RI - DNMS Licensee Event Report
Disposition

Licensee: Dept of Navy

Event Description: Loss of Licensed Mate

License No: 45-23645-01NA Docket No: 03029462 MLER-RI: 2005-037

Event Date: 2004 Report Date: 5-17-05 HQ Ops Event #:

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
- [ ] Special Inspection — Inspector/Date
- [ ] Telephone Inquiry — Inspector/Date
- [ ] Preliminary Notification/Report
- [X] Information Entered in RI Log
- [ ] Report Referred To:
- [ ] Daily Report
- [ ] Review at Next Inspection

(3) REPORT EVALUATION

- [✓] Description of Event
- [Y] Levels of RAM Involved
- [Y] Cause of Event
- [Y] Corrective Actions
- [Y] 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

Review during mgt inspection

- [X] Non-Public

Inspector Signauture: Date: 6.10.05

- [X] Public-SISP REVIEW COMPLETE

Branch Chief Initials: Date: 6.10.05

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

Rev. 02/25/05

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, DC 20350-2000

IN REPLY REFER TO

5104
Ser N455C/N5U9011332
17 May 2005

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

Ladies and Gentlemen:

SUBJECT: LOSS OF LICENSED MATERIAL

Loss of licensed material reportable under Title 10, Code of Federal Regulations, Part 20.2201 occurred with two Shipboard Automatic Chemical Agent Detection Alarming Units (Shipboard ACADAs) and three Vaportracer2 Handheld Explosive Detectors (HHEDs). These commodities are possessed and distributed under Naval Radioactive Materials Permit No. 13-00164-T1NP, issued in accordance with Nuclear Regulatory Commission Master Materials License No. 45-23645-01NA to the U.S. Navy. The enclosed report provides information required by Title 10, Code of Federal Regulations, Part 20.2201(b).

Sincerely,

L. L. FRAGOSO
Commander, MSC, U.S. Navy
Executive Secretary
Naval Radiation Safety Committee

Enclosure: 1. Radioactive Material Loss Report

Copy to:
NAVSURFWARCENDIV Crane
NAVSEADET RASO

1. The equipment involved was the Shipboard Automatic Chemical Agent Detection Alarming Units (Shipboard ACADAs), serial numbers A135 and A221, and Vaportracer2 Handheld Explosive Detectors (HHEDs), serial numbers 09-4691, 09-4695 and 09-4702. Each Shipboard ACADA has one 230-microcurie (μCi) source of Americium-241 oxide in a gold and silver foil with sealed source and device registry (SSDR) number NR-1129-D-101-S. Each HHED has one 10-millicurie (mCi) source of Nickel-63 with SSDR number NR-0399-D-101-E.

2. The USS FLETCHER was scheduled for decommissioning in the fall of 2004. Naval Surface Warfare Center (NWSC) Crane notified the USS FLETCHER in June 2004 to return the above listed equipment. The equipment was confirmed onboard the USS FLETCHER prior to the beginning of decommissioning. The USS FLETCHER was decommissioned in October 2004 and the equipment was not returned to NSWC Crane.

In early 2005, NSWC Crane was informed the USS FLETCHER had been scheduled for Foreign Military Sales (FMS). NSWC Crane was told a search for the equipment could not be performed until FMS had inventoried the equipment onboard, and upon completion of the inventory, NSWC Crane could submit requisitions for the equipment through the Equipment Removal Data System Program.

On 10 March 2005, Inactive Ships personnel at Pearl Harbor informed NSWC Crane the items were not located onboard the USS FLETCHER. Searches of the asset management system, transactions in and out of the warehouses, and Defense Reutilization and Marketing Office did not turn up any information on the equipment. In mid-March 2005 the anti-terrorism/force protection office was contacted and did not have any information about the location of the equipment. The last known verifiable location of the equipment was onboard the USS FLETCHER prior to decommissioning.

3. It is assumed the equipment was transferred to other ships and will turn up during NSWC Crane's on-going inventory monitoring of these permitted items.

4. It is highly unlikely that any individual has or will receive any exposure or internal deposition of radioactive material because the extremely well protected location of the sources within the items is a significant impediment to direct access to the sources. The Americium-241 sources are sealed inside the drift tube assembly, and it requires a great deal of effort to gain access to the radioactive material. The highest surface

reading for the Shipboard ACADA is 0.4 mrem/hr. There is no surface reading detectable for the HHEDs.

5. The investigation has prompted NSWC Crane to improve the procedure of retrieving permitted material prior to ships being turned over for decommissioning. NSWC Crane is working with the decommissioning teams to get the radioactive material back and promoting more visibility of the equipment during the time the ships are decommissioned.