CHAPTER 1

The Current Legislative and Regulatory Framework

Introduction

1.1 Within Australia's federal system of government, both the regulation of mining operations and the protection of the environment are principally State responsibilities. However the Commonwealth's national and international responsibilities for the management of nuclear activities and its specific responsibilities in relation to the Northern Territory, combined with its increasing role in environmental protection of matters of national environmental significance, has led to a situation where the oversight of uranium mining is a shared responsibility between the Commonwealth Government and the governments of the Northern Territory (for the Ranger and Jabiluka uranium mines) and South Australia (for the Honeymoon and Beverley uranium mines, as well as the Olympic Dam uranium mine at Roxby Downs, which is not included in the Committee's terms of reference).

1.2 This shared responsibility is described as 'cooperative federalism' which is reflected in the *Intergovernmental Agreement on the Environment* signed by the Commonwealth and all States and Territories in 1992. The agreement seeks to achieve sound environmental management through a system of parallel and complementary legislation. This concept is no better demonstrated than in section 41 of the *Atomic Energy Act 1953 (Cth)*, the key section dealing with uranium mining in the Ranger Project Area, which explicitly states that, except as provided by the regulations, the section shall not be construed as intended to exclude or limit the operation of any provision of a law of a State or Territory that is capable of operating concurrently with the section.¹

1.3 State and Territory law governs most operational aspects of the uranium mines and State and Territory agencies administer many of the approval processes. While the Commonwealth retains strong powers through its export permit processes, without which uranium mines would have no commercial future, it has chosen to delegate day-to-day administration of the mines to the South Australian and Northern Territory governments. This approach minimizes unnecessary duplication in administrative processes.²

¹ Atomic Energy Act 1953 (Cth), section 41(4).

² See Revised Working Arrangements for Co-ordinating the Regulation of the Environmental Aspects of Uranium Mining in the Alligator Rivers Region, at Appendix 9 to submission 77 from the Office of the Supervising Scentist, for a specific statement of the purpose of the working arrangements put in place in the NT in 1995.

1.4 This partnership arrangement is particularly the case in the Northern Territory where the Commonwealth has retained ownership of the uranium ore by virtue of section 35 of the Atomic Energy Act. The situation in this respect is the reverse of that in the States, in that it has been the position in Australia over the past century that uranium and other minerals are the property of the Crown in right of the States.³ In conjunction with section 35 and rights in respect of Aboriginal Land under the *Aboriginal Land Rights (Northern Territory) Act 1976,* the Commonwealth has also by means of regulation 4(2) of the *Northern Territory (Self Government) Regulations (Cth)* specifically reserved its powers over uranium mining in the Northern Territory. The emergence of native title in fact led to some broad community discussion of Aboriginal rights over minerals, but in August 2002 the High Court essentially confirmed that native title rights over minerals had been extinguished by State legislation.⁴

1.5 As will be apparent from the discussion below, many of the statutes that govern the four uranium mines are of a generalised nature, with many of the detailed environmental requirements set out in the various subordinate instruments, such as plans and other documents, which are mandated by the mining authorisation process.

1.6 This Chapter describes the laws and regulatory roles of each of the three governments, and succeeding chapters analyse the adequacy of the current system as it operates in the Northern Territory and South Australia. It should be noted that this regulatory framework is complicated by changes to the law since the mines subject to examination by the Committee were approved. For ease of reference, therefore, the Committee has included four tables at the end of this Chapter which identify which laws applied at the time of the original approvals, and as they are now.

1.7 The discussion in this Chapter examines, in turn the Commonwealth's national role, before examining in turn the Northern Territory and South Australian situations.

Commonwealth regulation

1.8 The powers of the Commonwealth to regulate uranium mining and other activities concerning the environment are primarily contained in Section 51 of the Commonwealth *Constitution*.⁵ Of particular importance are: the trade and commerce power;⁶ the taxation power;⁷ the quarantine power;⁸ the corporations power;⁹ the

³ Chris McGrath, "Uranium Mining, Use and Disposal Law in Australia: the Case for Cradle-to-Grave Philosophy", *Environmental and Planning Law Journal*, Volume 17, No. 6, December 2000.

⁴ *Western Australia v. Ward* (2002) 76ALJR1098.

⁵ See generally, the Report of the Senate Environment, Communications, Information Technology and the Arts References Committee, *Commonwealth Environment Powers*, May 1999.

⁶ Section 51(i).

external affairs power;¹⁰ the power over Commonwealth instrumentalities and the public service;¹¹ the power over customs, excise and bounties;¹² the financial assistance power;¹³ and the territories power.¹⁴ It has been suggested that the defence power (section 51 (vi)) also provides a source of legislative competence over uranium.¹⁵ Further, the powers of the Commonwealth to make laws for the government of territories (section 12.2) is relevant to the regulation of uranium mining in the Northern Territory.

