

## SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:  Koehler Engineering & Land Survey 194 Coker Lane Cape Girardeau, MO 63701  REPORT NUMBER(S) 2016-001		2. NRC/REGIONAL OFFICE  Region III U. S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352	
3. DOCKET NUMBER(S)  030-34590	4. LICENSE NUMBER(S)  24-32042-01	5. DATE(S) OF INSPECTION  June 14, 2016	

## 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:

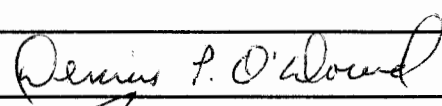
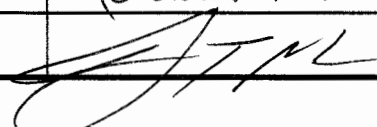
- ☒ 1. Based on the inspection findings, no violations were identified.
- ☐ 2. Previous violation(s) closed.
- ☐ 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was 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)

## 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			
NRC INSPECTOR	Dennis P. O'Dowd		06/14/16
BRANCH CHIEF	Aaron T. McCraw		6/24/16

**Docket File Information****SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

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6. INSPECTION PROCEDURES USED  87124		7. INSPECTION FOCUS AREAS  03.01-03.07	

**SUPPLEMENTAL INSPECTION INFORMATION**

1. PROGRAM CODE(S)  03121	2. PRIORITY  5	3. LICENSEE CONTACT  Kenny Stone, RSO	4. TELEPHONE NUMBER  (573) 335-3026
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☒ Main Office Inspection      Next Inspection Date: June 2021  
☐ Field Office Inspection  
☒ Temporary Job Site Inspection      Mo. Delta Med Ctr, 1008 No Main St, Sikeston, Mo.

**PROGRAM SCOPE**

This was a routine, unannounced inspection of a private engineering consulting company authorized to possess up to four nuclear gauging devices for use at temporary job sites anywhere in the United States where the NRC maintains regulatory jurisdiction. The licensee is authorized to store its gauges at its facility in Cape Girardeau, Missouri. At the time of the inspection, the licensee possessed the types and number of devices authorized by its license (i.e., three Troxler Electronics, Inc. Model 3440, and one Humboldt Scientific, Inc., Model 5001). Portable gauges were used for performing soil density measurements throughout the year during the construction season at temporary job sites in southeaster Missouri. The company employs 20-25 employees. At the time of the inspection, five individuals were authorized for portable gauge use, including the Radiation Safety Officer (RSO). The licensee does not perform any service or maintenance activities on the gauges.

**Performance Observations**

During the inspection, the inspector observed, reviewed, and/or discussed with the RSO, a geotechnical engineer who assists the RSO, and a gauge user at a temporary job site, the following items: (1) two independent, tangible barriers for gauge security and padlocks while unattended and in storage at the a temporary jobsite; (2) DOT requirements (including DOT HAZMAT training) and shipping papers; (3) dosimetry; (4) leak tests, physical inventories, and gauge utilization logs; (5) survey meter availability and use; (6) operating, emergency, and transportation procedures and incident reporting requirements. No issues were identified. It was noted that the licensee had discontinued assigning personal dosimeters to gauge users, based on its calculations and assessment of several years of dosimetry results demonstrating that users are unlikely to receive a dose in excess of 10% of the allowable limits in Part 20. The inspector observed the gauge storage areas at its facility, and determined that all gauges that were not in use were adequately secured with two independent barriers while not under constant control and surveillance. Licensee staff demonstrated storage and security procedures for a gauge when used and stored at a temporary job site, and during transportation. In interviews, licensee staff demonstrated adequate knowledge and understanding of operational, emergency, and radiation safety procedures involving the gauge. The inspector performed independent radiation measurements in the gauge storage area and near the gauge at a temporary job site. These measurements indicated no readings in excess of regulatory limits, or which indicated any dose concerns, and all were consistent with expected readings.

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