

Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry, Innovation, Science, Research and Tertiary Education Portfolio
Budget Estimates Hearing 2012-13
28 and 29 May 2012

AGENCY/DEPARTMENT: AUSTRALIAN NUCLEAR SCIENCE AND TECHNOLOGY ORGANISATION (ANSTO)

TOPIC: Returned Waste – radiation signature

REFERENCE: Question on Notice (Hansard, Monday 28 May 2012, page 11)

QUESTION No.: BI-3

Senator LUDLAM: Can you characterise for us the radiation signature on the canisters that you were describing before - these vitrified blocks that are then in steel containers? Take that on notice if you like. Specifically, for the material coming back, what is the radiation signature for one of those canisters if I am standing right next to it? I am presuming you would not advise that, but what if I did?

Dr Paterson: Certainly the risk of standing next to those containers is rather low. But I think that since you are asking for the specific signatures and levels of activity, we will ask our team to provide that to you on notice.

Senator LUDLAM: And what is the degree to which the steel canisters in which these blocks are hosted become activated and themselves radioactive over time?

Dr Paterson: Basically the level of activation of the steel will be included in the question we take on notice.

ANSWER

The steel transport and storage containers give off little radiation; people can safely stand next to them without wearing protective clothing.

Under international transport regulations, the dose from the containers must be less than two millisieverts per hour (mSv/h) at contact with the container, and less than 0.1 mSv/h two metres from the vehicle sides. The actual dose rate from the containers used for the Australian waste is expected to be significantly less than those limits.

The vitrified waste container (made of stainless steel) will not experience any significant activation. Similar containers are routinely used for multiple transports of spent fuel, with no activation issues arising.