

INES Event Rating Form (ERF)

Version 1

Sender's Name:	Patricia Milligan
Sender's Organization:	Nuclear Regulatory Commission (NRC) (United States of America)
Event Title:	Overexposure to Radiographer
Event Date:	2017-05-15
Location / Facility:	Wisconsin Rapids, Wisconsin/ACUREN INSPECTION, INC.
Event Country:	United States of America
Event Type:	Radiation Source
INES Rating:	2 - Incident (Final)
Rating Date:	2017-05-24

Impact on people and the environment

Release beyond authorized limits?	No
Overexposure of a member of the public?	No
Overexposure of a worker?	Yes

Impact on the radiological barriers and controls at facilities

Contamination spread within the facility?	No
Damage to radiological barriers (incl. fuel damage) within the facility?	No

Degradation of Defence In-Depth? No

Other information

Person injured physically or casualty?	No
Is there a continuing problem?	No

Event Description

During the performance of industrial radiography, the licensee radiographer approached the collimator without his survey meter. The radiographer positioned the collimator in preparation for an exposure shot without first retracting the 3.552 TBq (96 Ci) Se-75 source back inside the camera. Based on the dose assessment from the licensee, the radiographer received an overexposure of 1.76 Sv (176 rem) to each hand. At the time of the reporting of the event, there were no signs of skin reddening on the radiographer's hands. The U.S. statutory limit for extremity doses is 0.5 Sv (50 rem). The dosimetry badge results revealed a whole body exposure of only 1.52 mSv (152 mrem), which is below the statutory limit of 0.05 Sv (5 rem). NRC EN52759

Rating Justification

A Level 2 rating is warranted for exposure of a worker in excess of statutory annual dose limits. See Section 2.3.1 INES User's Manual 2008 Edition (IAEA-INES-2009) http://www-pub.iaea.org/MTCD/publications/PDF/INES-2009_web.pdf

Press Release Attached: No

Technical Document Attached: No

Further Information on Web:

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