1.9 Importantly, where any law of a State or Territory is inconsistent with a Commonwealth law, the Commonwealth law prevails,¹⁶ and the Commonwealth therefore has the ability to over-ride State laws should it choose to do so in areas within its legislative competence.

1.10 The Commonwealth's involvement in the regulation of uranium mining at the national level derives from the following seven key statutes:

- Atomic Energy Act 1953 The Atomic Energy Act provides for the authorisation of uranium mining on any land in the Ranger Project Area in the Northern Territory. While the Act itself does not provide substantive regulation of environmental performance, any environmental restrictions and obligations placed on the uranium mining operators in the Ranger Project Area must be consistent with the framework established by the Act. The Act is important in that it vests in the Commonwealth ownership of all uranium found in the Territories.¹⁷
- *Environment Protection and Biodiversity Conservation Act 1999* The principal legislative scheme for the mining, use and disposal of uranium is found in the Environment Protection and Biodiversity Conservation Act,¹⁸ which came
- 7 Section 51(ii).
- 8 Section 51(ix).
- 9 Section 51(xx).
- 10 Section 51(xxix).
- 11 Section 52.
- 12 Section 90.
- 13 Section 96.
- 14 Section 122.
- 15 See DE Fisher, *Environmental Law: Text and Materials*, cited in McGrath op cit, p. 507.
- 16 Section 109.
- 17 Section 35.
- 18 The Environment Protection and Biodiversity Conservation Act 1999 amounted to a major consolidation of existing Commonwealth environment protection legislation and repealed (among others) the Endangered Species Protection Act 1992 (Cth); Environment Protection (Impact of Proposals) Act 1974 (Cth); National Parks and Wildlife Conservation Act 1975 (Cth); and the World Heritage Properties Conservation Act 1983 (Cth).

into force on 16 July 2000. The key purpose of the Act is to clarify the matter of Commonwealth environmental jurisdiction, based on six matters of national environmental significance, one of which is 'nuclear actions' (defined in section 22 to include 'mining or milling uranium ore').¹⁹

Where a nuclear action has, will have, or is likely to have, a significant impact on the environment, approval must be sought from the Commonwealth Environment Minister. Before a project can proceed, the proposed action must undergo a Commonwealth environmental assessment and approval process, although these can be undertaken jointly by the Commonwealth and the State/Territory governments when required under both Commonwealth and State or Territory law.

Approvals granted under the earlier regime, the *Environmental Protection* (*Impact of Proposals*) Act 1974, remain valid,²⁰ with the approvals and environmental assessments for all four mines being examined by the Committee—for Ranger, Jabiluka, Beverley and Honeymoon—having been conducted under this Act.²¹ Accordingly, the provisions of the Environment Protection and Biodiversity Conservation Act do not apply to their current operations.²² Environment Australia representatives told the Committee that any major expansion, intensification or modification from the operation as approved would trigger the processes of the current legislation.²³

- *Nuclear Non-Proliferation (Safeguards) Act 1987* The Nuclear Non-Proliferation (Safeguards) Act relates to the 1973 Treaty on the Non-Proliferation of Nuclear Weapons and has the objective of ensuring the physical security of nuclear materials within Australia.
- *Environment Protection (Alligator Rivers Region) Act 1978* The Environment Protection (Alligator Rivers Region) Act was introduced by the Commonwealth following the report of the 1976 Ranger Uranium Environmental Inquiry (the Fox Inquiry) about the need for strong protection measures for the region's environment in relation to uranium mining activities. The Act is concerned with the administrative arrangements for the Commonwealth Government's oversight of uranium mining operations in the Alligator Rivers region in the Northern Territory, which incorporates the Ranger and Jabiluka mine sites. The legislation established the Office of the Supervising Scientist (OSS)²⁴, which operates as a Division of Environment Australia and incorporates the Environmental Research

24 Discussed in Appendix 4.

¹⁹ Sections 21, 22 and 22A.

²⁰ Environmental Reform (Consequential Provisions) Act 1999 Section 3, Schedule 3.

²¹ Mr Early, *Proof Committee Hansard*, Canberra 18 Oct 2002, pp. 304-305.

²² By operation of the Environmental Reform (Consequential Provisions) Act 1999.

²³ Mr Gerard Early and Mr Malcolm Forbes, *Committee Hansard*, Canberra 18 October 2002, p. 315.

Institute of the Supervising Scientist (ERISS). The OSS gathers and assesses information/data concerning the effects of mining on the local environment.

The Act also established the following bodies:

- the Alligator Rivers Region Advisory Committee, to facilitate communication between community, government and industry stakeholders on environmental issues associated with uranium mining in the Alligator Rivers Region; and
- the Alligator Rivers Region Technical Committee, to perform reviews of the research and monitoring programs relevant to uranium mines in the Alligator Rivers Region.
- Australian Radiation Protection and Nuclear Safety Act 1998 The transportation of uranium and its by-products is regulated through general provisions of the Australian Radiation Protection and Nuclear Safety Act which relate to radiation hazards.²⁵ The object of the Act is to '[p]rotect the health and safety of people, and to protect the environment, from the harmful effects of radiation.²⁶

The Act also established the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)²⁷ which is the statutory body responsible for the administration of the Act.

