

EVENT RATING FORM (ERF)

Event No.: 46577

Sent Date:

THE INTERNATIONAL NUCLEAR EVENT SCALE (INES)																
EVENT TITLE OVER EXPOSURE TO RADIATION WORKER										EVENT DATE 2011 01 13						
RATING		RATING DATE	OUT OF SCALE	DEVIATION	INCIDENT			ACCIDENT			FACILITY TYPE					
PROVISIONAL	<input type="checkbox"/>	2011-03-04	<input type="checkbox"/>	0	1	2	3	4	5	6	7	Power Reactor	<input type="checkbox"/>	Research Reactor	<input type="checkbox"/>	
FINAL	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RadWaste Facility	<input type="checkbox"/>	Radiation Source	<input type="checkbox"/>
COUNTRY USA				FACILITY NAME / PLACE MASSACHUSETTS GENERAL HOSPITAL							Irradiation		<input type="checkbox"/>	Transportation		<input type="checkbox"/>
											Fuel Fabrication		<input type="checkbox"/>	Fuel Reprocessing		<input type="checkbox"/>
											Research Facility		<input type="checkbox"/>	Mining/Milling		<input type="checkbox"/>
											Enrichment Facility		<input type="checkbox"/>	Other		<input checked="" type="checkbox"/>
											YES		NO			
Off-site impact																
Release Beyond Authorised Limits											<input type="checkbox"/>		<input checked="" type="checkbox"/>			
Overexposure of Members of Public											<input type="checkbox"/>		<input checked="" type="checkbox"/>			
On-Site Impact																
Contamination Spread											<input type="checkbox"/>		<input checked="" type="checkbox"/>			
Worker Overexposure											<input checked="" type="checkbox"/>		<input type="checkbox"/>			
Damage to Radiological Barriers											<input type="checkbox"/>		<input checked="" type="checkbox"/>			
Degradation of Defence In-depth											<input type="checkbox"/>		<input checked="" type="checkbox"/>			
Person Injured Physically or Casualty											<input type="checkbox"/>		<input checked="" type="checkbox"/>			
Is There a Continuing Problem											<input type="checkbox"/>		<input checked="" type="checkbox"/>			
Press Release Issued (if yes, please attach)											<input type="checkbox"/>		<input checked="" type="checkbox"/>			
Event Description On January 13, 2011, the licensee received a dosimetry report which stated that one of their employees received a year-to-date dose of 55 mSv (5.5 rem) which is above the statutory limit of 50 mSv (5 rem). The over dose was obtained in December 2010 during the emergency repair of a cyclotron unit over a period of several days. However, the affected employee's real-time dosimeter indicated a much lesser dose, calling into question the over dose indicated on the permanent dosimeter. Massachusetts subsequently performed an onsite inspection and determined that the affected employee did receive an over dose of 55 mSv (5.5 rem). The licensee attributes the over dose to misinterpretation of existing policy which restricts workers when year-to-date exposures approach limits; and over-reliance on real-time dosimeters. The licensee implemented several corrective actions to include application of administrative correction factors to readings of job-specific dosimeters to obtain more conservative real time results; modifying the permanent dosimeter exchange frequency to obtain more current year-to-date exposure totals; and revision to existing policy. The affected employee had been temporarily removed from potentially high exposure operations during the licensee's investigation, and was re-instated on March 3, 2011.																
Rating Justification and Difficulties Encountered																
The final rating for this event is Level 2.																
A Level 2 is warranted for exposure of a worker in excess of the statutory annuals 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																
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NOTE: This form *should not* be used for sending information to the IAEA about an actual event!
For this purpose the Nuclear Events Web-based System (<http://www-news.iaea.org>) should be used instead.