



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

June 22, 2018

EA-18-070

Mr. Andy McCune  
Chief Financial Officer  
Wade-Trim Incorporated  
25251 Northline Road  
P.O. Box 10  
Taylor, MI 48180

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03018534/2018001(DNMS) –  
WADE-TRIM INCORPORATED

Dear Mr. McCune:

On April 19, 2018, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at your Flint, Michigan facility, with continued in-office review through June 13, 2018. 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 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 licensee's apparent failure to control a portable gauge at a temporary jobsite in Mancelona, Michigan which was a controlled area, as required by Title 10 of the *Code of Federal Regulations* (CFR) 20.1802, 10 CFR 30.34(i), and NRC License Number 21-18598-02, Amendment 12, License Condition 19.A.

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. Mr. Robert Gattone of my staff discussed the circumstances surrounding this apparent violation, the significance of the issue, and the need for lasting and effective corrective action with Mr. Lynett of your staff at the final, telephonic inspection exit meeting on June 13, 2018.

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, or (2) request a Predecisional Enforcement Conference (PEC). **Please contact Aaron T. McCraw, Chief of the Materials Inspection Branch, at 630-829-9650 or [aaron.mccraw@nrc.gov](mailto:aaron.mccraw@nrc.gov) within 10 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. 03018534/2018001 (DNMS); EA-18-070," 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. Your response should be sent to the NRC's Document Control Center, with a copy mailed to the NRC Region III Office, 2443 Warrenville Road, Suite 210, Lisle, Illinois 60532, within 30 days of the date of this letter. 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, it 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 PEC 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. If a PEC is held, the NRC will issue a press release to announce the time and date of the PEC. The PEC will be open to public observation.

Because your facility has not been the subject of escalated enforcement action within the last 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 NRC 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 any response you provide 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.

A. McCune

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Please feel free to contact Mr. Gattone if you have any questions regarding this inspection. Mr. Gattone can be reached at 630-829-9823.

Sincerely,

***/RA Christine Lipa Acting for/***

John B. Giessner, Director  
Division of Nuclear Materials Safety

Docket No. 03018534/2018001  
License No. 21-18598-02

Enclosure:  
IR No. 03018534/2018001 (DNMS)

cc w/encl: Michael Lynett,  
Radiation Safety Officer  
State of Michigan

Letter to Mr. Andy McCune from John Giessner, dated June 22, 2018

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03018534/2018001(DNMS) –  
WADE-TRIM INCORPORATED

DISTRIBUTION w/encl:

Steven West  
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DATE	6/18/2018		6/20/2018		6/20/2018		6/22/2018	

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No.: 030-18534

License No.: 21-18598-02

Report No. 03018534/2018001(DNMS)

EA No.: EA-18-070

Licensee: Wade-Trim Incorporated

Facility: 555 South Saginaw, Street  
Flint, Michigan

Inspection Dates: April 19, 2018, with continued in-office  
review through June 13, 2018

Exit Meeting Date: June 13, 2018

Inspector: Robert G. Gattone, Jr.  
Senior Health Physicist

Approved By: Aaron T. McCraw, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Enclosure

## EXECUTIVE SUMMARY

### Wade-Trim Incorporated NRC Inspection Report No. 03018534/2018001(DNMS)

On April 19, 2018, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted an inspection of Wade-Trim Incorporated (licensee), with continued in-office review through June 13, 2018. This was a routine inspection of licensed activities involving the licensee's use of cesium-137 (Cs-137) and americium-241 (Am-241) in Troxler Model No. 3400 Series portable gauges for measuring physical properties of materials.

During the inspection, the inspector noted that the licensee identified an apparent violation of Title 10 of the *Code of Federal Regulations* (CFR) 20.1802, 10 CFR 30.34(i), and NRC License Number 21-18598-02, Amendment 12, License Condition 19.A., involving the licensee's apparent failure to control a portable gauge (gauge) that was in a controlled area and not in storage on August 23, 2017, resulting in damage to the gauge. Specifically, an authorized user (AU) was conducting measurements with a portable gauge containing 8 millicuries (mCi) of Cs-137 and 40 mCi of Am-241 at a temporary jobsite at "5 Corners" in Mancelona, Michigan. The AU was called by the foreman to view work results. The AU left the gauge and went to the foreman. The AU was about 20 feet away from the gauge, still in view of the equipment. The AU heard a person yelling to the operator of the skid steer to stop. The AU ran up to the gauge and visually inspected that it had been run over by the skid steer. The portable gauge's radioactive sources remained undamaged and intact; however, the portable gauge's face plate was damaged.

