



## Materials Inspection Report

<b>1. Licensee/Location Inspected:</b>  Soils and Materials Engineers, Inc. d/b/a SME 43980 Plymouth Oaks Boulevard Plymouth, MI 48170 Location Inspected: Job Site in Van Buren Twp., MI  Report Number(s) 2023-001	<b>2. NRC/Regional Office</b>  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
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<b>3. Docket Number(s)</b> 030-19574	<b>4. License Number(s)</b> 21-17158-02	<b>5. Date(s) of Inspection</b> August 23, 2023
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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: 2023.08.28 15:59:01 -04'00'</small>
BRANCH CHIEF	Rhex Edwards	 <small>Digitally signed by Rhex A. Edwards Date: 2023.09.17 14:46:24 -05'00'</small>



### Materials Inspection Record

<b>1. Licensee Name:</b> Soils and Materials Engineers, Inc.		<b>2. Docket Number(s):</b> 030-19574		<b>3. License Number(s)</b> 21-17158-02	
<b>4. Report Number(s):</b> 2023-001			<b>5. Date(s) of Inspection:</b> August 23, 2023		
<b>6. Inspector(s):</b> Ryan Craffey		<b>7. Program Code(s):</b> 04416	<b>8. Priority:</b> 5	<b>9. Inspection Guidance Used:</b> IP 87139	
<b>10. Licensee Contact Name(s):</b> Trevor Shaheen - RSO		<b>11. Licensee E-mail Address:</b> trevor.shaheen@sme-usa.com		<b>12. Licensee Telephone Number(s):</b> 734-454-9900 x1017	
<b>13. Inspection Type:</b> <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Announced <input type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		<b>14. Locations Inspected:</b> <input type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input checked="" type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		<b>15. Next Inspection Date (MM/DD/YYYY):</b> 10/19/2026 <input type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input checked="" type="checkbox"/> No change	
<b>16. Location(s) Inspected List:</b>  Van Born Road at Hannan Road, Van Buren Township, MI					
<b>17. Scope and Observations:</b> Soils and Materials Engineers, Inc. (SME) is an engineering and consulting firm authorized to store portable moisture density gauges containing byproduct material at offices in Michigan and Indiana, and to use them for measuring the physical properties of construction materials at temporary job sites in NRC jurisdiction. The scope of this inspection was limited to observations of licensed activities (compaction testing of backfill for a newly built natural gas line using a Troxler 3400 series gauge, s/n 29120) at a construction site on the northeast corner of Van Born Road and Hannan Road in Van Buren Township, Michigan.  During a inspection of another licensee working on the same project but at a different job site, the inspector learned that SME personnel were performing compaction testing at the job site in Van Buren Township. After concluding the other inspection, the inspector located the SME personnel and observed them conduct compaction testing of backfill in the pipeline trench. The individual performed several density tests, maintained control and constant surveillance of their gauge throughout, and locked the source rod in the shielded position immediately upon completion of the testing. Other workers in the area confirmed that this was how the individual normally conducted themselves. The inspector thereafter met with and interviewed the individual, a summer co-op student. The student was familiar with radiation safety topics and licensee procedures and demonstrated a strong commitment and ability to adequately secure licensed material in all scenarios. The gauge and its transport case were in good condition and properly labeled; independent surveys in the vicinity of the gauge were consistent with the radiation profiles in the applicable SS&D safety evaluation (NC-646-D-130-S).  The first student thereafter transferred control of the gauge to another co-op student who arrived on the job site to relieve the first. The inspector interviewed and observed this second student as well, noting the same familiarity for licensee operating and emergency procedures, as well as a similarly high degree of commitment to gauge security.  No violations of NRC requirements were identified as a result of this inspection. The inspector held an exit meeting by telephone with the licensee's RSO the same day, after departing the job site.					

**Materials Inspection Record (Continued)**

Signature and Date - Branch Chief

A handwritten signature in black ink, appearing to be 'R. Edwards', with a long horizontal line extending to the right.

Digitally signed by Rhex A. Edwards  
Date: 2023.09.17 14:45:54 -05'00'