



Materials Inspection Record

1. Licensee Name: Performance Engineers, Inc.		2. Docket Number(s): 030-38856		3. License Number(s) 21-35258-01	
4. Report Number(s): 2021-001			5. Date(s) of Inspection: August 11, 2021 with in-office review through September 22		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 03121		8. Priority: 5	9. Inspection Guidance Used: 87124
10. Licensee Contact Name(s): Aaron Nordman, PE - RSO		11. Licensee E-mail Address: anordman@performanceeng.com		12. Licensee Telephone Number(s): 231-547-2121	
13. Inspection Type: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Announced <input 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): 08/11/2026 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended <input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

This was an unannounced routine inspection of a civil/structural engineering firm authorized to stored portable moisture density gauges containing byproduct material at its office in Charlevoix, Michigan, and to use them for measuring the physical properties of materials at temporary job sites in NRC jurisdiction. At the time of the inspection, the licensee had two gauges and two individuals authorized to use them; they did so occasionally throughout the construction season.

The inspector toured the licensee's facility in Charlevoix. The storage area was properly posted, and two barriers were available for gauge storage. However, both of the licensee's gauges were on-board vehicles at the time of the inspection, either having just returned from a job site or having just been loaded on to a vehicle for dispatch to one. The gauge just returned was adequately secured behind at least two barriers; the other, however, was not (see below). The inspector surveyed the gauges and found no unusual readings; moreover both were in good condition, their transport cases were adequately labeled, and shipping papers were readily available in reach of the driver. The inspector interviewed a gauge user to discuss safe handling practices for gauges (no density testing was ultimately performed on account of the weather) as well as the licensee's RSO to discuss his oversight of the radiation safety program, including his role in response to emergencies. The inspector also reviewed a selection of records, including leak test results, personnel and area monitoring reports, gauge user training documentation, utilization logs, shipping papers, physical inventories and annual audits. During the period of in-office review, the licensee confirmed that it had access to a survey meter in the possession of a nearby gauge service provider.

As a result of this inspection, the inspector identified a SLIV violation of 10 CFR 30.34(i). Upon arrival, the inspector noticed one of the licensee's vehicles, a pickup truck, parked nearby. The inspector found a gauge case in the open bed of the unattended truck, and confirmed via surveys that a gauge was inside. The lid to the case was secured with two locks, however the case was secured to the vehicle with only a single locked chain. Therefore the licensee only used one barrier to secure the gauge against unauthorized removal.

The root cause of the violation was a misunderstanding of regulatory requirements; the gauge user thought that the lock on the gauge's handle constituted an independent physical control. As corrective action: the user returned the gauge to the designated storage location inside the office; the licensee obtained a second locking chain to secure the gauge case against unauthorized removal when transported in this truck, and was already planning to obtain a locking bed cover for the truck that would provide an additional independent physical control (the vehicle was only recently acquired).