

# **Radioactive Material License Guide**

# Positron Emission Tomography (PET)

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### LICENSING GUIDE FOR MOBILE FACILITIES REQUESTING RADIOACTIVE MATERIAL LICENSE FOR THE PURPOSES OF PERFORMING POSITRON EMISSION TOMOGRAPHY (PET)

The specific items identified below should be addressed in addition to the more general items identified in the "Instructions and Licensing Guide – Medical Use", which applies to all medical use licensees and applicants.

### **PURPOSE:**

The purpose of this guide is to provide assistance to applicants and licensees in preparing applications for new licenses, license amendments and license renewals that authorize the possession of radioactive material for the purposes of performing positron emission tomography (PET) This type of license is provided for in Environmental Regulatory Code Part XV. Radiation Protection, Sections 325, 326, and Chapter 7. This guide is to provide you with information that will enable you to understand specific regulatory requirements and licensing policies as they apply to mobile nuclear facilities.

#### **REQUIREMENTS:**

- 1. A complete application in accordance with the enclosed "Instructions and Licensing Guide Medical Use" must be submitted.
- 2. The application must also include the training and experience for each physician requested as an authorized user by the mobile nuclear medicine applicant. The training and experience of each proposed nuclear medicine technologist should be submitted as part of the application for review.
- 3. A statement from each hospital administrator granting approval of the use of radioactive material at his facility by the mobile nuclear medicine applicant must be provided with the application.
- 4. The application must provide verification that all diagnostic instrumentation transported to the facility shall be checked for calibration at each location prior to conducting procedures.
- 5. Submit the names and addresses of the medical institutions at which the van is to be parked. Submit a map to include the mobile van in relation to the building (medical institution/clinic/office), key the entrance to the building, parking lot, street, adjacent areas, etc, in addition to the mobile pet coach's Vin Number.
- 6. Indicate the security of radioactive material on the van if it is left unattended.
- 7. A description of the procedures for ensuring that radioactive materials transported in a vehicle will be secured at all times.
- 8. Records for the mobile nuclear medicine license must be maintained at an office in Louisiana so that adequate inspections may be performed. This may be onsite in the van. The Department will put a condition on the license that you must notify the Department at least five (5) days prior to vacating any address of use listed on the license. If you plan on spending only one day or more at each facility, you must provide to the Department a schedule of dates and sites that the van will be located.
- 9. If you plan to administer radiopharmaceuticals on the van, describe in detail how you will receive, transport and dispose of radiopharmaceuticals that are administered on the van.
- 10. Training:

Personnel should be instructed in the topics above as follows:

- a. Before assuming duties with, or in the vicinity of, radioactive materials;
- b. During annual refresher training;
- c. Whenever there is a significant change in duties, regulations, the terms of the license, equipment, procedures, or protocol.

Licensees should tailor their training programs according to their specific needs.

- a. Instruction in procedures for reacting to medical emergencies or patient death, including notification of appropriate medical personnel and the RSO (the intent of these procedures should in no way interfere with or be in lieu of appropriate patient care);
- b. Occupational dose limits;
- c. Dose to the embryo/fetus limits including instruction about declaration of pregnancy;
- d. Dose to individual members of the public;
- e. Workers right to be informed of occupational radiation exposure;
- f. Each individuals obligation to report unsafe conditions to the RSO;
- g. Applicable regulations, license conditions, information notices, bulletins, etc.;
- h. Location where copies of the applicable regulations and the radioactive material license are posted or made available for examination;
- i. Proper record keeping;
- j. Previous incidents, events and/or accidents; and
- k. Questions and answers.

## TRAINING FOR THE MEDICAL PHYSICS STAFF

In addition to the topics identified above for nursing staff and individuals involved in the treatment of patients, individuals should be instructed in the following, commensurate with their duties:

- 1. Appropriate surveys to be conducted, and when;
- 2. Leak testing;
- 3. Emergency procedures ;
- 4. Operating instructions to include daily preventative maintenance procedures as well as patients treatment;

TRAINING FOR ANCILLARY PERSONNEL (housekeeping, dietary services, security, etc.)

Individuals should be instructed in the following topics (licensees may choose to prohibit ancillary personnel from entering restricted areas, and train accordingly).

- 1. Posting/labeling;
- 2. Precautions

#### **RECORDS**:

Records of worker training should include date and duration of training; topics covered, names of individuals(s) providing training and attendees, and should be maintained for 3 years.

- 11. Submit your procedure if the line sources in the camera fail to return to their lead shielded position after performing a transmission scan or after a calibration measurement with a phantom.
- 12. ITEM 9.a HEALTH PHYSICS PROGRAM In addition to referring to the "Instructions and Licensing Guide Medical Use", please note that the licensee is responsible for the conduct of its PET program and for all actions of its employees. Accordingly, you must provide information about your radiation safety program. Please note that the Department can incorporate in licenses such additional requirements and conditions that it deems appropriate or necessary to protect health or to minimize danger to life or property.