NRC FORM 592M
(10-2020)

U.S. NUCLEAR REGULATORY COMMISSION

Materials Inspection Record

1. Licensee Name:	2. Docket Number(s):	3. License Number(s)
7NT Enterprises, LLC	03038799	34-35203-01

4. Report Number(s):	5. Date(s) of Inspection:
2022-001	January 25, 2022; exit May 20, 2022

6. Inspector(s):	7. Program Code(s):	8. Priority:	9. Inspection Guidance Used:
Ryan Craffey	03121	5	IP 87124

10. Licensee Contact Name(s):	11. Licensee E-mail Address:	12. Licensee Telephone Number(s):
Charles Pierce, II - RSO	charles.pierceii@7nteng.com	937-414-6914

13. Inspection Type:	14. Locations Inspected:	15. Next Inspection Date (MM/DD/YYYY):
☐ Initial	☑ Main Office ☐ Field Office	01/25/2027
☑ Routine ☐ Announced	☑ Temporary Job Site ☐ Remote	☑ Normal ☐ Extended
☐ Non-Routine ☑ Unannounced		☐ Reduced ☐ No change

16. Scope and Observations:

7NT Engineering was a geotechnical drilling and engineering services firm authorized to store portable moisture density gauges containing byproduct material at a field office in Indianapolis, Indiana, and to use them for measuring the physical properties of materials at temporary job sites in NRC jurisdiction. At the time of the inspection, the licensee had two gauges at the Indianapolis field office and three individuals authorized to use them. The licensee's RSO was based at the company's main office in Miamisburg, Ohio.

The inspector discovered while preparing for the inspection that the licensee had moved its Indianapolis field office and both gauges stored there from 5769 Park Plaza Court to 1422 South Talbot Street, a location not authorized by its license. The inspector confirmed that the licensee had moved the office in mid-February 2021. The RSO produced a letter dated March 1, 2021, providing notification to Region III of the move; however, this was never received by the Region and was dated after the move anyways. This was noted as a Severity Level IV violation of 10 CFR 30.34(c) and License Condition 10. The root cause was a misunderstanding of regulatory requirements. As corrective action, the licensee discussed the requirement with the inspector, and submitted a request to amend its license to add the new location of use. This request was approved on May 20, 2022.

The inspector toured the new field office on Talbot Street. All areas were adequately posted, and all licensed material was adequately secured. Independent surveys in the vicinity of the gauge storage cabinet inside and outside the facility were below regulatory limits to members of the public. While at the facility, the inspector interviewed licensee staff and discussed leak test collection methods and reviewed test results and reviewed material accountability practices via utilization logs. One gauge was currently out at a nearby job site - a construction project at Gainbridge Fieldhouse on Delaware Street in Indianapolis.

The inspector visited the project at Gainbridge Fieldhouse. The inspector observed the conduct of density testing, and interviewed the gauge user. The individual was not particularly knowledgeable about radiation safety principles, but was nevertheless conscientious with the gauge and operated it safely. The inspector reviewed the gauge user's practices for transporting the gauge. Although he had two locking chains to secure the gauge case, both were secured to a single lock on the only lockable hasp on the gauge lid. Moreover the locking chain intended to provide a second barrier against removing the gauge from the case was loose enough to be defeated, and although the bed of the truck had a lockable cover, it could not be locked at present because the user did not have a key. Finally, the inspector found the licensee's shipping papers inside a binder in the gauge case, instead of in the passenger compartment as required by 49 CFR 177.817(e)(2). The user indicated that the shipping papers were always kept in the case. This was noted as a Severity Level IV violation of 10 CFR 71.5(a) as it relates to 49 CFR 177.817(e)(2).

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The root cause of the violation was a lack of understanding of regulatory requirements. As corrective action, the gauge user placed the binder in the passenger compartment. The licensee committed to provide retraining to address the potential for recurrence, but has not confirmed the content or delivery of this training, therefore a response to the NOV has been required.

Following the on-site inspection, the inspector interviewed the RSO and discussed the implementation and oversight of the program. The inspector reviewed the provision of internal initial and refresher training for gauge users and a selection of related records in-office. During this review of the program, the inspector noted that the licensee had not formally reviewed its content or implementation at least annually, contrary to 10 CFR 20.1101(c). The root cause of this violation was a lack of understanding of regulatory requirements. The licensee has yet to provide corrective action to restore compliance or address the potential for recurrence.

Finally, the inspector also noted that the licensee did not have or have access to a radiation survey instrument, contrary to the licensee's commitments in its license application. The RSO assumed that either a nearby industrial equipment supplier or its leak test service provider would be able to furnish them with one promptly if needed in an emergency; however, when prompted by the inspector to confirm this, the RSO discovered that neither entity could. This was noted as a Severity Level IV violation of Condition 19.B of the license. The root cause was a lack of due diligence. As corrective action, the licensee purchased a Sentry EC personal alarming dosimeter and ratemeter and confirmed upon receipt that it responded visually and audibly to gamma radiation emitted by one of its gauges.