

**ARPANSA Regulatory Assessment of the Replacement Reactor Construction Application**

18 July 2001- Reactive Review Questions and Issues

PSAR Chapter 14 Environmental Assessment

Question reference	PSAR Section	Topic	ARPANSA Comment, Issue or Question and ANSTO's Response
14.1.	14.3 Regulatory Processes	Item 2 “NSW Legislation (where Commonwealth Legislation is not in force)”.	Please specify which NSW Legislation will be applied. For example, clearly items h) and j) covering NSW radiation control do not apply as ARPANS legislation does.
			Response: Where appropriate Commonwealth legislation is in force, it will have dominance over any NSW State legislation. There are cases where there is cross over between State and Commonwealth legislation. Using the ARPANSA example of radiation, the Commonwealth legislation is followed for all on-site activities and work performed by ANSTO officers. However, when ANSTO sources are transported and used within State jurisdictions, there is a need to ensure compliance with State legislation. For general environmental legislation the Inter-Governmental Agreement on the Environment (IGAE) ( <a href="http://www.ea.gov.au/esd/publications/igae.html">http://www.ea.gov.au/esd/publications/igae.html</a> ) provides guidance to Commonwealth agencies on compliance with state legislation where specific Commonwealth legislation does not take precedence. This relates to items a) to g), i) and k) to w) in Section 14.3, paragraph 2.
14.2.	14.3.1 Specific Project Approvals	Approval, referral and consultative requirements	Please provide the current status of these requirements.
			Response: The status of the specific project approvals is provided on a six monthly basis to the Minister of Environment and Heritage as is required under the EIS approval conditions. Once accepted by the Minister, this status report is publicly available and can be accessed via the ANSTO web site. ( <a href="http://home.ansto.gov.au/ansto/RRR/sub.html">http://home.ansto.gov.au/ansto/RRR/sub.html</a> ).
14.3.	14.3.1.6 ARPANSA	Facility Licence authorising preparation of the site, F0001	ARPANSA expects that ANSTO's responses and actions to address the conditions of Facility Licence F001 would be integrated or referenced in this (and other relevant) chapters of the PSAR. It currently is LBD-03, Appendix 1, as a “stand-
			Response: A reference to the Application document LBD-03 can be made.
14.4.	14.5 Environmental Management	Ecologically sustainable development principles throughout section.	Reference is made to ESD initiatives or principles without specifying or referencing. Please explain what are the ESD initiatives or principles.

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			<p>Response: Ecological Sustainable Development embodies a series of principles to extend environmental management to cover a range of issues such as the precautionary principle, intergenerational equity, conservation of biological diversity, ecological integrity and improved valuation and pricing of environmental resources. The principles of ESD are embodied in the "Report of the United Nations Conference on Environment and Development (The Rio Declaration) (<a href="http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm">http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm</a>).</p>
14.5.	14.5.1.2 Functional Roles and Responsibilities	"As part of the design process, ANSTO verifies and approves all design related deliverables submitted by INVAP and JHEDI." (1 <sup>st</sup> para).	Please reference the relevant sections of the Project Management Plan and Quality System specification of roles and responsibilities with respect to verification and approval of all design related deliverables. Please describe 'design related
			Response: This issue is covered in the Licence Application, Section 4.4.1.
14.6.	14.5.2 Environmental Management during Construction	Process for obtaining relevant approvals and referrals indicated in 14.3.1.	Provide evidence of review of this section, together with the plans mentioned in 14.3.1, undertaken by other authorities (Environment Australia, NSW EPA, NSW DLWC etc) and submit the results of such reviews to ARPANSA for consideration in the Licensing decision.
			<p>Response: The environmental management during construction does not involve radioactive substances and is generally related to the normal environmental issues associated with a civil engineering and construction project. As such, the primary body for control of these aspects is Environment Australia and, via the IGAE, the appropriate agencies in the State. A copy of the Construction Environmental Management Plan has previously been forwarded to ARPANSA, who will also be informed of any review performed by Environment Australia or any State Agencies.</p>
14.7.	14.5.3	Environmental Management Action Plan.	Please provide the current EMAP formally for ARPANSA review with the Application.
			<p>Response: The Environmental Management Action Plan is a five year plan designed to review ANSTO's current environmental practices and, where necessary, update the practices to reflect current environmental guidelines and international best practice. A presentation on the EMAP has been</p>

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			provided to ARPANSA; a further presentation can be arranged at ARPANSA's convenience. An updated version of the EMAP will be forwarded to ARPANSA.
14.8.	14.6.2 .1 Gaseous waste	Comparison of gaseous radioactive releases with HIFAR and estimates in the EIS and the reactor facility.	This comparison is incomplete. Please see question reference 12.13 of 9 July 2001.
			Response: This issue was addressed in the response to ARPANSA question 12.13.
14.9.	14.6.2.2 Liquid waste	"release criteria prescribed by Sydney Water in consultation with ARPANSA."	Please reference and provide evidence of the "consultation with ARPANSA". Please reference and/or provide the release criteria.
			Response: ARPANSA have been forwarded a copy of the Trade Waste Agreement between ANSTO and Sydney Water for each of its annual reviews. ARPANSA provided formal advice to Sydney Water of the appropriateness of the Trade Waste Agreement for Radioactive Discharges on 23 <sup>rd</sup> August 1999 (ARPANSA references 99/1368 and 99/1403). The release criteria used for liquid discharge are given in Chapter 12, Section 12.4.5.3.7.
14.10.	14.6.2.2 Liquid waste	"thoroughly sampled" before release.	Please indicate what is intended by "thoroughly sampled". For example, will all radionuclides be characterised, not just as "gross alpha/beta"?
			Response: The release criteria for the ANSTO site is based on the Trade Waste Agreement with Sydney Water and before there is any release from site it must be tested to show compliance. With the proposed system for the RRR the sampling is designed to provide operational information. The system is not designed and does not require full characterisation but is most likely to be based on gamma ray detection equipment. This will provide some information on the radionuclides but will not provide a full characterisation of the effluent.