

## INSPECTION RECORD

**Region:** III      **Inspection Report No.** 2019001

**License No.** 21-32749-01

**Docket No.** 030-38043

**Licensee:** Great Lakes Engineering Group, LLC  
934 Clark Street  
Lansing, MI 48906

**Locations Inspected:** Same as above

**Licensee Contact:** Donovan Larkin, RSO

**Telephone No.** 517-819-8023

**Program Code:** 03121      **Priority:** 5

**Type of Inspection:**      ☐ Initial      ☒ Routine      ☐ Announced  
   ☐ Special      ☒ Unannounced

**Last Inspection Date:** November 4, 2014      **Date of This Inspection:** April 12, 2019, with in-office review through June 19, 2019

**Next Inspection Date:** April 12, 2024      ☒ Normal      ☐ Reduced

### Summary of Findings and Actions:

- ☐ 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
- ☐ Follow-up on previous violations

**Inspector:** Jason Draper, Health Physicist

\_\_\_\_\_  
*/RA/*  
Signature

**Date:** 7/10/19

**Approved:** Aaron T. McCraw, Chief, MIB

\_\_\_\_\_  
*/RA/*  
Signature

**Date:** 7/11/19

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

### **1. AMENDMENTS AND PROGRAM CHANGES SINCE LAST INSPECTION:**

<u>AMENDMENT #</u>	<u>DATE</u>	<u>SUBJECT</u>
3	05/08/2019	Changed Main Office address and removed location of use.
2	02/26/2019	Added location of use and changed Radiation Safety Officer (RSO).
1	09/17/2015	Changed RSO.

The licensee's current license expires on July 31, 2019. The licensee has submitted its renewal application and has been granted timely renewal.

### **2. INSPECTION AND ENFORCEMENT HISTORY:**

The last inspection of this licensee was on November 4, 2014. No violations of NRC requirements were identified.

### **3. INCIDENT/EVENT HISTORY:**

No open items or events since the last routine inspection.

## **PART II – INSPECTION DOCUMENTATION**

### **1. ORGANIZATION AND SCOPE OF PROGRAM:**

Great Lakes Engineering Group, LLC, is authorized under NRC Materials License No. 21-32749-01 to use licensed material for measuring physical properties of materials with nuclear gauging devices. Licensed material is authorized to be used anywhere in the United States in areas of NRC jurisdiction. The licensee uses its gauges a few days a month for construction engineering projects throughout Michigan. The licensee uses Troxler Model 3430 portable gauges, containing cesium-137 and americium-241.

### **2. SCOPE OF INSPECTION:**

Inspection Procedure(s) Used: 87124

Focus Areas Evaluated: All

The inspector toured the licensee's main office to evaluate the licensee's measures for material security, hazard communication, and exposure control. At the time of the inspection, the licensee possessed two Troxler 3440 nuclear gauges, one of which was acquired in 2018. The licensee was not using any gauges at the time of the inspection, so the inspector was unable to inspect any temporary job site activities.

Through interviews with a gauge user and other licensee employees, the inspector found that the licensee's staff was knowledgeable of radiation protection principles and licensee procedures for use, storage and transportation of portable gauges. The inspector also reviewed a selection of licensee records for leak tests, use logs, audits, and training, as well as the shipping papers used during transport of the gauges.

Because the RSO was unavailable while the inspector was on site, the inspector continued the inspection from the regional office and contacted the RSO to interview him about the radiation safety program oversight as well as to review records that were unavailable at the time of the inspection.

3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:

Using a Thermo Scientific Radeye G Gamma Survey Meter (Serial Number 30336) calibrated on July 30, 2018, the inspector conducted independent surveys at each of the locations inspected. The inspector found no readings that would indicate residual contamination or exposures to members of the public in excess of regulatory limits.

4. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

Failure to Perform Semi-Annual Inventory

Between July 27, 2015, and September 12, 2018, the inspector identified a violation of License Condition 15 of NRC License 21-32749-01, which requires the licensee to perform a physical inventory every 6 months to account for all devices received and possessed under the license. Specifically, the inspector identified, through review of the use logs and interviews with the RSO, that the licensee did not have any gauge use during that time period and did not conduct any form of physical inventory to account for the gauge they possessed at the time. The licensee restored compliance when it received a new gauge in 2018 and resumed the use of the gauges but did not recognize the requirement to account for all the devices at least every 6 months until pointed out by the inspector during the inspection. The licensee was developing long-term corrective actions to prevent this violation from recurring.

Failure to Review Radiation Protection Program

Between April 8, 2015, and May 31, 2019, the inspector identified a violation of 10 CFR 20.1101(c), which requires the licensee to periodically (at least annually) review the radiation protection program content and implementation. Specifically, the inspector identified, through records review and interviews with the current and prior RSO, that these periodic reviews had not been performed since a previous RSO performed a review in 2015. On May 31, 2019, the RSO performed a review of the radiation protection program to restore compliance. The licensee was developing long-term corrective actions to prevent this violation from recurring.

5. PERSONNEL CONTACTED:

# Donavan Larkin, RSO  
Brian Morley, Former RSO

# Attended exit meeting via telephone on June 19, 2019.