



Materials Inspection Record

1. Licensee Name: Surveying Solutions, Inc.		2. Docket Number(s): 030-37659		3. License Number(s) 21-32687-01	
4. Report Number(s): 2021-001			5. Date(s) of Inspection: June 2, 2021		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 03121	8. Priority: 5	9. Inspection Guidance Used: 87124	
10. Licensee Contact Name(s): Adam Ball, PE - RSO		11. Licensee E-mail Address: aball@ssi-mi.com		12. Licensee Telephone Number(s): 989-846-6601	
13. Inspection Type:		14. Locations Inspected:		15. Next Inspection Date (MM/DD/YYYY):	
<input type="checkbox"/> Initial <input type="checkbox"/> Routine <input type="checkbox"/> Announced <input checked="" type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		<input type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input checked="" type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		<input type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input checked="" type="checkbox"/> No change	

16. Scope and Observations:

This was an unannounced field inspection of a construction engineering company authorized to use portable gauges containing radioactive material at its offices in Standish and St. Johns, Michigan, and at temporary job sites in NRC jurisdiction. The scope of this inspection was limited to observations of licensed activities (compaction testing using a Troxler 3400 series gauge) at a bridge repair project on US-10 at M-30 in Sanford, Michigan. The authorized user and his gauge were based out of the company's office in St. Johns.

While returning home from other inspection activities, the inspector noticed the individual using a portable nuclear gauge under a bridge along US-10. The inspector stopped and, prior to announcing his presence, observed the gauge user perform several density tests. The user maintained control and constant surveillance of the gauge at all times. The inspector interviewed two other workers on the project, who confirmed that the gauge user appeared to maintain adequate control of his gauge prior to the inspector's arrival. When the user returned to his vehicle, the inspector interviewed him and discussed the safe and secure use and transport of the gauge as well as emergency response measures for a damaged gauge. The user was knowledgeable of basic radiation safety principles and familiar with the licensee's operating and emergency procedures, which were present along with proper shipping papers and transportation emergency response information. The user implemented adequate measures for gauge security and transport using a Nux Box with a second lock recently installed on the lid. The gauge itself was in good condition and its transport case inside the Nux Box was properly labeled. Independent surveys in the vicinity of the device were consistent with decay-adjusted radiation profiles in the applicable SSDR safety evaluation.

The inspector did note that the user was not initially wearing dosimetry as required by commitments in the licensee's renewal application dated January 11, 2018. The user stated that he had switched safety vests earlier in the day and forgot to transfer his badge. A sample of exposure monitoring reports provided by the RSO after the on-site inspection confirmed that the user was not likely to receive more than 10% of any regulatory limit for radiation exposure, and therefore was not required to be monitored per 10 CFR 20.1502(a). Since the licensee's commitment was more restrictive than the regulatory requirement in 10 CFR, and the failure appeared to be isolated, it was considered a minor violation of Condition 19.A of License No. 21-32687-01.

As corrective action, the user retrieved the badge from his vehicle, and wore it for the remainder of the day. The inspector observed the user perform additional density testing, and noted afterwards that his exposure monitoring results were consistent with his methods for use and control of gauges. The inspector also discussed the finding and the relevant requirements with the licensee's RSO.