NRC FORM 591M PART 1
(10-2003) 10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
St. Louis PET Centers, LLC 12637 Olive Blvd. St. Louis, MO 63141 **REPORT NUMBER(S)** 2009-01	**Region III** **U.S. Nuclear Regulatory Commission** **2443 Warrenville Road, Suite 210** **Lisle, Illinois 60532-4351**

3. DOCKET NUMBER(S)	4. LICENSEE NUMBER(S)	5. DATE(S) OF INSPECTION
030-36010	24-32395-01	April 23, 2009

LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

[X] 1. Based on the inspection findings, no violations were identified.

[ ] 2. Previous violation(s) closed.

[ ] 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied.

_____ Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):

[ ] 4. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)

Licensee's Statement of Corrective Actions for Item 4, above.

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE'S REPRESENTATIVE	Michael Beat, M.D.		
NRC INSPECTOR	Kevin G. Null	Kevin G. Null	April 23, 2009

NRC FORM 591M PART 3
(10-2003) 10 CFR 2.201

Docket File Information

U.S. NUCLEAR REGULATORY COMMISSION

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6. INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87130	1, 2, 4, 5, 6, and 7

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02200	3	Michael Beat, M.D.	(314) 628-1300

[X] Main Office Inspection — Next Inspection Date: April 2012

[ ] Field Office

[ ] Temporary Job Site Inspection

PROGRAM SCOPE

The licensee operates a nuclear medicine clinic located in St. Louis with one full-time nuclear medicine technologist, who is also trained in PET and MRI imaging. The licensee is authorized for 35.100, 200 and 300 material. The clinic performs an average of about 2 – 3 diagnostic PET CT studies per day, and 2 – 3 technetium-99m studies (mostly bone and cardiac) per month. Periodically they also perform iodine-131 whole body scans using a 5 millicurie dose. Radiopharmaceuticals are received as unit doses from Cardinal Health. The licensee performed a Bexxar study to treat non-Hodgkin's lymphoma using a dose in the range of 50 – 80 millicuries of iodine-131 labeled with monoclonal antibodies. Written directives are issued for whole body scans and Bexxar studies. Instructions are provided to patients before they are released.

The licensee utilizes an AtomLab 100 dose calibrator and a Ludlum 14-C survey meter coupled to a 44-9 pancake probe, and 1 nuclear medicine imaging camera and 1 PET CT camera. The meter is calibrated annually by Radiation Protection Services, and the dose calibrator has been calibrated in accordance with the requirements in 10 CFR Part 35. Annual accuracy of the dose calibrator is performed by an outside consultant. Whole body dose for the nuclear medicine technologist for the first month of 2009 was 46 mrem and the extremity dose was 100 mrem. For the end of CY 2008, the dose to the nuclear medicine technologist was 187 mrem whole body, and 540 mrem extremity.

Performance Observations

The inspector interviewed the Nuclear Medicine Technologist and RSO/Physician Authorized User, and observed the technologist administer a diagnostic dose of F-18. The technologist used a syringe shield to limit extremity exposure, and was wearing gloves, lab coat, and whole body and extremity dosimetry. The technologist also demonstrated how area and package surveys, and smears for contamination are conducted and analyzed. Additional interviews of the technologist and RSO/Physician Authorized User indicated that both individuals had an adequate level of knowledge in radiation safety, and understood their responsibilities with regard to radiation protection and the security of licensed material.

The inspector performed independent surveys in the nuclear medicine department. Radiation levels in the hot lab ranged from 0.4 mR/hr – 1.0 mR/hr. Radiation levels in an unrestricted area outside the hot lab and quiet room after the technologist injected a patient with F-18 ranged from 0.05 mR/hr – 0.09 mR/hr.

No violations were identified.

KGI