



Materials Inspection Report

1. Licensee/Location Inspected:

Magruder Paving, LLC
255 Watson Rd.
Troy, MO 63379

2. NRC/Regional Office

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

Report Number(s) 2022001

3. Docket Number(s)

030-38234

4. License Number(s)

24-32782-01

5. Date(s) of Inspection

5/19/22 through 8/25/22

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)

10 CFR 30.34(i) requires portable gauge licensees to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee. Contrary to this, on May 18, 2022, the licensee failed to use a minimum of two physical controls when they stored a portable gauge in an asphalt laboratory with the only tangible barrier being a single locked door.

(continued on Page 2)

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	Duane Mueller	 9/9/22
NRC INSPECTOR	Jason Draper, Health Physicist	Jason D. Draper Digitally signed by Jason D. Draper Date: 2022.09.07 13:47:56 -05'00'
BRANCH CHIEF	Michael A. Kunowski	Michael A. Kunowski Digitally signed by Michael A. Kunowski Date: 2022.09.08 05:28:45 -05'00'

Materials Inspection Report (Continued)

The root cause of this violation was an oversight by the gauge user. As corrective action, the RSO and authorized gauge users reviewed the licensee's storage and security practices and reinforced during a safety meeting on August 26, 2022, with the authorized users the requirement to secure gauges with two barriers at all times when not under the control and constant surveillance of the licensee.

License Condition 17 of NRC license 24-32782-01 requires, in part, that each portable gauge have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position and that the gauge or its container be lock when not under the direct surveillance of an authorized user. Contrary to this, on May 18, 2022, the licensee failed to have a lock or outer locked container preventing removal of the sealed source from its shielded position when it stored it on the counter of the asphalt laboratory with the lockable door open when it was not under the direct surveillance of an authorized user.

The root cause of this violation was a misunderstanding of the license condition requirement. As corrective action, the RSO and authorized gauge users reviewed the licensee's storage and security practices and reinforced during a safety meeting on August 26, 2022, with the authorized users the requirement to lock the gauge in its case when left unattended.



Materials Inspection Record

1. Licensee Name: Magruder Paving, LLC		2. Docket Number(s): 030-38234		3. License Number(s) 24-32782-01	
4. Report Number(s): 2022001			5. Date(s) of Inspection: May 19, 2022, with in-office review through August 25, 2022		
6. Inspector(s): Jason Draper		7. Program Code(s): 03121		8. Priority: 5	9. Inspection Guidance Used: IP 87139
10. Licensee Contact Name(s): Duane Mueller, RSO		11. Licensee E-mail Address: dmueller@magrudercompanies.com		12. Licensee Telephone Number(s): (636) 383-7378	
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 checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): 05/19/2027 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

This was an unannounced routine inspection of a paving and asphalt company authorized to use portable nuclear gauges at their facility in Troy, MO, and at temporary job sites anywhere in NRC jurisdiction. At the time of the inspection, the licensee possessed two Seaman Model C-300 Series portable gauges containing radium-226 sealed sources and three Troxler Model 3242 portable gauges containing californium-252 sealed sources. During the construction season, the licensee used the radium-226 gauges for road projects and the californium-252 gauges for measuring asphalt content at the asphalt plant at the licensee's main office as well as other temporary job site asphalt plants in Missouri. The licensee employed approximately eight authorized gauge users who routinely used the gauges.

During the inspection, the inspector toured the licensee's main office storage location to ensure the gauges were secured appropriately, performed independent radiation surveys, and verified the presence of appropriate postings. At the time of the inspection, only one gauge, a Troxler Model 3242, was present at the main office as the other gauges were being used at temporary job sites. Additionally, neither the RSO nor any authorized gauge users were physically present, and there were no temporary job sites within a reasonable driving distance, so the inspector interviewed the RSO and a gauge user via telephone for a description of how the licensee accounts for, controls, and secures gauges during use and transport. During the in-office review, the inspector reviewed licensee records related to leak tests, DOT hazmat training, semi-annual inventories, utilization logs and occupational dose analyses.

During the inspection of the main office, the inspector identified that the Troxler Model 3242 portable gauge was routinely not secured using two independent physical controls that form tangible barriers. Specifically, while the gauge was routinely under the control and constant surveillance of the licensee during business hours, during non-business hours (nights and weekends) the gauge was stored on a counter in the laboratory building with doors with only one lock. This was a violation of 10 CFR 30.34(i). The inspector also identified that contrary to License Condition 17, the gauge did not have a lock or outer locked container to prevent unauthorized or accidental removal of the sealed source from its shield position when in storage or not under the direct surveillance of an authorized user. Specifically, this model of gauge has a lockable door to prevent access to the unshielded source, but neither this door lock nor an outer locked container was used while the gauge was unattended.

As corrective action and to prevent recurrence, the RSO reviewed the licensee's storage and security practices with the authorized user, and held a safety meeting on August 26, 2022, with the authorized users to reinforce the requirements to secure gauges with two barriers at all times when not under the control and constant surveillance of the licensee and to lock the gauge to prevent exposure of the sealed source, specifically by locking the gauge in its

Materials Inspection Record (Continued)

transportation case.

In Inspection Report 2016-001, the licensee was issued a Notice of Violation for the failure to provide refresher training to its hazmat employees that satisfied the requirements in Subpart H to 49 CFR 172. During this inspection the inspector verified through interviews with the RSO and a review of training records, that gauge users who transported the gauges had received the required hazmat refresher training at the required periodicity. This violation is closed.

Two violations of NRC requirements were identified as a result of this inspection.