



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

March 21, 2006

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

**SUBJECT: NRC INSPECTION REPORTS 030-36973/06-007 and 030-36973/06-014
(FORM 591M Part 1)**

Dear Mr. Coffey:

This letter refers to the routine inspections conducted on February 23, 2006, at your Pittsburgh, Pennsylvania facility and on March 10, 2006, at your Joplin, Missouri facility. The inspection results were discussed with Willie Regits of your staff during a final telephonic exit briefing conducted on March 16, 2006.

These inspections were 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 these inspections no violations of NRC requirements were identified; therefore, no response to this letter or the enclosed NRC Form 591Ms is required.

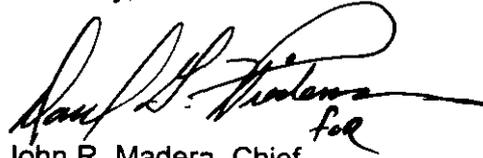
In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

J. Coffey

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Should you have any questions concerning these inspections or enclosed reports, please contact Ken Lambert of my staff at (630) 829-9633.

Sincerely,

A handwritten signature in black ink, appearing to read "John R. Madera", with a stylized flourish extending to the right. Below the signature, the word "for" is written in a smaller, cursive script.

John R. Madera, Chief
Materials Inspection Branch

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

Enclosures:

1. Inspection Report 030-36973/2006-007
2. Inspection Report 030-36973/2006-014

cc w/encl 1: State of Pennsylvania
cc w/encl 2: State of Missouri

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Cardinal Health Nuclear Pharmacy Services 7000 Cardinal Place Dublin, OH 43017		2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Region I, 475 Allendale Road King of Prussia, Pennsylvania 19406-1415	
3. DOCKET NUMBER(S) 030-36973		4. LICENSE NUMBER(S) 34-29200-01MD	5. DATE(S) OF INSPECTION 02/23/2006

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:

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.

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	Dennis Lawyer		02/23/2006

Docket File Information

**SAFETY INSPECTION REPORT
AND COMPLIANCE INSPECTION**



1. LICENSEE Cardinal Health Nuclear Pharmacy Services 7000 Cardinal Place Dublin, OH 43017 REPORT NOS 030-36973/2006-007	2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Region I, 475 Allendale Road King of Prussia, Pennsylvania 19406-1415
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3. DOCKET NUMBER(S) 030-36973	4. LICENSE NUMBER(S) 34-29200-01MD	5. DATE(S) OF INSPECTION 02/23/2006
6. INSPECTION PROCEDURES USED 87127	7. INSPECTION FOCUS AREAS 02.01-02.07	8. INSPECTOR Dennis Lawyer

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 2500	2. PRIORITY 2	3. LICENSEE CONTACT Angela Dolfi	4. TELEPHONE NUMBER 412-227-0911
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Main Office Inspection Next Inspection Date: February 2008

Field Office Pittsburgh, Pennsylvania

Temporary Job Site _____

PROGRAM SCOPE

The licensee is a radiopharmacy which runs two 8-hour shifts per day, starting at 11:30 P.M. The transporting of the first run starts at 3 A.M. and the second run starts at 8 A.M. A total of 600-800 doses per day are distributed. The service range is a circle of approximately 100 miles radius. The doses include all commonly used radiopharmaceuticals, including iodine 131 in both the capsule and liquid forms (total of about 50 per month) and samarium 153 (2-3 per month). Xenon 133 is distributed on Fridays at a rate of 10 vials per week. Iodine compounding is worked during the day. Generators are distributed about 8 per week. Eight generators are received each week for making up doses. They range from 12 to 18 curies each. PET and iodine 123 materials are also distributed.

There is a separate ventilation for iodine compounding. A weekly air sample is taken in the room and a weekly air sample is taken on the effluent downstream of charcoal filters.

There are 32 employees between the two shifts. They include a facility manager, four pharmacists, two shift supervisors, four technicians, and twenty one drivers who also do other miscellaneous jobs such as wrapping, loading unit doses into ammo boxes, and loading the trucks. Ranger pickups with individual box holders are used to transport doses.

Landauer is the vendor used for dosimetry and the RSO monitors doses. No regulatory limits have been approached or exceeded. A corporate HP group conducts audits three times per year, and the RSO conducts internal audits monthly. Maximum extremity doses for the 2004 and 2005 periods was 26 Rem in a year.

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Cardinal Health Nuclear Pharmacy Services Dublin, OH 43017 Joplin, MO pharmacy		2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532-4351	
REPORT NUMBER(S) 2006-014			
3. DOCKET NUMBER(S) 030-36973	4. LICENSEE NUMBER(S) 34-29200-01MD	5. DATE(S) OF INSPECTION Mar. 10, 2006	

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

- 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	Deborah A. Piskura		03/16/2006

