EDUCATION, SCIENCE AND TRAINING

SENATE LEGISLATION COMMITTEE - QUESTIONS ON NOTICE 2003-2004 SUPPLEMENTARY BUDGET ESTIMATES HEARING

AGENCY: Australian Nuclear Science and Technology Organisation

DEST Question No. E391_04

Senator Carr asked on 6 November 2003:

Question:

Can you provide a copy of the details and results of the ANSTO analysis into the consequences of a breach of a cask carrying SNF?

Answer:

ANSTO has provided the following response:

In preparation for the 2003 shipment, ANSTO analysed the probability and consequences of a range of events during the transport of spent fuel from Lucas Heights to a Sydney port. The consequences were based on the International standards (IAEA Regulations TS-R-1) for the type of cask used for this transport (Type "B" casks) and reports of accident tests and analysis carried out by Sandia National Laboratories, USA. The ANSTO analysis concluded that there would be no cask breach and therefore no release of activity from any traffic accident or attack by a truck carrying explosives. The only remotely credible case of cask breach identified was in the most extreme case of attack by an armour piercing missile. The analysis relating to this last event is attached. Even in this extreme case, the amount of radioactivity released would be very low, and the maximum dose received by any individual, even under the most conservative (pessimistic) scenario, would be very much less than the public dose limit of 1 mSv/year.