

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

<p>1. LICENSEE/LOCATION INSPECTED:</p> <p>Tyme Engineering, Inc. 32121 Schoolcraft Road, Livonia, MI 48150 Locations Inspected: Job Sites in Madison Heights, MI</p> <p>REPORT NUMBER(S) 2022-001</p>	<p>2. NRC/REGIONAL OFFICE</p> <p>Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352</p>
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<p>3. DOCKET NUMBER(S)</p> <p>030-36599</p>	<p>4. LICENSE NUMBER(S)</p> <p>21-32523-01</p>	<p>5. DATE(S) OF INSPECTION</p> <p>August 16, 2022</p>
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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. 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 10 CFR 71.5(a), on August 16, 2022, Tyme Engineering, Inc. transported licensed material on a public highway and did not comply DOT regulations with 49 CFR parts 107, 171 through 180, and 390 through 397. Specifically, a moisture density gauge containing sealed sources of cesium-137 and americium-241 was transported and was not marked and labeled as specified in 49 CFR 172.301(a)(1) and 172.403 and another gauge was transported and labeled with only one of two labels specified in 49 CFR 172.403.

As corrective action for this Severity Level IV violation, the licensee replaced all missing markings and labels, inspected other gauge cases in storage and replaced markings and labels as necessary, sent a memo to gauge users reminding them of USDOT requirements, and posted a checklist for transportation in the gauge room.

**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	Brian Hibdon	<small>Digitally signed by Brian Hibdon DN: cn=Brian Hibdon, o=TYME, ou=Materials Testing, email=brianh@tymeengineering.com, c=US Date: 2022.09.21 10:46:10 -04'00'</small>	
NRC INSPECTOR	Ryan Craffey	 <small>Digitally signed by Ryan J. Craffey Date: 2022.09.20 11:22:43 -04'00'</small>	
BRANCH CHIEF	Michael Kunowski	Michael A. Kunowski <small>Digitally signed by Michael A. Kunowski Date: 2022.09.20 13:28:22 -05'00'</small>	



### Materials Inspection Record

1. Licensee Name: Tyme Engineering, Inc.		2. Docket Number(s): 030-36599		3. License Number(s) 21-32523-01	
4. Report Number(s): 2022-001			5. Date(s) of Inspection: August 16, 2022		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 03121	8. Priority: 5	9. Inspection Guidance Used: IP 87124	
10. Licensee Contact Name(s): Brian Hibdon - RSO		11. Licensee E-mail Address: brainh@tymeengineering.com		12. Licensee Telephone Number(s): 586-405-6160	
13. Inspection Type:		14. Locations Inspected:		15. Next Inspection Date (MM/DD/YYYY):	
<input type="checkbox"/> Initial <input type="checkbox"/> Routine <input type="checkbox"/> Announced <input checked="" type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		<input type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input checked="" type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		No Change <input type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input checked="" type="checkbox"/> No change	

16. Scope and Observations:

Tyme Engineering was an engineering consulting firm authorized to store portable moisture density gauges containing byproduct material at its office in Livonia, MI and to use them for measuring the physical properties of materials at temporary job sites in NRC jurisdiction. The scope of this inspection was limited to observations of licensed activities (compaction testing on Segment 3 of the I-75 Modernization Project) at two job sites in Madison Heights, MI; the first near the interstate's crossing with Gardenia Ave. the second near the crossing with Lincoln Ave.

Following an inspection of the licensee's client (AECOM Technical Services of Michigan, docket no. 030-14020), the inspector drove the length of the I-75 Modernization Project and noted one of the licensee's vehicle on a frontage road under construction. The inspector exited the highway and located the vehicle. Prior to announcing his presence, the inspector observed one of the licensee's gauge users perform several compaction tests on the frontage road. The user maintained adequate control and constant surveillance of the gauge throughout. The inspector then met the user and interviewed him to discuss the safe use and transport of licensed material. The user was familiar with radiation protection principles and licensee procedures, and carried shipping papers and emergency response information as required. Independent surveys of the gauge were consistent with radiation profiles in the applicable SSSR safety evaluation. The gauge and its transport case were in good condition and adequately blocked and braced for transport; however, the case was neither marked nor labeled as required by the USDOT. This was noted as a SLIV violation of 10 CFR 71.5(a) for failure to comply with 49 CFR 172.301(a)(1) and 172.400(a)(1).

Following this, the inspector met a second gauge user on the same frontage road, about a mile south of the first. The second user's gauge was adequately secured in the bed of his vehicle and was adequately blocked and braced. Independent surveys were again consistent with aforementioned radiation profiles, and the user was familiar with radiation protection principles and licensee procedures. The gauge and its case were also in good condition; however, the case was also inadequately labeled, as only one Yellow-II label was present. This was noted as an additional example of the failure to comply with 172.400(a)(1).

The root cause of this violation was an oversight by the gauge users, with inadequate oversight of the safe transport of hazardous materials a contributing factor. As corrective action, the licensee replaced all missing markings and labels, inspected other gauge cases in storage and replaced markings and labels as necessary, sent a memo to gauge users reminding them of USDOT requirements, and posted a checklist for transportation in the gauge room.

Following the on-site inspection, the inspector also interviewed the RSO and reviewed a selection of records, including training records for the gauge users interviewed and leak test results for the gauges inspected.