

3 Closure obligations and commitments



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Cover photograph: Partridge Pigeon (*Geophaps smithii smithii*) [Vulnerable] on Trial Landform

GLOSSARY

Below are key terms that are used in this section.

Key term	Definition
Environmental Requirements	The Ranger Environmental Requirements are attached to the S.41 Authority and set out Primary and Secondary Environmental Objectives, which establish the principles by which the Ranger operation is to be conducted, closed and rehabilitated and the standards that are to be achieved.
Minesite Technical Committee (MTC)	<p>The Minesite Technical Committee, convened in accordance with Attachment A of the Working Arrangements for the Regulation of Uranium Mining in the Northern Territory dated 30 May 2005, is tasked with:</p> <ul style="list-style-type: none"> • Reviewing proposed and existing approvals and decisions under NT legislation. • Reviewing technical information in relation to Ranger Mine, including monitoring data and environmental performance. • Collaboratively developing standards for the protection of the environment. • Developing strategies to address emerging issues. <p>The MTC consists of the representatives of the Northern Territory Department of Industry, Tourism and Trade, the Supervising Scientist, ERA and the Northern Land Council. Representatives of the Commonwealth Department of Industry, Science, Energy and Resources may also attend MTC meetings.</p>
Mirarr	<p>Mirarr is a patrilineal descent group. Descent groups are often called 'clans' in English and kunmokurrkurr in Kundjeyhmi language. There are several Mirarr clans with each one distinguished by the language they historically spoke (e.g. Mirarr Kundjeyhmi, Mirarr Urningangk, Mirarr Erre).</p> <p>The Mirarr are the Traditional Owners of the land encompassing the RPA.</p>
Ranger Project Area (RPA)	Abbreviated to RPA. The Ranger Project Area means the land described in Schedule 2 to the Commonwealth <i>Aboriginal Land Rights (Northern Territory) Act 1976</i> .
WA Guidelines. WA Guidelines for Preparing Mine Closure Plans	Guidance documentation provided by the Western Australia Department of Mines, Industry Regulation and Safety for the development of mine closure plans.

ABBREVIATIONS & ACRONYMS

Below are abbreviations and acronyms that are used in this section.

Abbreviation/ Acronym	Description
ALARA	As low as reasonably achievable
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
ASNO	Australian Safeguards and Non-Proliferation Office
BPT	Best Practicable Technology
Cth	Commonwealth
DITT	Department of Industry Tourism and Trade
DPIR	Department of Primary Industry and Resources (now DITT)
EIS	Environmental Impact Statement
EMS	<i>Environmental Management System</i>
<i>EPBC Act</i>	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<i>EPIP Act</i>	<i>Environmental Protection (Impact of Proposal) Act 1974</i>
ER(s)	Environmental Requirements
ERA	Energy Resources of Australia Ltd
GISTM	Global Industry Standard on Tailings Management
IAEA	International Atomic Energy Agency
ICMM	International Council on Mining and Metals
ICRP	International Commission on Radiological Protection
OBS	Osmoflow Brine Squeezer
MCP	Mine Closure Plan
MMP	Mine Management Plan
MTC	Minesite Technical Committee
NLC	Northern Land Council
NGO	Non-Government Organisations
NOHSC	National Occupational Health and Safety Commission
NP	National Park
NT	Northern Territory
NTP	Northern Territory Portion
RPA	Ranger Project Area
S41	Section 41
SSB	Supervising Scientist Branch
WA	Western Australia

3 CLOSURE OBLIGATIONS AND COMMITMENTS

This section provides an overview of the closure obligations and commitments that are applicable to Energy Resources of Australia Ltd (ERA) in relation to the Ranger Project Area (RPA). An outline of the primary Commonwealth (Cth) and Northern Territory (NT) legislative framework is provided, including descriptions relating to rehabilitation and closure activities. Relevant external guidelines, standards, codes of practice and stakeholder input, along with internal corporate policies and standards, have also been addressed as relevant to the Mine Closure Plan (MCP).

As this MCP is appropriately addressing the requirements of the Mining Management Plan (MMP), this section also covers MMP statutory and non-statutory requirements.

It is implicit that ERA will comply with all necessary legal obligations and uphold internal standards during closure to ensure the ongoing preservation of cultural values, the protection of the environmental values in the surrounding Kakadu National Park (Kakadu NP), and the health and safety of the community.

Chapter 3.1 provides an overview of the ERA regulatory framework and includes a list outlining ERA key legislative instruments and agreements. Key legislation and agreements specific to Ranger Mine operations, including closure, together with explanation are included in Appendix 3.1. A compliance register of specific obligations is included in Appendix 3.2.

3.1 Legislative framework

Rehabilitation and closure of the Ranger Mine are governed by both Commonwealth and Northern Territory legislation and regulations.

3.1.1 Applicable legislation and agreements

The following Acts and Regulations are relevant to closure activities² at the Ranger Mine:

- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)*
- *Aboriginal and Torres Strait Islander Heritage Protection Regulations 2017 (Cth)*
- *Aboriginal Land Act 1978 (NT)*
- *Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)*
- *Aboriginal Land Rights (Northern Territory) Regulations 2007 (Cth)*
- *Atomic Energy Act 1953 (Cth)*
 - 'Government Agreement' between the Commonwealth, ERA and the Atomic Energy Commission (under the *Atomic Energy Act 1953*)
 - 'Section 41 Authority' under the *Atomic Energy Act 1953*

² Exploration, mining and milling activities have ceased

- 'Mining Agreement' (the Ranger uranium mining project agreement between the Northern Land Council (NLC) and ERA)
- *Australian Radiation Protection and Nuclear Safety Act 1998* (Cth)
- *Building Act 1993* (NT)
- Building Regulations 1993 (NT)
- *Bushfires Management Act 2016* (NT)
- *Control of Roads Act 1953* (NT)
- *Corporations Act 2001* (Cth)
- Customs (Prohibited Exports) Regulations 1958 (Cth)
 - Permit to export
- *Dangerous Goods Act 1998* (NT)
- Dangerous Goods Regulations 1985 (NT)
- *Electrical Workers and Contractors Act 1978* (NT)
- *Electricity Reform Act 2000* (NT)
- Electricity Reform (Safety and Technical) Regulations 2000 (NT)
- *Environmental Offences and Penalties Act 1996* (NT)
- Environmental Offences and Penalties Regulations 2011 (NT)
- *Environment Protection (Alligator Rivers Region) Act 1978* (Cth)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth)
- Environment Protection and Biodiversity Conservation Regulations 2000 (Cth)
- *Environment Protection (Northern Territory Supreme Court) Act 1978* (Cth)
- *Environmental Offences and Penalties Act 1996* (NT)
- Environmental Offences and Penalties Regulations 2011 (NT)
- *Fair Work Act 2009* (Cth)
- *Fire and Emergency Act 1996* (NT)
- Fire and Emergency Regulations 1996 (NT)
- *Fisheries Act 1988* (NT)
- *Hazard Waste (Regulation of Exports and Imports) Act 1989* (Cth)
- Hazardous Waste (Regulation of Exports and Imports) Regulations 1996 (Cth)
- *Heritage Act 2011* (NT)
- International Atomic Energy Agency Regulations for the Safe Transport of Radioactive Material

- *Industrial Chemicals Act 2019* (Cth)
- *Mineral Titles Act 2010* (NT)
- Mineral Titles Regulations 2011 (NT)
- *Mining Management Act 2001* (NT)
- Mining Management Regulations 2001 (NT)
 - Ranger Authorisation Variation 0108-18
- *Northern Territory Aboriginal Sacred Sites Act 1989* (NT)
- Northern Territory Aboriginal Sacred Sites Regulations 2004 (NT)
- *Nuclear Non-Proliferation (Safeguards) Act 1987* (Cth)
 - Permit to possess
 - Permit to decommission
- *Radiation Protection Act 2004* (NT)
 - Licences for radiation equipment
- *Radioactive Ores and Concentrates (Packaging and Transport) Act 1980* (NT)
 - Licence to transport and store U₃O₈
- Radiation Protection Regulations 2007 (NT)
- Ranger 'Section 44' Agreement between the Commonwealth of Australia and Northern Land Council (under the *Atomic Energy Act 1953*)
 - Ranger Uranium Mining Project Agreement between the Northern Land Council and ERA (2013)
- *Territory Parks and Wildlife Conservation Act 1976* (NT)
- Territory Parks and Wildlife Conservation Regulations 2001 (NT)
- Territory Parks and Wildlife Conservation By-Laws 1984 (NT)
- *Waste Management and Pollution Control Act 1998* (NT)
- Waste Management and Pollution Control (Administration) Regulations 1999 (NT)
- *Water Act 1992* (NT)
- Water Regulations 1992 (NT)
- *Weeds Management Act 2001* (NT)
- Weeds Management Regulations 2006 (NT)
- *Work Health and Safety (National Uniform Legislation) Act 2011* (NT)
- Work Health and Safety (National Uniform Legislation) Regulations 2011 (NT).

3.1.2 Commonwealth

The Commonwealth Government approved the Ranger Mine project on 9 January 1979. This approval followed the recommendations of the first and second reports of the Ranger Uranium Environmental Inquiry, which had been initiated under the *Environmental Protection Impact of Proposal Act 1974 (EPIP Act)* termed 'the Fox Inquiry' and assessed the potential impacts of uranium mining in the Alligator Rivers Region (Fox *et al.* 1976, 1977; Hart & Jones, 1984).

The Fox Inquiry provided the following recommendations relevant to rehabilitation and closure:

- all required rehabilitative work and all measures required for the continuing protection of the environment be carried out by the operator at its expense. It was recommended that:
 - the operator and its successors be bound by a legally enforceable obligation to carry out necessary work;
 - all obligations be enforceable by appropriate authorities which have the right and duty to enforce them;
 - performance of these obligations be fully secured at all times; and
 - the security be available freely to the appropriate authorities.
- the best practicable technology (developed anywhere, which can be applied to the uranium industry in Australia) to prevent environmental pollution and degradation be adopted from the outset;
- the Ranger Mine project be permitted to commence only if there is a firm, legally binding undertaking by Ranger Mine to place in one or the other of the pits the tailings and any stockpiles of low-grade ore remaining after milling ceases;
- a co-ordinating committee be established to review and consider any major changes in Ranger Mine's operating procedures (the Minesite Technical Committee (MTC) was formed as a result).

Title to the RPA was granted to the Kakadu Aboriginal Land Trust in 1978, in accordance with the Commonwealth *Aboriginal Land Rights (Northern Territory) Act 1976 (Aboriginal Land Rights Act)*. Prior to the Commonwealth Minister approving the Ranger Mine, the Commonwealth Government entered into the Section 44 Agreement with the NLC under the *Aboriginal Land Rights Act*. The original mining authorisation of the Ranger Mine was granted on 9 January 1979 under Section 41 of the *Atomic Energy Act 1953 (Cth) (Atomic Energy Act)*. Known as the S41 Authority, this approval provides the key tenure and land access approval required for the mine.

The section 41 Authority (Cth) established fundamental Environmental Requirements (ERs), which are inclusive of rehabilitation obligations applicable to the Ranger Mine. The ERs were appended to the main Commonwealth authority issued under Section 41 of the *Atomic Energy Act*. In general, the ERs set out environmental objectives that establish the principles by which the Ranger Mine operation is to be conducted, closed, and rehabilitated and the standards that are to be achieved. The ERs were revised in 1999 to be inclusive of conditions relating to rehabilitation.

The closure and rehabilitation of Ranger Mine is not subject to the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* because the action started prior to the commencement of the Act on 16 July 2000 and is therefore exempt under Section 43(a) of the *EPBC Act*.

3.1.3 Northern Territory

The key regulatory instrument that governs operations at the Ranger Mine on a day-to-day basis is the NT Authorisation 0108 (the Authorisation), which was issued under the NT *Mining Management Act 2018 (Mining Management Act)*. The Department of Industry Tourism and Trade (DITT), formally the Department of Primary Industry and Resources (DPIR), regulates ERA in accordance with the Ranger Authority under the *Mining Management Act*. Key closure obligations included within the Ranger Authorisation have been incorporated into the Closure Legal Obligations Register (Appendix 3.2).

Schedule 2.1 of the Ranger Authorisation provides the primary basis for operations, and states:

2.1 In addition to the obligation under the Environmental Requirements, the Operator is authorised to operate in accordance with the conditions and requirements set out in this Authorisation. In particular, the Operator is authorised to:

2.1.1 conduct mining operations and rehabilitation activities in accordance with the latest approved Mining Management Plan, Water Management Plan and Mine Closure Plan and all subordinate plans referenced therein, submitted in accordance with the processes set out in the Annexes.

The overall objective for rehabilitation and closure is based on the rehabilitation goals outlined in the Authorisation and the ERs. Annex A of the Authorisation includes the ERs, which makes specific references to the ERA obligations for environmental protection (Clause 1), rehabilitation (Clause 2) and the Rehabilitation Plan (Clause 9). The Variation of the Ranger Authority includes Annex B which addresses the requirements for submission and assessment of the MCP. ERA is now undertaking and pursuing final rehabilitation and closure of the Ranger Mine via the existing statutory review and assessment mechanisms.

Several legislative instruments relevant to environmental protection within the NT apply unless specific exemptions for the Ranger Mine have been made. These obligations are identified within the Closure Legal Obligations Register in Appendix 3.2.

3.1.4 Land and tenure

The Kakadu NP surrounds the RPA and was declared in three stages between 1979 and 1991 under the then *National Park and Wildlife Conservation Act 1975*, later replaced by the *EPBC Act* in 2000. Land tenure surrounding the RPA is a combination of Aboriginal and Commonwealth Government freehold land managed through several leasing, governance and service arrangements. Each stage of Kakadu NP includes Aboriginal land declared under the *Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)* and is either leased to the Director of National Parks or subject to a claim to traditional ownership under the Act.

