INSPECTION RECORD

Region: III **Inspection Report No.** 2017001 **License No.** 22-32823-01
Docket No. 030-38436

Licensee: White Earth Department of Transportation
36671 Marten Drive
White Earth, MN 56591

Locations Inspected: Same as above

Licensee Contact: Michael Bowman, Assistant Director **Telephone No**. 218-983-3263

Program Code: 03121 **Priority**: 5

Type of Inspection: ( ) Initial (X) Special ( ) Routine ( ) Announced (X) Unannounced

Last Inspection Date: 08/09/2016 **Date of This Inspection**: 07/13/2017 with in-office review through 8/8/17

The in-office review included information that was unavailable during the onsite inspection. Specifically, the inspector subsequently obtained a leak test record that was unavailable during the onsite inspection.

Next Inspection Date: 08/09/2019 ( ) Normal (X) Reduced

Justification for reducing the routine inspection interval:

Because the licensee had not completed corrective actions to prevent similar violations pertinent to leak testing, annual program audits, hazardous material training (aka HAZMAT) training, and shipping papers, the next routine inspection should be conducted approximately 3 years from the previous routine inspection.

Summary of Findings and Actions:

(X) No violations cited, clear U.S. Nuclear Regulatory Commission (NRC) Form 591 or regional letter issued
( ) Non-cited violations (NCVs)
( ) Violation(s), Form 591 issued
( ) Violation(s), regional letter issued
(X) Followup on previous violations

Inspector: Robert G. Gattone, Senior Health Physicist

/RA/ Date ***8/23/2017***
Signature

Approved: Aaron T. McCraw, Chief, MIB

/RA Patricia J. Pelke for/ Date: ***8/23/2017***
Signature

PART I – LICENSE, INSPECTION, INCIDENT/EVENT AND ENFORCEMENT HISTORY

1. AMENDMENTS AND PROGRAM CHANGES SINCE LAST INSPECTION:

AMENDMENT #	DATE	SUBJECT
None		

2. INSPECTION AND ENFORCEMENT HISTORY:

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on August 9, 2016, six violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

1. SLIII Violation: Title 10 of the *Code of Federal Regulations* (CFR) Section 20.1801 requires that the licensee secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas. Title 10 CFR 30.34(i) 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.

   Contrary to the above, from May 14 through August 9, 2016, the licensee failed to secure from unauthorized removal or access a portable gauge that was stored in a controlled area, and the licensee did not use a minimum of two independent physical controls that form tangible barriers to secure the gauge from unauthorized removal when the gauge was not under the control and constant surveillance of the licensee. Specifically, the licensee stored a portable gauge in an unlocked storage cabinet in an unsecured garage during normal business hours, and there were no individuals continuously present to maintain control or constant surveillance. The premises of this facility were bordered by a chainlink fence with a gate at the driveway; however, the gate was normally open during business hours, as were each of the rollup doors into the garage where the gauge was stored, and the garage was readily accessible from the street. The cabinet in which the gauge was stored did have a locking hasp on the door; however, the padlock hanging on the hasp was not closed.

   Licensee Planned Corrective Actions: The licensee installed a second locking hasp on the door to the storage cabinet, and locked the first hasp.

   During this inspection, the inspector determined that no principal activities had been conducted since September 20, 2015. The inspector observed that the licensee installed a second locked hasp on the door to the storage cabinet such that both hasps were locked. The licensee's only gauge was secured in a locked cabinet as per 10 CFR 30.34(i) since the last inspection. As such, this violation is closed.

2. SLIV Violation: Condition 13.A of NRC Materials License No. 22-32823-01 requires that sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by NRC under Title 10 of the *Code of Federal Regulations* (CFR) Section 32.210 or by an agreement state. Certificate of Registration No. NR-0587-D-104-S, dated May 25, 2004 and issued by the NRC under 10 CFR 32.210, states that the leak test

frequency of Seaman C-100, C-200, and C-300 portable moisture density gauges is 6 months.

