

INSPECTION RECORD

Region: III

Inspection Report No. 2020001

License No. 34-17371-02

Docket No. 030-35083

Licensee: Shelly & Sands, Inc.
P.O. Box 1585
Zanesville, OH 43702-1585

Locations Inspected: 1794 Moxahala Ave, Zanesville, OH (main office)
123 Dodd Dr, St. Mary's, WV (temporary job-site)

Licensee Contact: Harold Walton, ARSO **Telephone No.** 740-819-8038

Program Code: 03121 **Priority:** 5

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

Last Inspection Date: 5/13/2015 **Date of This Inspection:** 1/22/2020

Next Inspection Date: 1/22/2025 ☒ 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

Inspectors: Jason Draper, Health Physicist

/RA/
Signature

Date 03/26/2020

Approved: Robert Ruiz, Acting Branch Chief, MIB

Signature

Date: 3/27/2020

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

1. AMENDMENTS AND PROGRAM CHANGES SINCE LAST INSPECTION:

None

2. INSPECTION AND ENFORCEMENT HISTORY:

The last inspection of this licensee was a routine main office inspection conducted on May 13, 2015. The main office is located in an agreement state, and the inspector was unable to inspect any activities in NRC jurisdiction at the time of the inspection. No violations 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:

Shelly & Sands, Inc., is authorized under NRC Materials License No. 34-17371-02 to use licensed material for measuring physical properties of materials with nuclear gauging devices. Licensed material is authorized by this license to be used or stored only at temporary job sites anywhere in the United States within areas of NRC jurisdiction. The licensee uses the gauges daily throughout the year for asphalt content measurements at asphalt plants and during the construction season for density measurements at construction engineering projects in West Virginia. The licensee uses Troxler Models 3411-B, 3430, and 3440; and Campbell Pacific Nuclear Model MC Series portable gauges containing cesium-137 and americium-241. The licensee also uses Troxler Model 4640-B portable gauges containing cesium-137 and Troxler Model 3241-C portable gauges containing americium-241.

2. SCOPE OF INSPECTION:

Inspection Procedure(s) Used: 87124

Focus Areas Evaluated: All

This was a routine inspection of a temporary jobsite-only portable gauge licensee based out of an agreement state. The inspection consisted of records reviews associated with inventories, leak tests, personnel dosimetry, training, and periodic program reviews, as well as interviews with the ARSO at the licensee's main laboratory in Zanesville, Ohio. The inspection also consisted of an inspection of a temporary jobsite storage location near St. Mary's, West Virginia, and interviews with a gauge user there. At the temporary jobsite storage location, the inspector observed the licensee's measures for storing and securing gauges and reviewed the licensee's shipping papers for the gauges, which contained all necessary information. The inspector also performed independent surveys and found no readings that would indicate exposures above regulatory limits. The in-

office inspection consisted of interviews with the ARSO and another gauge user as well as review of documentation not readily available at the time of the on-site inspection.

3. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

During an inspection on January 22, 2020, the inspector identified that a violation occurred concerning the licensee's failure to maintain constant control and surveillance of a portable gauge, while not in storage, as required by Title 10 of the *Code of Federal Regulations* (CFR) Section 20.1802.

Specifically, through interviews with a gauge user, the inspector identified that on June 18, 2015, a gauge was struck by a licensee employee's vehicle at a jobsite. Through additional interviews with the ARSO and the gauge user involved in the incident, the inspector gathered that on the day of the incident, after the gauge user had completed a density measurement, the gauge user set the gauge (a Troxler 3440, Serial Number 14333, containing a nominal 8 millicurie cesium-137 source and a nominal 40 millicurie americium-241 source) down behind his truck while he was talking with a project inspector at the site. The gauge user moved away from the gauge while talking to the project inspector but kept the gauge in his view. After approximately 30 minutes, a flagger for the project instructed the gauge user to move his vehicle. At this time, the gauge user was distracted from his control of the gauge and got into his truck to move it. While moving the truck, the gauge user immediately identified that he had struck the gauge. The gauge user immediately got out of the truck and reestablished control of the gauge. The gauge user inspected the gauge and called the ARSO to notify him of the incident. The ARSO drove to the temporary jobsite and visually verified that while the gauge casing and electronics were damaged, the sources, source shielding, and source rod were not damaged. The ARSO transported the gauge back to the licensee's storage location in Zanesville, Ohio. The licensee later sent the gauge to a gauge service provider for a repair estimate, but ultimately decided not to repair or dispose of the gauge. The licensee maintains the gauge at the storage location marked so it is not used. The licensee routinely leak tests the sources of the gauge and have confirmed that the sources have not leaked.

In accordance with the Enforcement Policy, this violation would normally be categorized at Severity Level III and considered for escalated enforcement action. However, in accordance with NRC Enforcement Guidance Memorandum (EGM) 18-002, issued August 1, 2018, the NRC is exercising enforcement discretion to categorize this violation as a Severity Level IV violation because: (1) the failure to maintain control and constant surveillance of the portable gauge occurred during operational conditions; (2) the failure to maintain control and constant surveillance of the portable gauge was an isolated, non-willful occurrence and the non-compliance was of short duration and circumstance and did not cause a security access concern; and (3) no unauthorized individual contact with the portable gauge occurred and no unintended exposure to an individual occurred.

The inspector determined that the root cause of the violation was a lapse in oversight on behalf of the authorized portable gauge operator. As corrective action to restore compliance, the gauge user immediately regained control of the portable gauge after the gauge user had struck the gauge with a vehicle. As corrective action to prevent recurrence of a similar violation, the licensee reviewed this incident and the importance of gauge control with the other gauge users employed by the licensee during the

licensee's annual gauge user quality control meeting on April 7, 2016. These corrective actions were fully implemented as of April 7, 2016.

5. PERSONNEL CONTACTED:

- Brett Leach
- Tony Saunders
- # Harold Walton
- # Edward Morrison

- # Attended exit meeting via phone on February 28, 2020.

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