- Aboriginal Land Rights (Northern Territory) Act 1976 The Commonwealth gains additional jurisdiction in the Northern Territory through the operation of the Aboriginal Land Rights (Northern Territory) Act. The Act establishes the Northern Land Council (NLC) as a statutory authority to represent the interests of Aboriginal traditional owners. Both Ranger and the proposed Jabiluka mine are located within the NLC's area of jurisdiction, and both are on land which is traditionally owned by the Mirrar-Gundjehmi people.
- **Customs (Prohibited Exports) Regulations 1958 under the Customs Act 1901** Under regulation 11, an export licence is necessary for the export of radioactive material, including refined uranium, plutonium and thorium. Amendments to the regulations were made in August 2000 to strengthen Commonwealth control over uranium exports by enabling export permissions (or licences) for uranium to be granted subject to conditions. The amendment was made in response to Recommendation 9 of this Committee's June 1999 report entitled *Jabiluka: The Undermining of Process.* The amendment provides the Commonwealth Minister for Industry, Tourism and Resources with a clear and administratively efficient

²⁵ McGrath, C, 'Uranium mining, use and disposal law in Australia: the case for a cradle-to-grave philosophy', *Environmental and Planning Law Journal*, 2000, 17(6), p509.

²⁶ Section 3.

²⁷ See Appendix 4.

mechanism by which he/she can place legally binding conditions, including mine-site environmental conditions, on the export of uranium.²⁸

Exports of uranium from the four mines being examined by the Committee are subject to the Environmental Requirements developed under the *Environmental Protection (Impact of Proposals) Act 1974.*²⁹

Commonwealth Codes of Practice

1.11 The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) publishes the *Radiation Protection Series* to promote practices which protect human health and the environment from the possible harmful effects of radiation. ARPANSA is assisted in this task by its Radiation Health and Safety Advisory Council, and by its Radiation Health Committee which oversees the preparation of draft documents and recommends publication.

1.12 The *Series* contains four categories of publication, two of which apply to uranium mining:

- **Codes of Practice** are prescriptive in style and may be referenced by regulations or conditions of licence. They contain practice-specific requirements that must be satisfied to ensure an acceptable level of safety in dealings involving exposure to radiation. Requirements are expressed in 'must' statements.
- **Recommendations** provide guidance on fundamental principles for radiation protection. They are written in an explanatory and non-regulatory style and describe the basic concepts and objectives of best international practice.
- 1.13 The Codes and Recommendations relevant to uranium mining include:
 - Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores (1987);
 - Code of Practice on the Management of Radioactive Wastes from the Mining and Milling of Radioactive Ores (1982);
 - Codes of Practice for the Safe Transport of Radioactive Substances (1982); and,
 - Recommendations for Limiting Exposure to Ionising Radiation (1995).

Compliance with the Codes of Practice or aspects of them is a requirement of Authorisations issued by the Northern Territory Government or licences by the South Australian Government for the mining of uranium. At the time of finalising this

²⁸ Department of Industry ,Tourism and Resources, *Submission* 87, p 4.

²⁹ Department of Industry ,Tourism and Resources, *Submission* 87, p 4.

report, the Committee understood that the first two codes listed above are being reviewed by ARPANSA's Radiation Health Committee.³⁰

Northern Territory regulation

1.14 As noted above, the Commonwealth has specifically reserved its powers over uranium mining in the Northern Territory by means of the Atomic Energy Act and the Northern Territory (Self Government) Regulations. However, in July 1978, the same year as the NT gained self-government, the Commonwealth had indicated that:

The Commonwealth considers that uranium mining in the Territory should be regulated to the maximum extent possible through the laws of the Northern Territory.³¹

1.15 The environmental regulation of uranium mining in the NT has since been shared between the NT and Commonwealth Governments by virtue of a series of intergovernmental agreements. The earliest instrument was the September 1979 Memorandum of Understanding between the two governments entitled *Agreed Working Arrangements for Co-ordinating the Regulation of the Environmental Aspects of Uranium Mining in the Alligator Rivers Region* that effectively delegated responsibility for day to day regulation of uranium mining to the Northern Territory. That agreement was substantially updated in September 1995 and November 2000.³² It has been said that the division of regulatory responsibilities sees the Northern Territory Government taking responsibility for day-to-day regulation of mining activities and the Commonwealth, via the OSS, being vested with the responsibility of protection of the Alligator Rivers Region from the effects of uranium mining.³³

1.16 Northern Territory mining operations in general, but including both the Ranger and Jabiluka uranium mines, are regulated by the *Mining Management Act* 2001 (*NT*) administered by the Northern Territory Department of Business, Industry and Resource Development (DBIRD). The Mining Management Act amalgamates all operational provisions for mining into a single statute leaving the *Mining Act 1982* (*NT*) to regulate titles.³⁴ The Mining Act is said to contain only very minimal

³⁰ Private correspondence from ARPANSA to Committee, 1 October 2002.

