NRC FORM 591M PART 1
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
Missouri Cancer Associates, LLC 1705 East Broadway Columbia, MO 65201 REPORT NUMBER(S) 15-001	Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Rd, Suite 210 Lisle, IL 60532

3. DOCKET NUMBER(S)	4. LICENSE NUMBER(S)	5. DATE(S) OF INSPECTION
030-37082	24-32604-01	November 9 , 2015

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 violations(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	Zahid Sulaiman	Zahid Sulaiman	11-9-2015
BRANCH CHIEF	Aaron T. McCraw		12/15/15

NRC FORM 591M PART 3
(07-2012)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

Docket File Information

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6. INSPECTION PROCEDURES USED	7. INSPECTION FOCUS AREAS
87131 and 87132	03.01-03.07

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)	2. PRIORITY	3. LICENSEE CONTACT	4. TELEPHONE NUMBER
02230	2	Iris Ouyang, RSO	(573) 442-5525

☑ Main Office Inspection Next Inspection Date: 11/09/2017

☐ Field Office Inspection _____

☐ Temporary Job Site Inspection _____

PROGRAM SCOPE

This was a routine inspection of a cancer treatment clinic authorized to use iridium-192 in a High Dose Rate remote afterloader unit (HDR) under 35.600, strontium-90 under 35.400 and byproduct materials permitted in Sections 35.200 and 35.300. The licensee conducts approximately 180 HDR treatments each quarter. The HDR sources were exchanged quarterly, with the most recent source received in September 2015. The radiation therapy department was staffed with one full-time and one part-time oncologist, and two full-time authorized medical physicist (AMP). The majority of treatment conducted were to treat breast and gynecological cancers. The licensee possessed a strontium-90 eye applicator, which had not been used since last inspection. The nuclear medicine department was staffed with one full-time nuclear medicine technologists (NMT) who performed approximately 100 diagnostic flourine-18 studies monthly. Doses were received as unit dose from licensed radiopharmacy.

Performance Observations:

The inspector observed the licensee administer one fraction of a MammoSite treatment during the time of inspection with no issues noted. The inspector had the AMP demonstrate: (1) security of licensed material; (2) full calibration measurement; (3) daily spot checks; (4) emergency equipment and procedures; (5) safety procedures and instructions; and (6) door interlock system; (7) radiation monitoring equipment; and (8) ON-OFF switch to prevent dual operation in the treatment room. The inspector reviewed 7 gynecological and 10 breast cancer therapy written directives and treatment plans with no issues noted. The inspector observed the NMT demonstrate: (1) the dose calibrator constancy check; (2) the radioactive material package receiving and check-in procedures; (3) the end of the day daily and weekly area surveys; (4) proper handling of radioactive waste for decay-in-storage; and (5) conduct a physical inventory of sealed source in which all sources were accounted for. The inspector reviewed annual radiation safety program audits, radiation safety committee minutes, reviewed records for survey instrument calibration, leak test, dose calibrator linearity, accuracy and geometry test, training records, and dosimetry records for 2014, & 2015, indicating the maximum annual doses to be 528 mrem to whole body and 1810 mrem to extremity. The inspector performed independent radiation measurements of the hot lab, imaging room, and decay in storage areas which were consistent with licensee surveys result and within regulatory limit.

No violation of NRC regulatory requirements were identified during this inspection.