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

January 7, 2010

Mr. Jack Coffey
Senior Vice President
Quality and Regulatory
Nuclear Pharmacy Services
Cardinal Health
7000 Cardinal Place
Dublin, OH 43017

SUBJECT: NRC INSPECTION REPORT 030-36973/09-12 (FORM 591M Part 1)
CARDINAL HEALTH – SPRINGFIELD, MISSOURI FACILITY

Dear Mr. Coffey:

On December 30, 2009, the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at your Springfield, Missouri facility. The inspection results were discussed with Willie Regits of your staff during a final telephonic exit briefing conducted on January 5, 2010.

This inspection was an examination of activities conducted under your license as they relate to radiation safety and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, independent measurements, and observation of activities in progress. Within the scope of this inspection no violations of NRC requirements were identified; therefore, no response to this letter or the enclosed NRC Form 591M is required.

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 NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

Should you have any questions concerning this inspection or enclosed report, please contact Kenneth Lambert of my staff at (630) 829-9633.

Sincerely,

Tamara Bloomer

Tamara E. Bloomer, Chief
Materials Inspection Branch

Docket No.: 030-36973
License No.: 34-29200-01MD

Enclosure:
Inspection Report 030-36973/09-12

cc w/encl: State of Missouri

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
Cardinal Health **Nuclear Pharmacy Services** **7000 Cardinal Place** **Dublin, Ohio 430171** REPORT NUMBER(S)	**U.S. Nuclear Regulatory Commission** **Region III** **2443 Warrenville Road** **Suite 210** **Lisle, Illinois 60532-4351**

3. DOCKET NUMBER(S)	4. LICENSEE NUMBER(S)	5. DATE(S) OF INSPECTION
030-36973	**34-29200-01MD**	**December 30, 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				
NRC INSPECTOR		**Robert P. Hays**		**1/05/2010**

NRC FORM 591M PART 1 (10-2003)

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

Docket File Information

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE	2. NRC/REGIONAL OFFICE
Cardinal Health REPORT NUMBER(S) **2009-12**	**Region III** **2443 Warrenville Road, Suite 210** **Lisle, IL 60532**

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
03036973	**34-29200-01MD**	**December 30, 2009**

6. INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87125 (09/28/05)	**03.01-03.07**

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02500	**2**	**Lindsay Eggerman, Pharmacy RSO**	**417/831-5190**

☐ Main Office Inspection — Next Inspection Date: **December 2011**

☒ Field Office **3040 Elm Street, Springfield, Missouri**

☐ Temporary Job Site Inspection

PROGRAM SCOPE

This nuclear pharmacy staff included 3 pharmacists, 1 pharmacy technician, and 12 drivers. Currently the licensee has approximately 25+ customers located in Missouri and Arkansas. The licensee prepares and distributes an average of 180 unit doses/day. The licensee receives two Mo-99/Tc 99m generators each week. In addition to unit doses, the pharmacy distributes Xenon-133 gas vials, occasionally therapeutic beta emitters, compounded I-131 capsules as ordered, and FDG.

Volatile isotopes are stored in a hood with a set air flow. The air system within the nuclear pharmacy is not recirculated. The I-131 glove box has a dedicated exhaust system with charcoal filters and is monitoried weekly with release concentrations below constraint levels. The licensee's corporate office conducts periodic audits of the pharmacy with follow up of previous items identified needing corrective actions.

Performance Observations

Interviews with licensee personnel indicated adequate knowledge of radiation safety concepts and procedures. Inspector observed procedures in progress and the licensee's staff demonstrated/discussed: (1) unit dose prep procedures; (2) iodine compounding procedures; (3) package receiving and breakdown procedures; (4) area/contamination surveys; (5) safe use and isotope handling (6) DOT packaging and transportation procedures; (7) unit dose management system;(8) FDG handling and QC procedures; (9) wipe test counting and efficiency procedures; (10) survey instruments and calibrations; (11) postings and labeling; (12) staff training; (13) program audits; (14) weekly and monthly dose and dosimetry records; (15) bioassays; (16) waste handling; (17) facility security; and (18) emergency procedures and any events.

The inspector performed independent and confirmatory radiation measurements which indicated results consistent with licensee survey records and postings.