

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Macomb County Department of Roads 117 South Groesbeck Highway Mount Clemens, MI 48043 REPORT NUMBER(S) 2017001		2. NRC/REGIONAL OFFICE Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
3. DOCKET NUMBER(S) 030-09582	4. LICENSE NUMBER(S) 21-15686-01	5. DATE(S) OF INSPECTION November 17, 2017

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):

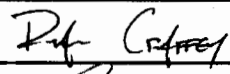
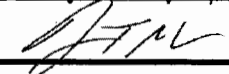
- 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)

Contrary to 10 CFR 71.5(a), as of November 17, 2017, Macomb County Department of Roads failed to comply with 49 CFR 177.842(d), which requires that packages of Class 7 (radioactive) materials must be so blocked and braced that they cannot change position during conditions normally incident to transportation.

As corrective action, the licensee committed to use additional cables and ratchet straps, and to evaluate making changes to the custom package it utilized for transporting Class 7 materials, so as to ensure that all such packages were blocked and braced when transported in the future. The licensee also instructed its active authorized users on the revised expectations for blocking and bracing these packages, and committed to provide this instruction to all authorized users during a future safety meeting.

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		Adam J. Newton <small>Digitally signed by Adam J. Newton DN: cn=Adam J. Newton, ou=Macomb County, ou=Department of Roads, email=anewton@nrc.gov, c=US Date: 2017.12.08 08:26:27 -05'00'</small>	
NRC INSPECTOR	Ryan Craffey		11/30/2017
BRANCH CHIEF	Aaron McCraw		12/05/2017

Docket File Information
SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Macomb County Department of Roads 117 South Groesbeck Highway Mount Clemens, MI 48043 REPORT NUMBER(S) 2017001	2. NRC/REGIONAL OFFICE Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352
--	---

3. DOCKET NUMBER(S) 030-09582	4. LICENSE NUMBER(S) 21-15686-01	5. DATE(S) OF INSPECTION November 17, 2017
--------------------------------------	---	---

6. INSPECTION PROCEDURES USED 87124	7. INSPECTION FOCUS AREAS All
--	--------------------------------------

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 03121	2. PRIORITY 5	3. LICENSEE CONTACT Adam Newton - RSO	4. TELEPHONE NUMBER (586) 463-8671
---------------------------------	----------------------	--	---

Main Office Inspection Next Inspection Date: 11/17/2022

Field Office Inspection 58270 Williams Street, New Haven, MI

Temporary Job Site Inspection 13 Mile Road at Gratiot Avenue, Roseville, MI

PROGRAM SCOPE

This was an unannounced routine inspection of a county roads department authorized to use portable moisture density gauges containing byproduct material at locations in Mount Clemens and New Haven, MI, and at temporary job sites in NRC jurisdiction. At the time of the inspection, the licensee had seven Troxler 3400 series gauges, and 18 individuals trained to use them. All seven gauges were stored in New Haven, though the licensee did maintain space at the Mount Clemens facility (where the RSO was based) in the event that storage there would be advantageous for future projects.

PERFORMANCE OBSERVATIONS: The inspector visited the facility in New Haven to evaluate the licensee's measures for materials security, hazard communication, and exposure control. The inspector conducted independent surveys of the facility; exposures in publicly-accessible areas were well below regulatory limits. The inspector observed the conduct of licensed activities on a resurfacing project in Roseville, MI. The inspector noted that the authorized user maintained control and constant surveillance of his gauge at all times on the job site. The inspector interviewed the authorized user and found him to be knowledgeable of radiation protection principles and licensee procedures. The inspector also visited the facility in Mount Clemens to review the content and implementation of the radiation safety program with the RSO. The inspector reviewed a selection of sealed source leak tests and inventories, authorized user training certificates, dosimetry reports, survey meter calibrations, and annual audits of the radiation safety program.

At the temporary job site in Roseville, the inspector identified a violation of 10 CFR 71.5(a) for the failure to adequately block and brace a custom Type A package containing the authorized user's portable gauge while being transported. Specifically, the licensee secured the package with a locked cable routed through two eye hooks attached to the bottom of the package, and an anchor point in the bed of the user's truck. This cable, however, did not prevent the package from freely changing position horizontally or vertically within the bed of the truck. The inspector determined that the root cause of the violation was a misunderstanding of USDOT requirements. As corrective action, the licensee committed to use a second cable present at the job site to secure the package during transport back to the storage location. The licensee also committed to obtain and utilize ratchet straps on these packages, and to evaluate making changes to the custom Type A package itself (i.e., bolting them to the beds of the trucks which transport them).

(Continued on Part 2)

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

Macomb County Department of Roads
117 South Groesbeck Highway
Mount Clemens, MI 48043

REPORT NUMBER(S) 2017001

2. NRC/REGIONAL OFFICE

Region III
U. S. Nuclear Regulatory Commission
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

3. DOCKET NUMBER(S)

030-09582

4. LICENSE NUMBER(S)

21-15686-01

5. DATE(S) OF INSPECTION

November 17, 2017

(Continued)

By November 30, 2017, the licensee had also instructed all employees still actively using portable gauges on the revised expectations for blocking and bracing these packages, and committed to provide this instruction to all authorized users during a future safety meeting, to be held before the start of the 2018 construction season.

While at the temporary job site in Roseville, the inspector also noted that the licensee effectively relied on constant surveillance to ensure that portable gauges were adequately secured while in transport and at job sites. After discussing the requirements of 10 CFR 30.34(i) and the potential challenges associated with relying on constant visual surveillance, the licensee committed to ensuring that the previously-described corrective actions, in conjunction with repositioning one padlock (from the lid of the Troxler gauge case inside the custom Type A package to the lid of the custom package itself), would also provide a minimum of two independent physical controls to prevent a future violation of 10 CFR 30.34(i) should there ever be a lapse in surveillance. The inspector confirmed that the licensee's adjustments to its gauge security measures, if implemented as described, would meet this requirement.

The licensee was previously cited in 03009582/2012001(DNMS) for two violations: one regarding periodic hazmat training, the other regarding periodic reviews of the content and implementation of the radiation safety program. The inspector reviewed the licensee's continued implementation of its corrective actions, and found them to be effective in preventing the recurrence of these and similar violations. The NRC therefore considers these violations to be closed.