

DEPARTMENT OF THE NAVY

NAVY ENVIRONMENTAL HEALTH CENTER 620 JOHN PAUL JONES CIRCLE SUITE 1100 PORTSMOUTH VA 23708-2103

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From: Commanding Officer, Navy Environmental Health Center

To: Distribution

Subj: NRSC BULLETIN 2006-01: ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

Ref: (a) NAVENVIRHLTHCEN ltr 6470 Ser OEM/000159 of 13 Feb 04 (NRSC Bulletin 2004-01: Receipt, Storage and Security of Radioactive Materials)

(b) NAVENVIRHLTHCEN 1tr 6470 Ser OEM/000383 of 10 Mar 04 (Addendum to NRSC Bulletin 2004-01)

(c) Title 10, Code of Federal Regulations (10 CFR), Parts 19, 20 and 35

Encl: (1) Naval Radiation Safety Committee Bulletin 2006-01: Additional Measures for the Receipt, Storage and Security of Radioactive Materials

- 1. The security and control of radioactive material is a prime concern of the Naval Radiation Safety Committee (NRSC). The NRSC manages the Navy's Master Materials License (MML) issued to the Navy by the U.S. Nuclear Regulatory Commission (NRC).
- 2. The NRSC in references (a) and (b) has previously mandated additional requirements for the receipt, storage and security of radioactive materials. These additional requirements were in response to a violation of Federal regulations in reference (c), specifically, 10 CFR 20.1802 for the failure of a Naval Medical Center to control and maintain constant surveillance of licensed material that was in a controlled or unrestricted area, and not in storage. As a result, the Command was issued a Notice of Violation for a Severity Level III finding. In summary, a package containing radioactive brachytherapy sealed sources was left unattended in an unrestricted area for several hours. Factors contributed to this event included the vendor placing an incorrect address on the package, the courier delivering the package to the center's loading dock vice the address on the package, and loading dock personnel not knowing the command's policy for receiving and processing radioactive material.

Subj: NRSC BULLETIN 2006-01: ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

- 3. Several more incidents regarding the improper delivery and receipt of packages containing radioactive material have since occurred at Navy medical treatment facilities. Two of the more serious incidents occurred at Naval Medical Centers, and resulted in Notice of Violations issued to the Commands for violations of Federal regulations in reference (c), specifically, 10 CFR 20.1801 for the failure to properly secure from unauthorized removal or access, licensed materials that were stored in controlled or unrestricted areas, and 10 CFR 20.1902(e) for the failure of the permittee to properly post areas or rooms in which licensed material were used or stored. The incidents are summarized below.
- a. In April 2006, a package containing radiopharmaceuticals was delivered to a Command's Pharmacy by the vendor on a Saturday, contrary to Command policy of delivering packages to the Officer of the Day's (OOD's) desk if delivered after normal working hours. The package was accepted by Pharmacy staff, and secured in a locked storage closet for approximately two days, at which time the Nuclear Medicine Radiopharmacy was notified and the package retrieved by Radiation Safety staff and delivered to Nuclear Medicine. As a result, a Notice of Violation was issued for two Severity Level IV findings.
- b. In October 2006, a package containing a 3.0 Curie radiopharmaceutical generator was delivered to a Command's Mailroom by FedEx on a Tuesday, contrary to Command policy and written agreement of delivering packages containing radioactive materials directly to Nuclear Medicine. The package was accepted by Mailroom staff, and stored in the Mailroom for approximately 24 hours. A second package containing radiopharmaceuticals was delivered by the same FedEx driver to the Mailroom the next day following the first delivery. Again, the Mailroom staff accepted the package. This package remained in the Mailroom for no more than 3 hours until discovered by Radiation Safety staff, at which time, the package containing the radiopharmaceutical generator was also discovered. Note that both packages had been properly addressed to Nuclear Medicine. As a result, a Notice of Violation was issued for a Severity Level III and a Severity Level IV finding. Violations were confirmed during a "reactive" inspection conducted by the Navy Environmental Health Center (NAVENVIRHLTHCEN).
- 4. As a measure to prevent similar incidents in the future, the NRSC is directing medical, research and academic activities that possess a Naval Radioactive Materials Permit (NRMP) to perform

Subj: NRSC BULLETIN 2006-01: ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

specific additional actions as discussed and delineated in the enclosed NRSC Bulletin 2006-01. This and previous Bulletins and Information Notices can be downloaded from the NAVENVIRHLTHCEN website at http://www-nehc.med.navy.mil/occmed/nrmp.htm.

