

INES Event Rating Form

Event Title:	Exposure of a maintenance worker in excess of statutory annual dose limits
Date of Event:	10 September 2012
Event Location / Facility Name:	Ljubljana, Pivovarna Union, d.d.
Event Country:	Slovenia
Type of Event:	Other

INES Rating:	1
Status of Rating:	Final
Date of Rating:	18 February 2013

Impact on People and Environment		
<i>Release beyond authorized limits?</i>	<input type="checkbox"/>	
<i>Overexposure of a member of the public?</i>	X	
<i>Overexposure of a worker?</i>	<input type="checkbox"/>	
Impact on the Radiological Barriers and Controls at Facilities		
<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"/>	
Degradation of Defence In-Depth?	<input type="checkbox"/>	
Person injured physically or casualty?	<input type="checkbox"/>	
Is there a continuing problem?	<input type="checkbox"/>	

Event Description:

On September 10, 2012 a maintenance worker of a brewery, who was not an occupational radiation worker, was exposed above the statutory annual dose limit of 1 mSv for a member of public while mounting an X-ray tube unit on a level gauge. The company's internal working procedures were violated since the worker was not authorised to perform a radiation practice.

The worker has mounted the X-ray tube unit into the gauge and established that the settings of the X-ray tube deviate from standard values. He tried to adjust the voltage and the current to the standard values. During the operational test he discovered that there was no signal on the gauge's detector. Using the portable gamma detector he found out that the X-ray beam was pointing in opposite direction, towards him, instead of towards gauge's detector. Due to suspicion of overexposure, the company notified the competent authorities.

An authorised technical support organisation performed reconstruction of the incident and the effective dose received by worker was assessed to 4.5 mSv. The rating for the event is level 1.

Justification of INES Rating:

One person (not an occupational radiation worker) received an effective dose greater than 1 mSv (statutory annual dose limit) but less than 10 mSv. The event was rated as level 1 based on:

Table 3 – Exposure of a member of the public in excess of statutory annual dose limit = Level 1.

Further Info on Web (URL):	-
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