UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

May 9, 2016

EA-16-098

Mr. Shawn Hellers, P.E.
Project Manager
7NT Enterprises, LLC
531 E. Third Street
Dayton, OH 45402

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03038799/2016001(DNMS)
7NT ENTERPRISES, LLC

Dear Mr. Hellers:

On March 22, 2016, two inspectors from the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at your office in Indianapolis, Indiana, with continued in-office review through April 13, 2016. The purpose of the inspection was to review activities performed under your NRC license to ensure that activities were being performed in accordance with NRC requirements. The in-office review included a review of your corrective actions. Mr. Geoffrey Warren of my staff conducted a final exit meeting by telephone with Mr. Eoghan Gregory of your staff on April 18, 2016 to discuss the inspection findings. The enclosed inspection report presents the results of the inspection.

During this inspection, the NRC staff examined activities conducted under your license related to public health and safety. Additionally, the staff examined your compliance with the Commission's rules and regulations as well as the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, one apparent violation of NRC requirements was identified and is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's website at http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html. The apparent violation concerned the apparent failure to provide two independent barriers to prevent removal of portable gauges in their cases from vehicles, as required by Title 10 of the *Code of Federal Regulations* (CFR) Part 30.34(i).

Because the NRC has not made a final determination in this matter, the NRC is not issuing a Notice of Violation for this inspection finding at this time. The circumstances surrounding this apparent violation, the significance of the issue, and the need for lasting and effective corrective action were discussed with Mr. Gregory at the inspection exit meeting on April 18, 2016.

Before the NRC makes its enforcement decision, we are providing you an opportunity to either: (1) respond in writing to the apparent violation addressed in this inspection report within 30 days of the date of this letter; (2) request a Predecisional Enforcement Conference (PEC); or (3) provide no further response. If a PEC is held, it will be open for public observation and the NRC will issue a press release to announce the time and date of the conference. **Please contact Aaron T. McCraw at 630-829-9650 within ten days of the date of this letter to notify the NRC of your intended response.**

If you choose to provide a written response, it should be clearly marked as "Response to the Apparent Violation in Inspection Report No. 03038799/2016001(DNMS); EA-16-098," and should include, for the apparent violation: (1) the reason for the apparent violation, or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance was or will be achieved. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violation. The guidance in NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be useful in preparing your response. You can find the information notice on the NRC's website at: http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/1996/in96028.html. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on the apparent violation and any other information that you believe the NRC should take into consideration before making an enforcement decision. The topics discussed during the conference may include the following: information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned to be taken.

Because your facility has not been the subject of escalated enforcement action within the last two years or two inspections, a civil penalty may not be warranted in accordance with Section 2.3.4 of the Enforcement Policy. In addition, based upon NRC's understanding of the facts and your corrective actions, it may not be necessary to conduct a PEC in order to enable the NRC to make a final enforcement decision. Our final decision will be based on your confirming on the license docket that the corrective actions previously described to the staff have been or are being taken.

Please be advised that the number and characterization of the apparent violations described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, will be made available electronically for public inspection in the

NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made publicly available without redaction.

Please feel free to contact Mr. Warren of my staff if you have any questions regarding this inspection. Mr. Warren can be reached at 630-829-9742.

Sincerely,

/RA Christine Lipa Acting for/

John B. Giessner, Director
Division of Nuclear Materials Safety

Docket No. 030-38799
License No. 34-35203-01

Enclosure:
IR 03038799/2016001(DNMS)

cc w/encl: Mr. Gregory, Radiation Safety Officer
State of Indiana
State of Ohio

NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made publicly available without redaction.

Please feel free to contact Mr. Warren of my staff if you have any questions regarding this inspection. Mr. Warren can be reached at 630-829-9742.

Sincerely,

/RA Christine Lipa Acting for/

John B. Giessner, Director
Division of Nuclear Materials Safety

Docket No. 030-38799
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Enclosure:
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cc w/encl: Mr. Gregory, Radiation Safety Officer
State of Indiana
State of Ohio

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DATE	5/2/2016		5/2/2016		5/2/2016		5/5/2016		5/9/2016	

OFFICIAL RECORD COPY

Letter to Shawn Hellers from John Giessner, dated May 9, 2016.

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03038799/2016001(DNMS)
7NT ENTERPRISES, LLC

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U.S. Nuclear Regulatory Commission
Region III

Docket No.	030-38799
License No.	34-35203-01
Report No.	03038799/2016001(DNMS)
EA No.	EA-16-098
Licensee:	7NT Enterprises, LLC
Facility:	5769 Park Plaza Ct. Indianapolis, Indiana 46220
Inspection Dates:	March 22, 2016, with continued in-office review through April 13, 2016
Exit Meeting Date:	April 18, 2016
Inspectors:	Geoffrey M. Warren, Senior Health Physicist Luis Nieves Folch, Health Physicist
Approved By:	Aaron T. McCraw, Chief Materials Inspection Branch Division of Nuclear Materials Safety

Enclosure

EXECUTIVE SUMMARY

7NT Enterprises, LLC
NRC Inspection Report 03038799/2016001(DNMS)

This was a routine inspection of licensed activities involving the use of byproduct material (cesium-137 and americium-241) for compaction testing at road and construction sites using portable nuclear gauging devices. 7NT Enterprises, LLC is an engineering company headquartered in Dayton, Ohio, with an office in Indianapolis, Indiana. U.S. Nuclear Regulatory Commission (NRC) License No. 34-35203-01 authorizes 7NT Enterprises, LLC to use Troxler Models 3430 and 3440 portable density gauges for measuring physical properties of construction materials.

