November 23, 2005

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-05- 018

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region IV staff on this date.

Facility	**Licensee Emergency Classification**
Iris NDT	___ Notification of Unusual Event
Tulsa, OK	___ Alert
Oklahoma Agreement State Licensee	___ Site Area Emergency
	___ General Emergency
	X Not Applicable

SUBJECT: RADIOGRAPHER'S DOSE EXCEEDS REGULATORY LIMITS

DESCRIPTION: On November 19, 2005, the State of Oklahoma Department of Environmental Quality (the State) notified the NRC Operations Center (EN 42156), of a potential overexposure of a radiographer. On November 22, 2005, the State informed the NRC that the actual thermoluminescent dosimeter result was 44 millisievert (4.4 rem) external dose for the incident. The radiographer's total year-to-date external dose is 69 millisievert (6.9 rem), a dose in excess of the NRC's annual occupational limit of 50 millisievert (5 rem).

Initially the State reported that, based on re-enactments by the licensee, the radiographer received potential calculated doses of 230 millisievert (23 rem) external dose and 1.7 gray (173 rad) extremity dose. Through the re-enactments, the licensee estimated that the radiographer was in front of the camera at a distance of 18 inches for approximately 3 minutes. The State is reviewing the difference between the calculated and actual dose.

The licensee reported that the incident occurred when the radiographer went to change the camera film after he thought his assistant had fully retracted the source. As the radiographer was on his way to the camera, he set his radiation detection instrument down to answer a cell phone call. At the same time the assistant, who was responsible for retracting the source, was distracted sending a text message on his cell phone. The radiographer's alarming rate meter was turned off. When the radiographer realized that his self-reading pocket dosimeter was off-scale, he notified the company's radiation safety officer. The assistant radiographer's pocket dosimeter had a reading of 1.2 millisievert (120 millirem). The processed badge result was 1.2 millisievert (121 millirem).

The camera was a SPEC Model 150 containing a 2.4 terabecquerel (66 Curie) iridium-192 source. The camera was tested after the event and found to be in good operating condition.

Both the radiographer and the assistant have been suspended pending further investigation. Blood samples for both individuals were taken as a precautionary measure. The State is continuing to investigate the incident.

Region IV received notification of this occurrence from the State of Oklahoma on November 19, 2005. Region IV has informed OEDO, NMSS, STP, and the Region's SLO and PAO.

This information has been discussed with the state and is current as of 11:00 a.m. (CST) on November 23, 2005.

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