³¹ Letter from Prime Minister Malcolm Fraser to Mr Paul Everingham, NT Chief Minister, 17 July 1978 – see OSS *Submission* 77, Appendix 1, p 3.

³² See OSS *Submission* 77, Appendix 1, pp 7-11, Appendix 4, pp 1-2, Appendix 5, pp 1-7, for the agreements.

³³ The Environment Centre NT Inc, *Submission 50*, p 2.

³⁴ Prior to 2001, the primary NT legislation was the *Uranium Mining (Environment Control) Act* 1979 (NT). The Mining Management Act replaced the Uranium Mining (Environment Control) Act and the *Mine Management Act 1990*, although Authorisations issued under these previous Acts remained in force. New Authorisations were required to be sought by 30 June 2002, unless an extension was applied for before 31 May 2001.

provisions governing environmental performance, although the Minister can attach specific environmental conditions as part of the grant of tenement.³⁵

1.17 The Mining Management Act mandates a regime of audits, inspections, investigations, monitoring and reporting to ensure compliance with agreed standards and criteria, and mining officers are appointed to enforce the Act. Mining site operators are obliged to report any serious accident or critical incident on site which may be subject to investigation.³⁶ The Act has also established a system of offences of intentionally doing or failing to do acts that cause environmental harm and institutes a system of criminal penalties for such offences.³⁷

1.18 To carry out mining activities in the Northern Territory, an operator must have four authorisations.

1.19 Firstly, an operator must apply to the Minister for an Authorisation,³⁸ which is granted subject to the condition that the operator complies with a current Mining Management Plan (or MMP, which must be submitted with the application for Authorisation), and any additional conditions specified in the Authorisation that the Minister considers appropriate.³⁹

1.20 Importantly under section 34 of the Mining Management Act, before granting an Authorisation that relates to uranium, the Minister **must** consult with the Commonwealth Minister and **must** act in accordance with any advice provided by the Commonwealth Minister. In effect, the Commonwealth Minister has the ability to veto any planned action by the NT Minister with which he/she disagreed. In addition, when granting or varying an Authorisation that relates to the Ranger Project Area, the Minister must ensure that the Authorisation incorporates or adopts by reference (with the necessary modifications) the Ranger Project Environmental Requirements.⁴⁰

1.21 Secondly, in the case of Jabiluka, the operator must have a Mineral Lease under the *Mining Act 1982 (NT)* or in the case of Ranger, an Authority to Mine issued under the *Atomic Energy Act 1953 (Cth.)*.

1.22 Thirdly, the operator must have a licence to export uranium (issued by the Commonwealth Minister for Industry, Tourism and Resources) under the *Customs Act* 1901 (*Cth*).

40 The Committee has emphasised the word 'must' because, under the former Uranium Mining (Environment Control) Act, the NT Minister was not required to consult or comply with such advice.

³⁵ Northern Land Council, *Submission 81*, p 9.

³⁶ Part 3, Division 4.

³⁷ Part 9.

³⁸ Section 35, Mining Management Act NT. These are frequently referred to as 'General Authorisations' or GA's.

³⁹ Section 37.

1.23 Fourthly, if the operator intends to export uranium, it must have approval by the relevant Commonwealth Minister (at the time of approvals for both Ranger and Jabiluka, this was the Minister for Resources under the now repealed *Environmental Protection (Impact of Proposals) Act 1974*, or henceforth the Minister for the Environment under the current *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*).

1.24 The Mining Management Plan attached to the NT Government's Authorisation is the principal administrative document for the mine. Section 40 of the Mining Management Act stipulates that the plan is to include the following:

- the identification and description of the mining activities;
- particulars of the implementation of the management system to address safety and health issues;
- particulars of the implementation of the management system to address environmental issues;
- a plan and costing of closure activities;
- particulars of the organisational structure; and
- plans of current and proposed mine workings and infrastructure and other information or documents required by the Minister.

1.25 The regulatory framework of both Northern Territory mines is complicated by their location within Aboriginal lands and therefore within the jurisdiction of the Northern Land Council (NLC) under the *Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)*. A number of agreements have been created pursuant to this legislation between the Commonwealth, the NLC and the mining companies, that affect the environmental management of the mines and give the NLC a specific role.

1.26 Having described above the overarching regulatory structure in the Northern Territory, the Committee now addresses the system of environmental regulation at Ranger and Jabiluka.

