

March 13, 2017

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE --PNO-IV-17-001-A

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, Arlington, Texas, staff on this date.

**Facility**

Kakivik Asset Management  
Anchorage, Alaska

Docket: 030-35371

License No.: 50-27667-01

**Licensee Emergency Classification**

- Notification of Unusual Event
- Alert
- Site Area Emergency
- General Emergency
- Not Applicable

SUBJECT: UPDATE: PERSONNEL RADIATION EXPOSURE POTENTIALLY IN EXCESS OF REGULATORY LIMITS

DESCRIPTION: This Preliminary Notification updates information contained in PNO-IV-17-001 which discussed the events related to a potential overexposure of an individual in excess of regulatory limits.

On March 7, 2017, Kakivik Asset Management notified the NRC that, while performing radiography at a remote site in Alpine, Alaska on March 6, a radiography camera source was not locked in the shielded position, resulting in the potential overexposure to the radiographer (Event Notification (EN) 52596). The licensee further stated in the report that after completing a radiographic exposure, the radiographer failed to recognize that the source (84.6 curies of iridium-192) was not locked in the fully shielded position. During repositioning of the radiography camera to inspect the next pipe weld, the radiographer stated that his dose rate meter alarmed when he placed the exposure device on the ground at the next weld to be radiographed and his survey meter and pocket dosimeter were off-scale high. The licensee believes that the radiographer failed to fully retract the source enough for it to lock in the shielded position, and the source was thus able to travel outside of the fully shielded position while the radiographer walked from one weld to the next. The Night Foreman immediately suspended radiographic operations, and removed the radiographer and the radiographer's assistant from the job site.

Nuclear Regulatory Commission (NRC) Region IV staff contacted the licensee's Radiation Safety Officer (RSO) after receiving the EN on March 7, 2017, to gather additional information regarding this event. The initial investigation by the licensee determined that there was only one radiographer who received an excessive radiation exposure, because the assistant radiographer's pocket dosimeter did not indicate any radiation exposure. The radiographer's personal dosimeter, as well as the assistant radiographer's personal dosimeter, were sent in for emergency processing. Since this radiography was being performed at night and in a remote location in Alaska, no members of the public were present.

The licensee performed preliminary calculations based on interviews with the radiographer, and established a likely radiation exposure between 3.5 Rem and 39 Rem whole body exposure. This was calculated based on the time it took to carry the exposure device to the next weld, the activity of the source, and the distance of the source to the trunk of the radiographer's body.

NRC Region IV was informed by email on March 13, 2017, by the licensee's RSO that the results of the emergency processing of the Landauer personal dosimeters had been received. The

radiographer received 452 millirem for the month of March 2017, and the radiographer's assistant received 40 millirem for the same period. This reflects the dose received during this event on March 6, 2017, as well as from radiography performed from March 1-5, 2017.

The State of Alaska has been updated.

The information presented herein has been discussed with the licensee and is current as of 1:45 p.m., March 13, 2017.

ADAMS ACCESSION NUMBER: ML17073A008

CONTACTS: James L. Thompson at (817) 200-1538