NWR
NorthwestRadiology
TRUSTED IMAGING SINCE 1967

June 8, 2020

Laura Cender
U. S. Nuclear Regulatory Commission
Materials Licensing Section
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

Control Number: 617682

Ms. Cender:

Please accept this as a response to your request for additional information concerning the renewal application for Northwest Radiology Network, Byproduct Materials License Number 13-32258-01. Responses follow the order of questions documented in the email from yourself to Mr. Patrick Byrne on June 8, 2020.

1. The area/rooms where F-18 will be used for calibration are currently approved on the license. Primarily, F-18 will be used to calibrate the dose calibrator located in the Hot Lab. Additionally, F-18 may be used for quality control testing of the PET/CT scanner, located in the PET/CT room.
2. The equipment calibrated with the F-18 will a dose calibrator. Additionally, F-18 may be utilized for PET/CT scanner quality control testing.
3. The calibration frequency of the dose calibrators is quarterly. The specific process for calibration of the dose calibrators includes performing a linearity test across a range that includes all clinically used dosages. 15 mCi of F-18 is a standard dosage for oncology PET imaging but 10 CFR 35.65(a)(3) only allows 15 mCi of non-Tc-99m isotopes with half-lives less than 120 days for calibration purposes. This limitation makes it difficult to receive a calibration dose that would allow the linearity test to cover the clinical range. The linearity test itself involves taking a series of measurements of the source as it either decays away or is attenuated by a series of leaded tubes of varying thicknesses.

Sincerely,

Lori Bricker

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Director of Operations
Northwest Radiology Network