

## SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

## 1. LICENSEE/LOCATION INSPECTED:

Missouri Cancer Associates  
1705 East Broadway, Suite 100  
Columbia, MO 65201

REPORT NUMBER(S) 2018001

## 2. NRC/REGIONAL OFFICE

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

## 3. DOCKET NUMBER(S)

030-37082

## 4. LICENSE NUMBER(S)

24-32604-01

## 5. DATE(S) OF INSPECTION

January 23<sup>rd</sup>, 2018

## 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	Ryan Craffey	<i>RH Craffey</i>	1/23/18
BRANCH CHIEF	Aaron McCraw	<i>AJ McCraw</i>	02/05/2018

**Docket File Information**

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6. INSPECTION PROCEDURES USED

87131, 87132

7. INSPECTION FOCUS AREAS

All

**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S)

02230

2. PRIORITY

2

3. LICENSEE CONTACT

Iris Ouyang, MS - RSO

4. TELEPHONE NUMBER

(314) 799-5648

☒ Main Office Inspection

Next Inspection Date: 01/23/2020

☒ Field Office Inspection

☐ Temporary Job Site Inspection

**PROGRAM SCOPE**

This was an unannounced routine inspection of a cancer treatment center authorized to use byproduct material for medical purposes at its facility in Columbia, Missouri. At the time of the inspection, the licensee performed 60-80 fractionated HDR treatments per month (mostly breast and gynecological), 70-80 diagnostic administrations per month (mostly F-18 FDG, but also some F-18 fluciclovine (Axumin) for prostate cancer imaging) and occasional therapeutic administrations of Xofigo and Zevalin. The licensee still possessed a Sr-90 sealed source for ophthalmic radiotherapy, however, the licensee had not used this source since the previous inspection.

**PERFORMANCE OBSERVATIONS**

The inspector toured the facility in Columbia to evaluate the licensee's measures for materials security, hazard communication, and exposure control. The inspector performed independent and confirmatory surveys of the facility, and found no evidence of residual contamination in unrestricted areas, nor exposures to members of the public in excess of regulatory limits. The inspector observed the administration of two PET scans using unit doses of F-18 FDG, as well as the receipt of packages containing radioactive material and the conduct of area surveys. The licensee's staff demonstrated the implementation of HDR daily spot checks, and discussed the implementation of procedures for HDR full calibrations, treatment planning, administration and emergency response. Through these observations, demonstrations, and discussions, the inspector found that the staff were knowledgeable of radiation protection principles and regulatory requirements, and moreover found that the licensee maintained a positive safety culture within the program.

The inspector reviewed a selection of records, including quarterly RSC meeting minutes and health physics audits, personnel dosimetry reports, documentation of HDR spot checks, full calibrations, and annual training, sealed source inventories and leak test results, as well as written directives and associated treatment planning and verification documentation for HDR, Xofigo, and Zevalin administrations.

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