

Senate Standing Committee on Economics
ANSWERS TO QUESTIONS ON NOTICE
 Innovation, Industry, Science and Research Portfolio
 Budget Estimates Hearing 2010-11
 31 May 2010

AGENCY/DEPARTMENT: AUSTRALIAN NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION

TOPIC: Safety breaches

REFERENCE: Written Question–Senator Eggleston

QUESTION No.: BI-43

How many safety breaches have occurred at Lucas Heights in the last ten years? Please detail them by month/year, what the incident was, what actions were taken? (*Sydney Morning Herald* 6/5/2010)

ANSWER

In the last ten years, there have been 12 safety breaches, determined by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) or Comcare, as follows:

Date	Nature of Breach	Actions Taken
April 2003	Licence requirements were breached when personnel did not undertake HIFAR heavy water plant room check. There were no radiological or safety consequences. (Breach of Australian Radiation Protection and Nuclear Safety (ARPANS) Regulation 49 and Section 30(2) of the ARPANS Act).	ANSTO reviewed its procedures and increased awareness amongst relevant staff.
June 2005	ANSTO failed to obtain prior approval from ARPANSA to install an extra hoist on the OPAL reactor hall crane. (Breach of ARPANS Regulations 44 and 51 and Section 30(2) of the ARPANSA Act).	The hoist, which was never used, was subsequently removed.
June 2005	Dosimeter worn by a radiopharmaceutical technician indicated that the dosimeter had received an effective dose of 66 millisieverts – equivalent to five abdominal CT scans. The statutory limit for radiation workers is 20 mSv annually, with ANSTO's self-imposed constraint 15 mSv. (Breach of ARPANS Regulations s 46(2), 49, 58 and Section 30(2) of the ARPANS Act).	The employee was reassigned to non-radioactive duties as a precaution. Possible explanation for high reading on dosimeter may be from it being left near a radioactive source for an extended period.
January 2007	A baggage x-ray machine was purchased and used without being licensed. ((Breach of Section 31(1) of the ARPANS Act)	ANSTO reviewed its procedures and increased awareness and training amongst relevant staff

February 2007	Internal processes in regard to the formal accreditation of an OPAL Shift Manager in February 2007 were not correctly followed. (Breach of ARPANS Regulation 49)	The shift manager concerned was subsequently properly accredited, and subsequent accreditations have been undertaken in accordance with the appropriate plans and arrangements.
June 2008	Improvement notice issued on under reporting of dangerous occurrences. Breach of OH&S (Safety Arrangements) Regulation 37A and Section 68 of the OHS Act)	Event reporting procedures reviewed and updated.
August 2008	Disposal of an X-ray unit without prior approval by ARPANSA. (Breach of ARPANS Regulation 53(1) and Section 31(2) of the ARPANS Act)	ANSTO reviewed its procedures and increased awareness amongst relevant staff
August 2008	Licensed radioactivity limit for Germanium-68 exceeded on 14 August 2008. (Breach of Section 31(3) of the ARPANS Act)	Procedures reviewed and modified to comply with permitted levels of radioactivity.
November 2008	Failure to comply with the Operational Limits and Conditions (OLCs), when a faulty instrument power supply was failed to be placed into tripped state. (Breach of ARPANS Regulation 49 and Section 30(2) of the ARPANS Act)	No enforcement action taken, as the reactor was maintained in a safe state.
January 2009	Operational limits and conditions were exceeded in the medical isotope production area of ARI by receiving radioactivity in excess of licence conditions. (Breach of Section 30(2) of the ARPANS Act).	Sources stored for safety until decayed to a permissible level.
February 2009	Non-compliance with the Code of Practice for the Safe Transport of Radioactive Material 2008 by exceeding the radioactive content for 'Type A' package. (Breach of Section 30(2) of the ARPANS Act).	ANSTO increased awareness amongst relevant staff of transport procedures.
February 2010	Licensed radioactivity limit for Flourine-18 exceeded from September 2007. (Breach of Section 31(3) of the ARPANS Act)	Procedures reviewed and modified to comply with permitted levels of radioactivity.