

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED:

Medical Outsourcing Solutions  
1735 DeKalb Ave  
Sycamore, IL 60178

2. NRC/REGIONAL OFFICE

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

REPORT NUMBER(S) 2019001

3. DOCKET NUMBER(S)

150-00012

4. LICENSE NUMBER(S)

IL-021864-01

5. DATE(S) OF INSPECTION

February 14, 2019

**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):


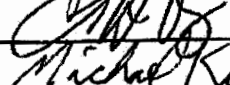
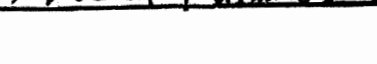
- ☒ 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

(Violations and Corrective Actions)

Contrary to Title 10 of the Code of Federal Regulations (CFR) 20.1802, on February 14, 2019, the licensee failed to control and maintain constant surveillance of licensed material that was in a controlled or unrestricted area and that was not in storage. Specifically, the licensee's two technologists left the vehicle unattended and not under direct surveillance with prepared doses totaling approximately 113 mCi of technetium-99m and a flood source containing approximately 6.54 mCi of Co-57 while going back to the clinic to keep unloading the vehicle. The cause of the violation was a licensee oversight. The licensee technologists were in a hurry to unload the vehicle and forgot to lock the vehicle. The technologists normally use a cart to bring all the doses at once, so that the material is never unattended, but that day they did not have the cart. As corrective actions, Radiation Safety Officer has talked to the technologists and retrained them, and the RSO will also provide a dedicated cart for that vehicle.

**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	James Doran		2/27/19
NRC INSPECTOR	Luis Nieves Folch		2/27/19
BRANCH CHIEF	Aaron T. McCraw		2/27/19

**Docket File Information**

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1. LICENSEE/LOCATION INSPECTED:  Medical Outsourcing Solutions 1735 DeKalb Ave Sycamore, IL 60178  REPORT NUMBER(S) 2019001		2. NRC/REGIONAL OFFICE  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352	
3. DOCKET NUMBER(S)  150-00012	4. LICENSE NUMBER(S)  IL-02186 <del>0</del> -01	5. DATE(S) OF INSPECTION  February 14, 2019	
6. INSPECTION PROCEDURES USED  87130	7. INSPECTION FOCUS AREAS  03.01-03.08		

**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S) 02220	2. PRIORITY 3	3. LICENSEE CONTACT Jim Doran-RSO	4. TELEPHONE NUMBER (815) 757-5056
<input type="checkbox"/> Main Office Inspection      Next Inspection Date:      TBD			
<input type="checkbox"/> Field Office Inspection			
<input checked="" type="checkbox"/> Temporary Job Site Inspection      10176 W 400 North, Michigan City, IN			

**PROGRAM SCOPE**

This was an unannounced reciprocity inspection of a medical service provider authorized to use and store radioactive material for diagnostic imaging at various facilities in Illinois and at temporary job sites in Illinois jurisdiction. The company conducted these activities at temporary job sites in NRC jurisdiction under a reciprocity request. During this inspection, two nuclear medicine technologists used unit doses of Tc-99m to perform cardiac stress tests on the premises of Lakeshore Cardiovascular Institute LLC in Michigan City, Indiana. The technologists transported these doses, along with other equipment, from one of the company's facilities in Illinois.

PERFORMANCE OBSERVATIONS: The inspector observed the conduct of two cardiac rest tests while at the job site in Michigan City, and noted the satisfactory use of ALARA practices and personnel dosimetry. The technologists adequately verified the identity of all patients and accounted for radioactive decay mathematically to ensure doses were within range at time of administration. The inspector conducted independent surveys of the client's facility following the morning tests, and found no evidence of residual contamination. The inspector interviewed the technologists to discuss area surveys, waste handling, spill response, and transportation of radioactive material. The inspector also reviewed a selection of available records, including client agreements, shipping papers, dosimetry reports, and documentation of package receipt, dose administration, and area surveys.

The inspector identified a Severity Level IV violation of 10 CFR 20.1802 for the failure to control and maintain constant surveillance of 8 unit doses of Tc-99m totaling approximately 113 mCi and a flood source containing approximately 6.54 mCi of Co-57. The inspector observed the technologists arrive and unload equipment. One went inside and the second one remained unloading the vehicle, when the second technologist went inside the clinic with half the licensed material. Both technologists were gone for several minutes, during which time the licensed material was left unattended inside the open vehicle outside the facility. The root cause appeared to be an oversight. As corrective action, the Radiation Safety Officer has talked to the technologists and retrained them, and the RSO will also provide a dedicated cart for that vehicle. On February 26, 2019 the inspector and the company's RSO discussed the requirement and best practices for ensuring security of licensed material.

No other violations were identified as a result of this inspection.

[REDACTED]

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**From:** Nieves Folch, Luis  
**Sent:** Wednesday, February 27, 2019 1:10 PM  
**To:** Warren, Geoff  
**Subject:** FW: RE: NRC 591 Report Severity Level IV Violation  
**Attachments:** nrc nov feb 2019\_20190227125840.pdf

**From:** Jim Doran [mailto:jdoran@micmos.com]  
**Sent:** Wednesday, February 27, 2019 12:56 PM  
**To:** Nieves Folch, Luis <Luis.NievesFolch@nrc.gov>  
**Subject:** [External\_Sender] RE: NRC 591 Report Severity Level IV Violation

Luis, attached is the signed 591 report – the corrective actions have been implemented today.

Jim Doran

**From:** Nieves Folch, Luis <Luis.NievesFolch@nrc.gov>  
**Sent:** Wednesday, February 27, 2019 9:33 AM  
**To:** Jim Doran <jdoran@micmos.com>  
**Subject:** NRC 591 Report Severity Level IV Violation

**This email contains an attachment. If you do not recognize the Sending email address of this email or if anything looks suspicious, DO NOT OPEN the attachment and forward the email to your support team for analysis.**

Dear Mr. Daron,

Attach is the 591 report for the inspection conducted on February 14, 2019. The report includes a Severity Level IV violation. At this moment is required of you to sign the Report where it says Licensee's Representative and email it back to me. After that there is no further actions on your part.

In accordance with Title 10 of the Code of Federal Regulations 2.390 of the NRC's "Rules of Practice," a copy of this message will be available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>.

Please feel free to contact me if you have any questions regarding this correspondence.

Thank you,

Luis Nieves  
Health Physicist  
U.S. Nuclear Regulatory Commission  
Division of Nuclear Materials Safety  
Office: (630) 829-9571  
Fax: (630) 515-1259