



## Materials Inspection Record

1. Licensee Name: TTL Associates, Inc.		2. Docket Number(s): 030-33903		3. License Number(s): 21-26666-01	
4. Report Number(s): 2021-001			5. Date(s) of Inspection: November 30 & December 1, 2021		
6. Inspector(s): D. A. Piskura, Senior Health Physicist			7. Program Code(s): 03121	8. Priority: 5	9. Inspection Guidance Used: 87124
10. Licensee Contact Name(s): Jeffrey S. Elliott, PE, RSO		11. Licensee E-mail Address: jelliott@ttlassoc.com		12. Licensee Telephone Number(s): 734-582-4900	
13. Inspection Type: <input type="checkbox"/> Routine <input type="checkbox"/> Announced <input checked="" type="checkbox"/> Non-Routine <input checked="" type="checkbox"/> Unannounced		14. Locations Inspected: <input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office <input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		15. Next Inspection Date (MM/DD/YYYY): 08/2025 <input type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input checked="" type="checkbox"/> No change	

## 16. Scope and Observations:

The licensee provided environmental, engineering, and construction consulting services with field offices located throughout the US in Agreement States and in Michigan. The Plymouth, Michigan field office employed 25 individuals, with 15 individuals serving as authorized gauge users. The licensee possessed 5 moisture gauges containing radium-226 sealed sources (currently maintained "in storage") and 7 moisture/density gauges containing cesium-137 and americium-241 sealed sources.

This was a special follow up inspection to review the licensee's corrective actions in response to an escalated enforcement action (EA-20-110) involving two SL III violations of 10 CFR 20.1802 and License Condition 14. Specifically, the licensee failed to maintain control and constant surveillance of licensed material while in use at a temporary job site which resulted in a damaged gauge incident. During the immediate emergency response, an individual attempted to take actions to mitigate the damage caused to the gauge cesium source rod from the incident. However, the individual performed unauthorized actions which caused the cesium-137 source to disconnect from the gauge source rod.

The inspector verified the licensee's corrective actions which included: (1) providing refresher training to all gauge users in July 2020 immediately following the damaged gauge incident; (2) formally counseling the employee who was involved in the damaged gauge incident and the follow actions that caused further damage to the gauge and dislodging of the cesium-137 source from the source rod; (3) issuing a memorandum to the gauge user staff, requiring each individual to sign and acknowledge the licensee's emergency procedures; (4) revising its emergency procedures (add including these new procedures on the back of its bill of lading for easy reference) to specifically instruct staff not to take measures in the field to repair a damaged gauge; and (5) providing its gauge users with field tablets uploaded with the licensee's operating and emergency procedures. During this inspection, the inspector toured the licensee's facility and the gauge storage room to verify the licensee's compliance with Paragraph 30.34(i). The inspector performed independent surveys of the gauge storage room and adjacent areas; the maximum radiation readings were 2 mR/hr measured at center of the storage room containing 12 portable gauges. At the surface of the storage room door, the inspector measured 0.8 mR/hr. At the time of this inspection, no field work was conducted using licensed material within NRC jurisdiction.

No violations were identified during this inspection. The violations described above are considered closed.

MK  
12-15-21