The inspectors noted that, for gauges secured in open-bed trucks, while the licensee provided two controls to prevent the gauge case from being opened and the gauge removed, the gauge case was secured to the bed of an open-bed truck with only a single chain and lock. Because of this, the case with the gauge in it could have been removed from the truck through the removal of only a single barrier. One gauge user stated that he had left the gauge secured in this way while leaving the vehicle unattended while on the way to a job site on March 22, 2016; other licensee personnel confirmed that they routinely left vehicles unattended for short periods of time with gauges secured in this way.

The use of a single chain and lock to secure the gauge case in the bed of the truck is an apparent violation of Title10 of the *Code of Federal Regulations* (CFR), Section 30.34(i), which requires that each portable gauge licensee 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.

As corrective action, the licensee's radiation safety officer (RSO) contacted each gauge user by telephone the day of the onsite inspection to instruct them to add a second chain and lock to secure the case inside the truck bed. In addition, he held a formal training session on March 28, 2016, to emphasize the requirements and updated the training manual to include the proper way to secure the gauge in a compliant manner.

REPORT DETAILS

1 Program Overview and Inspection History

This was the initial inspection of the licensee's activities under this license. 7NT Enterprises, LLC was authorized under NRC Materials License No. 34-35203-01 to use licensed material for compaction testing at road and construction sites with nuclear gauging devices. Licensed material was authorized to be used anywhere in the United States in areas of NRC jurisdiction. Ten trained gauge users used the gauges on a monthly basis for construction engineering projects throughout Indiana. The licensee used Troxler Model 3440 and 4640 portable gauges, containing cesium-137 and americium-241:beryllium sources. The licensee's headquarters were in Dayton, Ohio, but most activities under this license were based at the licensee's office in Indianapolis, Indiana.

2 Security of Portable Gauges

2.1 Inspection Scope

The inspectors observed the licensee's method of securing portable gauges in vehicles and at the licensee's storage facility, and interviewed licensee staff concerning monitoring gauges.

2.2 Observations and Findings

Licensee personnel demonstrated how gauges would be secured in vehicles to transport them to temporary job sites. The inspectors noted that, while the licensee provided two controls to prevent the gauge case from being opened and the gauge removed, the gauge case was secured to the bed of an open-bed truck with only a single chain and lock. Because of this, the case could have been removed from the truck through the removal of only a single lock. One gauge user stated that he had left the gauge secured in this way while leaving the vehicle unattended while on the way to a job site on March 22, 2016; other licensee personnel confirmed that they routinely left vehicles unattended for short periods of time, but not more than about five to ten minutes, with gauges secured in this way.

The use of a single chain and lock to secure the gauge case in the bed of the truck is an apparent violation of Title10 of the *Code of Federal Regulations* (CFR), Section 30.34(i), which requires that each portable gauge licensee 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.

The root cause of the violation was that the licensee believed that the gauges were secured in accordance with the rule because this system provided two barriers to prevent removal of the gauge from the case. The licensee had not considered that it provided only a single barrier to removal of the gauge in its case from the vehicle. As corrective action, the licensee's radiation safety officer (RSO) contacted each gauge user by telephone the day of the onsite inspection to instruct them to add a second chain and lock to secure the case inside the truck bed. In addition, he held a formal training session on March 28, 2016 to emphasize the requirements, and updated the training

manual to include the correct way to secure the gauge. The RSO provided documentation to the inspectors by email on April 8, 2016, that these corrective actions had been completed.

The inspectors observed that the licensee stored portable gauges at the facility in Indianapolis in a locked cabinet inside a locked storage area. In addition, licensee personnel stated that they would store the gauge secured inside the locked cab of the truck chained to the steering column if they were to leave the vehicle unattended for an extended period rather than leaving it in the back of the truck as described above. In these cases, the inspectors determined that the storage was in accordance with the requirements in 10 CFR 30.34(i).

2.3 Conclusions

The inspectors identified an apparent violation of 10 CFR 30.34(i) in which the licensee failed to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges, when the gauges were not under the control and constant surveillance of the licensee.

3 Other Areas Inspected

3.1 Inspection Scope

The inspectors reviewed the elements of the licensee's radiation safety program including the following: records of the physical inventories, leak tests, and dosimetry records. Licensee staff demonstrated use of the gauge at temporary job sites.

3.2 Observations and Findings

The inspectors determined that, except as described above, the licensee secured portable gauges appropriately and tracked the gauges through inventory checks and log sheets. Leak tests were performed timely and showed no evidence of leakage. Dosimetry records showed no exposures of regulatory concern. Licensee staff knew where they would get a survey meter if they needed one. Surveys of storage areas showed radiation levels consistent with postings. Transport of the gauges was performed in accordance with Department of Transportation requirements. Licensee staff received routine training in radiation safety. Interviews with licensee staff showed adequate knowledge of radiation safety concepts and protocols.

3.3 Conclusions

The inspectors had no findings in these areas.

4 Exit Meeting Summary

The NRC inspectors presented preliminary inspection findings following the onsite inspection on April 18, 2016. The licensee did not identify any documents or processes reviewed by the inspectors as proprietary. The licensee acknowledged the findings presented.

LIST OF PERSONNEL CONTACTED

#* Eoghan Gregory, Radiation Safety Officer
Shawn Hellers, P.E., Project Manager
Chuck Pierce, Technologist
Matt Smith, Technologist

Attended preliminary onsite exit meeting on March 22, 2016
* Attended telephonic exit meeting on April 18, 2016.