As corrective actions to prevent future recurrence of a similar incident, the licensee investigated the incident and reminded the AU of the need to maintain control of portable gauges. The licensee laid off the AU in late 2017, and was not rehired due to the gauge incident and other performance issues. The licensee informed other AUs of the incident and reminded them of expectations regarding control of portable gauges. During the licensee's annual training, the gauge incident information was discussed as an additional reminder of expectations.

## **REPORT DETAILS**

### **1.0 Program Overview and Inspection History**

Wade-Trim Incorporated is authorized by NRC Materials License No. 21-18598-02 to use licensed material for measuring physical properties of materials with nuclear gauging devices. Licensed material is authorized to be stored at locations in Bay City, Flint, and Gaylord, Michigan, and used anywhere in the United States in areas of NRC jurisdiction. The radiation safety officer (RSO) reported to the chief financial officer. The licensee used a total of 9 gauges for construction engineering projects, and there were 12 authorized users (AUs). The licensee used Troxler Models 3411, 3430, 3440, and 3411-B portable gauges containing Cs-137 and Am-241.

The NRC conducted its previous routine inspection of the licensee on April 16, 2013. As a result of the inspection, the licensee was cited for a Severity Level IV violation of 10 CFR 30.34(i) for failure to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges were not under the control and constant surveillance of the licensee at temporary job sites. Specifically, the licensee used only one independent physical control when storing gauges from the Bay City office at temporary jobsites in company vans, including the storage of a gauge at a temporary jobsite on January 24, 2013. In addition, the NRC cited the licensee for a Severity Level IV violation of 10 CFR 20.1101(c) for failure to review the radiation protection program content and implementation. Specifically, the licensee reviewed the radiation protection program content and implementation only once in January 2012 during the inspection review period.

The NRC previously inspected the licensee on November 4, 2008. As a result of the inspection, no violations of NRC regulatory requirements were identified.

### **2.0 Security of Portable Gauges**

#### **2.1 Inspection Scope**

The inspector followed up on the previous violation to determine if the licensee implemented successful corrective actions to prevent a similar violation of 10 CFR 30.34(i).

#### **2.2 Observations and Findings**

The inspector noted that there were no temporary jobsites within a reasonable distance from the licensee's Flint facility during the onsite inspection; therefore, the inspection did not include temporary jobsites.

The inspector observed a Troxler Model 3411 at the Flint facility that was stored and dispatched from the facility. The facility storage room door was locked and the licensee had posted the "Caution Radioactive Materials" sign and NRC Form 3. A large, heavy locked box was inside of the locked storage room that contained the gauge and it was inside of its carrying case. The carrying case had one hasp that was locked and limited to authorized individuals. As such, the licensee complied with 10 CFR 30.34(i) because there were a minimum of two independent physical controls that formed tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges were not under the control and constant surveillance of the licensee.

In addition, the inspector observed an AU demonstrate how he had secured a portable gauge in an open bed pickup. The AU used padlocked chains, a padlocked gauge case hasp, and a truck bed that had a locked bed enclosure that prevented access to the gauge in the truck bed. In addition, the tailgate was locked. As such, the licensee complied with 10 CFR 30.34(i) because there were a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges were not under the control and constant surveillance of the licensee. As such, the inspector closed the previous violation of 10 CFR 30.34(i).

The inspector asked the licensee if there were any incidents including fires, floods, and theft of portable gauges containing licensed material since the last inspection. The RSO stated that there were no incidents including fires, floods, and theft of portable gauges containing licensed material since the last inspection. In addition, the inspector asked the RSO if there were any incidents or accidents involving portable gauges since the last inspection. The RSO provided information regarding a portable gauge incident that resulted in damage to the gauge. Specifically, on August 23, 2017, an AU was using a Troxler Model 3411 portable gauge containing 8 mCi of Cs-137 and 40 mCi of Am-241 at a temporary jobsite at "5 Corners" in Mancelona, Michigan, that was a controlled area. The AU was called by the foreman to view work results. The AU left the gauge and went to the foreman. The AU was about 20 feet away from the gauge, still in view of the gauge. The AU heard a person yelling to the operator of a skid steer to stop. The AU ran up to the gauge and visually inspected that it had been run over by the skid steer. The gauge's face plate was damaged; however, there was no damage to the radioactive materials inside the gauge.

