

## SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

## 1. LICENSEE/LOCATION INSPECTED:

Cardinal Health Nuclear Pharmacy Services, Dublin Ohio  
Location Inspected: 3040 East Elm Street  
Springfield, MO 65802

REPORT NUMBER(S) 2016004

## 2. NRC/REGIONAL OFFICE

Region III  
U. S. Nuclear Regulatory Commission  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

## 3. DOCKET NUMBER(S)

030-36973

## 4. LICENSE NUMBER(S)

34-29200-01MD

## 5. DATE(S) OF INSPECTION

May 19, 2016

## 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:

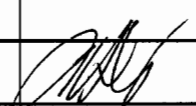

- ☒ 1. Based on the inspection findings, no violations were identified.
- ☐ 2. Previous violation(s) closed.
- ☐ 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.

Non-cited violation(s) were discussed involving the following requirement(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 in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.  
(Violations and Corrective Actions)

## Statement of Corrective Actions

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	Luis Nieves Folch		6/1/2016
BRANCH CHIEF	Aaron T. McCraw		6/3/16

(07-2012)  
10 CFR 2.201**Docket File Information****SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

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## 6. INSPECTION PROCEDURES USED

87127

## 7. INSPECTION FOCUS AREAS

03.01-03.07

**SUPPLEMENTAL INSPECTION INFORMATION**

## 1. PROGRAM CODE(S)

02500

## 2. PRIORITY

2

## 3. LICENSEE CONTACT

Dane Dishman, NPT, AU, Site RSO

## 4. TELEPHONE NUMBER

(417) 831-5190

☐ Main Office Inspection

Next Inspection Date: TBD

☒ Field Office Inspection 3040 East Elm Street, Springfield, MO 65802☐ Temporary Job Site Inspection**PROGRAM SCOPE**

This was an unannounced, routine inspection of a radiopharmacy operating under Cardinal Health's multi-site license. This site, located in Springfield, Missouri, routinely served 15-20 clients in a two-hour range. The pharmacy operated Monday through Friday, with limited hours on weekends. The pharmacy distributed around 80 doses each weekday, primarily in one of two runs. The first run began around 1:30 am, with deliveries out around 3:00 am. The second run began around 8:00 am, with deliveries out around 9:00 am. In addition to compounding doses of technetium-99m and other common isotopes, the pharmacy also compounded a handful of iodine-131 capsules each week. The licensee had three authorized nuclear pharmacists, one pharmacy technician and nine drivers on staff at the time of the inspection.

Performance Observations: The inspector toured the facility to evaluate the licensee's measures for materials security, hazard communication and exposure control. The inspector conducted independent surveys of restricted and unrestricted areas, and found no residual contamination or exposures to members of the public in excess of regulatory limits. The inspector observed a variety of activities during the licensee's first run, including dose preparation, outgoing package preparation, client package return and waste handling, incoming generator and area surveys, and delivery vehicle loading. The licensee's staff also demonstrated the implementation of procedures for air effluent monitoring and bioassay for personnel preparing iodine -131 capsules. Through these observations, demonstrations and other discussions, the inspector found the licensee's staff to be knowledgeable of radiation protection principles and regulatory requirements.

The inspector reviewed a selection of records, including internal and external audits, ALARA and incident reports, dose calibrator quality control records, air effluent monitoring reports, survey meter calibration certificates, hazmat training records, bioassay results and dosimetry reports, which indicated maximum exposures of 150 to 210 millirem whole-body and 0.8 to 2 rem extremity in 2014 through 2016.

The licensee previously reported a leaking source in April 2014 (NMED 140261). They have disposed of it by transfer to a waste broker. Based on this, the event is closed.

No violations of NRC requirements were identified as a result of this inspection.

## Warren, Geoffrey

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**From:** Warren, Geoffrey  
**Sent:** Friday, June 03, 2016 9:11 AM  
**To:** 'glenn.sullivan@cardinalhealth.com'  
**Subject:** NRC Inspection Report - Springfield MO  
**Attachments:** CH Spr 5-16 - NRC 591M.pdf

Enclosed is the inspection report for the NRC's May 19 inspection at the Cardinal Health facility in Springfield, Missouri, as we discussed by telephone this morning. No violations were identified as a result of the inspection. No response is required to the report or this e-mail.

Please contact me if you have any questions.

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Geoffrey Warren  
Senior Health Physicist  
NRC Region III  
630-829-9742