The Mirarr are the Traditional Owners of the land within the RPA. The Mirarr estate includes the RPA, Mining Lease (MLN1), Jabiru and parts of Kakadu NP. The Mirarr exercise their rights as Traditional Owners under two Aboriginal Land Trusts and benefit from fee simple title (a form of freehold ownership legislated by the NT Government) to most of the estate. Aboriginal freehold title exists across most of the land in the RPA, with the titles held by the Kakadu Aboriginal Land Trust. The Kakadu Aboriginal Land Trust was handed an Aboriginal freehold title over NT Portion 7127 (currently Portion 2273) under the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) on 16 August 2013.

Land in the NT is subject to cadastral divisions, called Northern Territory Portions or Parcels (NTPs) for the purposes of identification and security of land ownership. Land tenure in the region, relevant to the RPA, includes NTPs 2273, 2376, 1656, 1657, 1662, 1685 and 1686. The majority of NTP 2376 is declared as Kakadu NP and leased back to the Director of National Parks (with current lease expiration date of 31 December 2077); the remaining part of NT Portion 2376 is within the boundaries of the RPA. The RPA also includes NTPs 1656, 1657, 1685, 1686 and part of NTP 1662 (Figure 3-1).

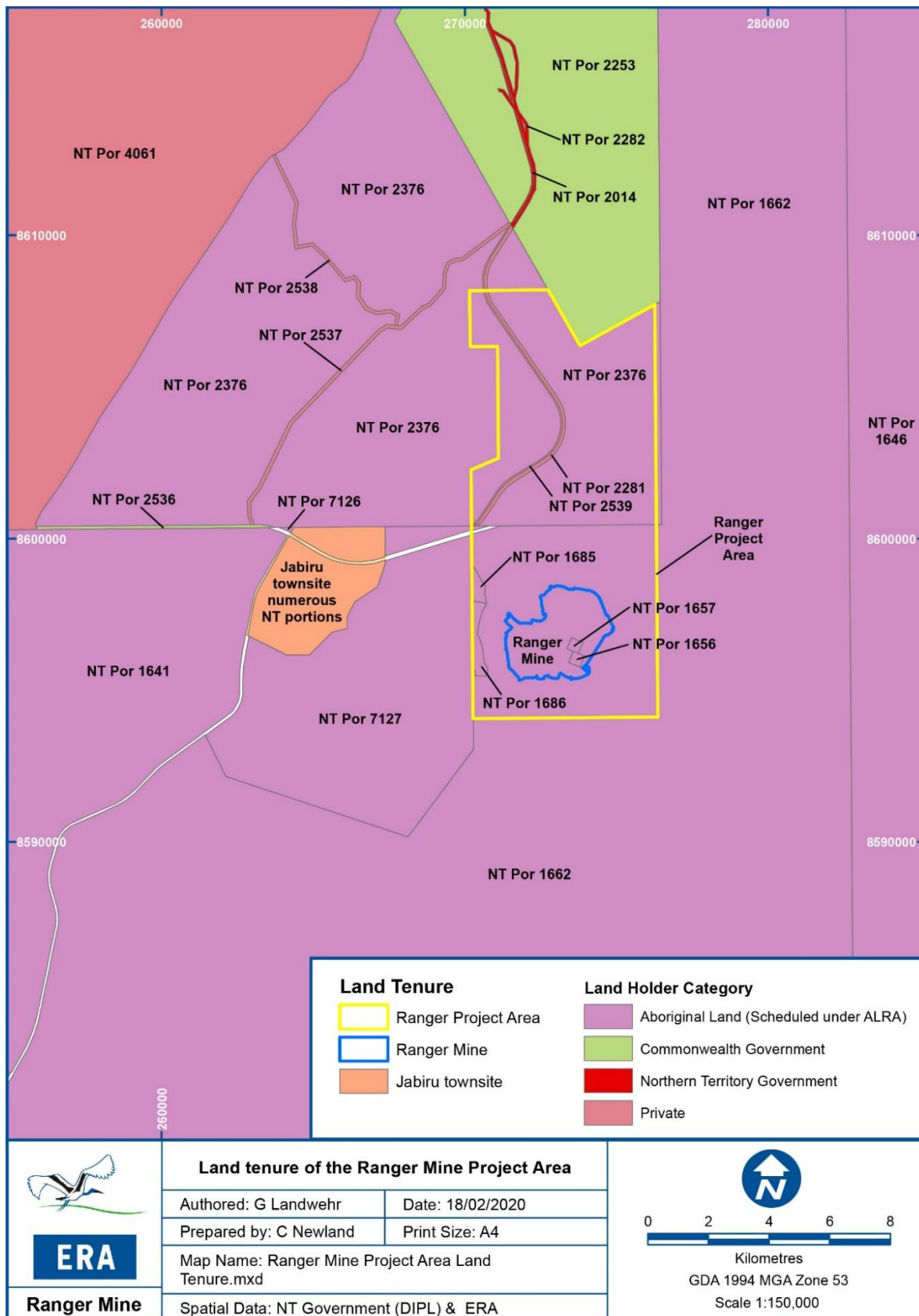


Figure 3-1: Post-closure tenure and land access

In accordance with schedule 5.1 of the S41 Authority, ERA ceased all mining operations on 8 January 2021. Schedule 3 of the S41 Authority requires ERA to comply with the Mining Agreement (Ranger Uranium Mining Project Agreement) established between the NLC and ERA, which requires the RPA to be vacated on cessation of mining operations, other than for the purposes of undertaking rehabilitation as required by the S41 Authority (Schedule 5.2). The current rights of ERA to access and occupy the RPA, under the current S41 Authority, continues until 8 January 2026.

Gundjeihmi Aboriginal Corporation (GAC), the NLC and ERA have been working collaboratively with relevant Government departments on the rehabilitation of the RPA and the proposed amendment to the *Atomic Energy Act*. The GAC and NLC, together with ERA have written to the relevant Minister to confirm that they jointly support the introduction of legislation to amend the *Atomic Energy Act* to allow ERA to apply for a new S41 Authority to access the RPA to complete rehabilitation of the site beyond January 2026. At the time of writing this 2022 MCP, the amendments had just been presented to Parliament and are not yet finalised.

The S41 Authority requires ERA to undertake a monitoring program ‘following cessation of operations until such time as a relevant close-out certificate is issued.’ Following the completion of rehabilitation works, rehabilitated areas will undergo stabilisation and monitoring as the site progresses towards development of a long-term stable landform and viable ecosystem that meets closure objectives. ERA assumes monitoring will continue for up to 25 years after the closure phase is completed.

The rehabilitation obligations of ERA will cease once the close-out certificate has been issued by the Minister, subject to the Supervising Scientist and the NLC agreeing that the specific part of the RPA has met the aims and objectives for rehabilitation. Close-out will be granted at the point at which the rehabilitation requirements have been met or are assured, appropriate regulations and standards have been met and the site is suitable for the intended future land use. Following close-out, a separate process will be required to formally relinquish the RPA.

3.2 Standards, codes of practice and guidelines

The following external standards, codes of practice, and guidelines are relevant to closure activities at the Ranger Mine:

- Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) 7th Edition
- Australian Guidelines for Water Quality Monitoring and Reporting – Summary 2000
- Code of Practice – Safe Transport of Radioactive Material (ARPANSA 2019)
- Code of Practice & Safety Guide: Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (ARPANSA 2005)
- Western Australia (WA) Government Guidelines for preparing Mine Closure Plans (DMIRS 2020a, 2020b)
- National standards for the practice of ecological restoration in Australia. Second Edition. (SRG 2018)

- International Council on Mining and Metals (ICMM) (2019) Integrated Mine Closure: Good Practice Guide (2nd Edition)
- ACARP Management of waste tyres in the mining industry C8037 (2000)
- NTEPA Guidance Note - Asbestos disposal in the NT – information on the requirements for the disposal of Asbestos in the Northern Territory (2018).

ERA has closely followed the ICMM (2019) best practice for mine closure and has adopted the elements of closure planning (Figure 3-2).

MINE CLOSURE GOOD PRACTICE



Figure 3-2 Integrated mine closure good practice framework (ICMM 2019)

3.2.1 Corporate policies and standards

ERA and Rio Tinto both have a number of Health, Safety and Environmental and Community (HSEC) policies and standards. The Closure Standard is an element of the Rio Tinto sustainable development framework, designed and developed to incorporate the ICMM Sustainable Development Framework (Rio Tinto 2014, ICMM 2015).

The Rio Tinto Closure Standard (HSEC-B-27) requires each Rio Tinto operation (globally) to develop and implement a plan for closure that achieves the requirements of the Closure Standard. The plan must be based on comprehensive and up-to-date knowledge base of the regulatory, socio-economic, cultural and environmental context in which the site operates; and all reasonable options for post-closure land use(s) must be identified and evaluated.

One of the core ERA values for the Ranger Mine closure is that the natural and cultural values of the surrounding World Heritage-listed Kakadu NP must continue to remain protected. To achieve this ERA has made it a business priority to care for country and deliver the best-in-class rehabilitation. The ERA Environmental Policy sets the underlying commitments required from employees and the company to ensure the environment remains protected and specifically commits to:

- respect all agreements with the NLC and Aboriginal Traditional Owners;
- comply with, and endeavour to exceed, all applicable legislation and commitments;
- rehabilitate land on which ERA operates, to establish an environment similar to the adjacent areas of Kakadu NP;
- conduct research to develop environmentally sound closure strategies; and
- ensure sound environmental decision making through collaboration with leading research providers, using best practicable technologies and engaging qualified suppliers.

3.2.2 Statutory and Non-Statutory Obligations

ERA has a system to identify, manage, assess and report against legal compliance requirements. This system includes Environmental Management System (EMS) procedures, checklists, inspections and audits. Legal compliance is monitored on a continual basis from analysis of monitoring and other data, maintenance of compliance checklists, and a system of regular audits and inspections. As part of this system, areas of non-compliance are promptly identified and actioned.

Inspections may also be conducted on an ad hoc basis by government authorities to assess, among other matters, performance against legal and other requirements.

Consistent with EMS procedures, any changes to legal requirements such as new approvals or changes to legislation are monitored. These changes may be identified from research, industry contact and correspondence from Non-Government Organisations (NGOs), government notifications, subscriptions, media reports and legal advice. ERA's EMS

framework, and procedural and training documentation, is also reviewed on an ongoing basis and is updated as required to reflect changes in legal requirements.

3.2.2.1 Statutory Requirements

Operations and closure at Ranger are governed by both Australian and NT legislation and regulations as discussed above. ERA maintains a Compliance Obligation Register to identify and manage compliance with the relevant Acts and Regulations (Appendix 3.2).

As a uranium mining and milling facility, international guidelines relating to radiation protection apply to the Ranger Mine. The system of radiation management is based on the justification, optimization and limitation principles established by the International Commission on Radiological Protection (ICRP), standardized by the International Atomic Energy Agency (IAEA) and adopted in a joint Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and National Occupational Health and Safety Commission (NOHSC) document.

3.2.2.2 Non-Statutory Obligations

ERA complies with the environmental management and sustainability requirements of its major shareholder, Rio Tinto. Rio Tinto has implemented Environmental Standards that aim to manage environmental risk at a consistent level across all Rio Tinto operations.

Several agreements are in place to support the function of ERA's regulators and the relationships between ERA and key stakeholders. Relevant agreements include:

- An agreement between the Commonwealth of Australia and the NT in relation to the principles to be applied in the regulation of uranium mining in the Northern Territory.
- A Memorandum of Understanding commonly referred to as the 'Working Arrangements' which establishes procedures for consultation between the Australian Government's Office of the Supervising Scientist and the Northern Territory Department of Primary Industry and Resources (DPIR) now the Department of Industry, Tourism and Trade (DITT) in the performance of their legislative functions. The 'Working Arrangements' also set out the functions of the Minesite Technical Committee (MTC).
- The GAC, NLC, ERA and the Commonwealth Government finalised the suite of agreements governing operations at the RPA, including a Mining Agreement in January 2013.

Ranger's Safety Management System and EMS has been certified to AS4801 and ISO14001 standards respectively since December 2003. The system is audited by an accredited external party on an annual basis to ensure compliance to these standards.

3.2.3 Supervising Scientific Branch (SSB) rehabilitation standards

The SSB published nine rehabilitation standards for the RPA (Department of Agriculture, Water and the Environment, 2021), which are based on over 40 years of research and monitoring in the area surrounding the Ranger mine. The SSB rehabilitation standards are reviewed and updated as required.

These standards are respected by ERA, along with the overarching corporate standards, to promote desired outcomes for environmental protection.

3.3 Western Australia Mine Closure Plan guidelines

Annex B of the Ranger Authorisation and the Rio Tinto internal requirements frame the content and structure of the MCP. At the request of the Commonwealth Government, and in the current absence of NT specific closure plan guidelines, this MCP has been prepared with reference to the WA Guidelines for Preparing Mine Closure Plans (the WA Guidelines) (DMIRS, 2020b). The WA Guidelines outline a general mine closure planning process. ERA has followed this mine closure planning process throughout its operation and addresses each component of this process in detail throughout this MCP.

The Annex B requirements align with the WA Guidelines, which recognise that closure planning is a progressive process and that mine closure plans are living documents that undergo ongoing review, development, and continuous improvement throughout the life of a mine. This is consistent with the requirement to update and submit the MCP annually as per the Authorisation. The level of information required recognises the stage of mine development (i.e. exploration, planning and design/approvals, construction, operations, decommissioning, post-closure maintenance and monitoring), with detail increasing as the mine moves through closure.

The WA Guidelines also include requirements for radiation management for uranium mines, such as the 'as low as reasonably achievable' (ALARA) principle and the 'best practicable technology' (BPT) principle, defined by the International Commission on Radiological Protection (ICRP), and endorsed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) (ARPANSA 2005, DMIRS 2020a, 2020b). These principles are discussed in detail in *Section 6, Best Practicable Technology*.

3.3.1 Other closure and rehabilitation resources

Beyond the guiding documents identified above, there are several other sources of information that are useful to the mining industry for the management of rehabilitation and closure. These documents provide a baseline to cross-check whether the ERA closure practices are conforming to industry standards and that the necessary planning and management aspects are being considered. The following documents have been considered:

- A guide to leading sustainable development in mining (Australian Government 2011);
- Mine closure – leading practice sustainable development program for the mining industry (Australian Government 2016a);
- Mine rehabilitation – leading practice sustainable development program for the mining industry (Australian Government 2016b);
- Guidance for the assessment of environmental factors – rehabilitation of terrestrial ecosystems. No. 6. (EPA 2006);

- A framework for developing mine-site completion criteria in Western Australia. [endorsed by the Department of Mines, Industry Regulation and Safety] (Young *et al.* 2019); and
- Kakadu Management Plan 2016 - 2026 (Director of National Parks 2016).