Ranger

1.27 The Ranger mine is situated within the Ranger Project Area, which was established under the 26-year Authority to Mine issued under section 41 of the *Atomic Energy Act 1953 (Cth)* in January 1979, and which is administered by the Federal Minister for Industry, Tourism and Resources. The current section 41 Authority is granted subject to Environmental Requirements (ERs) defined by the Commonwealth to provide for environment protection, and are appended to and integrated into the Ranger General Authorisation from the NT Government (and the extension of the agreement under section 44 of the *Aboriginal Land Rights (Northern Territory) Act 1976* - see next paragraph for details). Ranger's current ERs came into force in January 2000 – as part of a renewal for another period of 26 years of the Commonwealth's Authority to Mine following the expiry of the original section 41 Authority, and are a revised version of the originals drafted in the 1970s. Where there

is a failure to comply with the section 41 Authority and the ERs, the Minister may take action against the mining operator.

1.28 Section 41 also specifies that operations at Ranger are bound by the Ranger Uranium Project Government Agreement, which was originally made on 9 January 1979 between the Commonwealth, Peko-Wallsend Operations Ltd (Peko), Electrolytic Zinc Company of Australasia Ltd (EZ) and the Australian Atomic Energy Commission (AAEC). By this agreement, those named in the section 41 Authority carry out operations on behalf of the Commonwealth. Another agreement in November 1978 was struck between the Commonwealth and the Northern Land Council under section 44 of the *Aboriginal Land Rights (Northern Territory) Act 1976*, which contained the original 45 ERs governing the operations at the Ranger Mine as well as Broad Principles as recommended by the Ranger Uranium Environmental Inquiry to be taken into account by the Supervising Authority in developing water release standards.⁴¹

1.29 Subsequently by the Ranger Uranium Project Deed of Assignment – Commonwealth of Australia and Australian Atomic Energy Commission to Energy Resources of Australia Ltd and the Ranger Uranium Project Deed of Assignment both signed in September 1980—ERA became the sole operator with Peko, EZ and AAEC assigning the whole of their respective interests to that company. At the same time, the Commonwealth sold and assigned to ERA its share of Concentrates of Ranger Uranium Ore and Other Mineral Products and certain other rights and entitlements under the January 1979 Government Agreement.⁴²

Management Plans

- 1.30 The Ranger operator is required to maintain the following:
- Ranger Mining Manual;⁴³
- Ranger Rehabilitation Plan;⁴⁴
- Ranger Ore Treatment Manual;⁴⁵
- Radiation Protection Manual;⁴⁶and

- 42 Both reports, AGPS, Canberra 1980.
- 43 Ranger General Authorisation Section 3.3.
- 44 Ranger Environmental Requirements (conditions of the Authority issued under s.41 of the *Atomic Energy Act 1953 (Cth)*, Section 9.
- 45 Ranger General Authorisation Section 4.1.
- 46 Ranger General Authorisation Section 6.4. The General Authorisation requires all mine site employees to be issued with the Manual.

⁴¹ Ranger Uranium Project Government Agreement, AGPS, Canberra 1979. The section 44 agreement is at Annexure B and the ERs are at Appendix A to Annexure B (there are no page numbers).

- Water Management System Operation Manual.⁴⁷
- Mining Management Plan⁴⁸

Monitoring

1.31 The Ranger operator is required to carry out environmental monitoring based on an approved program, including proper analysis of results.⁴⁹

Reporting requirements

1.32 The Ranger operator is required to provide an Annual Environmental Management Report approved by the Commonwealth Minister for Resources, the Supervising Authority (usually the Supervising Scientist) and the Northern Land Council.⁵⁰

Incident reporting

1.33 The Ranger operator is required under the General Authorisation to notify the NT Minister 'as soon as is practicable' of any infringement of the conditions and requirements of the Authorisation or the Environmental Requirements.⁵¹ More detailed instructions are contained in the Environmental Requirements, which require the company to 'directly and immediately notify' the Supervising Authority, the Supervising Scientist, the Minister and the Northern Land Council of any breaches under three criteria set out in the relevant section.⁵²

- 51 Ranger General Authorisation Section 6.1.
- 52 Ranger Environmental Requirements Section 16.

⁴⁷ Ranger General Authorisation Section 7.2.

⁴⁸ *Mining Management Act 2001* (NT), Division 3 of Part 4.

⁴⁹ Ranger Environmental Requirements, Section 13.

⁵⁰ Ranger Environmental Requirements (conditions of the Authority issued under section 41 of the *Atomic Energy Act 1953 (Cth)*, Section 18. Matters that must be addressed are listed at Section 18.2.

Jabiluka

1.34 The Jabiluka Uranium mine was established by a Mining Lease issued by the Northern Territory Minister for Resources under the Northern Territory's *Mining Act 1982* and *Uranium Mining (Environment Control) Act 1979*, but is now regulated by the Mining Management Act. It is not subject to authorisation under the *Atomic Energy Act 1953* - however, as at Ranger, ownership of uranium is vested in the Commonwealth by section 35 of the Act.

