

Docket File Information**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) 13-01

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

December 18, 2013

6. INSPECTION PROCEDURES USED

87121

7. INSPECTION FOCUS AREAS

03.01-03.07

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S)

3320

2. PRIORITY

1

3. LICENSEE CONTACT

Nick Darnell, RSO

4. TELEPHONE NUMBER

(417) 782-5080

 Main Office Inspection Next Inspection Date: 12/18/2014 Field Office Inspection Temporary Job Site Inspection**PROGRAM SCOPE**

The licensee is authorized by their license to conduct industrial radiography at temporary job sites and at the licensee's Joplin, MO facility. The licensee is also approved for a permanent radiographic installation (PRI). The licensee's industrial radiography program included 2 radiographers and 1 assistant radiographer in training. At the time of the inspection, the licensee possessed one Ir-192 and one Co-60 radiographic exposure devices (REDs). The REDs has not been transported off site to other temporary job sites since the previous inspection. The majority of industrial radiography is conducted as needed in the PRI and use averaged 5-10 exposures per month for production of feed water heaters. The Ir-192 source is exchanged annually by the licensee. The licensee also uses additional dosimeters as area monitors around the PRI as additional monitoring for verification of any gamma exposures during the monitoring periods. No industrial radiography was scheduled on the day of the inspection.

Performance Observations

The licensee's RSO/radiographer demonstrated/discussed: (1) survey meter instrumentation and calibrations; (2) source exchanges (4/12/13); (3) NSTS reporting; (4) RED labels; (5) day of use and quarterly radiography equipment inspections; (6) misconnect tests and alarming rate meter tests for alarm and battery; (7) security of the REDs; (8) utilization logs; (9) radiographer's certifications; (10) staff training; (11) DU leak tests/inventories (7/2013 and 1/2013); (12) radiographer audits; (13) incidents or events with REDs (none); (14) pocket dosimeters and alarming rate meter calibrations; (15) radiation safety program audits (8/16/2013); (16) dosimetry records for 2012 and 2013 indicated annual doses were from 0 mrem to the highest of 93 mrem; (17) PRI visible and audible warnings and tests; and (18) REIRS reports.

The inspector performed independent radiation measurements which indicated no dose concerns and consistent with licensee survey records and postings.