3.4 Closure permits and approvals

ERA obtained a 'Permit to Decommission Facility' on 8 January 2021 under the *Nuclear Non-Proliferation (Safeguards) Act 1987* from the Australian Safeguards and Non-Proliferation Office (ASNO). Decommissioning works proceeded following the receipt of, and in accordance with the permit.

The annual update and approval of the MCP will cover a range of closure activities undertaken on-site as the Ranger mine transitions from its operational phase into closure. However, stand alone applications will be required for activities that require amendment of the Ranger Authorisation, cause or have potential to cause disturbance to intact or undisturbed areas of the RPA, or are likely or have the potential to impact downstream values.

In 2019, during further discussions on the amendments to the Ranger Authorisation, Ministers agreed that the following matters (the matters agreed in writing) will require consultation with the Commonwealth Minister pursuant to subsection 34(3) of the *Mining Management Act 2001* (NT):

- the making of substantial changes to the Ranger Authorisation;
- assessment of the MCP and the process for assessing the MCP;
- assessment of the Ranger Mining Management Plan in so far that it addresses the requirements of the Environmental Management Report referenced in clause 18 of the Environmental Requirements, noting that most elements of the management plan are now more relevant for inclusion within the MCP and will be captured in the 2022 MCP; and
- applications for the approval of significant rehabilitation and closure activities including, but not limited to, the final Pit 1 and Pit 3 landform, the Ranger 3 Deeps exploration decline, deconstruction of the Tailings Storage Facility and/or processing plant and the final landform over the Ranger Project Area.

The following applications require Commonwealth Ministerial approval:

- **Pit 3 Closure** (submitted February 2022): this application was submitted to the MTC for assessment on 7 April 2022 and seeks approval for the method of Pit 3 closure up to, but excluding, the final landform layer of 6m. The application details the most recent tailings consolidation modelling, planned capping layer, wicking, geotextile, bulk material movement (waste rock) and waste disposal within the bulk material. All associated studies have also been included in the application to inform the environmental risk and potential mitigation strategies. Feedback on the application has been received and a revised document to address this feedback is being developed.

- **Ranger Water Dam Deconstruction and Final Landform** (forecast submission Q1 2024): ERA completed mill operations in the first quarter of 2021 and has transitioned into rehabilitation and closure of the mine. The tailings in the above-ground Ranger Water Dam (RWD) floor and confining embankments have now been transferred to Pit 3. The RWD will be used for water storage during Pit 3 capping construction and for on-site water balance needs. The RWD decommissioning schedule will be dependent on the proposed deconstruction methodology and when water storage is no longer a constraint. ERA are now commissioning engineering study works to develop a selected Best Practicable Technology conceptual design for the RWD deconstruction, as well as Coonjimba and Gulungul Catchments reconstruction to meet ERs in the S41 of the Authorization for the regulatory decommissioning and final landform application compliant with ANCOLD guidelines and Global Industry Standard on Tailings Management (GISTM). The outcomes of this study will be combined with outcomes of all other relevant studies in the final landform application. This application will document the activities planned to achieve the final landform, how this final landform will achieve the ERs, the risks and controls associated with achieving the ERs, and contingency measures that would be applied if required.

Beyond the two major stand-alone applications noted above, the MTC is responsible for reviewing 'minor' applications and advising on matters for consideration as part of the Regulatory Authority's approval. This process will generally occur when information is not available at the time of MCP submission, or due to the complexity of the supporting information.

The current applications that are to be submitted to the MTC for approval in 2022 are:

- An application to change the release criteria for BC distillate. In addition to a request to increase the threshold for electrical conductivity of distillate permitted to be directed to release water storages, this application will also request that near-spec distillate be able to be directed to RP2.
- An application to treat and release process water through the upgraded Osmoflow Brine Squeezer (OBS). ERA is in the process of upgrading the OBS through the addition of a pre-filtration section, similar to that in the existing pond water treatment plants that will enable the Brine Squeezer to treat process water through to a high quality permeate by reverse osmosis. The upgraded Brine Squeezer will provide additional process water treatment capacity to the existing Brine Concentrator.

No areas outside of the RPA footprint are planned to be disturbed during closure.

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APPENDIX 3.1: OVERVIEW OF PRIMARY LEGISLATION, AGREEMENTS AND AUTHORISATIONS

Act	Administering Authority	Overview of the Act
<i>Aboriginal Land Act 1978 (NT)</i>	Minister for Aboriginal Affairs Department of the Chief Minister and Cabinet Department of Industry Tourism and Trade (DITT)	Authorises a Land Council to grant certain permits to access Aboriginal land but Land Councils are not able to grant permits that would interfere with the use or enjoyment of the owner of another interest, such as the s.41 Authority, granted under the <i>Atomic Energy Act</i> .
<i>Aboriginal Land Rights (Northern Territory) Act 1976 (Cwlth)</i>	Minister for Indigenous Australians s44 Agreement The Attorney-General's Department The Department of the Prime Minister and Cabinet	The Act establishes the process for licensing use of Aboriginal Land, Aboriginal Land Trusts and the Land Councils to manage the Land Trusts. The relevant Australian Government Ministers have entered into an agreement under section 63 of the Act, which determines how much of the royalties that ERA pays to the Australian Government go to the traditional owners. ERA has approval (s44 Agreement) under the <i>Aboriginal Land Rights (Northern Territory) Act</i> to mine and explore the Ranger Project Area, which is on land belonging to the Kakadu Aboriginal Land Trust.
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwlth)</i>	Attorney-General's Department Department of Climate Change, Energy, the Environment and Water	The <i>Aboriginal and Torres Strait Islander Heritage Protection Act</i> is designed to be a last resort for protection of both significant Aboriginal objects and areas. It allows the Commonwealth Minister for the Environment to make a declaration to protect significant Aboriginal objects and areas in certain defined circumstances.

<i>Atomic Energy Act 1953</i> (Cwlth)	Department of Industry, Science and Resources	This Act vests title of all "prescribed substances" in the Commonwealth which includes uranium oxide (section 5). The Act establishes the process for authorising mining as well as recovering, treating and processing prescribed substances. <u>The Act does not exclude or limit the operation of any Territory law that is capable of operating concurrently.</u> Part III of the Act specifically addresses the Ranger Project Area (RPA) and refers to the definition of the RPA as stated in the <i>Aboriginal Land Rights Act</i> .
<i>Environment Protection (Alligator Rivers Region) Act 1978</i> (Cwlth)	Department of Climate Change, Energy, the Environment and Water	The <i>Environment Protection (Alligator Rivers Region) Act</i> establishes the functions and responsibilities of the Supervising Scientist and the Environmental Research Institute of the Supervising Scientist (ERISS), as well as establishing the Alligator Rivers Regional Advisory Committee (ARRAC) and the Alligator Rivers Region Technical Committee (ARRTC). The SSB is required to provide advice to the Commonwealth Minister, NT Minister and or the Supervising Authority (per Ranger Authorisation).
<i>Environmental Protection (Northern Territory Supreme Court) Act 1978</i> (Cwlth)	Attorney-General's Department	This Act gives the Supreme Court of the NT jurisdiction to make orders for the enforcement, in relation to uranium mining operations in the Alligator Rivers Region, of any requirement that relates to the environment in that region.

<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cwlth)	Department of Climate Change, Energy, the Environment and Water	The <i>Environment Protection and Biodiversity Conservation Act</i> (“EPBC Act”) provides a national scheme for environment and heritage protection and biodiversity conservation. Under the EPBC Act, actions likely to have a significant impact on a matter of national environmental significance (MNES) are assessed. Matters considered to be of national environmental significance include for example; world heritage values (Kakadu National Park), wetlands of international importance, migratory species, and nuclear actions (including uranium mining). The Criminal Code applies to offences under the Act and breaches of the Act can result in prosecution. The Act prohibits a number of activities from being conducted as set out in the Regulations.
<i>Heritage Act 2011</i> (NT)	Minister for Arts, Culture and Heritage Department of Territory Families, Housing and Communities	The <i>Heritage Act</i> protects Aboriginal archaeological objects and places. The archaeological objects covered are relics pertaining to the past occupation by Aboriginal or Macassan people, being: an artefact or thing of any material given shape to by man; a natural portable object of any material sacred according to Aboriginal tradition; or human or animal skeletal remains.
<i>Mining Management Act 2001</i> (NT)	Minister for Mining and Industry Department of Industry, Tourism and Trade	The <i>Mining Management Act</i> is the primary legislation governing mining in the NT and specifically addresses environmental management, health and safety on mine sites. The Act also covers control of the mine site, the issuing of Authorisations to mine, requirements for Mining Management Plans and offences under the Act. The Act requires the Ranger Authorisation to incorporate or adopt by reference the Ranger Mine ERs.

<i>Northern Territory Aboriginal Sacred Sites Act 1989 (NT)</i>	Minister for Arts, Culture and Heritage Aboriginal Areas Protection Authority	Establishes a procedure for the protection and registration of sacred sites and establishes the Aboriginal Areas Protection Authority (AAPA) as an independent statutory organisation to oversee protection. The Act establishes offences for entry onto, work on or, desecration of, sacred sites without appropriate Authority Certification or in contravention of the certification. The Act does not derogate from the provisions of the <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> or the <i>Aboriginal Land Rights (NT) Act 1976</i> .
<i>Protection of Movable Cultural Heritage Act 1986 (Cwlth)</i>	The Department of Infrastructure, Transport, Regional Development, Communications and the Arts	For a declared heritage place or object, a conservation management plan is required for a person to carry out work of any sort, to damage, demolish, destroy, desecrate or alter or, for the object to be moved. ERA and the Gundjeihmi Aboriginal Corporation (GAC) maintain a secure database of archaeological sites on the Ranger Project Area to ensure that no harm comes to those sites.
<i>Radiation Protection Act 2004 (NT)</i>	Minister for Health NT Department of Health	The Radiation Protection Act repealed the Radiation (Safety Control) Act 1978 (NT). The Act applies to the manufacture, sale, acquisition, possession, use, storage, transport and disposal of a radiation source but can include any activity that is connected with radiation practices.
Code of Practice and Safety Guide on Radiation Protection and Radioactive Waste	Australian Government - Australian Radiation Protection and Nuclear Safety Agency	The Code establishes requirements for radiation protection for the mining industry and protection of human health and the environment from the effects of radioactive waste generated. As part of its Authorisation, ERA is required to abide by the provisions in the Code of Practice (1987). This

Instrument	Governing Body/Parent Instrument	Description
Management in Mining and Mineral Processing (2005)	(ARPANSA)	Relates to preparing an approved Radiation Management Plan, Radioactive Waste Management Plan, cessation of operations and rehabilitation.
Memorandum of Understanding between the Commonwealth of Australia and the NT regarding Working Arrangements for the Regulation of Uranium Mining in the NT (1975)	Commonwealth Minister for Resources and Minister for Northern Australia Northern Territory Minister for Mining and Industry; Minister for Northern Australia and Trade	<p>The Commonwealth of Australia and the NT share regulatory responsibility for uranium mining via the Memorandum commonly referred to as "the Working Arrangements". The purpose is to establish procedures for consultation between the Australian Government's Office of the Supervising Scientist and the NT Department of Primary Industry and Resources (DPIR) in the performance of its legislative functions with "maximum efficiency and minimum duplication".</p> <p>The Working Arrangements establish the functions of the Ranger MTC; make provision for ad hoc Technical Working Groups comprised of the same representatives (and others as necessary); and reiterate the functions of the Alligator Rivers Region Advisory Committee (ARRAC) and refer to the Alligator Rivers Region Technical Committee (ARRTC); and establishes that the NT Supervising Authority (NT Department of Primary Industry and Resources).</p>

Agreement between the Commonwealth of Australia and the NT in relation to principles to be applied in the regulation of uranium mining in the NT (2000)	Commonwealth Minister for Resources and Minister for Northern Australia Northern Territory Minister for Mining and Industry; Minister for Northern Australia and Trade	As per the <i>Mining Management Act</i> the NT Minister must consult with the Commonwealth Minister (administering the Atomic Energy Act) about matters agreed in writing between them relating to the mining of uranium or thorium; and, must act in accordance with any advice provided by the Australian Government Minister. The 'matters agreed in writing between' the Australian and NT Ministers (referred to above) are principally contained in this Agreement. The NT Minister is the Supervising Authority for the Ranger Mine ERs, the Australian Government Minister has the primary decision-making role.
s41 Authority (Jan 1979) New s41 Authority (November 1999)	Commonwealth Minister for Resources and Minister for Northern Australia <i>Atomic Energy Act 1953</i> (Cwlth)	The Australian Government Minister granted ERA an authority (s.41 Authority) under the <i>Atomic Energy Act 1953</i> (Cwlth) authorising ERA to mine, recover, treat and process uranium oxide (a "prescribed substance") at Ranger Mine. The Environmental Requirements (ERs) are attached to the s.41 Authority and form a condition of the Authority. The s.41 Authority also states that ERA must comply with the "Complementary Agreement", "Government Agreement" and "Mining Agreement". Under this Authority, the supervising authority is required to approve the MCP (also approved by Cwlth) with advice from SSB. The original s41 Authority under the <i>Atomic Energy Act</i> applied for 26 years (21 years mining and 5 years rehabilitation) between 1979 and 2000.

s41 Authority - Environmental Requirements (ERs)	Commonwealth Minister for Resources and Minister for Northern Australia <i>Atomic Energy Act 1953</i> (Cwlth)	The Ranger Mine ERs are attached to the s.41 Authority and set out Primary and Secondary Environmental Objectives which establish the principles by which the Ranger Mine operation is to be conducted, closed and rehabilitated and the standards that are to be achieved.
s44 Agreement	Minister for Indigenous Australian	The Commonwealth was required to enter into an agreement with the NLC under the then section 44 (2) of the <i>Aboriginal Land Rights Act</i> prior to authorising the s41 Authority under the <i>Atomic Energy Act</i> . This agreement continues in force under transitional provisions. The s44
between the Commonwealth of Australia and the Northern Land Council (November 1978) Renegotiated s44 Agreement (January 2013)	Northern Land Council <i>Aboriginal Land Rights</i> <i>(NT) Act 1976</i> (Cwlth) (Attorney-General's; Prime Minister and Cabinet)	Agreement was established to address payments to be made to the NLC and conditions for operating the Ranger Mine.

