

THIS EVENT IS NOT FOR PUBLIC DISCLOSURE PER AGREEMENT STATE REQUEST UNTIL 3/24/05.

March 22, 2005

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-05-006

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

Conan MMP Inspection, Inc.
City: Long Beach
State: CA
License #: 4832-19
California Agreement State License

Licensee Emergency Classification

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

SUBJECT: OVEREXPOSURE DURING RADIOGRAPHY OPERATIONS

DESCRIPTION: This Preliminary Notification supplements Event Report Number 41485, March 12, 2005, and provides updated information regarding the reported extremity exposure.

The original report of the event was provided by the California Radiologic Health Branch regarding potential overexposures during radiography operations. While performing radiography, a radiography camera source was not fully retracted before disconnecting the guide tube.

On March 11, 2005, Conan MMP Inspection, Inc., a State of California licensee, notified the State that two of its employees were conducting radiographic operations at a refinery located in Carson, CA, using an Industrial Nuclear Corporation (Model IR 100) exposure device. The device contained an iridium-192 sealed source with an activity of approximately 3.3 terabecquerels (90 curies).

The licensee reported that after performing about 10 radiographic exposures the radiographer approached the camera without a survey instrument and disconnected the guide tube. When he returned to the crank area, the radiographer and an assistant noticed that survey instruments were reading off-scale. Additionally, the radiography crew checked their pocket dosimeters, and they were also off-scale. They found that the source had not fully retracted. The radiographer used pliers to successfully retract the source into the shielded position.

Dosimetry indicates that the radiographer and his assistant received whole body doses of 16 millisievert (1.6 rem) and 27 millisievert (2.7 rem), respectively. Event reconstruction dose calculations indicated that the radiographer may have received a shallow dose equivalent of 550 millisievert (55 rem) to the hands, a dose in excess of the Nuclear Regulatory Commission's extremity dose limit of 500 millisievert (50 rem). [This Preliminary Notification revises the hand dose previously recorded in the Event Report as 2.12 sievert (212 rem).] There have been no reported physical problems related to the exposures received by either the radiographer or the assistant. The radiographic device will be sent to the manufacturer for evaluation and repair. The State of California is conducting an investigation of the event.

Region IV received notification of this occurrence from NRC's Operation Center on March 12, 2005. Region IV has informed OEDO, NMSS, STP and the Region's SLO and PAO.

This information has been discussed with the California Department of Health Services and is current as of 7:00 a.m (CST) on March 22, 2005.

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