



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

JAN 25 2010

Michael Muhlbauer, D.V.M.
Associated Veterinary Specialists
12462G Natural Bridge Road
Bridgeton, MO 63044

Dear Dr. Muhlbauer:

This refers to your letter dated September 17, 2009, requesting an amendment to your NRC Byproduct Materials License No. 24-26584-01, to be issued concurrently with an amendment to NRC Byproduct Materials License No. 48-32697-01.

At this time I was unable to approve your request to authorize the use of fluorine-18 as fluorodeoxyglucose (F-18) as an imaging agent in canines and Michael C. Muhlbauer, D.V.M. as an authorized user (AU) to your license because your letter dated September 17, 2009 was insufficient to complete our review.

If you wish to pursue this request, please provide the information requested below, addressed to my attention and include the control no. 318512 to facilitate proper handling. We will then continue our review.

Please review the attached excerpt from NUREG 1556, Vol. 7, Appendix H, "Considerations for Laboratory Animal and Veterinary Medicine Uses." As your proposed use of the F-18 appears to involve elements of both laboratory animal and veterinary medicine uses, please address all of the information requested in this document.

In particular, please explain in explicit detail how you will restrict and secure the outdoors area at the veterinary clinic where the injected canines are brought to void between injection and imaging. Will this area be posted in accordance with 10 CFR Part 20? Will this area require surveillance?

Please provide a worst case scenario radiation/contamination level calculation for the F-18, assuming a maximum activity administered to the canine. Please show all of your work, i.e., equations, decay, assumptions, constants, parameters, any shielding and/or distance and/or occupancy factors employed.

If you have further questions concerning these matters please contact me at (630) 829-9841 or (800) 522-3025, ext. 9841.

As we are unable to issue an amendment at this time, we are voiding your current request. "Void" means that we have taken your application out of our active database. This action is without prejudice to future resubmission of a license request.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's

M. Muhlbauer

document system (ADAMS). The NRC's document system is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

A handwritten signature in cursive script that reads "Colleen Carol Casey".

Colleen Carol Casey
Materials Licensing Branch

License No. 24-26584-01
Docket No. 030-33561

Enclosure:

Appendix H to NUREG 1556,
Vol. 7