Contrary to the above, the White Earth Department of Transportation failed to test a Seaman C-300 portable gauge, containing a sealed source of radium-226, at intervals not to exceed 6 months. Specifically, the licensee failed to test the sealed source in the gauge between July 1, 2011 and August 9, 2016, an interval greater than 6 months.

Licensee Planned Corrective Actions: The licensee's staff collected a leak test during the inspection, using a kit which the manufacturer had provided when it transferred the gauge to the licensee, and placed the shipment in the mail for analysis by the manufacturer. The licensee also committed to creating multiple electronic calendar reminders to ensure that future leak tests were collected at the required intervals.

During this inspection, the inspector noted that the licensee took a leak test sample for the sealed source on August 9, 2016, and sent it to Seaman Nuclear Corporation (SNC) for analysis. SNC mailed the leak test results to the licensee on August 23, 2016, and the licensee did not recall seeing the leak test results and could not produce it. The licensee committed to complete a leak test of the portable gauge's sealed source before the next use of the gauge. In addition, the inspector discussed the leak test condition in the NRC license with the licensee. As such, this violation is open.

3. SLIV Violation: Condition 22.A of NRC Materials License No. 22-32823-01 requires in part that the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the application dated May 6, 2011. Item 10.2 of the application dated May 6, 2011 states that "[we will] have access to and use a radiation survey meter that meets the criteria in the section entitled "Radiation Protection Program – Instruments" in NUREG-1556, Vol.1, Rev. 1, dated November 2001."

   Contrary to the above, as of August 9, 2016, the White Earth Department of Transportation did not have access to or use of a radiation survey meter.

   Licensee Planned Corrective Actions: As corrective action, the licensee committed to contact other nearby organizations which use moisture density gauges, and to establish an agreement with one of them to obtain access to a survey instrument in the event of an emergency.

   During this inspection, the inspector contacted Northern Technologies, Inc.'s RSO who verified that it has an agreement to provide the licensee access to or use of a radiation survey meter. As such, this violation is closed.

4. SLIV Violation: Title 10 CFR 20.1101(c) requires that the licensee shall periodically (at least annually) review the radiation protection program content and implementation.

   Contrary to the above, as of August 9, 2016, the White Earth Department of Transportation failed to periodically (at least annually) review the radiation protection

program content and implementation. Specifically, the licensee has not reviewed the radiation protection program and implementation since the license was issued on June 13, 2011.

Licensee Planned Corrective Actions: The licensee committed to review and consider the example checklist in NUREG-1556 Vol. 1, Rev.1, and to perform an audit thereafter. The licensee was also considering the submission of a request to name the AU as RSO.

During this inspection, the inspector noted that the licensee did not conduct a review of its radiation protection program since August 9, 2016. The licensee committed to conduct a review of its radiation protection program when they start using the gauge again. In addition, the licensee considered submission of a request to name the sole authorized user (AU) as the licensee's radiation safety officer; however, the licensee did not ultimately submit the request to change the RSO to a new individual. The licensee committed to submit a request to the MLB Chief to change the individual named as the RSO on the license. As such, this violation is open.

5. SLIV Violation: Title 10 CFR 71.5(a) requires that each licensee who transports licensed material outside the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the DOT regulations in 49 CFR Parts 107, 171 through 180, and 390 through 397, appropriate to the mode of transport.

   Title 49 CFR 172.702 requires that each hazmat employer shall ensure that each Hazmat employee is trained and tested, and that no hazmat employee performs any function subject to the requirements of 49 CFR Parts 171-177 unless trained, in accordance with Subpart H of 49 CFR Part 172. The terms Hazmat Employer and Hazmat Employee are defined in 49 CFR 171.8.

   Title 49 CFR 172.704(a) specifies the elements of hazmat employee training as: (1) general awareness/familiarization training, (2) function-specific training, (3) safety training; (4) security awareness training; and (5) in-depth security training, if applicable.

   Title 49 CFR 172.704(c)(2) requires, in part, that a hazmat employee receive initial training and recurrent training at least once every three years.