1.35 Jabiluka is subject to ERs established in the Environmental Impact Statement (EIS) conducted under the Commonwealth's then *Environmental Protection (Impact of Proposals) Act 1974* and the *World Heritage Properties Conservation Act 1983*.

1.36 As the Jabiluka Mineral Lease is on Aboriginal Land, the operator is obliged to comply with ERs that are contained in what is called the section 43 Jabiluka Agreement entered into in 1982 directly between ERA and the Northern Land Council (NLC) – the Commonwealth is not a party. These ERs can be enforced by the NLC by a civil court action for breach of contract.⁵³ This document is understood to be confidential between the parties and the Committee is unable to confirm its contents.

1.37 The operator at Jabiluka is therefore bound by environmental requirements contained in two separate instruments: the Authorisation (and attached Mining Management Plan and, since 31 July 2003, the Mineral Lease with ERs as annexed), and the section 43 Jabiluka Agreement.

Management Plans

1.38 The operator is required to develop an approved Environmental Management Plan.⁵⁴ The operator must also appoint a suitably qualified Environment Protection Officer and Radiation Safety Officer⁵⁵ and prepare, for the approval of the Supervising Authority,⁵⁶ the following:

- Water and tailings management plans, including the designation of Restricted Release Zones.⁵⁷
- Air quality models in relation to emissions from the installation.⁵⁸

⁵³ The role of the Northern Land Council is set out further in Appendix 4. See also NLC, *Submission 81*, 14.

⁵⁴ Jabiluka General Authorisation, Annex D.4.1.

⁵⁵ Jabiluka Mineral Lease, Schedule 3, Para 3.

⁵⁶ The Northern Territory Minister for Business, Industry and Resource Development.

⁵⁷ Jabiluka Mineral Lease, Schedule 3, Para 9.

⁵⁸ Jabiluka Mineral Lease, Schedule 3, Para 16(b). Under para 17, these emissions may not exceed the values specified in the National Emission Standards for Air Pollutants, National Health and Medical Research Council.

- Contingency plans covering natural disasters, operational emergencies, materials failure and other unscheduled events.⁵⁹
- Site revegetation plan.⁶⁰

1.39 Prior to the commencement of any works, the operator shall conduct surveys of flora and fauna, cultural heritage, hydrogeology and geotechnical conditions.⁶¹

1.40 The operator must also prepare an approved:

- Radiation Protection Program and Acid Rock Plan;⁶² and
- Water Management System Operation Manual.⁶³

Reporting requirements

1.41 Detailed reporting requirements are set out in Annex D of the Jabiluka General Authorisation, which includes:

- annual updates to the Environmental Management Plan;⁶⁴
- annual Report on the operation and performance of the Water Management Plan;⁶⁵
- monthly environmental monitoring data reports;⁶⁶
- quarterly trend and environmental monitoring data summary reports;⁶⁷
- annual interpretative environmental monitoring report;⁶⁸
- quarterly radiation and atmospheric monitoring data summary reports;⁶⁹ and
- annual radiation and atmospheric monitoring interpretative reports.⁷⁰

- 60 Jabiluka Mineral Lease, Schedule 3, Para 25.
- 61 Jabiluka General Authorisation, Schedule 4.
- 62 Jabiluka General Authorisation, Schedule 5.
- 63 Jabiluka General Authorisation, Schedule 6.
- 64 Jabiluka General Authorisation, Annex D.4.
- 65 Jabiluka General Authorisation, Annex D.1.
- 66 Jabiluka General Authorisation, Annex D.2.1.
- 67 Jabiluka General Authorisation, Annex D.2.2.
- 68 Jabiluka General Authorisation, Annex D.2.3.
- 69 Jabiluka General Authorisation, Annex D.3.1.
- 70 Jabiluka General Authorisation, Annex D.3.2.

⁵⁹ Jabiluka Mineral Lease, Schedule 3, Para 29.

Monitoring

1.42 The operators must establish, subject to the approval of the Supervising Authority:

- monitoring programs covering construction, commissioning, operating and decommissioning phases in accordance with detailed provisions;⁷¹ and
- an atmospheric monitoring station.⁷²

1.43 The operators must also comply with the detailed requirements of the Jabiluka Environmental Monitoring Program⁷³ and the Occupational Health Monitoring Program.⁷⁴

Incident reporting

1.44 The Jabiluka operator has two sets of incident reporting requirements. Under the General Authorisation, the operator must report 'as soon as practicable' to the Minister any infringement of the conditions and requirements of the Authorisation.⁷⁵

1.45 Secondly, under the Mineral Lease, the operators are required to ensure that the provisions of the Environmental Requirements are observed and to inform the Supervising Authority of any infringement,⁷⁶ or the occurrence of any other events as defined in the documents in para 1.38.⁷⁷

South Australian regulation

1.46 In South Australia, uranium mining operations require approvals under the following Commonwealth and State legislation.