- 5. The enclosed NRSC Bulletin requires a formal written response to NAVENVIRHLTHCEN by 15 January 2007. The response shall describe the procedures and actions the command has taken in implementing these actions.
- 6. Questions pertaining to the requirements of this bulletin can be directed to LCDR Brian D. Pomije, MSC, USN, Radiation Health Team Leader at (757) 953-0766 or DSN 377-0766, facsimile (757) 953-0670 or by e-mail at brian.pomije@med.navy.mil.

B. D. POMIJE By direction

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Subj: NRSC BULLETIN 2006-01: ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

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ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

19 December 2006

References:

- (a) Title 10, Code of Federal Regulations (CFR), Part 19, Part 20 and Part 35
- (b) NUREG 1556, Consolidated Guidance About Material Licenses, Vol. 9, Rev. 1: Program-Specific Guidance About Medical Use Licenses
- (c) NUREG-1556, Consolidated Guidance About Material Licenses, Vol. 7: Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope
- (d) NAVENVIRHLTHCEN ltr 6470 Ser OEM/000159 of 13 Feb 04 (NRSC Bulletin 2004-01: Receipt, Storage and Security of Radioactive Materials)
- (e) NAVENVIRHLTHCEN ltr 6470 Ser OEM/000383 of 10 Mar 04 (Addendum to NRSC Bulletin 2004-01)

Purpose

The Naval Radiation Safety Committee (NRSC) is issuing this bulletin to provide guidance and direction concerning the security and control of radioactive material (RAM) as required by references (a) through (c). Requirements in this bulletin are in addition to those requirements in references (d) and (e).

Discussion

- 1. Security and control of radioactive material is a prime concern of the Naval Radiation Safety Committee. Radiation Safety Officers (RSOs) and staff must institutionalize procedures and instill cultures within their commands that ensure the security and control of radioactive material. This will ensure compliance with regulations and assist in keeping personnel exposures (employees and public) at a minimum. Given the events of September 11, 2001 and other recent events, it is imperative to maintain a high level of alertness to security-related matters, ensuring radioactive material is not acquired by terrorists.
- 2. Control and security of RAM begins at the time it is ordered. To ensure that the RAM is properly received by your activity, it is critical to provide the company proper shipping instructions

ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

and the correct address to which the RAM should be shipped. The delivery address should include the command's name and address, including the building and room number. RAM should be shipped and delivered directly to radiation safety personnel to ensure that the material is properly handled, processed, and secured.

- 3. A command's primary defense in ensuring the security and control of RAM is to provide appropriate radiation safety training/instructions to individuals at the facility. Individuals that routinely work with and are directly involved with the shipping and/or receipt of RAM must be trained. These individuals include Nuclear Medicine, Radiation Oncology and Radiation Safety staff. Training is also required for individuals that have a potential to come into contact with RAM. This group includes supply/loading dock personnel, mailroom personnel, pharmacy personnel, housekeeping, the OOD/CDO duty staff, and emergency response personnel including firefighters and security personnel. These individuals should be familiar with how to identify RAM, their Command's procedures for receiving RAM; they should be able to contact the correct individuals authorized to receive RAM and should be able to escort/direct the courier to the proper delivery location. Normal package receipt areas including loading docks, mailrooms and pharmacies, should be continuously posted with employee instructions to follow in the event a package containing RAM is delivered to, or discovered at these locations.
- 4. Any questions pertaining to the requirements of this bulletin can be directed to LCDR Brian D. Pomije, MSC, USN, Radiation Health Team Leader at (757) 953-0766 or DSN 377-0766, facsimile (757) 953-0670 or by e-mail at brian.pomije@med.navy.mil.

ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

Action

This bulletin requires each permittee to respond to the Navy Environmental Health Center (NAVENVIRHLTHCEN) by 15 January 2007, with the statements (commitments) and information requested below. The response shall be forwarded as a formal letter, and a copy of this response will be maintained with the command's Naval Radioactive Materials Permit (NRMP). It will be considered an integral part of the permit along with your permit application, amendments and other correspondence. The response letter shall be signed by the Commanding Officer of the medical treatment facility or a member of management with "by direction" authority for such matters, other than the RSO.

- 1) Action: Commands shall review and evaluate compliance with the requirements in NRSC Bulletin 2004-01 (reference (d)) and the Addendum to NRSC Bulletin 2004-01 (reference (e)), as well as commitments in their formal responses to those bulletins.
- 2) Action: Commands shall review and evaluate their procedures for ordering, receiving and processing radioactive materials to ensure they provide high levels of security and control. Ensure that the procedures include a written agreement between the Command and the vendor, to include specific delivery instructions including:
- (a) the name of the individual (i.e., RSO or designee) to whom the package shall be delivered;
- (b) the address to which the materials shall be delivered, including building and room number as applicable, as well as emergency contact information (e.g., a telephone number to Radiation Safety) which is manned 24/7;
- (c) the route the delivery person shall take through the facility; and
- (d) signatures by both parties, acknowledging the above delivery requirements (renewed annually, or when changes in delivery procedures occur).

These procedures shall be formally documented in an instruction or SOP and forwarded as an enclosure to the formal response letter to NAVENVIRHLTHCEN.

ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

- 3) Action: Commands shall post placards in the loading dock/supply receiving areas, mailrooms, pharmacies, and any other areas deemed appropriate by the Command, providing specific instructions on:
 - (a) how to recognize a package containing RAM;
 - (b) what action(s) to take; and
- (c) who to contact in the event that a RAM package or a courier delivering a package labeled as RAM is discovered unattended.

Commands shall state in their response letters to NAVENVIRHLTHCEN the status in completing this action, including a description and wording of the placard.

- 4) Action: Commands shall review and evaluate their training programs required by 10 CFR 19.12 to ensure that the complexity of the instructions is commensurate with the potential radiological health protection problems present in the work place. Ensure that the training includes, but is not limited to, OOD/CDO duty staff, supply/loading dock personnel, emergency responders (i.e., firefighters, etc.), security personnel, housekeeping staff, mailroom and pharmacy personnel, and any other personnel that require training as deemed appropriate by the Command. These training requirements are outlined in detail in the appendices of references (b) and (c) pertaining to radiation safety training, specifically the training of ancillary staff. Commands shall state in their response letters to NAVENVIRHLTHCEN:
- (a) the specific actions performed in reviewing and evaluating their training programs and the results;
- (b) the number of personnel (by worker type) who received training directed by this Bulletin; and
- (c) the number of personnel who still require the training directed by this Bulletin.
- 5) Action: Commands shall provide generalized training required by 10 CFR 19.12, initially within 60 days of reporting aboard, and annually thereafter, to all staff members at the Command regarding the identification of radioactive materials, and what to do and who to notify if radioactive materials are discovered unattended or are being incorrectly delivered to the facility. For example, training can be incorporated into Command

ADDITIONAL MEASURES FOR THE RECEIPT, STORAGE AND SECURITY OF RADIOACTIVE MATERIALS

Indoctrination, or be distributed to all-hands training via e-mail or by Plan of the Day (POD). In addition, training can be either in person or online. There should also be a system in place to document that individual staff members meet the above requirements.

Commands shall state in their response letter to NAVENVIRHLTHCEN the specific actions performed in evaluating the security of RAM in their possession and the status of actions in the paragraphs above.

Approved by:

L. L. Fragoso

CAPTAIN, MSC, USN Executive Secretary

Naval Radiation Safety Committee

Office of Chief of Naval Operations (N455)