Instrument	Governing Body/Parent Instrument	Description
<p>Extension Agreement between the Commonwealth of Australia and the Northern Land Council</p> <p>(March 1999)</p>	<p>Minister for Indigenous Australians</p> <p>Commonwealth Minister for Resources and Minister for Northern Australia</p> <p>Northern Land Council</p> <p>s44 Agreement</p>	<p>For ERA to continue operations beyond 2000, the Commonwealth was required to negotiate a new s44 Agreement with the NLC before it could grant a new s41 Authority. An agreement was unable to be successfully negotiated between 1996 and 1998. This resulted in an arbitration process and concluded with the parties entering into an "agreement to agree" in the form of a Deed ("Extension Agreement"). This extends the s.44 agreement for a <i>further</i> 26 years (21 years mining, 5 years rehabilitation) and required the parties to agree on a new s.44 agreement.</p>
<p>Complimentary Agreement between the Commonwealth of Australia, the Northern Land Council and ERA</p> <p>(March 1999)</p>	<p>Commonwealth Minister for Resources and Minister for Northern Australia</p> <p>Minister for Indigenous Australians</p> <p>Northern Land Council</p> <p>s44 Agreement</p>	<p>ERA, the Commonwealth and NLC entered into a "Complementary Agreement" to complement the terms of the extension agreement.</p> <p>This contemplated that:</p> <ul style="list-style-type: none"> a) The Commonwealth and NCL would renegotiate the terms of the extended s44 Agreement; b) The NLC and ERA would negotiate the Mining Agreement; and c) The Commonwealth and ERA would amend the Government Agreement to reflect the renegotiated s44 Agreement and was consistent with the Mining Agreement. <p>In addition, under this complementary agreement, ERA has agreed to enter into a "mining agreement" with the NLC.</p>

Instrument	Governing Body/Parent Instrument	Description
<p>Ranger Uranium Project Deed of Assignment Commonwealth of Australia and Australian Atomic Energy Commission to Energy Resources of Australia LTD (September 1980)</p>	<p>Commonwealth of Australia</p>	<p>Commonwealth agreed to sell and assign its shares of Concentrates of Ranger Uranium Ore and certain other rights to ERA. Further the AAEC agreed to to sell and assign the whole of the AAEC enterprise, it rights, obligations and duties and the whole of its interest in the Authority. ERA agreed to purchase and take those assignments on the conditions within this Deed.</p>
<p>Ranger Uranium Project - Government Agreement between Commonwealth of Australia and Energy Resources of Australia LTD (September 1979) (Amended 1982, 1990, 1992, 1993, 1995, 1999 & 2013)</p>	<p>Commonwealth Minister for Resources and Minister for Northern Australia Section 41 Authority</p>	<p>The Commonwealth entered into a separate agreement, in October 1974, with ERA's predecessor (Peko-Wallsend Operations Ltd, Electrolytic Zinc Company of Australasia Ltd) which referred to the development and mining of ranger deposits. The parties entered into a Memorandum of Understanding in 1975, which was later foreshadowed by the "the Government Agreement" and included the AAEC. In 1980 Peko, EZ and the AAEC sold the whole of their interests and rights under the Government Agreement to ERA and the s41 Authority was transferred to ERA.</p>

Overview of Primary Legislation, Agreements & Authorisations

Instrument	Governing Body/Parent Instrument	Description
Mining Agreement between the Northern Land Council and ERA (January 2013)	s44 Agreement Extension Agreement	The Mining Agreement is executed contemporaneously with the deed of amendment and restatement that varies the Extended s44 Agreement to create the Renegotiate s44 Agreement. The Commonwealth Minister consented to the NLC entering the Mining Agreement pursuant to the <i>Land Rights Act</i> . ERA entered into the Mining Agreement as consideration of the NLC entering into the Renegotiated s44 Agreement and in order to comply with its obligations under the Complementary Agreement.
Ranger Authorisation and Annex to Authorisation Variation of Authorisation 0108-18 (June 2018)	NT Department of Industry, Tourism and Trade (DITT) <i>Mining Management Act 2001</i> (NT)	The NT maintains an Authorisation for the Ranger Mine operations which fulfils the requirements of the Mining Management Act 2001 (NT). The Annex of Authorisation contains the key terms of ERA's licence to operate and reflects the ERs.

APPENDIX 3.2: CLOSURE LEGAL OBLIGATIONS REGISTER

ERA Closure Obligations Register up to 30 June 2022

This register contains the environmental and cultural legal obligations applicable to ERA in relation to the closure of the Ranger Mine. The obligations below represent a subset of the overarching obligations and compliance requirements applicable to all operations. The list compiled below is not limiting and all efforts have been made to identify commitments that either generally or specifically apply to the mine closure timeline, objectives and activities.

Instrument	Title	Section	Obligation
Legislation	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)</i>	Section 20 - Discovery of Aboriginal remains	If ERA discovers anything suspected to be Aboriginal remains, details of the remains and their location must be reported to the Minister.
Legislation	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)</i>	Section 22(2) & 23 - Offences & Penalties	ERA will be guilty of an offence if it engages in conduct that contravenes the terms of a declaration relating to significant Aboriginal object(s) (see section 12). This is an indictable offence. (Penalties: Max: 250 Penalty Units).
Legislation	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)</i>	Section 22(3) - Offences & Penalties	If ERA does not report the discovery of remains suspected to be Aboriginal to the Minister (see section 20), it will be guilty of an offence. (Penalty: a fine not exceeding 5 Penalty Unit).
Legislation	<i>Aboriginal Land Act 1978 (NT)</i>	Section 4(1) - Entry onto Aboriginal land or road	ERA shall not enter onto/remain on Aboriginal land or use a road unless it has been issued with a permit to do so. A permit also allows ERA to use a road that is bordered by that Aboriginal land. (Penalty - Max: 8 Penalty Units).
Legislation	<i>Aboriginal Land Act 1978 (NT)</i>	Section 4 - Entry onto Aboriginal land or road and Section 21 - No prosecution except on authority of Land Council	It is an offence to enter onto Aboriginal land or use a road without a permit. A complaint against this offence shall not be heard unless it is supported by a notice in writing by the relevant Land Council. (Penalty: Max: 8 Penalty Units).
Legislation	<i>Aboriginal Land Act 1978 (NT)</i>	Section 5 - Issue of permits	The Land Council for the area in which the Aboriginal land or road is situated or the Traditional Aboriginal Owners of an area, may issue a permit to a person to enter onto and remain on that Aboriginal land or use that road subject to conditions specified by the Land Council/Traditional Aboriginal Owners. The permit must be in writing and can be cancelled by the Land Council or the Traditional Aboriginal Owners.

Instrument	Title	Section	Obligation
Legislation	<i>Aboriginal Land Act 1978 (NT)</i>	Section 5A - Administrator may issue permits to use roads in certain circumstances	Where the Land Council or those Traditional Aboriginal Owners refuse to issue the permit to use the road, within a reasonable time, then the person may apply to the Administrator who may issue the permit to use the road subject to the conditions set out in the permit.
Legislation	<i>Aboriginal Land Act 1978 (NT)</i>	Section 22(1) - Vehicles may be stopped and questions asked	A police officer may require an ERA employee, where they are about to enter Aboriginal land or open road, to produce a permit or state his name and address.
Legislation	<i>Aboriginal Land Act 1978 (NT)</i>	Section 23 - Offence to refuse to produce permit	It is an offence not to produce a permit or state your name and address if ERA is required to do so under section 22(1). (Penalty: 8 Penalty Units).
Legislation	<i>Aboriginal Land Rights (Northern Territory) Act 1976</i>	Section 48D- Payments in respect of mining under Acts	ERA is not authorised to enter or remain on the land or do any act on the land unless the Commonwealth has entered into an agreement for the payment of specified amounts by the Commonwealth to the Land Council. An agreement was made on 3 November 1978 and extended on 19 March 1999.
Legislation	<i>Aboriginal Land Rights (Northern Territory) Act 1976</i>	Section 69 - Sacred Sites	Unless authorised under the Act, ERA is guilty of an offence if it enters or remains on a Northern Territory sacred site. It is a defence if ERA had no reasonable grounds to suspect that the land concerned was a sacred site. (Penalty: \$1,000 Penalty Units).
Legislation	<i>Aboriginal Land Rights (Northern Territory) Act 1976</i>	Section 70 - Entry on Aboriginal Land	Unless authorised under the Act, ERA is guilty of an offence if it enters or remains on Aboriginal Land. The defence of necessity applies. (Penalty: 10 Penalty Units).
Legislation	<i>Atomic Energy Act 1953 (Commonwealth)</i>	Section 41 - Authority to mine prescribed substances on behalf of, or in association with, the Commonwealth	The Minister may authorise ERA to mine for prescribed substances in the Ranger Project Area, subject to any specific conditions or restrictions, and: (a) enter with workmen, b) bring on machinery and vehicles, c) take possession of whole/part of the land, d) carry on, upon or under that land operations for discovering prescribed substances, and for mining, recovering, treating and processing prescribed substances and other minerals in order to obtain prescribed substances, e) erect or install buildings, structures and machinery for mining operations, f) cut and construct water races, drains, dams, tramways and roads for mining operations, g) bore or sink for water, and pump, raise or use water, or mining operations, h) demolish or remove buildings, structures and machinery erected or installed, i) remove persons who enter the land without consent or by law, j) pass over, or authorize persons and things to pass/be carried over the land, and k) do all other things necessary for the exercise of ERA's powers. ERA must also comply with the Ranger Uranium Project Government Agreement that was made on 9/1/1979 between the Commonwealth, Peko-Wallsend Operations Ltd., Electrolytic Zinc Company of Australasia Limited and the Commission.

Instrument	Title	Section	Obligation
Legislation	<i>Atomic Energy Act 1953 (Commonwealth)</i>	Section 41A - Revocation and variation under Section 41	ERA may apply for the authority to mine to be cancelled. This may not occur unless an action for the rehabilitation of the area affected by operations has been observed. By prior written notice, the Minister may impose additional conditions or restrictions on ERA if they refuse or fail to comply with an existing condition or restriction. This may prevent mining operations for a specific period or indefinitely.
Legislation	<i>Atomic Energy Act 1953 (Commonwealth)</i>	Section 41C - Further Authority under section 41 in respect of Ranger Project Area	(4) If the agreement is extended as mentioned in that or a further agreement is entered into the Minister shall; a) as soon as practicable, after consulting with the applicants, determine the conditions and restrictions to which the new authority is to be subject, being conditions and restrictions that: i) include conditions and restrictions that the Minister is satisfied will ensure the rehabilitation, in the manner and to the extent provided by the current authority, of the area affected by operations carried on under the current authority; b) as soon as practicable, but not later than 6 months before expiration of the mining period, give to the applicants a notice in writing setting out those conditions and restrictions.
Legislation	<i>Atomic Energy Act 1953 (Commonwealth)</i>	Section 41D - Offences relating to breach of condition	It is an offence to refuse/fail to comply with a condition or restriction subject to which an authority has been granted to the company. (Penalty: 100 Penalty Units).
Legislation	<i>Atomic Energy Act 1953 (Commonwealth)</i>	Section 41E - Offences relating to breach of condition	It is an offence to enter into a land without the consent of the person in possession of the land or without the right or power conferred by law. (Penalty: 10 Penalty Units).
Legislation	<i>Australian Radiation Protection and Nuclear Safety Act 1998 (CTH)</i>	N/A	Codes of practice relevant to ERA include: - Code of Practice and Safety guide: Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (2005) - Code of Practice for the Safe Transport of Radioactive Material (2001) still applies)
Legislation	<i>Biological Control Act 1986 (NT)</i>	N/A	Under the Act ERA can make an application to Northern Territory Biological Control Authority for an organism which is causing harm to the Territory to the Northern Territory Biological Control Authority. The Authority can declare the organism to be a target organism and implement biological control measures which includes either reducing the numbers or preventing an increase of the numbers of the organism. Under the Act, ERA can also nominate an organism to be declared an agent organism if it believes its release would control a target organism. The Act is not directly applicable to the operations of ERA therefore further information has not been included.

Instrument	Title	Section	Obligation
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 68 - Requirement to establish firebreaks	Owner or occupier of land must have a firebreak around the perimeter of the land, or another approved position or close to, the land within a fire protection zone. (Penalty - Max: 20 Penalty Units and 2 Penalty Units for each day during which the offence continues).
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 70(1),(5)/81(5) - Property fire management plans	Owner of land within a fire protection zone may be required to prepare and submit to the executive director a property fire management plan for the land. The executive director may return the plan and request amendments to be made.
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 72 - Offence to light small fire near flammable material	ERA must not light small fire: (a) within a fire protection zone or a fire danger zone during a fire danger period or (b) less than 4 m away from bush or other flammable material. (Penalty - Max: 100 Penalty Units).
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 73 - Offence to light fire unless authorised by permit	ERA must not intentionally lights a fire (other than a small fire) in the open air within a fire protection zone, or within a fire danger area during a fire danger period. (Penalty - Max: 500 Penalty Units or Imprisonment for 5 years).
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 75 - Matter not to be thrown	ERA must not throw from a vehicle or otherwise, within 4 m of any bush or other flammable material, a thing that is burning or smouldering within a fire protection zone, or within a fire danger area during a fire danger period. (Penalty - Max:100 Penalty Units).
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 76 -Spark arresters	ERA must not start an engine which sparks, flames or burning material from the engine's exhaust, on the land that is within a fire protection zone, or within a fire danger area during a fire danger period.(Penalty - Max:100 Penalty Units).
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 84 - Property fire management plans	Owner of land within a fire management area must perform all the acts specified in the fire management plan and within the stipulated period as specified by the executive director.
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 86(1) - Prohibition on fires in fire ban areas	ERA must not intentionally light a fire in the open air in a fire ban area during a fire ban period. (Penalty - Max: 500 Penalty Units or Imprisonment for 5 years).
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 90 - Duty of owner or occupier to control fires	An owner or occupier of land must take all reasonable steps to protect property on the land from fire and prevent fire spreading from one land to other land. If unable to control a fire on the land, the owner/occupier must take all reasonable steps to notify fire control officer or fire warden and the occupier of or a person apparently over the age of 16 years present on land to which the fire is likely to spread. (Penalty - Max: 500 Penalty Units or Imprisonment for 5 years).
Legislation	<i>Bushfires Management Act 2016 (NT)</i>	Section 91 - Duty of person who lights fire to control it	If a fire is lit, ERA must protect property on the land from the fire and prevent the fire spreading from the land to other land. If a person who lights a fire is unable to control the fire, they must take all reasonable steps to notify as per Section 90. (Penalty - Max: 500 Penalty Units or Imprisonment for 5 years).