- A licence to export uranium (issued by the Commonwealth Minister for Resources) under the *Customs Act 1901 (Cth)*
- Approval by the relevant Commonwealth Minister (prior to 1999, the Minister for Resources under the now repealed *Environmental Protection (Impact of Proposals Act 1974*, or since 1999 the Minister for the Environment under the current *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*.
- A Mining Lease, granted under the *Mining Act 1971 (SA)*, which may be granted by the Minister for Mineral Resources Development (the Mining Minister)

77 Jabiluka Mineral Lease, Schedule 3, , Environmental Requirements, Para 31.

⁷¹ Jabiluka Mineral Lease, Schedule 3, Para 32 – 36.

⁷² Jabiluka Mineral Lease, Schedule 3, Para 15.

⁷³ Jabiluka General Authorisation, Annex B.

⁷⁴ Jabiluka General Authorisation, Annex C.

⁷⁵ Jabiluka General Authorisation Schedule 3.

⁷⁶ Jabiluka Mineral Lease, Schedule 3, Environmental Requirements, Para 7.

following consideration of the results of an assessment, including assessment of the likely environmental impacts, and satisfactory resolution of Native Title.

- Licence to Mine or Mill Radioactive Ores under the *Radiation Protection and Control Act 1982 (SA)*,⁷⁸ which is the principal Act controlling all types of activities involving radiation, including mining and milling of radioactive ores. A licence is subject to conditions that the State Minister for Environment and Conservation may attach and includes requirements to comply with the Commonwealth Codes of Practice for uranium mining.⁷⁹ These Codes require that uranium mines have a Radiation Management Program and a Radioactive Waste Management Program, approved by the Government for the mining lease.
- Permits are also required under the *Water Resources Act 1997 (SA)* for all well holes drilled.
- Mines are also subject to the provisions of the *Mines and Works Inspection Act* 1920 (SA) and the *Occupational Health Safety and Welfare Act 1986* (SA).⁸⁰

1.47 Conditions may be attached to these instruments, based on the findings of the environmental impact assessment as carried out by Planning SA under section 75 of the *Development Act 1993 (SA)* in cooperation with the Commonwealth, because of the joint nature of the Environmental Impact Statement. The environmental impact assessment process results in the State Planning Minister and the Commonwealth Environment Minister providing advice to the South Australian Mining Minister and the Commonwealth Minister for Resources respectively, to be taken into account in developing conditions of approval.

1.48 South Australia has incorporated the Commonwealth's two Codes of Practice on Radiation Protection and Management of Radioactive Wastes into the *Radiation Protection and Control Act 1982*, which provides for an 'Appropriate Authority' to implement the provisions of the Codes and to grant approvals or authorisations. The Appropriate Authorities for the purposes of the several Codes are as follows.

- <u>Radiation Protection Branch of the Environment Protection Authority</u>: Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores (1987) and the National Health and Medical Research Council's recommendations for limiting exposure to ionising radiation (1995).
- <u>Department of the Premier and Cabinet</u>: Codes of Practice for the Safe Transport of Radioactive Substances (1982).

⁷⁸ Note that on 27 June 2002, the administration of the RPC Act was transferred from the Minister for Health to the Minister for Environment and Conservation.

⁷⁹ See para xxx above.

⁸⁰ Southern Cross Resources, Honeymoon Uranium Project – Environmental Impact Statement, 2.9.4.

• <u>Department of Primary Industry Resources South Australia</u>: Code of Practice on the Management of Radioactive Wastes from the Mining and Milling of Radioactive Ores (1982).

1.49 The EPA also has responsibilities for radiation safety aspects of mines under the *Environment Protection Act 1993*, which specifies responsibility for pollution and environmental harm, environmental authorization processes and conditions, environment protection order processes and conditions, and actions to deal with environmental harm. At the time of finalising this report, amendment of the Environment Protection Act was underway to apply its provisions to all mine sites, including uranium mine sites subject to the Radiation Protection and Control Act.

Management Plans⁸¹

1.50 The Honeymoon and Beverley uranium mines are required to produce and abide by the following.

- Environmental Management and Monitoring Program (EMMP).⁸²
- Radioactive Waste Management Program (RWMP).⁸³
- Mining and Rehabilitation Program (MARP).⁸⁴
- Radiation Management Program.⁸⁵

Reporting requirements⁸⁶

1.51 The two mine operators are required to provide the following reports under their respective mining leases.⁸⁷

- Annual Environmental Report to the Mines Minister, required by the EMMP.
- Annual Environmental Report to the Minister for Environment and Conservation, required by the Licence to Mine or Mill.
- Quarterly Reports to the Chief Inspector of Mines, covering groundwater monitoring and management of hazardous chemicals.
- Quarterly Reports to the Manager, Radiation Protection Branch, EPA, containing occupational and environmental radiation monitoring data.

