



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

(FSME-10-019, March, Training, Industrial Radiography)

March 12, 2010

ALL AGREEMENT STATES, MICHIGAN

REPORTING REQUIREMENTS FOR INDUSTRIAL RADIOGRAPHY (FSME-10-019)

Purpose: To notify the Agreement States that the U.S. Nuclear Regulatory Commission's (NRC) Office of Federal and State Materials and Environmental Management Programs (FSME), FSME Licensee Newsletter, Summer 2009 edition featured an article that was written to clarify the requirements for a 24-hour report for certain industrial radiography events in addition to the 30-day written report requirement in 10 CFR 34.101. The newsletter was distributed to all NRC materials licensees. The NRC believes that this article could be useful to industrial radiography licensees in the Agreement States particularly to users of Industrial Nuclear Company Inc. (INC) IR-100 device models. The NRC asks that this information be disseminated to industrial radiography licensees in the Agreement States especially users of the INC IR-100 model.

Background: The goal of the FSME Licensee Newsletter was to clarify some confusion that exists as to when an industrial radiography licensee is required to make 24-hour reports under 10 CFR 30.50(b)(2). Contrary to the requirements some licensees have been not making the required 24-hour notification for events in which the sealed source assembly did not return to the fully shielded position within the exposure device.

Discussion: NRC requirements in 10 CFR 30.50(b)(2) state, in part, that a 24-hour report is required when equipment is disabled or fails to function as designed when the equipment is required by regulations to prevent unnecessary exposures to radiation. The equipment is required to be operable when it is disabled or fails to function and no redundant equipment is available to perform the required safety function. Contrary to this requirement the NRC has encountered some instances where a licensee was unable to retract a source to the fully shielded position because the safety latch mechanism engaged prematurely leaving the source not in the fully shielded position. In one situation a licensee determined that the reason for the malfunction was due to sand deposits within the latch mechanism. The licensee was able to remove the sand deposits and was able to retract the source to the fully shielded position. However, contrary to the regulations the licensee did not make the 24-hour report. The licensee thought that since they were able to remove the sand deposits from the latch mechanism while in the field and were able to fully retract the source a 24-hour report was not necessary. The reporting requirements pertain to all industrial radiography device models, however there have been several recent events involving the safety latch engaging early in INC IR-100 models. As discussed in the FSME Licensee Newsletter licensees may not be aware of the requirements to report these cases as events in addition to making the 24-hour report. The NRC is interested in collecting data related to sources not being able to be retracted into the fully shielded position to determine whether there is a generic problem particularly with the INC IR-100 models. In order to further clarify the 24-hour reporting requirement the NRC will consider amending 10 CFR 34.101 to fully articulate all the reporting requirements for radiography in a future revision to 10 CFR 34.

The article can be found beginning on pages 5 and 6 of the newsletter at:
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0117/09-02.pdf>.

NRC Point of Contact: If you have any questions on this correspondence, please contact me at 301-415-3340 or the individual named below.

| | | |
|------------|--|--|
| CONTACT: | Tomas Herrera | James Thompson |
| TELEPHONE: | 301-415-7138 | 817-276-6538 |
| E-MAIL: | Tomas.Herrera@nrc.gov | James.Thompson@nrc.gov |

/RA/

Robert J. Lewis, Director
Division of Materials Safety
and State Agreements
Office of Federal and State Materials
and Environmental Management Programs

Enclosure: As Stated