



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

May 3, 2007

Docket No. 03035758  
Control No. 140423

License No. 31-30650-01

Barry A. Lissman, D.V.M.  
Vice-President  
Thyro-Cat, LLP  
227 Union Avenue  
Holbrook, NY 11741

SUBJECT: THYRO-CAT, LLP, REQUEST FOR ADDITIONAL INFORMATION  
CONCERNING APPLICATION FOR AMENDMENT TO LICENSE, CONTROL  
NO. 140423

Dear Dr. Lissman:

This is in reference to your letter dated April 19, 2007 requesting to amend Nuclear Regulatory Commission License No. 31-30650-01. In order to continue our review, we need the following additional information:

1. Current NRC guidance recommends holding cats treated with iodine-131 (I-131) for a minimum of 96 hours in order to ensure that no individual member of the public receives more than 2 millirem in any one hour AND 100 millirem total radiation exposure. This is based on theoretical calculations performed by the NRC and veterinary studies provided to the NRC. Shorter holding times may be approved on a case-by-case basis. You are currently authorized to hold cats for 3 days and release them only if radiation levels are less than 0.5 millirem per hour (mrem/h) at 1 meter from the cat's throat, with instructions to the owner to limit close contact to the cat to 10 minutes per day for a specified period of time. Your letter requests to remove the restriction to hold the cat for 3 days, based on your experience treating and surveying hundreds of cats.
  - a. Provide survey data that demonstrates the time period normally required for cats treated in your practice to reach the 0.5 mrem/h at 1 meter (this is approximately 4.5 mrem/h at 1 foot).
  - b. Provide any additional information, such as actual dosages administered to cats in your practice, that may explain why cats in your practice have lower dose rates over time than at other veterinary facilities providing similar treatments. Please note that, to date, veterinary studies provided to the NRC have shown little correlation between administered dosages and radiation levels measured after a given period of time, and wide variability in radiation levels measured among cats given the same initial dosage of I-131 and measured at given time intervals.
  - c. State the minimum time that cats will be held. Confirm that cats will NOT be released until radiation surveys demonstrate that radiation levels are less than

0.5 mrem/h at 1 meter from the cat's throat, and that such surveys will be documented.

2. Provide a copy of the instructions to owners who use flushable litter. Because I-131 contamination is a concern, instruction to the owners should include direction on cleaning and/or rinsing the toilet after disposal of contaminated flushable litter.

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).

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. 140423. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5040.

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 Elizabeth Ullrich***

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

cc:  
Gerald W. Bennett, Ph.D., Radiation Safety Officer

DOCUMENT NAME: C:\FileNet\ML071230343.wpd

**SUNSI Review Complete: EUllrich**

After declaring this document "An Official Agency Record" it will be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	<input checked="" type="checkbox"/> N	DNMS/RI	<input type="checkbox"/>	DNMS/RI	<input type="checkbox"/>		
NAME	EUllrich/EU							
DATE	5/3/2007							

OFFICIAL RECORD COPY