

EDUCATION, SCIENCE AND TRAINING

SENATE LEGISLATION COMMITTEE - QUESTIONS ON NOTICE 2006-2007 ADDITIONAL ESTIMATES HEARING

Outcome ANSTO
Output Group: ANSTO

DEST Question No. E1009_07

Senator Carr asked on 14 February 2007, EWRE Hansard page 20.

Question:

Isotope Production

Senator CARR— Can you give me a list of the isotopes that you will not be producing at OPAL even though you have the capacity to do so and your estimates of the reasons for that? I do not mean demand or the number of persons that are likely to be affected—

Dr Smith— So you mean isotopes with medical applications?

Senator CARR— Yes, those with medical applications. I take it that there are other isotopes that have non-medical applications in the mining and construction industries and the like. Are you able to give me a list of the isotopes that might be used for engineering purposes and the number of people who might have to import them because they are not being produced here?

Dr Smith— Yes, we can do that.

Answer:

ANSTO has provided the following response:

Isotope Production

The list of medical isotopes that OPAL has the capacity to produce but are not proposed to be produced by OPAL at this time are as follows:

Bromine-82
Tin-117m
Iodine-125
Xenon-133
Dysprosium-165
Holmium-166
Lutetium-177
Rhenium-186
Rhenium-188
Platinum-195m
Gold-198

None of those isotopes were produced in HIFAR. As indicated at the hearing, the reason why we are not currently planning to produce those isotopes in OPAL is a lack of demand by nuclear medicine practitioners in Australia. We note that the production of any of those isotopes would require the installation of equipment to process the irradiated targets into radiopharmaceuticals.

Given their long half-lives, there is no need for an indigenous source of production of industrial isotopes. Major overseas producers of industrial sources have economies of scale which are not available to ANSTO. The ANSTO Board has therefore decided to cease production of industrial sources in ANSTO's reactor and to enter into a distribution agreement with an overseas supplier of such sources. We believe that that agreement will have minimal effect upon the supply of sources to Australian users.