

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: K & S Engineers, Inc. 9715 Kennedy Avenue Highland, IN 46322 (Locations: Highland, IN and Farmington Hills, MI) REPORT NUMBER(S) 2021001		2. NRC/REGIONAL OFFICE Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352	
3. DOCKET NUMBER(S) 030-28612	4. LICENSE NUMBER(S) 13-24480-01	5. DATE(S) OF INSPECTION June 23, 2021, though March 22, 2022	

LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.

_____ Non-cited violation(s) were discussed involving the following requirement(s):

- 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)
One Severity Level IV violation documented on Part 2

Statement of Corrective Actions

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

TITLE	PRINTED NAME	SIGNATURE	DATE
LICENSEE'S REPRESENTATIVE	Marcus Stallings, Safety Director	<i>Marcus Stallings</i>	4/11/22
NRC INSPECTOR	Jason D. Draper, Health Physicist	Jason D. Draper	Digitally signed by Jason D. Draper Date: 2022.03.31 11:01:25 -05'00'
BRANCH CHIEF	Michael A. Kunowski	Michael A. Kunowski	Digitally signed by Michael A. Kunowski Date: 2022.03.31 12:03:16 -05'00'

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

K & S Engineers, Inc.
9715 Kennedy Avenue
Highland, IN 46322
(Locations: Highland, IN and Farmington Hills, MI)

REPORT NUMBER(S) 2021001

2. NRC/REGIONAL OFFICE

Region III
U. S. Nuclear Regulatory Commission
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

3. DOCKET NUMBER(S)

030-28612

4. LICENSE NUMBER(S)

13-24480-01

5. DATE(S) OF INSPECTION

June 23, 2021, though
March 22, 2022

(Continued)

License Condition 19.A of Amendment 9 of NRC License 13-24480-01 requires the licensee, in part, to conduct its program in accordance with the statements, representation, and procedures contained in the documents listed, including the license renewal application dated July 19, 2011.

Item 10 "Radiation Safety Program - Occupational Dosimetry," of the license renewal application states, "either we will maintain, for inspection by NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10 percent of the allowable limits in 10 CFR Part 20, or we will provide dosimetry processed and evaluated by an NVLAP-approved processor that is exchanged at a frequency recommended by the processor."

Contrary to the above, between July 2019 and April 2020, the licensee failed to have its dosimetry processed and evaluated by an NVLAP-approved processor or maintain documentation demonstrating that unmonitored individuals were not likely to receive a radiation dose in excess of 10 percent of the allowable limits. Specifically, the licensee provided dosimetry to its employees but failed to return the dosimetry for processing and evaluation.

The licensee determined that the root cause of the violation was turnover in staff that caused a lack of ownership over dosimetry activities. As corrective actions, as well as to prevent recurrence, the licensee has submitted unprocessed badges they were able to locate, and has assigned a designated person (Safety Director) as responsible for managing dosimetry reports, submitting dosimetry badges, verifying these badges are received by the processor, verifying that quarterly reports are received by the licensee, and performing an annual review of dosimetry reports to ensure compliance with NRC requirements.



Materials Inspection Record

1. Licensee Name: K & S Engineers, Inc.		2. Docket Number(s): 030-28612		3. License Number(s) 13-24480-01	
4. Report Number(s): 2021001			5. Date(s) of Inspection: June 23, 2021, with in-office review through March 22, 2022		
6. Inspector(s): Jason Draper		7. Program Code(s): 03121	8. Priority: 5	9. Inspection Guidance Used: IP 87124	
10. Licensee Contact Name(s): Marcus Stallings, Safety Director		11. Licensee E-mail Address: mstallings@kandsengineers.onmicrosoft.com		12. Licensee Telephone Number(s): 708-846-8732	
13. Inspection Type: <input type="checkbox"/> Initial		14. Locations Inspected:		15. Next Inspection Date (MM/DD/YYYY):	
<input checked="" type="checkbox"/> Routine <input checked="" type="checkbox"/> Announced		<input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Field Office		06/23/2026 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended	
<input type="checkbox"/> Non-Routine <input type="checkbox"/> Unannounced		<input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		<input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