Instrument	Title	Section	Obligation
Code of Practice	<i>Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (2005)</i>	Section 2.7.1 - Radiation Management Plan	Before the commencement of any stage of an operation to which this Code applies, a Radiation Management Plan (RMP) for that stage must be devised and presented to the relevant regulatory authority for approval. The Plan must be directed towards meeting the objectives of this Code and must be in accordance with the best practicable technology and take into account the potential dose delivery pathways.
Code of Practice	<i>Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (2005)</i>	Section 2.8.1 - Radioactive Waste Management Plan	A Radioactive Waste Management Plan (RWMP) must be developed to provide for the proper management of radioactive waste arising from operations. Before the commencement of any stage of an operations, a RWMP for that stage must be presented to the relevant regulatory authority (see Annex A) for approval. The Plan must be directed towards meeting the objectives of this Code and must be in accordance with best practicable technology and take into account the potential dose delivery pathways.
Code of Practice	<i>Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (2005)</i>	Section 2.9.4 - Approvals and Authorisations	An operator must not commence decommissioning or rehabilitation of any part of a mine, processing plant or waste management facility to which this Code applies without authorisation from the relevant regulatory authority.
Code of Practice	<i>Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (2005)</i>	Section 2.9.5 - Approvals and Authorisations	The relevant regulatory authority must be informed of any proposal for significant changes to an operation to which an approved Radiation Management Plan or Radioactive Waste Management Plan applies.
Code of Practice	<i>Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (2005)</i>	3.7.4 Cessation of Operations	Cessation of operations constitutes a 'significant change' under Clause 2.9.5 of the Code, and the relevant regulatory authority (see Annex A) should be notified. The operator should continue all relevant monitoring, inspection and rehabilitation programs until approval to discontinue is received from the relevant regulatory authority. b) Permanent Closure - Prior to the permanent closure of all or part of an operation, plans for decommissioning and rehabilitation will need to be updated or prepared, and submitted for approval. Such plans will form part of the relevant RMP and RWMPs. Again, the relevant regulatory authority will require assurance that the site remains in an acceptable condition until rehabilitation is complete, and that deterioration which might prejudice final rehabilitation does not occur.
Code of Practice	<i>Code of Practice for Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (2005)</i>	3.7.5 Authorisation to Rehabilitate	The waste management plan should contain proposals for rehabilitation of the project as a whole and for individual components (for example tailings dams reaching their capacity). On decommissioning, these plans will need to be updated and engineering detail finalised. Requirements and responsibilities for continuing monitoring and surveillance of the site, and of any remedial work that may become necessary, will need to be determined.

Instrument	Title	Section	Obligation
Legislation	<i>Dangerous Goods Act 1998 (NT)</i>	Section 9(1) - Safe handling of dangerous goods	A person handling dangerous goods must ensure as far as practicable, that all dangerous goods are handled safely. (Penalty: 2160 penalty units and where an offence results in death or serious harm to a person – 40320 penalty units)
Legislation	<i>Dangerous Goods Act 1998 (NT)</i>	Section 9(2) - Safe handling of dangerous goods	ERA will be guilty of an offence, if it is involved in the handling of dangerous good and fails to ensure that: (a) the goods are handled in a manner or in circumstances that the goods will not: (i) endanger or be likely to endanger the safety or health of a person or (ii) damage or be likely to damage any property or (b) the goods are not abandoned.
Legislation	<i>Dangerous Goods Act 1998 (NT)</i>	Section 9(3) - Safe handling of dangerous goods	ERA may be guilty of an offence, if it is in charge of dangerous goods and fails to ensure: (a) the safety and maintenance in safe condition of the plant or a container, vehicle, building or structure, used in the handling of the goods; (b) plant, containers and substances used, handled, stored or transported for goods in a safe manner or (c) a system is in place which provides and ensures: (i) the safe management of the goods; (ii) the identification of hazards, assessment and control of risks; (iii) safe work practices; (iv) that appropriate information, training, instruction and supervision are provided for safe handling of the goods; and (v) that appropriate information for safe handling of the goods is provided to other persons affected, or likely to be affected.
Legislation	<i>Dangerous Goods Act 1998 (NT)</i>	Section 15 - Goods too dangerous to transport	ERA must not transport any dangerous goods or cause or arrange to transport, dangerous goods that the Regulations specify are too dangerous to transport (Penalty - 2160 penalty units).
Legislation	<i>Dangerous Goods Act 1998 (NT)</i>	Reg 5D - Possession of explosives	ERA must not have any explosives (other than safety cartridges, distress signals or propellant for firearms) in its possession except in accordance with the terms and conditions of a licence (Penalty - Max: 40 penalty units).
Legislation	<i>Electricity Reform Act 2000 (NT)</i>	Section 35 - Surrender of License	An electricity entity must give 6 months prior written notice to Utilities Commission before the surrender of the licence.
Legislation	<i>Environmental Offences and Penalties Act 1996 (NT) and Environmental Offences and Penalties Regulations 2011 (NT)</i>	Section 4 - Penalty for environmental offence level 1, i.e., where the offence causes 'serious environmental harm'	If ERA is found guilty of a level 1 environmental offence, a penalty of not less than 1924 penalty units and not more than 19240 penalty units is applicable.
Legislation	<i>Environmental Offences and Penalties Act 1996 (NT) and Environmental Offences and Penalties Regulations 2011 (NT)</i>	Section 5 - Penalty for environmental offence level 2, i.e., where the offence causes 'material environmental harm'	If ERA is found guilty of a level 2 environmental offence, a penalty of not less than 770 penalty units and not more than 7700 penalty units is applicable.

Instrument	Title	Section	Obligation
Legislation	<i>Environmental Offences and Penalties Act 1996 (NT) and Environmental Offences and Penalties Regulations 2011 (NT)</i>	Section 6 - Penalty for environmental offence level 3, i.e., where the offence causes 'environmental harm'	If ERA is found guilty of a level 3 environmental offence, a penalty of not less than 385 penalty units and not more than 3850 penalty units is applicable.
Legislation	<i>Environmental Offences and Penalties Act 1996 (NT) and Environmental Offences and Penalties Regulations 2011 (NT)</i>	Section 7 - Penalty for environmental offence level 4, i.e., where the offence occurs, but no environmental harm is caused	If ERA is found guilty of a level 4 environmental offence, a penalty of not more than 385 penalty units is applicable.
Legislation	<i>Environmental Offences and Penalties Act 1996 (NT) and Environmental Offences and Penalties Regulations 2011 (NT)</i>	Section 8 - Infringement notices	If ERA appears to have committed a level 3 or 4 environmental offence and is served with an infringement notice, ERA may pay as an alternative to the prescribed penalty under this Act: a) level 3 environmental offence, 8.8 penalty units, or b) level 4 environmental offence, 4.4 penalty units.
Legislation	<i>Environment Protection (Alligator Rivers Region) Act 1978 (CTH)</i>	Section 27 - Power of Supervising Scientist to obtain information and documents	ERA to provide the information and documents within the time limit and manner as specified, if the notice in writing furnished by the Supervising Scientist for providing such information and documents.
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 3: Section 12 - Requirement for approval of activities with a significant impact on a declared World Heritage property	A person must not take an action that: (a) has or will have a significant impact on the world heritage values of a declared World Heritage property, or (b) is likely to have significant impact on the world heritage values of a declared World Heritage property (Civil Penalty - Max: 50,000 penalty units).
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 3: Section 15A - Offences relating to World Heritage Properties: Section 17B - Offences relating to declared Ramsar wetlands : Section 18A - Offences relating to listed threatened species etc : Section 20A - Offences relating to listed migratory species	(1) A person is guilty of an offence if: (a) the person takes an action; and (b) the action results in or will result in or is likely to have a significant impact on either the world heritage values of a property, the ecological character of a wetland or a species or ecological community; and (c) either the property is a declared World Heritage property, the property is declared a Ramsar wetland, the species is a listed threatened species, the community is a listed threatened ecological community or the species is a listed migratory species. Strict liability applies to paragraph (c) (Civil penalty - Max: 50,000 penalty units). (Penalty - Punishable on conviction by imprisonment Max: 7 years, a fine - Max: 420 penalty units, or both--Additionally, Penalty - Max 2,100 penalty units (Section 4B(3) Crimes Act, 1914)).

Instrument	Title	Section	Obligation
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 3: Section 25 - Requirement for approval of prescribed actions Reg 12.20 Taking plants into Commonwealth reserve	A person must not cause or allow a plant to be taken into, or possess a plant in, a Commonwealth reserve. Penalty: 20 penalty units (\$2,200). This does not apply to a) taking into the Jabiru township a plant included on the Director's list of plants, b) taking a specified plant into a Commonwealth reserve to cultivate or propagate the plant on land held under a lease or licence granted by the Director, or c) taking a plant into a Commonwealth reserve as food. It does not apply to a person who takes a plant into, or possesses a plant, in a reserve if the plant is confined in a vehicle on a road or in a vessel on a watercourse. This regulation does not apply to specified pest species.
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Reg 12.19A Offences in relation to non-native species and Reg 12.19B Offences in relation to native species Reg 12.19C Complying with a direction in relation to native species	It is an offence if a person takes an action and do not comply with the directions in relation to native species in a Commonwealth reserve that results in the a) death or injury of a member of a non - native and native species in the reserve; or b) involves taking, trading, keeping or moving a member of a non-native and native species in the reserve; or c) cause disturbance or harm to a member of a native species in the reserve; or d) cause disturbance or harm to the habitat of a native species in the reserve. (Penalty: 50 Penalty units).Note: The above regulation (a) and (b) are not applicable on person who is permitted by these regulations to take action.
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 3: Section 25 - Requirement for approval of prescribed actions Reg 12.21 Cultivating plants	A person must not cultivate or propagate a plant in a Commonwealth reserve. (Penalty: 30 penalty units). Note: This does not apply to: a) in the Jabiru township if the plant is a native species and included in the Director's list of plants or b) on land that is not in the township but held under a lease or licence granted by the Director which specifies the plant may be cultivated or propagated. This regulation does not apply to specified pest species.
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 3: Section 26 - Requirement for approval of activities involving Commonwealth land	A person must not take on Commonwealth land an action that has/will have/is likely to have a <i>significant impact</i> on the environment. A person must not take outside Commonwealth land an action that has/will have/is likely to have a significant impact on the environment. (Penalty: 10,000 penalty units).
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 4: Section 43A - Actions with prior authorisation	(1) A person may take an action described in a provision of Part 3 without an approval under Part 9 (Approval of Actions) for the purposes of the provision if: (a) the action consists of a use of land, sea or seabed; and (b) before the commencement of this Act, the action was authorised by a specific environmental authorisation; and (c) immediately before the commencement of this Act, no further specific environmental authorisation was necessary to allow the action to be taken lawfully ;

Instrument	Title	Section	Obligation
			and (d) at the time the action is taken, the specific environmental authorisation continues to be in force.
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Section 211 Killing or injuring member of listed migratory species 211A Strict liability for killing or injuring member of listed migratory species	A person commits an offence if: (a) the person takes an action; and (b) the action results in the death or injury of a member of a species; and (c) the member is a member of a listed migratory species; and (d) the member is in or on a Commonwealth area. (Penalty for aggravated offence - Max: Imprisonment for 2 years or 3,000 Penalty Units or both and Penalty in any other case - Max: Imprisonment for 2 years or 1,000 Penalty Units or both) Strict liability applies to (a) to (d) (Penalty aggravated offence - Max: 1,500 Penalty Units and Penalty in any other case - Max: 500 Penalty Units)
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Section 211B Taking etc. member of listed migratory species 211C Strict liability for taking etc. member of listed migratory species	A person commits an offence if: (a) the person takes, trades, keeps or moves a member of a species; and (b) the member is a member of a listed migratory species; and (c) the member is in or on a Commonwealth area. (Penalty for aggravated offence - Max: Imprisonment for 2 years or 3,000 Penalty Units or both and Penalty in any other case - Max: Imprisonment for 2 years or 1,000 Penalty Units or both) Strict liability applies to (a) to (c) (Penalty aggravated offence - Max: 1,500 Penalty Units and Penalty in any other case - Max: 500 Penalty Units)
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	211D Trading etc. member of listed migratory species taken in Commonwealth area 211E Strict liability for trading etc. member of listed migratory species taken in Commonwealth area	A person commits an offence if: (a) the person trades, keeps or moves a member of a migratory species; and (b) the member is a member of a listed migratory species; and (c) the member has been taken in or on a Commonwealth area. (Penalty for aggravated offence - Max: Imprisonment for 2 years or 3,000 Penalty Units or both and Penalty in any other case - Max: Imprisonment for 2 years or 1,000 Penalty Units or both) Strict liability applies to (a) to (c) (Penalty aggravated offence - Max: 1,500 Penalty Units and Penalty in any other case - Max: 500 Penalty Units). Strict Liability applies to (1)(b) (Penalty - Max: 5,000 Penalty Units).