Title 10 CFR 20.1802 requires that the licensee control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage. Title 10 CFR 30.34(i) requires that the 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. NRC License Number 21-18598-02, Amendment 12, License Condition 19.A. requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in an application dated September 9, 2015. Appendix B, Section 10 of the licensee's September 9, 2015, application states that operating and emergency procedures will be developed, implemented, and maintained and will meet the criteria in the section entitled "Radiation Safety Program - Operating and Emergency Procedures" in NUREG-1556, Vol.1, Rev 1, dated November 2001. The licensee's operating procedure "Radiation Safety Program Operators' Manual," dated February 2016, Section 4.A. requires that "when the gauge is in use in the field, you as the authorized user must maintain control over the gauge at all times. Control will be defined as having the gauge within a radius of six feet of your person and within plain sight." The licensee's AU's apparent failure to (1) control the portable gauge containing 8 mCi of Cs-137 and 40 mCi of Am-241 at a temporary jobsite in Mancelona, Michigan, which was a controlled area; (2) use a minimum of two independent physical controls that form tangible barriers to secure a portable gauge from unauthorized removal, when the portable gauge was not under the control and constant surveillance of the licensee; and (3) remain within a six-foot radius of the portable gauge user at all times is an apparent violation of 10 CFR 20.1802, 10 CFR 30.34(i), and License Condition 19.A.

As corrective actions to prevent future recurrence of a similar incident, the licensee investigated the incident and reminded the AU of the need to maintain control of portable



gauges. The licensee laid off the AU in late 2017, and the AU was not rehired due to the gauge incident and other performance issues. The licensee informed other AUs of the incident and reminded them of expectations regarding control of portable gauges. During the licensee's annual training, the gauge incident information was discussed as an additional reminder of expectations.

### 2.3 Conclusions

The licensee identified an apparent violation of 10 CFR 20.1802, 10 CFR 30.34(i), and License Condition 19.A. The licensee implemented corrective actions to prevent a similar incident.

## 3.0 **Radiation Safety Program**

### 3.1 Inspection Scope

The inspector observed an AU demonstrate how he had used a portable gauge at a temporary jobsite, including how he would respond to emergencies involving a portable gauge, based on scenarios posed by the inspector. The inspector also interviewed the AU and other applicable staff regarding how the gauges were maintained and repaired. The inspector reviewed several selected records, including leak test records. In addition, the inspector used an NRC-owned, calibrated survey meter, to conduct independent and confirmatory radiation measurements.

### 3.2 Observations and Findings

The inspector reviewed records of the licensee's annual radiation protection program audits for the Flint, Michigan facility dated from 2013 through 2017. No concerns were identified. As such, the previous violation regarding failure to review the radiation protection program content and implementation, as required by 10 CFR 20.1101(c), was closed.

The inspector observed an AU demonstrate how he had used a portable gauge at a temporary jobsite, including how he would respond to emergencies involving a portable gauge, based on scenarios posed by the inspector. The AU's demonstration of how he used the gauge was adequate, including how he would prevent the gauge from being damaged at the temporary jobsite. In addition, the AU's demonstration of how he would respond to a damaged portable gauge at a temporary jobsite was adequate.

The inspector observed that the gauge's case was a DOT 7A package that was in good physical condition and correctly marked and labeled. The inspector also observed that the shipping paper contained all of the required information.

The inspector conducted an independent ambient exposure rate survey at the surface of the gauge and determined that the radiation levels were as expected. In addition, the inspector conducted a confirmatory survey with the calibrated NRC survey instrument, and the licensee used its S.E. International Survey Meter Monitor 4 that was calibrated. Measurements between the inspector's and the licensee's instruments were consistent.

The inspector reviewed selected leak tests, inventory records, training and qualification records, and dosimetry reports. The inspector did not identify any concerns with these records.

The inspector noted that the licensee did not perform any non-routine service or maintenance on its gauges. These activities were performed annually by an authorized entity.

### 3.3 Conclusions

There were no identified radiation safety violations of NRC regulatory requirements within the scope of this inspection.

### 4.0 **Exit Meeting Summary**

The inspector conducted a final exit meeting by telephone with the licensee's RSO to present the inspection findings on June 13, 2018. The licensee acknowledged the findings presented.

### **LIST OF PERSONNEL CONTACTED**

Bruce Carlstrom, Authorized User  
#^ Michael Lynett, RSO

# Attended preliminary exit meeting on April 19, 2018

^ Participated in final telephonic exit meeting on June 13, 2018

### **INSPECTION PROCEDURES USED**

87124: Fixed and Portable Gauge Programs