

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

Thermal Engineering International
Utility Products Division
2702 W. 9th Street
Joplin, MO 64801

REPORT NUMBER(S) 2018001

2. NRC/REGIONAL OFFICE

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

3. DOCKET NUMBER(S)

030-17798

4. LICENSE NUMBER(S)

24-19500-01

5. DATE(S) OF INSPECTION

10/16/18

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:

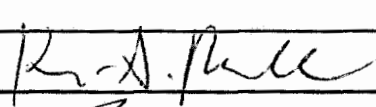
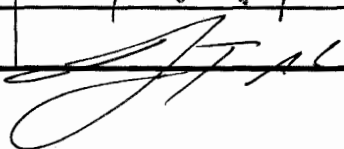
- ☒ 1. Based on the inspection findings, no violations were identified.
- ☐ 2. Previous violation(s) closed.
- ☐ 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was 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	Kevin G. Null		10/16/18
BRANCH CHIEF	Amos T. McCann		11/9/18

Docket File Information

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3. DOCKET NUMBER(S) 030-17798	4. LICENSE NUMBER(S) 24-19500-01	5. DATE(S) OF INSPECTION October 16, 2018
6. INSPECTION PROCEDURES USED 87121	7. INSPECTION FOCUS AREAS All	

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 3320	2. PRIORITY 1	3. LICENSEE CONTACT Nick Darnell	4. TELEPHONE NUMBER (417) 782-5080
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<input checked="" type="checkbox"/> Main Office Inspection	Next Inspection Date: 10/16/2019
<input type="checkbox"/> Field Office Inspection	
<input type="checkbox"/> Temporary Job Site Inspection	

PROGRAM SCOPE

This was a routine, unannounced inspection of a licensee authorized to conduct industrial radiography in a permanent radiographic installation (PRI) at their facility in Joplin, Missouri, and at temporary job sites under NRC jurisdiction. The licensee manufactured large industrial feed water heaters, condensers, and heat exchangers, and utilized gamma radiography equipment to verify the quality of welds. The licensee had one PRI where the majority of radiography was performed. For manufactured product that would not fit in the PRI, the licensee would establish a temporary job site within their facility in Joplin. The licensee was staffed by a radiation safety officer (RSO)/radiographer, one other radiographer, and two assistant radiographers.

PERFORMANCE OBSERVATIONS

The inspector toured the facility and the PRI, and interviewed the RSO and a radiographer. The inspector also observed a radiographer conduct exposures of several welds in the PRI. The inspector noted that the radiographer used appropriate dosimetry including a whole body badge, and a properly calibrated pocket ion chamber (PIC) and alarming rate dosimeter. The radiographer demonstrated functioning audible/visible alarming systems in the PRI, and the use of a properly calibrated survey meter which he used to verify that the source had returned to a safe, shielded position after each exposure. Using a calibrated Canberra model RadEyeG gamma survey meter, the inspector performed independent surveys alongside the radiographer as he conducted the post-exposure surveys of the radiographic equipment.

The inspector reviewed a selection of records pertaining to the radiation protection program including personal dosimetry, calibration of PIC's and survey meters, sealed source leak tests, physical inventory, and visual and operability checks of equipment before each use,

The inspector performed an independent survey of unrestricted areas directly adjacent to the radiography camera storage room. Radiation levels ranged from 0.6 mrem/hr - 1.2 mrem/hr.

No violations or NRC requirements were identified.