Instrument	Title	Section	Obligation
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 15: Section 354 & 355 - Activities that may be carried on only under management plan	(1) A person must not do the following acts in a Commonwealth reserve except in accordance with its management plan: a) kill, injure, take, trade, keep or move a member of a native species, b) damage heritage, c) carry on an excavation, d) erect a building or other structure, e) carry out works, or f) take an action for commercial purposes. (Penalty - Max: (Body corporate) 5,000 penalty units). A person must not carry on mining operations in a Commonwealth reserve except in accordance with a management plan in operation for the reserve. (Penalty - Max: (Body Corporate) 5,000 penalty units) (1A) Subsection (1) does not apply in relation to the Kakadu National Park or the Antarctic.
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 15: Section 387 - No mining operations in Kakadu National Park	A person must not carry out mining operations in Kakadu National Park. Note: This does not prevent, as prescribed by the regulations: a) the use, development or reconstruction of the town Jabiru, b) transportation of anything in Kakadu National Park along routes including air (see Part 1 of Schedule 9), c) the construction and use of pipelines and power lines in Kakadu National Park along routes (see Part 2 of Schedule 9), d) activities for the purposes of building or construction, or the supply of water, in Kakadu National Park as long as they are not connected with, or incidental to, mining operations and e) prescribed activities (i.e. the non destructive monitoring of the environment) in Kakadu National Park in connection with, or incidental to, mining operations outside Kakadu National Park.
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 17: Section 458 - Directed environmental audits	ERA may be directed by the Minister to undertake an environmental audit where the Minister suspects ERA is contravening/has contravened the Act
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 17: Section 490 - Providing false or misleading information in response to a condition on an approval or permit	The person is guilty of an offence the person is reckless as to whether information is false or misleading in a material particular which is provided in relation to a requirement of a condition attached to an environmental authority. (Penalty - Max: If ERA knew the information was false or misleading: 2yrs imprisonment and/or 600 penalty units). (Penalty – Max: If ERA was reckless as to whether the information was false or misleading: 1 yr imprisonment and/or 300 penalty units).

Instrument	Title	Section	Obligation
Legislation	<i>Environment Protection and Biodiversity Conservation Act 1999 (CTH) and Environment Protection and Biodiversity Conservation Regulations 2000</i>	Part 18: Section 499 - Commonwealth powers to remedy environmental damage and Section 500 - Liability for loss or damage caused by contravention	ERA must not take an action or make an omission that contravenes this Act or the regulations. This includes providing false or misleading information leading to the grant of an authority under the Act or the regulations. ERA is also liable to pay any affected party for any loss or damage suffered by that party as a result of the contravention. There is no limit to financial liability.
Legislation	<i>Environment Protection (Northern Territory Supreme Court) Act 1978 (Commonwealth)</i>	Section 4 - Jurisdiction of the Supreme Court	<p>(1) The Supreme Court of the Northern Territory of Australia has jurisdiction, at the suit of the Director, the Commission or a Land Council, to make orders for or in relation to the enforcement, in relation to uranium mining operations in the Alligator Rivers Region, of any requirement of or having effect under a prescribed instrument, so far as the requirement relates to any matter affecting the environment in that region.</p> <p>(2) A Land Council is not entitled to maintain a suit by virtue of this section unless the matter in relation to which the requirement is sought to be enforced is a matter affecting the environment in a part of the Alligator Rivers Region that is included in the area for which that Land Council is established and is Aboriginal land within the meaning of the <i>Aboriginal Land Rights (Northern Territory) Act 1976</i>.</p> <p>(3) The Director or the Commission is not entitled to maintain a suit by virtue of this section unless the matter in relation to which the requirement is sought to be enforced is a matter affecting the environment in a part of the Alligator Rivers Region that is included in a Commonwealth reserve or conservation zone under Part 15 of the <i>Environment Protection and Biodiversity Conservation Act 1999</i>.</p>
Legislation	<i>Fire and Emergency Act 1996 (NT)</i>	Section 30(6) - Granting a permit	<p>On grant of a permit to light a fire in the open air in an emergency response area, ERA must not:</p> <p>(a) contravene a permit or a condition to which a permit is subject;</p> <p>(b) provide false or misleading information in respect of an application for a permit; or</p> <p>(c) except with the consent of the Director, alter a particular or condition shown on a permit.</p> <p>(Penalty - Max: 100 penalty units or imprisonment for 2 years and an additional penalty not exceeding 5 penalty unit if the offence continues).</p>
Legislation	<i>Fire and Emergency Act 1996 (NT)</i>	Section 33 - Occupier to extinguish fires	<p>Where a fire is burning on land in an emergency response area and the lighting of the fire is not permitted, ERA must immediately on becoming aware of the fire regardless of who lit it:</p> <p>a) take all reasonable steps to extinguish or control the fire and</p> <p>b) as soon as is practicable report the existence and location of the fire to a member or a member of the Police Force.</p>

Instrument	Title	Section	Obligation
			(Penalty - Max:100 penalty units or imprisonment for 2 years and an additional penalty not exceeding 5 penalty unit if the offence continues).
Legislation	<i>Fire and Emergency Act 1996 (NT)</i>	Section 34(1) and 34(2) - Power of occupier to enter land	An occupier of land in an emergency response area who believes a grass or bush fire which is burning within 1 kilometre of his or her land constitutes a fire risk to his land, may enter the land on which the fire is burning, take on to that land a vehicle or equipment for extinguishing or controlling the fire and take all reasonable measures to control the fire provided there is no notice of the intent to fire either orally or written by the person lighting it or by a member or a police officer unless occupier believes that the fire is unlawfully lit or is out of control. (Penalty - Max:100 penalty units or imprisonment for 2 years and an additional penalty not exceeding 5 penalty unit if the offence continues).
Legislation	<i>Fire and Emergency Regulations 1996 (NT)</i>	Regulation 3 - Firebreaks	ERA as an occupier or owner of the land in an emergency response area must ensure that a firebreak that complies with the regulation is created and maintained along the entire boundary of the land. (Penalty - Max: 100 penalty units).
Legislation	<i>Fire and Emergency Regulations 1996 (NT)</i>	Regulation 4 - Accumulation of flammable or combustible material	ERA as an occupier or owner of the land must ensure that flammable or combustible material does not accumulate on the land in such a way that it constitutes a danger by fire. (Penalty - Max: 100 penalty units).
Legislation	<i>Fisheries Act 1988 (NT)</i>	Section 11 45 (4) - Requirement for permit	(1) Subject to this Act or to an instrument of a legislative or administrative character made under it a person shall not – (c) cause or permit a shock, sound, or other vibration, whether by percussion, the use of an explosive, or otherwise, where an effect of the shock, sound, or vibration is, or may be, that fish or aquatic life is stunned, injured, killed, or detrimentally affected; or (e) introduce a dangerous substance into waters of the Territory unless the person does so under and in accordance with a permit. (Penalty- Max: 500 penalty units or imprisonment for 2 years)
Legislation	<i>Heritage Act 2011 (NT)</i>	Section 111 - Causing damage to heritage place or object	ERA must not engage in a conduct that results in damage to a heritage place or object unless the conduct is in accordance with: a heritage agreement; a work approval; authorised work; repair order; or exempt work. (Penalty - Max: 400 penalty units or imprisonment for 2 years).
Legislation	<i>Heritage Act 2011 (NT)</i>	Section 112 - Removal of part of heritage place	ERA must not remove a part of a heritage place unless:(a) it is in the possession of a person/group who has the right to possess it and removes it in accordance with the Aboriginal tradition;(b) the removal is carried out in accordance with a heritage agreement or a work approval or a repair order; or(c) the removal is authorised under the declaration of the heritage place or object.(Penalty - Max: 400 penalty units or imprisonment for 2 years)

Instrument	Title	Section	Obligation
Legislation	<i>Heritage Act 2011 (NT)</i>	Section 113 - Removal of heritage objects from Territory	ERA must not remove a heritage object from the Territory unless: (a) it is in the possession of a person/group who has the right to possess it and removes it in accordance with the Aboriginal tradition; or (b) the removal is carried out in accordance with the CEO's approval. (Penalty - Max: 400 penalty units or imprisonment for 2 years)
Legislation	<i>Heritage Act 2011 (NT)</i>	Section 114 - Discovery of archaeological places and objects	ERA must, as soon as practicable, give the CEO a written report of the discovery of a place or object the person knows is an Aboriginal or Macassan archaeological place or object with the prescribed details. (Penalty - Max: 20 penalty units)
Legislation	<i>Mineral Titles Act 2010 (NT)</i>	Section 94(1) - Reports	The holder of a mineral title must give the Minister reports about the authorised activities conducted under the title, and other matters, as required by this Act or prescribed by regulation.
Legislation	<i>Mineral Titles Act 2010 (NT)</i>	Section 99(1) - Removal of equipment	No later than 3 months after a mineral title ceases to be in force, the person who held the mineral title immediately before the cessation must remove from the former title area all plant, machinery and other equipment placed there by the person.
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 13 - General obligation to take care	Every person on a mining site must take care of the environment.
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 16 – Obligations of operator	1) The operator for a mining site must ensure that the environmental impact of mining activities is limited to what is necessary for the establishment, operation and closure of the site. Operator must: (a) establish and maintain an appropriate management structure of competent persons for the site; and; (b) ensure that workers on the site are competent to perform their duties; and; (c) establish, implement and maintain an appropriate environment protection management system for the site; and; (d) provide adequate resources for the implementation and maintenance of the management system; and (e) ensure, by regular assessment, that the management system operates effectively. (3) The operator for a mining site must display in a prominent place on the site all written instructions of a mining officer relating to the site and make those instructions available to a contractor or worker on request.
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 29 – Operator must report environmental incident or serious environmental incident	ERA (as operator) must notify the CEO as soon as practicable If an environmental incident, or serious environment incident occurs, if ERA gives oral notice of a serious/critical incident to the CEO, written notice must also be given as soon as practicable. (Penalty - Max: 200 Penalty Units). A breach of either of the above is an offence of strict liability.

Instrument	Title	Section	Obligation
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 33 - No unauthorised release of waste or contaminant	(1) ERA commits an offence if: (a) the person releases waste or a contaminant that is from a mining site; and (b) the release is not authorised by the mining management plan for the site. (2) Abovementioned offence-is an offence of strict liability (Penalty: 200 Penalty Units). Note: The above provisions applies regardless of whether the release occurs on or outside the mining site; or causes, or has the potential to cause, environmental harm
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 34(4) - Minister to have regard to mining interest etc.	In 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.
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 38 - Variation or revocation of Authorisation	ERA (as operator) may apply for a variation of an Authorisation. Variations will only be approved where they have the effect of improving the protection of the safety or health of persons or the environment. An application for a variation of an Authorisation must state the reasons for the application and include a revised Mining Management Plan.
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 40 - Mining management plan and required information	1) A mining management plan is a plan for the management of a mining site for which the operator requires an Authorisation to carry out mining activities. 2) A mining management plan must include the following: (g) a plan and costing for closure.
Legislation	<i>Mining Management Act 2001 (NT)</i>	Division 4 - Security and levy (Section 42A - Application of Division)	This Division does not apply in relation to the following: a) an operator who carries out mining activities under the Authorisation relating to the Ranger Project Area; b) an Authorisation granted in relation to the Ranger Project Area.
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 46 - Certificate of closure	1) On completion of the rehabilitation of a mining site to the satisfaction of the Minister, the operator for the site may apply to the Minister for a certificate of closure in respect to the site. 2) When the operator has met the closure criteria for the mining site, the Minister must: a) issue to him or her a certificate of closure in respect of the site; and b) return or relinquish any outstanding security provided by the operator. 3) In this section, closure criteria means the standard or level of performance, as specified in the mining management plan for the mining site, that demonstrates successful closure of the site.
Legislation	<i>Mining Management Act 2001 (NT)</i>	Section 83 - Minister may cause action to be taken on a mining site	(3) The Minister may cause action to be taken to complete rehabilitation of a mining site.

Instrument	Title	Section	Obligation
Legislation	<i>Northern Territory Aboriginal Sacred Sites Act 1989 (NT) and Northern Territory Aboriginal Sacred Sites Regulations 2004</i>	Section 19B - Application for Authority Certificate	ERA must apply to the Authority for an Authority Certificate when performing or proposing to perform work or use land comprised in or in the vicinity of a sacred site.
Legislation	<i>Northern Territory Aboriginal Sacred Sites Act 1989 (NT) and Northern Territory Aboriginal Sacred Sites Regulations 2004</i>	Section 33 - Entry onto sacred sites	A person shall not enter or remain on a sacred site. Penalty - Max: 1,000 penalty units
Legislation	<i>Northern Territory Aboriginal Sacred Sites Act 1989 (NT) and Northern Territory Aboriginal Sacred Sites Regulations 2004</i>	Section 34 - Work on sacred site	A person shall not work on or use a sacred site. (Penalty - Max: 2,000 penalty units. It is a defence if it is proved that the defendant acted in accordance with the conditions of an Authority or Ministers Certificate permitting it to do so
Legislation	<i>Northern Territory Aboriginal Sacred Sites Act 1989 (NT) and Northern Territory Aboriginal Sacred Sites Regulations 2004</i>	Section 35 - Desecration	A person shall not desecrate a sacred site. (Penalty - Max: 2,000 penalty units.

