

## INSPECTION RECORD

**Region:** III

**Inspection Report No.** 2019001

**License No.** 24-00188-02

**Docket No.** 030-05064

**Licensee:** St. Louis Testing Laboratories, Inc.  
2810 Clark Avenue  
St. Louis, MO

**Locations Inspected:** Same as above

**Licensee Contact:** Don Baumer, RSO

**Telephone No.:** 314 531 8080

**Program Code:** 03320

**Priority:** 1

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

**Last Inspection Date:** August 1, 2018

**Date of This Inspection:** May 31, 2019 with  
continued in-office review through July 18, 2019

**Next Inspection Date:** May31, 2020 ☒ 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:** Zahid Sulaiman, Health Physicist

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*/RA/*  
Signature

**Date:** 08/8/19

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

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Signature

**Date:** 08/15/19

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

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

AMENDMENT #	DATE	SUBJECT
39	8/3/2018	Added two Selenium-75 exposure devices

### 2. INSPECTION AND ENFORCEMENT HISTORY:

IR #	DATE	TYPE	FINDINGS
2018001 34.47(a)	9/24/2018	Routine	SL IV 10 CFR
2017001	7/24/2017	Routine	Clear

During this inspection, the inspector reviewed and confirmed the licensee's corrective actions to the violation of Title 10 of the *Code of Federal Regulations* (CFR) 34.47(a). The violation involved a radiographer's failure to wear a personnel dosimeter at all times during radiographic operations. The inspector reviewed the following corrective actions: (1) written statement from the individual describing the incident, (2) the licensee's calculations for the individual's exposure for this incident (65 mrem), (3) the licensee's discussion of the incident with radiography personnel during a safety meeting on August 23, 2018, and (4) the licensee's providing each radiographer a multiple compartment holder, worn on the belt to secure all the required personnel monitoring devices. The inspector determined that the licensee's corrective actions appeared adequate and noted that the violation had not recurred. This violation is closed.

### 3. INCIDENT/EVENT HISTORY:

No open items or events since the last routine inspection.

## PART II – INSPECTION DOCUMENTATION

### 1. ORGANIZATION AND SCOPE OF PROGRAM:

St. Louis Testing Laboratories, Inc. is authorized to possess sealed sources in exposure devices and source changers for the conduct of industrial radiography. The licensee is authorized to perform radiographic operations at temporary job sites and on the business property, as well as within a permanent radiographic installation (PRI). Radiographic operations were conducted daily by eighteen radiographers who used QSA Global, Inc. exposure devices containing iridium-192 and cobalt-60 sources. At the time of this inspection, the licensee employed no radiographer's assistants. The licensee possessed two cesium-137 sources for instrument calibrations. The majority of the radiographic operations were conducted at temporary job sites. In-house radiography was conducted routinely within the licensee's PRI. The licensee performs instrument calibrations within the PRI. The PRI was constructed with solid concrete blocks providing adequate shielding for licensee staff working in the adjacent areas, as well as members of the public. The licensee installed CCTV monitoring and radiation detectors on the roof directly over the PRI. Access to the roof was restricted during exposures within the PRI.

2. SCOPE OF INSPECTION:

Inspection Procedure(s) Used: 87121

Focus Areas Evaluated: All

This inspection included a review of selected records, interviews with licensee personnel, a tour of the facility, and independent measurements. At the time of this inspection, no radiographic operations were conducted. The inspector observed a radiographer demonstrate: (1) daily equipment checks; and (2) alarming rate meter, pocket dosimeter, and survey meter checks. The inspector observed a radiographer demonstrate radiographic operations at the PRI facility. The inspector also observed a radiographer demonstrate radiographic operations at a temporary job site, such as: establishing the rope barriers, posting signs, taking measurements outside the barriers, conducting direct surveillance, and using a calibrated survey instrument, personnel dosimeter, pocket dosimeter, and alarming rate meter.

Through interviews, the inspector determined that the radiographers were knowledgeable of radiation protection principles and license procedures. The inspector observed licensee staff conduct a physical inventory of the licensee's sealed sources, and all sealed sources were accounted for. The inspector reviewed other aspects of the licensee's radiation protection program, which included the security of licensed materials, utilization logs, quarterly inventories, sealed source leak tests reports, radiographers' training and certifications, DOT hazmat training, operating and emergency procedures, survey instrument calibrations, alarming rate meter calibrations, pocket dosimeter calibrations, radiation safety program audits, and dosimetry reports.

The maximum TEDE dose (in millirem) to a radiographer was reported as:	<u>2018</u>	<u>YTD</u>
	2,089	(3/31/2019) 58

3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:

Using a Ludlum Model 2403 GM survey meter calibrated on April 19, 2019 and a ThermoFisher RadEyeG energy-compensated GM detector calibrated on July 30, 2018, the inspector conducted independent surveys within each area inspected and the reading was within the regulatory limits.

4. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

During this inspection, the RSO raised a concern regarding security requirements. Details of inspector's review of this concern are discussed in the Security Addendum to the Inspection Report.

5. PERSONNEL CONTACTED:

#\* Donald Baumer – Radiation Safety Officer  
#\* Juergen Bloch – Alternate Radiation Safety Officer  
# Ron Werth – Radiographer

\* Attended Final exit meeting on July 18, 2019.