This was an announced routine inspection of a construction materials testing company with its main office in Highland, Indiana, authorized to use licensed material for measuring physical properties of materials with portable nuclear gauging devices. In addition to its main office, the license authorized two field offices, and authorized the use of licensed material at temporary job sites anywhere in the United States in areas of NRC jurisdiction. The licensee no longer stored licensed material at their Beech Grove, Indiana, field office, and recently acquired the Farmington Hills, Michigan, location along with the gauges possessed there from another licensee. From the licensee's Highland office, the licensee used gauges on a daily basis for construction engineering projects throughout Indiana. At this location, the licensee possessed three Troxler Model 3411 and six Troxler Model 3400 Series moisture-density gauges and employed four authorized gauge users. In 2019, the licensee transferred for disposal the radium-226 gauge they were authorized to possess. The licensee did not perform any service or maintenance activities on its gauges; these services were performed by a licensed service provider.

PERFORMANCE OBSERVATIONS

The inspection consisted of a tour of the licensee's gauge storage area, interviews with licensee personnel (the RSO, the Safety Director, and a gauge user), observation of licensee staff performance and demonstrations, and a review of select records. The inspector was unable to perform an inspection of temporary job site activities during this inspection.

The inspector toured the licensee's Highland facility and observed the storage location for the gauges. The inspector confirmed that while in storage, the licensee secured the gauges with at least two independent physical controls that form tangible barriers. The inspector also reviewed a sample of records including: utilization logs, annual program audits, leak tests, physical inventories, transfer records, DOT hazmat training, and gauge user training. The licensee also possessed a calibrated radiation survey instrument.

The inspector interviewed an authorized gauge user and observed the gauge user demonstrate how the licensee transports gauges, including the securing of gauges in vehicles, blocking and bracing, and the use of shipping papers. The inspector did not identify any issues with the licensee's transportation of gauges.

Based on review of the licensee's dosimetry records, the inspector identified that the licensee was missing dosimetry records between July 2019 and April 2020. The licensee Safety Director contacted the dosimetry vendor, but the vendor didn't have any record of processing the licensee's dosimetry for this period of time except for 1 employee for July 2019 through October 2019. After additional searches, the licensee was also able to locate unprocessed

Materials Inspection Record (Continued)

dosimetry in the office, some of which was also for the July 2019 through October 2019 timeframe. License Condition 19.A of NRC license 13-24480-01 requires the licensee to conduct its program in accordance with the statements, representations, and procedures contained in its application dated July 19, 2011. As part of Item 10 of this license renewal application, the licensee committed to either maintain documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10 percent of the allowable limits in 10 CFR 20, or provide dosimetry processed and evaluated by an NVLAP-approved processor. Contrary to this requirement, the licensee failed to have its dosimetry processed and evaluated by an NVLAP-approved processor. Specifically, the licensee was provided dosimetry, but failed to return it for processing and evaluation.

As corrective action, the licensee appointed the Safety Director as the designated person responsible for managing dosimetry reports, submitting dosimetry for processing, verifying dosimetry is processed and reports received, and performing annual reviews of dosimetry records.

During the inspection, the inspector also followed up on six open NOVs from previous inspections. Two open NOVs (IR 2012001 and IR 2017001) involved the licensee's failure to provide hazmat training to all hazmat employees at least once every three years. The inspector reviewed the licensee's corrective actions and training records and determined that the licensee's corrective actions appeared to be effective and all four gauge users had received hazmat training within the last 3 years. These NOVs are closed.

One open NOV (IR 2017002) involved the licensee's failure to perform periodic reviews (at least annually) of the radiation protection program content and implementation of its Beech Grove, Indiana field office. The inspector verified that in 2018, the licensee removed all licensed material from the Beech Grove field office, and the licensee had performed radiation protection program reviews at least annually since the last inspection. This NOV is closed.

