RI - DNMS Licensee Event Report Disposition

Licensee: Pennoni Associates

Event Description: Lost Gauge

License No: 37-17637-02 | Docket No: 0301579 | MLER-RI: 2006-037

Event Date: 08/19/06 | Report Date: 08/21/06 | HQ Ops Event #: 42790

1. REPORTING REQUIREMENT

- [ ] 10 CFR 20.1906 Package Contamination
- [X] 10 CFR 20.2201 Theft or Loss
- [ ] 10 CFR 20.2203 30 Day Report
- [ ] Other
- [ ] 10 CFR 30.50 Report
- [ ] 10 CFR 35.3045 Medical Event
- [ ] License Condition

2. REGION I RESPONSE

- [ ] Immediate Site Inspection — Inspector/Date:
- [X] Special Inspection — Inspector/Date: Rolph / 9/18/06
- [X] Telephone Inquiry — Inspector/Date: Rolph / 8/21/06
- [ ] Preliminary Notification/Report
- [X] Information Entered in RI Log
- [ ] Report Referred To:
- [ ] Daily Report
- [ ] Review at Next Inspection

3. REPORT EVALUATION

- [X] Description of Event
- [X] Levels of RAM Involved
- [X] Cause of Event
- [X] Corrective Actions
- [ ] Calculations Adequate
- [ ] Additional Information Requested from Licensee

4. MANAGEMENT DIRECTIVE 8.3 EVALUATION

- [ ] Release w/Exposure > Limits
- [ ] Repeated Inadequate Control
- [ ] Exposure 5x Limits
- [ ] Potential Fatality
- [ ] Deliberate Misuse w/Exposure > Limits
- [ ] Pkging Failure>10 rads/hr or Contamination>1000x Limits
- [ ] Large# Indivs w/Exp>Limits or Medical Deterministic Effects
- [ ] Unique Circumstances or Safeguards Concerns

If any of the above are involved:

- [ ] Considered Need for IIT
- [ ] Considered Need for AIT

Decision/Made By/Date:

5. MANAGEMENT DIRECTIVE 8.10 EVALUATION (additional evaluation for medical events only)

- [ ] Timeliness - Inspection Meets Requirements (5 days for overdose / 10 days for underdose)
- [ ] Medical Consultant Used-Name of Consultant/Date of Report:
- [ ] Medical Consultant Determined Event Directly Contributed to Fatality
- [ ] Device Failure with Possible Adverse Generic Implications
- [ ] HQ or Contractor Support Required to Evaluate Consequences

6. SPECIAL INSTRUCTIONS OR COMMENTS

- [ ] Non-Public
- [X] Public-SUNSI REVIEW COMPLETE

Inspector Signauture: Letter Initiated for Rolph — Date: 9-25-06

Branch Chief Initials: JDK for JDK — Date: 9/25/06

Location of File: G:\Reference\Blank Forms\LER FORM.wpd

Rev. 02/25/05

1965-2006 40 years Pennoni CONSULTING ENGINEERS of Designing the Future

September 21, 2006

Administrator
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Re: USNRC License 37-17637-02
Report of Loss of Licensed Material

Dear Sir:

On August 21, 2006 our Radiation Safety Officer (Charles M. Snyder) telephoned your office and the NRC Operations Center in Washington, D.C. to report a loss of a moisture/density gage. This report is being submitted in accordance with 10CFR20.2201.

This gage is identified as follows:
Manufactured by Humboldt Scientific
Model No. 5001, Serial No. 4746
Contains the following sealed radioactive sources (Spec. Form Type "A"):
Cs137 – 0.37GBq, serial no. 5874CM
Am241:Be – 1.48GBq, serial no. NJ05012
The transit case is a Type A unit, labeled Radioactive II-Yellow, with a Transit Index of 0.2

A summary of the circumstances of loss is as follows:

During the late evening of August 19, 2006, our technician, Donald Benway, was approached by his ex-sister-in-law requesting the use of this automobile for a brief but urgent errand. Mr. Benway agreed to the request and allowed the use of his vehicle by his ex-sister-in-law.

