

EDUCATION, SCIENCE AND TRAINING

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

Outcome: ANSTO
Output Group: ANSTO

DEST Question No. E516_06

Senator Crossin asked on 2 November 2005, EWRE Hansard page 23.

Question:

Can you give me details, for the last five years, of how often isotopes have been imported, from where, and the quantity?

Answer:

Isotope imports

ANSTO has provided the following response:

The accounting package used by ANSTO Radiopharmaceuticals and Industrials (ARI) was changed around three and a half years ago. Consequently, it has only been possible to provide figures for the past three and a half years.

Medical Bulk Isotope imports over that period have been:

Isotope	Quantity	Percentage of annual production	Reason
Sodium Molybdate Mo-99	155,400 – 303,400 GBq p.a.	10-20%	Reactor shutdown (planned & unplanned)
Sodium Iodide 131	6,140 – 13,300 GBq p.a.	3-6%	Unscheduled shutdown of HIFAR
Thallium 201	740 – 1,480 GBq p.a.	3-6%	Cyclotron planned Christmas maintenance shutdown
Gallium 67	410 – 560 GBq p.a.	3-4%	Cyclotron planned Christmas maintenance shutdown
Phosphorous 32	310 GBq p.a.	100%	Not produced in HIFAR
Sodium Chromate 51	20 GBq p.a.	100%	Not produced in HIFAR
Iodine 125	40 GBq p.a.	100%	Not produced in HIFAR

The figure for Mo-99 in particular emphasises that HIFAR has reached its capacity in terms of supplying demand for this isotope (the “parent” for technetium 99m, the most widely used

radiopharmaceutical). The extra capacity offered by OPAL should mean ARI's need to import Mo-99 will be significantly reduced. These isotopes were imported from Nordion and NTP.

As to in Industrial Sources, ARI have been importing 4.4 – 20 GBq of Selenium Sources and 520 to 1550 GBq of Caesium sources p.a. Such sources are not manufactured in HIFAR. These sources were imported from China and Russia.