



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

May 29, 2007

Docket No. 030-37465  
Control No. 140471

License No. 06-31245-01

Anne Masloski, DVM  
Medical Director  
Connecticut Veterinary Center  
470 Oakwood Avenue  
West Hartford, CT 06110

SUBJECT: CONNECTICUT VETERINARY CENTER, REQUEST FOR ADDITIONAL  
INFORMATION CONCERNING APPLICATION FOR NEW LICENSE,  
CONTROL NO. 140471

Dear Dr. Masloski:

This is in reference to your application dated April 30, 2007 applying for a Nuclear Regulatory Commission license. In order to continue our review, we need the following additional information:

1. In accordance with Item 8.5 of NUREG-1556, Volume 7, "Consolidated Guidance About Materials Licensees, Program-Specific Guidance About Academic, Research and Development, and Other Licensed of Limited Scope" (NUREG-1556, Vol. 7), provide limits for the amount of licensed materials to be possessed, commensurate with the scope of your program. When setting the limits for the licensed materials, please consider the maximum activity you will have on site at any one time, including licensed materials in waste.
2. In accordance with Item 8.5 of NUREG-1556, Vol. 7, for the Cs-137 sealed source you requested, please list all manufacturer(s) and model number(s) that you may use. We will list this information on the license.
3. In accordance with Item 8.5 and Appendix H of NUREG-1556, Vol. 7, for the use of licensed materials in animals, please submit:
  - a. a description and diagram of the animal housing facilities and other facilities and equipment where licensed materials will be used, addressing the items in Item 8.9 that were not included in your previous submission;
  - b. a description of the training that will be provided to individuals caring for containing licensed materials;
  - c. a copy of the instructions provided to animal caretakers for handling of animals, animal waste carcasses, and cleaning and decontamination of animal cages;

- d. your release criteria for the cats treated with radioiodine. NRC has approved different release criteria for different groups of cats based on behavioral groupings and confidence in owner compliance with instructions. Each release must be accompanied with written instructions addressing, at a minimum, (1) waste handling, (2) contamination, and (3) appropriate human interaction/isolation instructions.

You must assure that the dose to individual members of the public dose not exceed 100 millirem, which is the annual public dose limit in 10 CFR 20.1301. While you may establish other release criteria, the following are examples of the appropriate degree of cat/human interaction/isolation for the three most frequently proposed release criteria:

- |     |                      |   |
|-----|----------------------|---|
| (1) | 0.25 mR/hr at 1 foot | restricted very close contact: isolation usually not required   |
| (2) | 0.5 mR/hr at 1 foot  | limited human interaction; isolation for 1-2 days; later restricted very close contact  |
| (3) | 0.5 mR/hr at 1 meter | licensee (vet) pre-administration acceptance screening; subsequent post-administration licensee evaluations; isolation; very limited human interaction for several weeks; |
- e. and, regardless of the release criteria used, please confirm that cats are held for minimum of 96 hours prior to their release.

Appendix H of NUREG-1556, Volume 7 addresses considerations for laboratory animal uses and may be helpful to you in developing a response. The NUREG-1556 Volumes are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Electronic Reading Room; Document Collections; NUREG-series pub**; then **Publications prepared by NRC staff (NUREG-nnnn)**; then **NUREG -1556**.

4. In accordance with Item 8.7 of NUREG-1556, Vol. 7, provide information that demonstrates that Anne Masloski, DVM and Francois Crevier, DVM, are qualified by training and experience to use licensed materials.
- a. Please describe the individuals' on-the-job or formal training, including the location and duration of the training. Training length (usually 40 hours) should cover (a) radiation protection principles, (b) characteristics of ionizing radiation (c) units of radiation dose and quantities, (d) radiation detection instrumentation, (e) biological hazards of exposure to radiation (appropriate to the types and forms of byproduct material to be used, and (f) hands-on use of radioactive material. The description of the use of licensed materials should include the specific isotopes handled, the maximum quantities of materials handled, where the experience was gained, the duration of experience, and the type of use.

- b. Describe additional training and experience that the proposed RSO has in performing the duties of a Radiation Safety Officer, as described in Item 8.7.1 and Appendix I of NUREG-1556, Vol. 7.
5. In accordance with Item 8.8 of NUREG-1556, Vol. 7, describe how you will assess the effectiveness of training, the method and frequency of training for the various groups of workers (such as veterinarians, technicians, housekeeping, etc.).
6. In accordance with Item 8.10.2 of NUREG-1556, Vol. 7, describe the instrumentation that you will have to perform required surveys and monitoring, and describe how your instrumentation will be calibrated.
7. In accordance with Item 8.10.3 of NUREG-1556, Vol. 7, confirm that you will develop procedures for ensuring material accountability. Also, confirm that you will perform a that physical inventory of all sealed sources and devices, conducted at intervals not to exceed 6 months, for all sealed sources received and possessed under the license.
8. In accordance with Item 8.10.4 of NUREG-1556, Vol. 7, confirm that you have either performed a prospective evaluation to determine that personnel monitoring is not required, as described in that section; or confirm that you will monitor individuals in accordance with the criteria in that section.
9. Section 8.10.6 of NUREG-1556, Vol. 7 addresses considerations for safe use of radionuclide and emergency procedures. Please confirm that you will develop, implement and maintain written procedures for safe response to spills of licensed material. You may refer to Appendix P of NUREG-1556, Vol. 7 for guidance, and your procedures may refer to this appendix.
10. In accordance with Item 8.10.7 of NUREG-1556, Vol. 7, describe the surveys and monitoring that will be required for your radiation protection program. Be sure that you address the types of surveys and monitoring, the frequency at which they will be performed, and the radiation and/or contamination levels that will require additional actions to be taken. Because of the possibility of personnel intake of iodine, these procedures should include bioassay monitoring in the event of a release of the I-131 due to spill, breakage of vial, accidental syringe injection to staff member or any other incident that may occur during the handling process that might result in uptake of radioiodine. You may refer to Appendix Q of NUREG-1556, Vol. 7 for guidance, and your procedures may refer to this appendix.

Current NRC regulations and guidance are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material**; then **Regulations, Guidance, and Communications**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-888-293-6498. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

A. Masloski  
Connecticut Veterinary Center

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We will continue our review upon receipt of this information. Please reply to my attention at the Region I Office and refer to Mail Control No. 140471. If you have any technical questions regarding this deficiency letter, please call Lizette Roldán at (610) 337-5237.

If we do not receive a reply from you within 30 calendar days from the date of this letter, we will assume that you do not wish to pursue your application.

Sincerely,

***Original signed by Michelle Beardsley***

Betsy Ullrich  
Senior Health Physicist  
Commercial and R&D Branch  
Division of Nuclear Materials Safety

cc:  
Francois Crevier, DVM Radiation Safety Officer

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**SUNSI Review Complete: LRoldán**

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