

**NMED Item Number: 981103****Event Details**

**ABSTRACT:** The licensee reported a release of radioactive material due to a ruptured sewer discharge line. The licensee was discharging 18.5 MBq (500 uCi) of I-125 and 259 MBq (7 mCi) of S-35 when the discharge line to the sanitary sewer became plugged. In an attempt to dislodge the plug, the licensee applied pressure to the discharge line. At that time, the line ruptured. A liquid was found in a dirt area approximately eight feet from the exterior of the building. Further investigation revealed that a steam condensate line crossing above the sanitary sewer line was leaking. The licensee believes that the leaking hot water corroded the sewer line pipe. Degradation of the pipe wall lead to its rupture. The licensee has taken soil samples and is preparing them for lab analysis. A rough, preliminary analysis of the samples indicated a maximum activity of 57 pCi/gram. The pipe has been repaired; excavated soil has been placed back in the hole excavated to make repairs. The area will be capped with asphalt or concrete and digging in the effected area will be prohibited for at least 880 days (ten half-lives of S-35). After this period, the area will be re-sampled to assure that no radioactive material above releasable limits remain. Survey results with a GM survey meter identified no levels above background. Survey with NaI probe also did not detect levels above background. Bioassays are being completed for all personnel involved. Results of first run urinalysis (24 hours after initial exposure) are all background. The licensee will complete three runs. In addition, the licensee is conducting measurements of thyroid burdens. Those results are pending.

Event Date/Time	Discovery Date/Time	Report Date/Time
09/21/1998 0000 NR	09/21/1998 0000 NR	09/25/1998 0000 NR

**Licensee Information:**

Agreement State Regulated:	YS	Reciprocity:	NONE
License Number:	IA-37-1-52-ABB	Licensee:	IOWA, UNIVERSITY OF
Docket:	NA	City:	OAKDALE CAMPUS
Program Code:	NA	State:	IA
Other License No:	NR	NRC Region Office:	3

**Site of Event:**

License No: NR Site Name: OAKDALE CAMPUS  
State: IA

**Additional Involved Party:**

License No: NA Name: NA  
City: NA  
State: NA

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	N
Agreement State Reportable Event:	Y	Investigation:	Y
Atomic Energy Act Material:	Y	NMED Record Complete:	Y
Consultant Hired:	N		

**Event Class:**

RLM - RADIOACTIVE MATERIAL REL.  
CAUSE: DEFECTIVE OR FAILED PARTS

**Release of Material Information**

Release Type:	Activity:	Consequence:	Isotope
SURFACE	NR	FIELD NOT USED	S-35
SURFACE	NR	FIELD NOT USED	I-125

**Equipment Information (Component Level):**

A/2

## RLM

Component ID#: 1  
Componet ID: UNSEALED MATERIAL, OTHER  
System ID: NA  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA  
Manufacture Date:

Isotope: S-35  
Activity (Curies): NR  
Assay Date:  
Source Change Date:  
Leak Results (uCi): NA  
Consequence: FIELD NOT USED

## RLM

Component ID#: 2  
Componet ID: UNSEALED MATERIAL, OTHER  
System ID: NA  
Manufacturer: NR  
Model Number: NA  
Serial Number: NA  
Manufacture Date:

Isotope: I-125  
Activity (Curies): NR  
Assay Date:  
Source Change Date:  
Leak Results (uCi): NA  
Consequence: FIELD NOT USED

**Reporting Requirements:**

RLM Mode Reported: WRITTEN

Report Requirements: 30.50(b)(1)(i) - THE 24 HOUR REPORT OF AN UNPLANNED CONTAMINATION EVENT THAT PROHIBITS ENTRY TO AN AREA OR REQUIRES ADDITIONAL RADCON MEASURES FOR 24 HOURS.

**Contributing Factors/Corrective Actions Information:**

## RLM

Factor #: 1  
Contributor: NOT REPORTED  
Precipitator: NOT REPORTED  
Corrective Action: NEW EQUIPMENT OBTAINED

**Keywords**

Class Code: RLM SURFACE  
Class Code: RLM S-35  
Class Code: RLM I-125

**Event Documents List**

Report ID No	Entry Date	Retraction Date	Type of Report
9810200237	11/05/1998		AGREEMENT STATE LICENSEE REPORT
IA-98-02	11/05/1998		AGREEMENT STATE LICENSEE REPORT