

# INES Event Rating Form

<b>Event Title:</b>	Overexposure to Radiographer
<b>Date of Event:</b>	2014-03-13
<b>Event Location / Facility Name:</b>	LaPorte, Texas/Acuren Inspection
<b>Event Country:</b>	USA
<b>Type of Event:</b>	Radiation Source

<b>INES Rating:</b>	2
<b>Status of Rating:</b>	Final
<b>Date of Rating:</b>	2014-04-24

<b>Impact on People and Environment</b>		
<i>Release beyond authorized limits?</i>	<input type="checkbox"/>	
<i>Overexposure of a member of the public?</i>	<input type="checkbox"/>	
<i>Overexposure of a worker?</i>	<input checked="" type="checkbox"/>	
<b>Impact on the Radiological Barriers and Controls at Facilities</b>		
<i>Contamination spread within the facility?</i>	<input type="checkbox"/>	
<i>Damage to radiological barriers (incl. fuel damage) within the facility?</i>	<input type="checkbox"/>	
<b>Degradation of Defence In-Depth?</b>	<input type="checkbox"/>	
<b>Person injured physically or casualty?</b>	<input type="checkbox"/>	
<b>Is there a continuing problem?</b>	<input type="checkbox"/>	

## Event Description:

*Note: When the ERF is published on IAEA NEWS, the first 300 characters of the event description will appear on the NEWS home page.*

Two radiography trainees were performing industrial radiography inside of a tank. The first trainee handled the guide tube of a radiography camera while the Ir-192 source was in the guide tube. The Ir-192 source contained 2,553 GBq (69 curies). The first trainee was not wearing his personnel monitoring devices because he had left them in the truck. He also was not using a survey meter. Based on the reenactment of the event in which it was determined that the trainee's hand was 0.5 centimeter from the source for 10 seconds, the licensee has calculated a dose of 36 Sv (3,680 rem) to the hand of the first trainee; however, the trainee presently is not experiencing any pain and no deterministic effects have been observed. The whole body dose to the first trainee is 60 mSv (6 rem). The second trainee did not handle the guide tube, but received a whole body dose of 33 mSv (3.3 rem). Blood samples have been taken and sent to the Radiation Emergency Assistance Center/Training Site (REAC/TS). The licensee, Acuren Inspection, will continue to monitor the hand of the first trainee and communicate with REAC/TS. Update 04/24/2014: Texas has completed its investigation, and has calculated a dose of 120 mSv (12 rem) to the whole body and 40 mSv (4 rem) to the hand. These figures render this event a statutory whole body overexposure only, and are consistent with the licensee's calculation of 130 mSv (13 rem) to the whole body and 60 mSv (6 rem) to the hand. EN49912.

## Justification of INES Rating:

*Note: When the ERF is published on IAEA NEWS, the justification of the INES rating will only appear to privileged users.*

**A Level 2 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](http://www-pub.iaea.org/MTCD/publications/PDF/INES-2009_web.pdf)**

<b>Further Info on Web (URL):</b>	Click here to enter text.
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**Annexes:**

<b>Annex Title</b>	<b>Category</b>	<b>Description (optional)</b>
Click here to enter text.	Choose an item.	Click here to enter text.
Click here to enter text.	Choose an item.	Click here to enter text.