Instrument	Title	Section	Obligation
Legislation	<i>Nuclear Non- Proliferation (Safeguards) Act 1987 (CTH)</i>	Section 13 - Permit to Possess Nuclear Material	<p>ERA to comply with the restrictions and conditions associated with the permit in respect of one or more of the following:</p> <ul style="list-style-type: none"> (a) the nuclear material, or the class of nuclear material, or the associated items or items, or the class of associated items; (b) the period for which the permit is to have effect; (c) the locations for which the permit is to have effect and the procedures to be followed if nuclear material or an associated item is to be transported from one location to another (including requirements for the giving of notice to the Minister, the Director or any carrier engaged by the holder of the permit); (d) the measures to be taken to ensure the physical security of nuclear material or an associated form; (da) the taking of measures that are consistent with Australia's obligations under the Physical Protection Convention (e) the persons, of class of persons, who are allowed to be allowed access to nuclear material or an associated item and the conditions on which access to nuclear material or an associated item is to be allowed; (f) the steps to be taken, and the records to be kept, to account for nuclear material or an associated item; (g) the uses to which nuclear material or an associated item may be put; (h) the enrichment of nuclear material or the reprocessing of irradiated nuclear material; (i) the reports to be furnished, and the inspections to be permitted, in respect of nuclear material or an associated item; (k) the transfer by the holder of the permit to another person of property in, or possession or control of, nuclear material or an associated item; (m) if the permit is a permit to possess associated technology - the communication of the information contained in, or that may be obtained or deduced from, the associated technology; (n) the alteration, dispersal or disposal of nuclear material or an associated item; (o) if nuclear material or an associated item is to be held at a nuclear facility - the provision to the Director of information in order to allow inspectors or Agency inspectors to comply with health and safety procedures applicable at the facility. <p>(Penalty - The permit/authority may be revoked by the Minister in case of contravention of the condition, failure to observe a restriction subject to which the permit or authority is granted, contravention of a direction given or an order made under Section 73 or convicted of an offence against this Act (Section 19)).</p>

Instrument	Title	Section	Obligation
Legislation	<i>Nuclear Non- Proliferation (Safeguards) Act 1987 (CTH)</i>	Section 16B - Permit to decommission facility	<p>(1) The Minister may grant a written permit for work to be carried out to decommission the whole or a part of a facility described in paragraph 28A(1)(a), but only if the Director's report under paragraph 12(2)(b) relating to the application for the permit states that the Director is satisfied that:</p> <p>(a) the applicant for the permit has provided the Director with all information the applicant was required under paragraph 12(2)(a) to provide in relation to the application; and</p> <p>(b) appropriate procedures could be applied for the implementation of the Australian safeguards system in relation to nuclear material and associated items that, during the decommissioning, are to be removed from the facility or otherwise dealt with; and</p> <p>(c) adequate physical security could be applied to nuclear material and associated items that, during the decommissioning, are to be removed from the facility or otherwise dealt with.</p> <p>(2) The permit is granted subject to the restrictions and conditions specified in it.</p> <p>(3) The permit may specify restrictions and conditions in respect of:</p> <p>(a) inspection of the work and the facility by inspectors and Agency inspectors; and</p> <p>(b) reports relating to the work and the facility (including reports on incidents affecting the work or the facility).</p>
Legislation	<i>Public and Environmental Health Regulations 2014 (NT) / Public and Environmental Health Further Amendment Regulation 2020 (NT)</i>	Regulations 55, 56, 72 Note: Reg 74, 75 and 78 were repealed in 2020 Amendment	<p>ERA as an owner or occupier of a place must:</p> <p>(a) ensure there is no water at the place such that the water is or may become a breeding ground for mosquitoes (r55(1));</p> <p>(b) ensure that no circumstances exists at a place such that water accumulates at the place and becomes a breeding ground for mosquitoes (r55(2));</p> <p>(c) comply with the directions given by the authorised officer regarding accumulation of water which may become a breeding ground for mosquitoes (r56);</p> <p>(d) comply with the directions given by the CHO regarding installation of sanitary facilities (r72);</p>

Instrument	Title	Section	Obligation
Legislation	<i>Radiation Protection Act 2004 (NT) and Radiation Protection Regulations 2007</i>	Parts 2 Division 1 Section 11, Division 2 Section 12, Subdivision 2 Section 13,15 Division 3 Section 16, 17, 18,19, Division 6 Section 24 and Part 3 Division 1 Section 25, 26, 27, 28 Part 5 Division 4 Section 68, 69	To ensure that radiation emitted from the source during the manufacture, possession, use, storage, transport, disposal or other dealing does not result in harm to health or safety of persons or the environment. For a person who deals with a radiation source, to take all measures that are reasonable and practicable to ensure that radiation emitted from the source during the dealing does not result in harm to the health or safety of persons or the environment. (Penalty - Max: 2500 penalty units) (s.11). To comply with the requirements of the act, including:- not to manufacture, sell, acquire, possess, use, store, transport, dispose of or otherwise deal with a radiation source other than in accordance with a licence (Penalty - Max: 1000 penalty units) (s12); - treated person does not receive a dose of radiation in an amount or in a way that does not comply with the request of the diagnostic procedure (Penalty - Max: 1000 penalty units) (s.13);-not to cause another person to receive a dose of radiation that is higher than the prescribed dose limit (Penalty - Max: 1000 penalty units) (s.15);- to ensure the owner of a radiation source holds a certificate of registration for the source (Penalty - Max: 5000 penalty units)(s.16);- to ensure the occupier of a place where a radiation source is used or stored holds a certificate of registration for the place (Penalty - Max: 5000 penalty units) (s.17);- not to carry out any work on a radiation source unless the holder of a certificate of accreditation (Penalty - Max: 1000 penalty units) (s.18);- not to issue a certificate of compliance for a radiation source unless the holder of a certificate of accreditation (Penalty - Max: 5000 penalty units) (s.19(1));- not to issue a certificate of compliance for a radiation place unless the holder of a certificate of accreditation (Penalty - Max: 5000 penalty units) (s.19(2));- not to possess or supply a radiation source that is prescribed by the regulations to be a banned radiation source (Penalty - Max: 5000 penalty units) ((s.24).To ensure that an application for a licence to possess a radiation source to carry out a radiation practice is accompanied by the proposed radiation protection plan for the radiation practice (s.25 - s.28).To comply with the requirements in relation to authorised officers to provide name and address (Penalty - Max: 100 penalty units) (s.68).To comply with the requirements in relation to authorised officers and give information about the offence. (Penalty - Max: Body Corporate 500 penalty units).To notify the Chief Health Officer of a dangerous event in the prescribed form (Penalty - Max: Body Corporate 5000 penalty units) (s.69).
Legislation	<i>Radiation Protection Act 2004 (NT) and Radiation Protection Regulations 2007</i>	Part 3A Section 47B - Monitoring of exposure to radiation	The operator for a mining site must conduct monitoring or testing in relation to exposure to radiation for each radiation worker who works on the mining site. (Penalty - Max: Body Corporate 1000 penalty units)

Instrument	Title	Section	Obligation
Legislation	<i>Radiation Protection Act 2004 (NT) and Radiation Protection Regulations 2007</i>	Part 3A Section 47B - Monitoring of exposure to radiation, Section 47C - Operator to keep personal radiation exposure records for radiation workers, 47D Reporting, 47F Access to records and information for radiation workers and Regulation ,9D - Monitoring requirements, 9E - Personal radiation exposure records, 9F - Reporting requirements	The operator for a mining site must: - prepare and implement a monitoring and dose assessment program and conduct monitoring or testing in relation to exposure to radiation for each radiation worker who works on the mining site (Penalty - Max: 1000 penalty units); - maintain an up to date personal radiation exposure record for each radiation worker (Penalty - Max: 500 penalty units); - keep a personal radiation exposure record for the period prescribed by the Regulations (Penalty - Max: 100 penalty units); - must give information as required to the CEO of ARPANSA within the meaning of the Australian Radiation Protection and Nuclear Safety Act 1998 (Cth) and the Chief Health Officer (Penalty Max: 500 penalty units); - give a person access to, or a copy of, radiation exposure information about the person on request (Penalty - Max: 500 penalty units).
Legislation	<i>Soil Conservation and Land Utilisation Act 1969 (NT)</i>	Section 20 - Landholder to reduce hazard	A landholder in an area that is declared to be an erosion hazard (under section 17) must take measures as specified by the Commissioner to reduce the hazard within a certain time. Prior to declaration, the landholder is notified and is able to make an objection to the proposal. (Penalty - Max: 0.8 penalty units).
Legislation	<i>Territory Parks and Wildlife Conservation Act 1976 (NT) and Territory Parks and Wildlife Conservation Regulations 2001</i>	Section 66 - Offences relating to protected wildlife	A person must not: (a) take or interfere with protected wildlife unless the person is authorised to do so; (a) have in his or her possession or under his or her control an animal that is protected wildlife or bring protected wildlife into, release protected wildlife in or take protected wildlife out of the Territory unless the person is authorised to do so under this Act. (Penalty - (a) Protected wildlife other than threatened wildlife – Max: 2,500 penalty units and (b) Threatened wildlife - 5,000 penalty units)
Legislation	<i>Territory Parks and Wildlife Conservation Act 1976 (NT) and Territory Parks and Wildlife Conservation Regulations 2001</i>	Section 67C - Offences relating to areas of essential habitat	It is an offence to alter, damage or destroy essential habitat or remove wildlife from an area of essential habitat unless authorised under the Act. (Penalty: 2,500 penalty units)

Instrument	Title	Section	Obligation
Legislation	<i>Territory Parks and Wildlife Conservation By-Laws 1984 (NT)</i>	Part 3 - Control of Activities By-laws 12 - 17	ERA must not:(a) deposit or discharge industrial waste or noxious, offensive or polluting substances or material elsewhere than in an area provided by means of a sign or other notification for the purpose (by-law 12).(b) carry on trade or commerce without a permit (by-law 13).(c) use or carry (i) a firearm or other weapon; (ii) a trap or snare; (iii) a net or spear gun; or (iv) ammunition or explosives; or lay a bait or poison, unless he has first obtained from the Commission a permit to do so (by-law 14).(d) use or carry a device manufactured for the purpose of detecting metals in a park or reserve except in accordance with a permit issued by the Commission (by-law 15).(e) disperse or lay (whether from an aircraft or in another way) a chemical substance in a park or reserve except in accordance with a permit issued by the Commission (by-law 16).(f) except in accordance with a permit issued by the Commission, damage, injure, destroy or otherwise interfere with wildlife that is an animal in a park or reserve (by-law 17).
Legislation	<i>Territory Parks and Wildlife Conservation By-Laws 1984 (NT)</i>	Part 3 - Control of Activities By-laws 18 & 27	ERA must not, in a park or reserve: (a) dig or otherwise interfere with any soil, stone or other material forming part of the park or reserve; or remove, mark, damage, deface or otherwise interfere with a: (i) rock or natural feature; or (ii) tree, shrub or plant whether or not planted by the Commission; except as provided in a plan of management in force under the Act. (by-law 18) (b) remove, interfere with or take an impression of an Aboriginal painting or historic painting, carving, object, structure or relic without the written approval of the Commission. (by-law 27)
Legislation	<i>Territory Parks and Wildlife Conservation By-Laws 1984 (NT)</i>	Part 3 - Control of Activities By-law 19	ERA must not except in accordance with the conditions of a permit issued by the Commission: (a) dam or divert a river or watercourse; or (b) pump or siphon off water from a lake, river, watercourse or natural water storage for use in an agricultural, industrial or other enterprise; or (c) foul or pollute a lake, river, watercourse or natural water storage. Maximum penalty: 40 penalty units and 8 penalty units for each day during which the offence continues. (by-law 19).
Legislation	<i>Waste Management and Pollution Control Act 1998 (NT)</i>	Section 12 - General environmental duty	A person who conducts an activity that causes or performs an action which is likely to cause pollution resulting in environmental harm or that generates or is likely to generate waste must take all measures that are reasonable and practicable to prevent or minimise the pollution or environmental harm and reduce the amount of the waste.

Instrument	Title	Section	Obligation
Legislation	<i>Waste Management and Pollution Control Act 1998 (NT)</i>	Section 14 - Duty to notify of incidents causing or threatening to cause pollution	<p>(1) A person conducting the activity must notify the NT EPA, where an incident occurs in the conduct of an activity and the incident causes or is threatening or may threaten to cause, pollution resulting in material environmental harm or serious environmental harm as soon as practicable after (and in any case within 24 hours after) first becoming aware of the incident or the time he or she ought reasonably be expected to have become aware of the incident. (Penalty: environmental offence level 4).</p> <p>(2) A person must not intentionally fail to notify the NT EPA as soon as practicable and in any case within 24 hours after first becoming aware of the incident where an incident occurs in the conduct of an activity and the incident causes or is threatening or may threaten to cause, pollution resulting in material environmental harm or serious environmental harm. (Penalty: environmental offence level 3).</p>
Legislation	<i>Waste Management and Pollution Control Act 1998 (NT)</i>	Section 30 - Where approval or licence required	<p>(1) A person must not, except under an environment protection approval, conduct an activity specified in Part 1, Schedule 2. Penalty: environmental offence level 4.</p> <p>(2) A person must not, except under an environment protection approval, modify/alter premises in/on which an activity specified in Part 1 or 2 of Schedule 2 is conducted/is to be conducted if: a) while the modification/alteration is carried out there is likely to be: i) significant increase/alteration in waste generated, stored, treated or disposed of or ii) significant increase in the risk of pollution resulting in environmental harm or b) at the premises modified/alterd there is likely to be: i) significant increase/alteration in waste generated, stored, treated or disposed of or ii) significant increase in the risk of pollution resulting in environmental harm. Penalty: environmental offence level 4. (3) A person must not, except under an environment protection licence or a best practice licence, conduct an activity specified in Part 2, Schedule 2. Penalty: environmental offence level 4. (4) Subsections (1) and (2) do not apply to maintenance of premises in/on which an activity specified in Part 1 or 2, Schedule 2 is conducted/is to be conducted.</p>
Legislation	<i>Waste Management and Pollution Control Act 1998 (NT)</i>	Section 39 - Person must comply with approval or licence	<p>(1) The holder of an environment protection approval or a licence must not intentionally contravene or fail to comply with it. Penalty: environmental offence level 3.</p> <p>(2) The holder of an environment protection approval or a licence must not contravene or fail to comply with it. Penalty: environmental offence level 4.</p>

Instrument	Title	Section	Obligation
Legislation	<i>Waste Management and Pollution Control Act 1998 (NT) and Waste Management and Pollution Control (Administration) Regulations 1998</i>	Section 42 - Annual fee and Regulation 3B -Annual fee	(1) The holder of: a) an environment protection licence or b) a best practice licence that is granted for a period of 2 years or more must pay the annual fee specified on the licence each year/part of a year the licence remains in force. The annual fee is stated in the Regulations. The Chief Executive Officer may waive whole/part of the fee in relation to a best practice licence. The Chief Executive Officer may give written notice if the fee has not been paid. Failure to pay will result in licence suspension (s. 45).
Legislation	<i>Waste Management and Pollution Control Act 1998 (NT)</i>	Section 43 - Notification of ceasing to conduct licensed activity and surrender of licence	(1) ERA must notify the NT EPA within 14 days after stopping an activity which the licence relates. Penalty: environmental offence level 4. (2) Subsection (1) does not apply to ERA if the NT EPA has approved the transfer of the licence to another person. (3) ERA may, with the approval of the NT EPA, surrender the licence.
Legislation	<i>Waste Management and Pollution Control Act 1998 (NT)</i>	Schedule 2 Part 1 – Activities that require environment protection approval	1. Constructing, installing or carrying out works for premises disposing waste by burial other than: a) domestic waste from a domestic residence disposed of on the land the premises are situated on, b) domestic waste from temporary construction camps, c) waste generated by pastoral activities disposed of on the land the pastoral activities are carried out, d) waste rock, rubble and other inert materials used for reclaiming land; and e) waste of a prescribed class. 2. Constructing, installing or carrying out works for premises, other than sewerage treatment plants, for the storage, re-cycling, treatment or disposal of listed wastes on a commercial/fee for service basis. 3. Constructing, installing or carrying out works for premises processing hydrocarbons to produce, store and/or dispatch liquefied natural gas or methanol, where: a) the premises are designed to produce more than 500,000t/y of liquefied natural gas and/or methanol and b) no lease, licence or permit under the Petroleum Act or the Petroleum (Submerged Lands) Act relates to the land which the premises are/will be situated.

