

INES Event Rating Form (ERF)

Version 1

Sender's Name:	Patricia Milligan
Sender's Organization:	Nuclear Regulatory Commission (NRC) (United States of America)
Event Title:	Worker Overexposure
Event Date:	2017-12-01
Location / Facility:	Buford Georgia / Theragenics Corporation
Event Country:	United States of America
Event Type:	Irradiation/Accelerator Facility
INES Rating:	2 - Incident (Final)
Rating Date:	2018-01-19

Impact on people and the environment

Release beyond authorized limits?	No
Overexposure of a member of the public?	No
Overexposure of a worker?	Yes

Impact on the radiological barriers and controls at facilities

Contamination spread within the facility?	No
Damage to radiological barriers (incl. fuel damage) within the facility?	No

Degradation of Defence In-Depth? No

Other information

Person injured physically or casualty?	No
Is there a continuing problem?	No

Event Description

A cyclotron technician received 719 mSv (71.9 rem) to the left hand for the period of 11/6/2017 to 11/19/2017. The licensee contributed the dose to one of two instances that occurred during this period of time. 1) The technician worked on cleaning and rebuilding the central region of a cyclotron, for 2 hours and 2) The technician had difficulty operating the manipulator arms and pneumatic screwdriver within a hot cell and removed 10 screws in the target rail of the hot cell by hand. To date, no effects to the left hand of the technician have been seen. In response to the event the licensee scheduled retraining for employees and developed new procedures. The state of Georgia requested to receive a copy of the procedures once they are finalized. The dose received exceeds the U.S. statutory limit for extremity dose of 500 mSv (50 rem). NRC EN53144

Rating Justification

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

Press Release Attached: No

Technical Document Attached: No

Further Information on Web:

Contact Person:	Patricia Milligan
Affiliation:	Nuclear Regulatory Commission (NRC)
Email:	Patricia.Milligan@nrc.gov
Telephone:	0013012873739
Organization on Web:	http://www.nrc.gov
