



Materials Inspection Report

1. Licensee/Location Inspected: Moore & Bruggink, Inc. 2020 Monroe Avenue, N.W. Grand Rapids, MI 49505 Report Number(s) 2022-001	2. NRC/Regional Office Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
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3. Docket Number(s) 030-31159	4. License Number(s) 21-23396-02	5. Date(s) of Inspection 10/26/22; exit 10/31/22
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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	Ryan Craffey	 <small>Digitally signed by Ryan J. Craffey Date: 2022.11.21 16:02:30 -05'00'</small>
BRANCH CHIEF	Rhex Edwards	 <small>Digitally signed by Rhex A. Edwards Date: 2022.11.23 11:54:21 -06'00'</small>



Materials Inspection Record

1. Licensee Name: Moore & Bruggink, Inc.		2. Docket Number(s): 030-31159		3. License Number(s) 21-23396-02	
4. Report Number(s): 2022-001			5. Date(s) of Inspection: October 26, 2022; exit October 31, 2022		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 03121	8. Priority: 5	9. Inspection Guidance Used: IP 87139	
10. Licensee Contact Name(s): Scott Knapp - RSO		11. Licensee E-mail Address: sknapp@mbce.com		12. Licensee Telephone Number(s): 616-363-9801	
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"/> Hybrid <input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input checked="" type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): 10/26/2027 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	
16. Location(s) Inspected List: Main Office - 2020 Monroe Avenue, N.W., Grand Rapids, MI Temporary Job Site - Virginia Avenue at 168th Street in Spring Lake, MI					
17. Scope and Observations: Moore & Bruggink, Inc. is a professional engineering, survey, and inspection services company authorized to store portable moisture density gauges at its office in Grand Rapids, Michigan, and to use them at temporary job sites in NRC jurisdiction for measuring the physical properties of construction materials. At the time of the inspection, the licensee had three gauges (one Troxler 3411B, one Troxler 3430, and one InstroTek 3500) and nine individuals (including the RSO) authorized to use them. The inspector toured the office in Grand Rapids. All areas were adequately posted, and all licensed material was adequately secured behind two barriers. The inspector performed independent surveys of the facility; radiation levels were well before regulatory limits to members of the public in unrestricted areas. All gauges and cases present were in good condition and adequately labeled. The inspector reviewed a selection of records including utilization logs, sealed source leak tests, personnel dosimetry reports, and gauge user training materials. The inspector then visited a temporary job site in Spring Lake, Michigan and met with a gauge user preparing to perform compaction testing on asphalt for a road repaving project. The gauge was adequately blocked, braced, and secured in his vehicle, and shipping papers were present and accessible as required. The gauge and its case were both in good condition and the case was adequately labeled. Independent surveys in the vicinity of the device were consistent with radiation profiles in the applicable SDR safety evaluation (NC-646-D-130-S). The inspector interviewed the user to discuss radiation safety topics and response to emergencies involving the licensed material. The inspector also observed the conduct of licensed activities while on-site; the user implemented adequate ALARA practices and wore assigned personnel dosimetry throughout. During a brief period of in-office review, the inspector interviewed the licensee's RSO to discuss the conduct of gauge maintenance and his preparations for responding to emergencies involving licensed material, and reviewed additional leak test records not available at the time of the on-site inspection.					


Materials Inspection Record (Continued)

The licensee was previously cited in IR 03031159-2017001(DNMS) for a SLIV violation of LC 11 for failure to provide radiation safety training to gauge users, and two SLIV violations 10 CFR 71.5(a) for failure to provide initial and refresher hazmat training to gauge users per USDOT requirements. The inspector reviewed the licensee's corrective actions, which appeared adequate and effective. All gauge users had received the required training at the required intervals and those interviewed were knowledgeable of applicable requirements. Therefore, these violations (and a similar violation of 10 CFR 71.5(a) identified in IR 03031159-2012001(DNMS) for failure to provide refresher hazmat training every three years) are closed.

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

Signature and Date - Branch Chief



 Digitally signed by Rhex A. Edwards
Date: 2022.11.23 11:54:49 -06'00'