Summary of allocation of responsibilities between the Commonwealth and the States

1.52 This discussion demonstrates that regulation of *mining operations*, including uranium mining, is principally the responsibility of the State and Territory governments and that regulation extends beyond environmental matters, to include such issues as the health of workers and the safety of the mine operation. The Commonwealth is involved in the initial environmental impact assessment process and in the granting of an export licence for the uranium. For reasons of administrative efficiency, a single Environmental Impact Assessment was undertaken for each of the

⁸¹ South Australian Government, *Submission 84*, Appendix 2.

⁸² For Honeymoon: Mining Lease First Schedule, para 6.

⁸³ For Honeymoon: Mining Lease Second Schedule, para 2.9.

For Honeymoon: Mining Lease First Schedule, para 7 an Second Schedule paras 2.5 & 2.6.

a condition of the Licence to Mine or Mill.

⁸⁶ South Australian Government, *Submission* 84, Appendix 2.

⁸⁷ Beverly Mining Lease, Second Schedule, paras 1 and 2; Honeymoon Mining Lease, Second Schedule, para 3.

four mines being examined by the Committee, with the State/Territory governments taking the lead in each case with Commonwealth cooperation.

1.53 Regulation of the operational mines in the Northern Territory is the responsibility of the Northern Territory Department of Business, Industry and Resource Development, with the Commonwealth Supervising Scientist having a monitoring, research and supervisory role over mining activities in the Alligator Rivers region. In South Australia, day-to-day management of uranium mining is the responsibility of the Office of Minerals and Energy Resources, with regulation of radiation safety aspects of mines being the responsibility of the Environment Protection Authority.⁸⁸

Tables showing former and current legislative regimes

Instrument	Authority	Legislation
Authorisation to Mine	Commonwealth Minister for Industry & Resources	s.41 Atomic Energy Act 1953 (Cth)
Permit to Export ERs attached	Commonwealth Minister for Industry & Resources	Customs Act 1901 (Cth) Customs (Prohibited Exports) Regulations 1958 (Cth)
Environmental Impact Statement	Commonwealth Minister for the Environment providing recommendations to the Commonwealth Minister for Industry & Resources (the action Minister)	Environmental Protection (Impact of Proposals) Act 1974 Cth
General Authorisation ERs at Appendix A	NT Minister for Mining	Uranium Mining (Environmental Control) Act 1979 (NT)(UMEC)

Table 1.1Ranger (NT) approval process - 1970s

⁸⁸ Mr Early, Committee Hansard, Canberra 18 Oct 2002, p. 305

Instrument	Authority	Legislation
Mineral Lease	NT Minister for Mining	Mining Act 1982 (NT)
ERs attached		(and section 43 Jabiluka Agreement)
Permit to Export ERs attached	Commonwealth Minister for Industry & Resources	Customs Act 1901 (Cth) Customs (Prohibited Exports) Regulations 1958 (Cth)
Environmental Impact Statement	Commonwealth Minister for the Environment providing recommendations to the Commonwealth Minister for Industry & Resources (the action Minister)	Environmental Protection (Impact of Proposals) Act 1974 (Cth)
General Authorisation	NT Minister for Mining	Uranium Mining (Environmental Control) Act 1979 (NT)

Table 1.2Jabiluka (NT) approval process - 1990s

Table 1.3	Approvals in the NT under current legislation
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Instrument	Authority	Legislation
Permit to Export	Commonwealth Minister for Industry & Resources	Customs Act 1901 (Cth) Customs (Prohibited Exports) Regulations 1958 (Cth)
Environmental Impact Statement	Commonwealth Minister for the Environment.	Environmental Protection and Biodiversity Conservation Act 1999 (Cth)
General Authorisation	NT Minister for Mining	Mining Management Act 2001 (NT)

Table 1.4	Approvals in SA under (current legislation
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Instrument	Authority	Legislation
Permit to Export	Commonwealth Minister for Industry & Resources	Customs Act 1901 (Cth) Customs (Prohibited Exports) Regulations 1958 (Cth)
Environmental Impact Statement	<i>At time of approval</i> Commonwealth Minister	Environmental Protection
	for the Environment providing recommendations to the Commonwealth Minister for Industry & Resources (the then action Minister) <i>Now</i>	(Impact of Proposals) Act 1992 (Cth)
	Commonwealth Minister for the Environment.	Environmental Protection and Biodiversity Conservation Act 1999 (Cth)
Mining Lease	SA Minister for Mining	Mining Act 1971 (SA)
ERs contained in Schedules		
Licence to Mine or Mill Radioactive Ores	SA Minister for Mining	Radiation Protection and Control Act 1982 (SA)