

## TARGET COUNTRY: AUSTRALIA

Target Country	CG N°	Target CG Coordinator	JC Article No.	National Report Citation	Question/Comment & Answer	
AU	2	P. Kayser	5	Section B, Page 9	<b>Question</b>	The report states the commonwealth legislation and ARPANSA's licensing system require appropriate steps be taken to review the safety of any existing spent fuel management facility and ensure that all reasonably practical improvements are made to upgrade facility safety. Further, Page 9 of the report notes that the dry storage facility is comprised of 50 storage holes with capacity for 1100 spent fuel elements. Please describe what is inspected and reviewed for these 50 storage holes and what improvements or upgrades have been made since facility construction. How is the condition of the spent fuel monitored or guaranteed?
					<b>Answer</b>	The dry storage facility was built in 1968. An improvement in the 1980's was the construction of a building completely enclosing the facility. The condition of the spent fuel is monitored by measurements of krypton-85, relative humidity, and oxygen concentration of gas in each tube. In addition, spent fuel elements have been removed from the dry store on occasions for examination in a hot cell on site. Spent fuel is stored in the tubes in an atmosphere of dry nitrogen. There is no intention to use the dry store facility after 2007/8. The licence issued by the Commonwealth regulatory body, the Australian Radiation Protection and Nuclear Safety Agency, for the Australian Nuclear Science and Technology Organisation's fuel operations division requires monitoring and inspection of all spent fuel storage.
AU	2	P. Kayser	6	Section G, Page 22	<b>Question</b>	A "public scrutiny" process is required for siting proposed facilities. Please describe this process and discuss how public concerns are addressed.
					<b>Answer</b>	The Commonwealth of Australia (the federal government) is the only jurisdiction of the 9 Australian jurisdictions with facilities related to the nuclear fuel cycle (aside from uranium mines).  In accordance with Regulation 40, under the Australian Radiation Protection and Nuclear Safety Regulations 1999, the Commonwealth

						regulatory body, the Australian Radiation Protection and Nuclear Safety Agency, is required to invite public submissions on any application involving a nuclear installation such as the proposed National Radioactive Waste Repository and National Intermediate Level Waste Store. Paragraph 41(3)(g) of the Regulations requires ARPANSA to take into account the content of any public submissions in deciding whether or not to issue a licence. In the past, public submissions have been invited as part of the assessing the application for a licence to construct the Australian Nuclear Science and Technology Organisation's replacement nuclear research reactor – information about the submission process and a copy of the public consultation report can be found at <a href="http://www.arpansa.gov.au/rrrp.htm">http://www.arpansa.gov.au/rrrp.htm</a>
AU	2	P. Kayser	8	Section G, Page 22	<b>Question</b>	The report states that the commonwealth legislation and ARPANSA's licensing system require that before construction of a spent fuel management facility, a systematic safety assessment and an environmental assessment must be carried out. Further that before operations, updated versions of the safety and environmental assessments must be prepared. Were such assessments carried out for the replacement research reactor now under construction? What were the conclusions?
					<b>Answer</b>	Yes. For information on the licensing action undertaken under the <i>Australian Radiation Protection and Nuclear Safety Act 1998</i> please visit <a href="http://www.arpansa.gov.au/rrrp.htm">http://www.arpansa.gov.au/rrrp.htm</a> For information on the separate environmental impact assessment carried out under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> please visit <a href="http://www.ea.gov.au/epbc/index.html">http://www.ea.gov.au/epbc/index.html</a> and <a href="http://www.ea.gov.au/assessments/epip/notifications/lucas/pubs/assessmentreport.doc">http://www.ea.gov.au/assessments/epip/notifications/lucas/pubs/assessmentreport.doc</a> (for a copy of the assessment).
AU	2	P. Kayser	11	Section H, Page 27	<b>Question</b>	Sufficiently low-level waste is currently discharged into the air, sewer, incinerated, or sent to a landfill. What are the clearance levels for these disposition methods and how were they established? How is incineration ash treated and disposed?
					<b>Answer</b>	There are nine separate legal jurisdictions in Australia, the Commonwealth of Australia, six States and two self-governed Territories and the requirements vary. In some jurisdictions air and waterborne discharge limits are given in schedules in regulations and in others specific conditions of licence are used to regulate these emissions. The schedules are usually based on the criteria that the dose to any member of the public at the point of discharge should not

						<p>exceed the dose limit for members of the public. Some of the regulations, however, predate the ICRP 60 recommendations, which were adopted in Australia in 1995, and the ICRP Lung Model in ICRP 1966 and as such are not current with respect to current dose conversion factors and public dose limits.</p> <p><i>A Code of Practice for Disposal of Radioactive Wastes by the User</i> was promulgated by the National Health and Medical Research Council of Australia in 1985 and is used as guidance by all jurisdictions for disposal by air, water, landfill and by incineration. Recommendations are given for radionuclide activities for disposal by landfill. Incineration is not commonly used in Australia and is usually reserved for biological waste and animal carcasses contaminated to low levels with radionuclides of low radiotoxicity. Little radioactive residue is usually left in the ash, which is monitored and disposed of according to licence conditions. A copy of the Code is available at <a href="http://www.arpana.gov.au/pubs/rhs/rhs13.pdf">http://www.arpana.gov.au/pubs/rhs/rhs13.pdf</a></p>
AU	2	P. Kayser	26	Section F, Page 17	<b>Question</b>	The Moata reactor is in a 30-year Care and Maintenance phase of decommissioning. Please describe plans for decommissioning and waste disposal after this phase.
					<b>Answer</b>	The 1999 Moata Decommissioning Study identified long-term options. The timing of dismantling will depend on many factors including: use of the reactor site; physical condition of facilities; status of radioactive materials; regulatory requirements; availability of a waste repository; overseas experience and cost estimates.
AU	2	P. Kayser	32	Section G, sub-section (iv) Page 8	<b>Question</b>	Management of short-lived wastes in most jurisdictions is carried out by allowing the radionuclides to decay until the waste is no longer classified as radioactive, then disposing according to regulations for non-radioactive waste. What are the clearance levels to be considered non-radioactive and how were these levels established?
					<b>Answer</b>	There are no clearance criteria in Australia as such. If waste falls below exemption criteria it can be cleared. Waste that fall within the requirements of the User Disposal Code can be disposed of with the approval of the regulatory authority. A copy of the Code is available at <a href="http://www.arpana.gov.au/pubs/rhs/rhs13.pdf">http://www.arpana.gov.au/pubs/rhs/rhs13.pdf</a> The Code was developed based on internationally accepted practices at the time of publication.