At the time of the vehicle loan, the moisture/density gage was in the back seat of the vehicle, secured to the seat by a locked cable.

Mr. Benway's ex-sister-in-law did not return the vehicle as promised, but instead loaned the vehicle to another person.

When Mr. Benway was unable to contact his ex-sister-in-law the next morning failed, he notified the police department of the City of Bethlehem, PA of the missing vehicle and the gage that it contained. Mr. Benway informed his immediate supervisor (Delbert Thomas), who in turn notified the RSO. The RSO, Mr. Charles Snyder, contacted Mr. Benway, who related the events to date and stated that he expected the car to be returned to him that night. Under these circumstances, it appeared unlikely that an exposure would result to anyone.

Pennoni

On Monday, August 21, upon learning that the vehicle had not been returned, Mr. Snyder contacted the NRC Region I office and the NRC Operations Center to report the missing gage because while it still seemed unlikely that an exposure would result, Mr. Snyder felt the uncertainty over the location of the car increased the possibility that an exposure could result. Mr. Snyder also contacted Officer Conrad of the Bethlehem police to describe the gage and possible hazards to the public.

On Wednesday August 23, Mr. Benway was able to reach the person who had obtained his car from his ex-sister-in-law and was informed of the location of the car's contents (including the gage). Mr. Benway's ex-wife was able to gain control of the car and return it to his residence. The gage was not in the car. Mr. Benway passed this information on to Edward Sander (regional technology head).

Mr. Sander visited Mr. Benway's residence to document the condition of his car, noting that the cable was still locked to the vehicle.

Mr. Benway was successful in obtaining the location where the gage had been discarded. Mr. Sander visited the reported site of the gage and found the gage in its case as well as other items that had been in Mr. Benway's vehicle. Mr. Sander returned the items to Bethlehem office.

Mr. Snyder secured the gage in the designated storage room and checked the gage and case with a survey meter, finding no abnormal readings.

It was observed that the source rod lock was in placed and locked. There were no items missing from the case interior. The case handle that had been locked to the car via a cable had been removed from the case by having its four screws removed.

Mr. Snyder telephoned both the NRC Region I office and the NRC Operations Center to inform both parties that the gage had been located and secured in its designated storage location at the Bethlehem office.

The licensed material had not been removed from the gage and is therefore in the possession of the license holder and being utilized in an appropriate manner.

Pennoni believes there was no exposure of radiation to any individual. Because the gage was locked in Mr. Benway's vehicle at an appropriate distance from the driver, it is believed that the ex-sister-in-law was exposed to no or virtually unrecordable radiation. The person who obtained the gage from the ex-sister-in-law refused to cooperate in any manner except to provide its location. There was no evidence that the gage had been removed from its case and since the source rod lock was in place, there could not have been any contact with the encased source. As such, any exposure would be similar to that received by the RSO when conducting semi-annual leak tests, which is less than 10 mrem.

Mr. Sander, in his discussions with Mr. Benway, reinforced the regulations on maintaining control of the gages, reminding him that this subject was a part of his formal training and is reviewed at the annual inspectors meeting by the RSO. Mr. Sander informed Mr. Benway that since his actions were not in accordance with the established policies for use and transport of a gage, that he would be disciplined accordingly.

The gage was properly secured, including meeting the two barriers to removal regulation. The storage in his locked vehicle at his residence was also in accordance with regulations up to the point of his giving up

Pennoni

control of the car. When Mr. Benway released his vehicle with the gage in it, he violated security instructions he was provided in his initial training, subsequent retraining and contained in the company policy brochure. Although the established policies meet NRC regulations, they will be reviewed for refinement or amplification. A policy governing the storage of gages when off duty will be implemented. A review of security procedures, including methods to maintain the two barriers to removal regulation will be made with the technicians.

With any questions or if additional information is needed please contact the Radiation Safety Officer, Chas M. Snyder, P.E. at 610.231.0600 extension 5027.

Very truly yours,

PENNONI ASSOCIATES INC.

Chas M. Snyder, P.E.
Radiation Safety Officer