kentucky

00 FEB 14 PM 4:56  
OSP

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

Supervisor, Radioactive Materials Program

Kentucky Radiation Health and Toxic Agents Branch

**FILE CENTER COPY** 93  
SP-E-9

# 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<br><b>Eastern Kentucky University</b>   |                              | CITY AND STATE<br><b>Richmond, KY</b> |  | ORIGINAL ITEM NUMBER    |
| TYPE OF LICENSE (i.e., Field Radiography, Private Practice Medical, etc.)<br><b>Academic - Limited Scope</b> |                              | LICENSE NUMBER<br><b>203-032-83</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>Ni-63</b>                          | <input checked="" type="checkbox"/> AEA MATERIAL | <b>August 1999</b>      |
| <input checked="" type="checkbox"/> NO   |                              |                                       | <input type="checkbox"/> ACCELERATOR PRODUCED    | DATE OF THIS REPORT     |
|  |                              |                                       | <input type="checkbox"/> NORM                    | <b>February 8, 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 type="checkbox"/> 100 MILLICI - < 1 CI | <input type="checkbox"/> 10 CI - 100 CI | <input type="checkbox"/> UNKNOWN |
| <input checked="" type="checkbox"/> 1 MILLICI - < 100 MILLICI | <input type="checkbox"/> 1 CI - < 10 CI       | <input type="checkbox"/> > 100 CI       |                                  |

EVENTS INVOLVING OVEREXPOSURE

| NUMBER OF OVEREXPOSURES           | TYPE OF INDIVIDUAL | EVENT LOCATION    | DOSE TO     | DOSE | RAD | REM |
|-----------------------------------|--------------------|-------------------|-------------|------|-----|-----|
|                                   |                    |                   | WHOLE BODY  |      |     |     |
| SOURCE OF RADIATION               | EMPLOYEE           | RESTRICTED AREA   | LENS OF EYE |      |     |     |
| <input type="checkbox"/> EXTERNAL | MINOR EMPLOYEE     | UNRESTRICTED AREA | EXTREMITY   |      |     |     |
| <input type="checkbox"/> INTERNAL | EMBRYO/FETUS       | CONTROLLED AREA   | SKIN        |      |     |     |
| <input type="checkbox"/> BOTH     | PUBLIC             |                   | ORGAN       |      |     |     |

LEAKING SOURCE

LOST OR STOLEN MATERIAL

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

RELEASE OF MATERIALS

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

EVENTS INVOLVING FACILITIES

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

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

## Attachment

On December 17, 1999, Eastern Kentucky University reported to the Kentucky Radiation Control Program, the loss of two (2) nickel sources. The sources were reported to be 10 and 15 millicuries each as contained in a gas chromatograph (GC).

The circumstances of the loss are as follows. Prior to August, the device was removed from its place of use to a location where other surplus equipment was stored. This surplus equipment was sold in "lots" in late July or early August. The University was able to determine from records the individual to whom the "lot" believed to contain the GC was sold. A search was made of his property but the device was not found. The individual indicated he had probably sold the device to either an aluminum smelting company or a scrap metal dealer. The University believes the GC was smelted.

No exposures to individuals are believed to have occurred. The nickel-63, if smelted, would be incorporated into the aluminum.

Information on the GC is as follows:

Perkin-Elmer Model 2000/2100 gas chromatograph  
Ni-63 serial number 819, 15 millicuries  
Ni-63 serial number 703, 10 millicuries  
Electron capture detector model 6000204

The University has undertaken corrective steps to maintain better accountability of sources and equipment.