

EDUCATION, SCIENCE AND TRAINING

SENATE LEGISLATION COMMITTEE - QUESTIONS ON NOTICE 2005-2006 BUDGET ESTIMATES HEARING

Outcome: ANSTO

Output Group: ANSTO

DEST Question No. E254_06

Senator Carr provided in writing.

Question:

ANSTO: ARPANSA Quarterly Report, 1 October – 31 December 2004

Appendix A, A.9 and A.10 list 2 incidents involving the ANSTO Radiopharmaceuticals and Industrials (ARI) License:

- the release of noble gases from the molybdenum separation facility, and;
- emissions from the Isotope Processing Building stack exceeding the four-weekly notification levels of emissions.

Were the 2 incidents related in any way? Are there any structural issues causing concern with meeting license conditions? What is ANSTO doing to assess that no health risks have arisen as a result? Do these incidents delay any operations? Is ANSTO enhancing OH&S and security arrangements to guard against similar incidents?

Answer:

Incidents involving the ANSTO Radiopharmaceuticals and Industrials (ARI) Licence

ANSTO has provided the following response:

Were the 2 incidents related in any way?

No. The two events were not related, and involved emissions from two separate buildings.

Are there any structural issues causing concern with meeting license conditions?

The premise of this question is incorrect. ANSTO is operating within its licence conditions. Notification levels, which are set at 20% of the discharge limits, trigger investigations of causes. Exceeding notification levels does not constitute an inability to meet licence conditions.

What is ANSTO doing to assess that no health risks have arisen as a result?

There are no health risks associated with these events. As indicated above, the ARPANSA notification levels are set very low and have no significant dose consequence. The total annual discharge from all nuclides from all stacks at ANSTO contributes less than 4 μSv dose to a hypothetical individual located continuously at the ANSTO buffer zone boundary (see ANSTO's annual reports on Environmental and Effluent Monitoring at ANSTO Sites). This is very small compared to natural background radiation, which is around 2000 μSv a year. The incidents noted in the ARPANSA quarterly report have no measurable impact on those doses.

Do these incidents delay any operations?

There was no delay of any consequence in operations attributable to these events.

Is ANSTO enhancing OH&S and security arrangements to guard against similar incidents?

No. These events do not warrant action on OH&S and security.

The cause of the first event was identified as poor thermal conductivity within the target can. Action has been taken to improve the thermal conductivity in cans by changing the way in which they are packed.

The cause of the second event was the continued use of an aging filtration bank while a new bank was being commissioned. Since the event, the new filter bank has been commissioned and the emissions from that building have dropped significantly as a direct consequence.