

**Senate Standing Committee on Economics**  
ANSWERS TO QUESTIONS ON NOTICE  
Innovation, Industry, Science and Research Portfolio  
Supplementary Budget Estimates Hearing 2010-11  
20 October 2010

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**AGENCY/DEPARTMENT:** AUSTRALIAN NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION

**TOPIC:** Xenon Emissions

**REFERENCE:** Question on Notice (Hansard, 20 October 2010, E4)

**QUESTION No.:** SI-2

**Senator LUDLAM**— Giving us the monthly averages does not really help us when it was an event that occurred over a couple of days. Is anybody able to tell us what the highest rate of release was?

**Dr Storr**—During the period to which you refer the highest release was something like a little bit less than seven per cent of the allowable release for that radionuclide.

**Senator LUDLAM**—Allowable over what sort of period—over a year or a month? What does ‘allowable’ mean?

**Dr Storr**—That would be the allowable release over a month.

**Senator LUDLAM**—So seven per cent of the allowable release over a month was released over a period of a day or so? What kind of period are we talking about?

**Dr Storr**—The allowable limit is over a four-week period. The release from that particular event would have been through maybe one or two processing runs from the molybdenum-99 processing facility.

**Senator LUDLAM**—Does a processing run go for a couple of hours; is it like a shift?

**Dr Storr**—Yes, a processing run goes for approximately 24 hours in total.

**Senator LUDLAM**—So maybe for two days, one or two runs. Please provide us with some more detail perhaps on notice because I have a couple of events that I want to run through with you.

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**ANSWER**

Further details, including the Radioxenon Measurements at the Melbourne International Monitoring Station detected from November 2008 to February 2009, can be found in a journal article titled *Evaluation of Radioxenon releases in Australia using Atmospheric Dispersion Modelling Tools* in the Journal of Environmental Radioactivity 101 (2010) pages 353-361, which was co-authored by the Australian Radiation Protection and Nuclear Safety Agency, ANSTO and their counterparts at the Vienna University of Technology. A copy of the article is attached to the response to Supplementary Budget Estimates question SI-1 (October 2010) or can be found at <http://apo.ansto.gov.au/dspace/handle/10238/2002>