

September 1, 2011

Mr. Charles H. Rose, Executive Director
American Association for Nuclear
Cardiology, Inc.
5660 Airport Boulevard, Suite 101
Boulder, CO 80301

Dear Mr. Rose:

This letter is in response to your correspondence dated July 22, 2011, addressed to Robert J. Lewis, Director, Division of Materials Safety and State Agreements, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission (NRC). In your letter you asked whether there were any licensing requirements that required a licensee to return old sources for recycling and also asked if there were specific requirements regarding receipt and shipping related to the sources.

In your letter, as an example, you mentioned Cobalt-57 sealed sources, which are used by your members for QA/QC on gamma cameras. These types of calibration, transmission and reference sources are authorized for medical uses pursuant to 10 CFR Part 35.65. Also, 10 CFR Part 30 authorizes receipt and transfer of material covered in 10 CFR Part 35. As a result, it is unnecessary to explicitly authorize these activities in a license. However, NRC and Department of Transportation (DOT) regulations contain requirements related to the return of used sources such as those you have cited.

The NRC and DOT regulatory requirements that are applicable are listed below.

1. 10 Part 19.12 "Instruction for Workers," requires the licensees that all individuals who in the course of employment are likely to receive in a year an occupational dose in excess of 100 mrem (1mSv), shall be kept informed of the storage, transfer, or use of radiation and /or radioactive materials. Also, this section requires that the extent of the instructions must be commensurate with potential radiological health protection problems present in the work place.
2. 10 CFR Part 30.32(h)(x) requires applications for specific licenses to include details of training to be provided and brief description of the frequency, performance objectives and plans for the training that the licensee will provide workers on how to respond to an emergency including any special instructions and orientation tours the licensee would offer to fire, police, medical other emergency personnel. The training shall familiarize personnel with site-specific emergency.
3. 10 CFR Part 35.24(3)(b) requires that a licensee's management appoint a Radiation Safety Officer, who agrees, in writing, to be responsible for implementing the radiation protection program. The licensee, through the Radiation Safety Officer, shall ensure

that radiation safety activities are being performed in accordance with licensee-approved procedures and regulatory requirements.

Also, the training shall thoroughly prepare site personnel for their responsibilities in the event of accident scenarios postulated as most probable for the specific site, including the use of team training for such scenarios.

4. 10 CFR Part 71.14(b)(1), states that licensees of the Commission are exempt from NRC's general license requirements with respect to the transportation of low-level materials, e.g., packages containing no more than a Type A quantity (as specified in Table A-1). Notwithstanding this exemption, licensees who deliver licensed material to a carrier for transport are required to comply with the applicable regulations of the U.S. DOT [per 10 CFR 71.5(a), which essentially incorporates DOT HAZMAT transportation regulations by reference]. DOT regulations require HAZMAT training (as applicable), including general awareness/familiarization and function-specific training [see 49 CFR Subpart H, 172.704(a)(1) and (2)]. NRC licensee compliance with DOT regulations is subject to both NRC and DOT inspection and enforcement.
5. 10 CFR Part 20.1906, requires that each licensee who expects to receive a package containing quantities of radioactive material in excess of a Type A quantity, as defined in § 71.4 and appendix A to 10 CFR Part 71, shall make arrangements to receive and notification of the arrival of the package, monitor external surfaces of the packages as appropriate for damage and degradations. The licensees are required to perform the monitoring as soon as practical after receipt of the package, but not later than 3 hours after the package is received at the licensee's facility if it is received during the licensee's normal working hours, or not later than 3 hours from the beginning of the next working day if it is received after working hours. This section also includes development of procedures for handling of packages and reporting requirement for lack of timely receipt and reporting contaminated packages to the NRC.
6. 10 CFR Part 20 "Subpart K-Wastes Disposal," provides general requirements and acceptable disposal methods for disposal of licensed material by the licensees. Additionally, 10 CFR Part 20.2006, stipulates in detail the requirements for transfer for disposal of licensed materials and record keeping requirements for the recipients of licensed materials. While there is no explicit requirement for licensees to return or recycle used sources, a licensee must maintain possession of the material under their license, transfer to another person licensed to possess the material, or dispose of the material in accordance with NRC requirements.
7. Our response above is focused on addressing the types of sealed sources that you listed in your letter, i.e., transmission, reference sealed sources. However, please note that NRC regulations impose additional oversight, controls, reporting and record keeping requirements for the use, storage, transfer and transportation of other types of sealed sources containing radioactivity in quantities equal to or greater than IAEA Category 1 or 2 for radionuclides that are listed in Appendix "E" of 10 CFR Part 20.

C. Rose

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If you have any additional questions regarding the information provided here, you may contact Mr. Michael Fuller of my staff at (301) 415-0520, or michael.fuller@nrc.gov.

Sincerely,

/RA/

James Luehman, Acting Director
Division of Materials Safety
and State Agreements
Office of Federal and State Materials
and Environmental Management Programs

C. Rose

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Sincerely,

James Luehman, Acting Director
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