



## Materials Inspection Report

## 1. Licensee/Location Inspected:

Missouri Department of Transportation  
105 W. Capital Ave.  
P.O. Box 270  
Jefferson City, MO 65102  
(Locations Inspected: Hannibal and Columbia)

Report Number(s) 2022002

## 2. NRC/Regional Office

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

## 3. Docket Number(s)

030-18363

## 4. License Number(s)

24-20415-01

## 5. Date(s) of Inspection

August 1, 2022

## 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. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements, and were assessed at Severity Level IV, in accordance with the NRC Enforcement Policy.

A. 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, corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy were satisfied.

(Non-cited violation(s) was/were discussed involving the following requirement(s))

B. The following violation(s) is/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 AND DATE
LICENSEE'S REPRESENTATIVE		
NRC INSPECTOR	Jason Draper, Health Physicist	Jason D. Draper Digitally signed by Jason D. Draper Date: 2022.08.17 09:31:19 -05'00'
BRANCH CHIEF	Michael A. Kunowski	Geoffrey M. Warren Digitally signed by Geoffrey M. Warren Date: 2022.08.17 09:36:43 -05'00'



## Materials Inspection Record

1. Licensee Name: Missouri Department of Transportation		2. Docket Number(s): 030-18363		3. License Number(s) 24-20415-01	
4. Report Number(s): 2022002			5. Date(s) of Inspection: August 1, 2022		
6. Inspector(s): Jason Draper		7. Program Code(s): 04417		8. Priority: 5	9. Inspection Guidance Used: IP 87139
10. Licensee Contact Name(s): Lydia Brownell, RSO		11. Licensee E-mail Address: Lydia.Brownell@modot.mo.gov		12. Licensee Telephone Number(s): (573) 526-4628	
13. Inspection Type: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Announced <input type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		14. Locations Inspected: <input type="checkbox"/> Main Office <input checked="" type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): 04/16/2023 <input type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input checked="" type="checkbox"/> No change	

## 16. Scope and Observations:

This was a routine unannounced inspection of a state highway department authorized to use and store portable nuclear gauges at numerous offices throughout the State of Missouri as well as at temporary job sites in NRC jurisdiction. The scope of this inspection was limited to the activities associated with field offices in Hannibal and Columbia, MO. At the time of the inspection, the licensee stored, at each of these locations, one Troxler Model 3400 Series moisture density gauge containing americium-241 and cesium-137 sealed sources that was used during the construction season and returned to the main storage facility in Jefferson City over the winter. Each location employed approximately 7-9 authorized gauge users, and the field offices were audited annually by the respective District RSO.

During the inspection of the field offices, the inspector toured the licensee's facilities to verify gauges were secured appropriately as well as performed independent surveys and verified the presence of appropriate postings. The gauges were not being used at the time of the inspection, but the inspector had gauge users demonstrate how gauges were used, stored, and transported. The inspector also interviewed licensee staff and the RSO regarding training, occupational dose, routine maintenance, and emergency procedures. The inspector also reviewed a selection of licensee records including leak tests, shipping papers, hazmat training records, facility audits, and the licensee's documentation demonstrating that unmonitored individuals were not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502(a).

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

**From:** [Draper, Jason](#)  
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**Subject:** NRC 591M - Missouri Department of Transportation (Hannibal and Columbia)  
**Date:** Wednesday, August 17, 2022 10:02:00 AM  
**Attachments:** [NRC 591M - Missouri Department of Transportation \(Hannibal Columbia\) id\\_gw.pdf](#)

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Lydia,

As we discussed following my inspection, attached is the inspection report for the routine NRC inspection that was performed of your facilities in Hannibal and Columbia, Missouri, on August 1, 2022. Please review and keep this document for your records. There is no response required, though I would appreciate an email confirming that you have received the document. Let me know if you have any questions.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made 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>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made publicly available without redaction.

Jason Draper  
Health Physicist (Inspector)  
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