

ANSWERS TO ESTIMATES QUESTIONS ON NOTICE

HEALTH AND AGEING PORTFOLIO

Supplementary Budget Estimates 2010-11, 20 October 2010

Question: E10-123

OUTCOME 1: Population Health

Topic: ANSTO Buffer Zone

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Senator Ludlam asked:

I asked you a question around the three-mile exclusion zone that we used to have in place in which food growing was prohibited.

- a) Can you give us any background at all as to why that decision was made and whether the facility somehow became safer in the 1980s or whether the initial exclusion zone was an over reaction?
- b) Can you step us back through that decision making? Just the reasoning behind having the buffer zone, why one mile is appropriate and why three miles; you get the picture.

Answer:

- a) Land use restrictions around the Lucas Heights facility were first introduced in 1960 by the Australian Atomic Energy Commission (AAEC) (now the Australian Nuclear Science and Technology Organisation (ANSTO)). These restrictions prohibited residential settlement within a 1.6 kilometre radius centring on the High Flux Australian Reactor (HIFAR) (which ceased operating in 2007) and included no settlement in the Woronora River Valley within 3.2 kilometres of HIFAR and future settlement restricted within 4.8 kilometres. These restrictions were modified by the AAEC in 1967 so that between 1.6 and 4.8 kilometres no more than 5,000 people were to be housed in a 20 degree sector, and no food processing, hospitals or manufacturing were permitted. In 1983, the Commonwealth Nuclear Safety Bureau (NSB) which was established under the *ANSTO Act*, advised the New South Wales Government that, following further analyses of the safety of the ANSTO operations, land use restrictions beyond the 1.6 kilometre buffer zone were no longer necessary.
- b) The 1983 decision to lift the land use restriction from a 3 mile buffer zone to a 1 mile (1.6 kilometres) buffer zone was based upon engineering improvements made to HIFAR in the previous few years which would have reduced the probability of a major radioactivity release to so low a level that the need for evacuation outside the 1.6 kilometre exclusion zone would be extremely unlikely. However the Nuclear Safety Bureau advised the operators of HIFAR that an emergency plan would need to be maintained which included the possibility of evacuation and this was subsequently developed. The NSB's findings was also based upon consideration of the excellent safety record of research reactors overseas some of which were located considerably closer to residential centres than 1.6 kilometres.