Two open NOVs (IR 2017002) involved the licensee's failure to ensure that shipping papers were readily available in the driver's compartment and the failure to block and brace packages during transport. The inspector observed the licensee's demonstration of the transport of licensed material and verified that the licensee blocked and braced packages and had the appropriate shipping papers available. These NOVs are closed.

One open NOV (IR 2017002) involved the licensee's failure to provide dosimetry or maintain documentation justifying not requiring dosimetry. During this inspection, the licensee was unable to produce dosimetry records showing that dosimetry was processed for all gauge users for all monitoring periods, and was unable to locate unprocessed dosimetry, as mentioned above. This resulted in an additional NOV of the relevant license condition; therefore, this NOV remains open.

As a result of this inspection, the inspector identified one violation of NRC requirements (described above).



Materials Inspection Record

1. Licensee Name: K & S Engineers, Inc.		2. Docket Number(s): 030-28612		3. License Number(s) 13-24480-01	
4. Report Number(s): 2021001			5. Date(s) of Inspection: July 1, 2021		
6. Inspector(s): Ryan Craffey		7. Program Code(s): 03121	8. Priority: 5	9. Inspection Guidance Used: IP 87124	
10. Licensee Contact Name(s): Todd Bowling - Site RSO		11. Licensee E-mail Address: tbowling@kandsengineers.com		12. Licensee Telephone Number(s): 248-987-2480	
13. Inspection Type: <input type="checkbox"/> Initial		14. Locations Inspected:		15. Next Inspection Date (MM/DD/YYYY):	
<input checked="" type="checkbox"/> Routine <input checked="" type="checkbox"/> Announced		<input type="checkbox"/> Main Office <input checked="" type="checkbox"/> Field Office		06/23/2026 <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Extended	
<input type="checkbox"/> Non-Routine <input type="checkbox"/> Unannounced		<input type="checkbox"/> Temporary Job Site <input type="checkbox"/> Remote		<input type="checkbox"/> Reduced <input type="checkbox"/> No change	

16. Scope and Observations:

On April 23, 2021, the licensee purchased select assets of another portable gauge licensee (CTI and Associates, Inc., docket no. 030-12040), specifically their Construction Materials Testing Group, its facility in Farmington Hills, Michigan and all 28 of their portable moisture density gauges. Of the 17 CTI and Associates employees previously authorized to use gauges, six joined the licensee's new operations, as did the laboratory manager who continued to serve as Site RSO for the Farmington Hills facility. At the time of the inspection, the licensee had rented two of its newly-acquired gauges back to CTI and Associates for long-term landfill construction projects. Sixteen were out of service for various reasons. The licensee had used some of its ten operational gauges on construction projects in the Detroit and Ann Arbor metro areas since acquiring them.

The inspector toured the facility in Farmington Hills. All areas were adequately posted, and all licensed material was adequately secured behind at least two barriers. The inspector performed independent surveys in unrestricted areas in and around the facility. All readings were below regulatory limits to members of the public. The inspector verified that all gauges were accounted for, and performed confirmatory surveys in the vicinity of a selection of them. These readings were consistent with the applicable SSDR safety evaluations (adjusted for decay) and were similar to readings obtained by the licensee's survey instruments. All gauges and transport containers were in good condition, except one which had been damaged in June 2018 at a job site in Ann Arbor (see EN 53446, NMED 180266). The matter was previously reviewed by the NRC during a reactive inspection with no violations noted (see IR 03012040/2018001(DNMS)). The inspector confirmed that all shielding and other safety equipment on the gauge were undamaged and remained fully functional. The licensee intends to dispose of this and several other disused gauges in the near future.

No licensed activities were ongoing at the time of the inspection; instead, the licensee demonstrated the use and transport of gauges at the facility in Farmington Hills, and discussed implementation of operating and emergency procedures on temporary job sites.

The inspector reviewed a selection of records, including gauge utilization logs, shipping papers, sealed source leak test results (all 28 gauges had been leak tested shortly before transfer), quarterly physical inventories, personnel dosimetry reports, annual area survey results, and tracking sheets for gauge maintenance and for authorized user training.

No violations of NRC requirements were identified as a result of this inspection.