   Contrary to the above, as of August 9, 2016, the White Earth Department of Transportation did not provide recurrent training at least once every three years for its hazmat employees that satisfied the requirements in Subpart H to 49 CFR Part 172, and the licensee otherwise meets the definition of a hazmat employer in 49 CFR 171.8. Specifically, the licensee's sole hazmat employee (the authorized gauge user) had not been provided recurrent hazmat training since initially receiving this training on January 26, 2011, an interval of greater than three years.

   Licensee Planned Corrective Actions: The licensee committed to find a provider for this training, and to ensure that its AU received the training before transporting the gauge again.

During this inspection, the inspector noted that the licensee did not provide HAZMAT training for its AU since the last inspection. The licensee looked for a vendor to provide the training; however, because the AU did not have a commercial driver's license, the licensee did not provide the AU with the training. The licensee committed to provide HAZAMAT training to the AU before the next use of the gauge and every 3 years thereafter. The licensee committed to create an Outlook calendar appointment to ensure that HAZMAT training is conducted every 3 years. As such, this violation is open.

6. SLIV Violation: Title 49 CFR 177.817(a) states, in part, that a person may not transport a hazardous material by highway unless that person has received a shipping paper prepared in accordance with Part 172 of this subchapter.

   Contrary to the above, on September 20, 2015, and on previous occasions, the White Earth Department of Transportation's authorized gauge user transported a Seaman C-300 portable moisture density gauge, containing a Class 7 (radioactive) hazardous material, on public highways without a shipping paper.

   Licensee Planned Corrective Actions: The licensee completed the example shipping paper, and placed it in the gauge case for future use. The previous inspector discussed this requirement with the licensee's staff to ensure that they understood the requirement, and that the shipping paper must be accessible, as required by 49 CFR 177.817(e), during any future transport of the gauge.

   During this inspection, the inspector noted that the licensee prepared a shipping paper on or about August 9, 2016, and it was placed in the gauge case for future use; however, the shipping paper was not available during the onsite inspection because the AU was far from where the gauge and its case were, and the AU was the only individual who had access to the shipping paper in the secured gauge case. As such, this violation is open.

3. INCIDENT/EVENT HISTORY:

   There were no events since the last routine inspection.

PART II – INSPECTION DOCUMENTATION

1. ORGANIZATION AND SCOPE OF PROGRAM:

   White Earth Department of Transportation is authorized under NRC Materials License No. 22-32823-01 to use licensed material for measuring physical properties of materials with nuclear gauging devices at temporary job sites on lands under exclusive Federal jurisdiction within the White Earth Reservation. The licensee had a Seaman Nuclear Corporation Model C-300 portable gauge. The inspector determined that no principal activities had been conducted since September 20, 2015. The inspector discussed with the licensee the requirements of 10 CFR 30.36(d), which requires licensee's to notify the NRC within 60 days upon the occurrence of 24 months without any principal activities being conducted under the license. The licensee acknowledged the requirements of 10 CFR 30.36(d). The inspector also determined that the licensee's only gauge was secured in a locked cabinet in accordance with 10 CFR 30.34(i) since the last inspection and had not been used or transported during that time.

2. SCOPE OF INSPECTION:

Inspection Procedure(s) Used: 87124

Focus Areas Evaluated: 02.01. 02.02, 02.05, and 02.07

3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:

The inspector used an NRC owned, calibrated survey instrument to conduct independent surveys at selected surfaces of a locked cabinet that contained the licensee's Seaman Nuclear Corporation Model C-300 portable gauge containing a radium-226 source. The highest reading was 2.7 milliRoentgen per hour (mR/hr). Based on an interview with the Assistant Public Works Director, the area that read 2.7 mR/hr was occupied about 3 times per year, and the duration of each of those occupancies were 15 minutes.

4. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

No violations of NRC regulatory requirements were identified during this inspection. Four SLIV violations from the previous inspection remain open, pending completion of licensee corrective action.

5. PERSONNEL CONTACTED:

Michael Bowman, Assistant Public Works Director
Michael James LaChapelle, RSO
Bernham Tibbetts, AU

Attended exit meeting on August 8, 2017

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