Instrument	Title	Section	Obligation
Legislation	<i>Waste Management and Pollution Control Act 1998 (NT)</i>	Schedule 2 Part 2 – Activities that require licence	<p>1. Operating premises for the disposal of waste by burial that service/are designed to service the waste disposal requirements of more than 1 000 persons.</p> <p>2. Collecting, transporting, storing, re-cycling, treating or disposing of a listed waste on a commercial or fee for service basis other than in/for the purpose of a sewerage treatment plant.</p> <p>3. Operating premises, other than a sewerage treatment plant, associated with collecting, transporting, storing, re-cycling, treating or disposing of a listed waste on a commercial or fee for service basis.</p> <p>4. Omitted.</p> <p>5. Operating premises for processing hydrocarbons to produce, store and/or despatch liquefied natural gas or methanol where: a) the premises are designed to produce more than 500,000 tonnes annually of liquefied natural gas and/or methanol and b) no lease, licence or permit under the <i>Petroleum Act</i> or the <i>Petroleum (Submerged Lands) Act</i> relates to the land which the premises are situated.</p>
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 16 - Prohibition of pollution	<p>ERA is prohibited (unless authorised) from allowing waste to come into contact with water or from allowing water to be polluted. It is an environmental offence to willfully cause (level 1) or to cause (level 2), either directly or indirectly, waste to come into contact with water or for water to be polluted causing serious environmental harm. It is an environmental offence level 3 to cause, either directly or indirectly, waste to come into contact with water or for water to be polluted causing material environmental harm. It is an environmental offence level 4 to cause, either directly or indirectly waste to come into contact with water or for water to be polluted.</p> <p>Evidence of a drain, pond, dump or other means where waste is capable of coming into direct/indirect contact with water will incur a penalty. In limited circumstances, the Regulator may authorise ERA to allow waste to come into contact with water or water to be polluted.</p> <p>(Maximum default penalty: 20 penalty units)</p>
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 40 - Prohibition of unauthorised works - replaced in the 2018 Amendment to – Interfering with waterway without authorisation	<p>ERA must not (unless authorised) engage in conduct that interferes with a waterway. (Penalty - Max: 500 units). ERA must not (unless authorised) intentionally engage in conduct that interferes with a waterway and the person is reckless in relation to the result. (Penalty - Max: 1,000 units or imprisonment for 2 years).</p>
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 41 and Regulation 6 and 2018 Amendment - Grant of Construction Permit	<p>ERA must apply for a Construction Permit if ERA wishes to interfere with a waterway. The application must be in accordance with the approved form.</p>

Instrument	Title	Section	Obligation
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 42 as replaced in 2018 Amendment - Breach of term or condition of permit	If ERA holds a Construction Permit it must not contravene a term or condition of the permit. (Penalty - Max: 500 penalty units)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 45 and Regulation 8 - Licence to take surface water	If ERA wants to take surface water, ERA must apply to the Controller for water extraction licence to take or use water. An application for a licence must be in the approved form.
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 46 repealed and replaced in 2018 Amendment - Breach of licence to take surface water	If ERA holds a licence to take surface water, it must not contravene a term or condition of the licence. (Penalty - Max: 500 penalty units)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 48, 49 and Regulation 10(1), 48 repealed and replaced in 2018 Amendment - Drilling bore work without a licence	If ERA wishes to drill, construct, deepen, enlarge, remove, replace, alter or repair a bore or part of a bore, ERA must apply for a drilling licence in accordance with the approved form. (Penalty - Max: 500 penalty units)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 55 & 56, repealed and replaced in 2018 Amendment – Power to require information about bore	ERA must provide to the Controller upon request, information in relation to any bores situated on the land, and provide the information within a specified time or as soon as practicable after the completion of bore work. Penalty – Max: 30 penalty units)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 58, repealed and replaced in 2018 Amendment - Breach of permit to do bore work	If ERA holds bore construction permit it must comply with the terms and conditions of that permit. (Penalty: 500 penalty units)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 59, 60 and Regulation 9, 59 repealed and replaced in 2018 Amendment – Taking groundwater without authorisation (59), Grant of	If ERA wishes to take groundwater it must have a ground water extraction licence from the Controller. The licence must be in accordance with the approved form. Penalty – Max: 500 penalty units if ERA takes water from a bore without authorisation. Max: 1,000 penalty units or imprisonment for 2 years if intentionally takes water from a bore without authorisation).

Instrument	Title	Section	Obligation
		licence to take groundwater (60)	
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 61, repealed and replaced in 2018 Amendment - Breach of licence to take groundwater	If ERA holds a licence to take water from a bore, ERA must comply with its terms and conditions. (Penalty: 500 penalty units)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 62 - Prohibition of unlicensed waste disposal	ERA is not permitted to cause waste to be disposed of underground by using a bore. The prohibition is strict and applies regardless of whether the act was deliberate or caused environmental harm. In limited circumstances, the Minister/Controller may authorize disposal underground by using a bore. Environmental offence level 1 - person who wilfully causes waste to be disposed of underground by a bore causing serious environmental harm. Environmental offence level 2 - person who causes waste to be disposed of underground by a bore causing serious environmental harm. Environmental offence level 3 - person who causes waste to be disposed of underground by a bore causing material environmental harm. Environmental offence level 4 - person who causes waste to be disposed of underground by a bore. In proceedings for an offence against this section, proof of the existence on land of a way where waste is capable of being disposed of underground by a bore is evidence of contravention. (Maximum default penalty: 20 penalty units)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018)</i>	Section 63 & 65 - Underground waste disposal licence	If ERA wishes to dispose of waste underground it must apply to the Controller for an underground waste disposal licence, in a form approved by the Controller. If a person wants to change the use of the bore, written consent must be obtained from the Controller. An offence against this section is an environmental offence level 3.
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 64 - Breach of term or condition of licence	If ERA holds a licence to dispose of waste underground, its terms and conditions must be complied with. Offence: An offence against this section is an environmental offence level 3. (Maximum default penalty: 20 penalty units)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 74 and Regulation 9A - Grant of waste discharge licence	ERA may apply to the Controller to grant a waste discharge licence in the approved form to carry out an action which would otherwise be an offence against section 73 or because the action is not and cannot be (but for this section) authorised by or under this Act.
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 76 - Breach of terms and conditions of licence	The holder of a waste discharge licence must not contravene or cause, suffer or permit a person to contravene a term or condition to which the licence is subject. An offence against this section is an environmental offence level 3. (Penalty - Max: 20 penalty units)

Instrument	Title	Section	Obligation
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 79 and 2018 Amendment - Power to construct works	A person shall not, unless authorised by the Minister, or under and in accordance with this or any other Act, acquire, construct, maintain, repair, alter, operate or remove works for: investigating, observing, measuring or assessing waste or water, conserving water or protecting or enhancing its quality, irrigating or draining land, the use of water for recreation purposes, or controlling flooding. A person may not cause, suffer or permit another person to do so. (Penalty – Max: 200 penalty units or imprisonment for 2 years if intentional and reckless in relation to the result)
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 98, repealed and replaced in 2018 Amendment - Destruction of works	ERA shall not intentionally engage in conduct that results in authorised works being damaged or destroyed, or benefits from the works being diminished. (Penalty - Max: 100 penalty units).
Legislation	<i>Water Act 1992 (NT) and Water Regulations 1992 (NT) and Water Legislation Amendment Act 2018</i>	Section 99, repealed and replaced in 2018 Amendment - Interference with rights	ERA shall not intentionally engage in conduct that results in materially diminishing another person's enjoyment of a right mentioned in section 10, 11 or 14 of the Act, or interferes with the performance of an act authorised under section 97. (Penalty - Max: 100 penalty units).
Legislation	<i>Water Legislation Amendment Act 2018</i>	Section 100 – Wasting water	ERA shall not intentionally engage in conduct that results in more water being used than is reasonably necessary for the immediate purpose for which the water is taken, water being taken without adequate control or supervision of its taking. (Penalty - Max: 50 penalty units).

Instrument	Title	Section	Obligation
Legislation	<i>Weeds Management Act 2001 (NT) and Weeds Management Regulations 2006 (NT)</i>	Section 9 - General duties	<p>(1) ERA as owner and occupier of land must:</p> <p>a) take all reasonable measures to prevent the land being infested with a declared weed,</p> <p>b) take all reasonable measures to prevent a declared/potential weed on the land spreading to other land and</p> <p>c) notify an officer within 14 days of becoming aware of a declared weed that has not previously been/known to have been present on the land.</p> <p>(2) ERA must comply with a weed management plan relating to the weed.</p> <p>(3) ERA must dispose of the weed only on the land or at a designated weed disposal area.</p> <p>(4) ERA must not, except in accordance with a permit:</p> <p>a) bring a declared weed into the Territory,</p> <p>b) propagate or scatter a declared weed,</p> <p>c) sell or purchase a declared weed,</p> <p>d) hire any equipment, device or thing that contains or carries a declared/potential weed,</p> <p>e) store, grow or use a declared weed or any thing that contains or carries a declared weed or f) transport a declared weed except to deliver it to an officer.</p> <p>(Penalty: environmental offence level 3).</p>
Legislation	<i>Weeds Management Act 2001 (NT) and Weeds Management Regulations 2006 (NT)</i>	Section 21 - Quarantine areas	<p>ERA must not contravene or fail to comply with a restriction on the movement of persons, animals, vehicles, aircraft, boats, plants, fodder, soil or any other thing in, into or out of the quarantine area except in accordance with an access permit as specified in a notice. (Penalty - environmental offence level 3).</p>
Legislation	<i>Weeds Management Act 2001 (NT) and Weeds Management Regulations 2006 (NT)</i>	Section 32 - Moving animals and vehicles on roads	<p>ERA must not drive a vehicle that ERA knows/should reasonably know contains/carries a declared weed: a) on a public road or b) from the person's land to another person's land. An exception to this obligation is where the vehicle has been cleaned in accordance with a declared weed management plan or in compliance with the direction of an officer. (Penalty - environmental offence level 3)</p>
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 2.3 - Termination	<p>(a) This Mining Agreement will terminate on the earlier of:</p> <p>(i) 8 January 2026;</p> <p>(ii) the date this Mining Agreement is terminated by mutual agreement between the Parties; or</p> <p>(iii) the date of Final Close Out</p>
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 2.4(a) - Actions Following Termination	<p>On the Termination Date, ERA will immediately pay to the Commonwealth all monies then due and payable to the Commonwealth under the Government Agreement or the New s.41 Authority.</p>

Instrument	Title	Section	Obligation
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 2.4 (b) - Actions Following Termination	On the Termination Date, ERA will immediately, or as soon as practicable, comply with any obligation or meet any liability which may have arisen or accrued prior to the Termination Date and which has not been complied with or met at the Termination Date.
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 2.4 (c) - Actions Following Termination	On the Termination Date, ERA will vacate the Ranger Project Area unless otherwise lawfully authorised to undertake rehabilitation or revegetation after the Termination Date.
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 3.1 - Operations	ERA will, in undertaking Operations, comply with: a) the New s.41 Authority, including the Environmental Requirements; b) Applicable Laws; c) the Government Agreement; and d) this Mining Agreement.
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 3.2 (a)(i)(ii) - Cessation of Mining Operations	(a) ERA will cease Mining Operations on the Ranger Project Area on the earlier of the following: (i) the date that ERA is required to cease Mining Operations on the Ranger Project Area pursuant to clause 5.1 of the New s.41 Authority; and (ii) the date that is 40 days after the date on which ERA was served with a Cessation Notice under clause 18.1(c).
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 3.2 (b) - Cessation of Mining Operations	(b) Subject to clause 3.2(c), on cessation of Mining Operations ERA will vacate the Ranger Project Area, other than as required for Rehabilitation purposes.
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 4.1 - Sustainability Payment	Subject to clause 4.2 below, in each Annual Period during the currency of this Agreement in which Mining Operations are conducted and for the two Annual Periods following the Cessation of Mining Operations, ERA must pay to the NLC an annual payment (a Sustainability Payment) to or for the benefit of the Traditional Aboriginal Owners of the Ranger Project Area.
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 4.2(c) - Timing for Sustainability Payment	Each subsequent payment is due on the 9 January of each Annual Period (being the anniversary of the date on which the Original s.41 Authority was granted).

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Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 6.1 - General	<p>In conducting the Operations on the Ranger Project Area, ERA must manage the development of resources and the protection of the Environment by complying with the Environmental Requirements and, and in doing so must:</p> <ul style="list-style-type: none"> (a) consistently maintain the best practicable standards of Environmental planning and management; (b) comply with all Environmental Authorisations; (c) regularly monitor the Environmental performance of the Operations and ensure that proper management procedures are in place to meet its responsibilities; and (d) maintain certification to the current or most recent relevant Australian or international standards for Environmental management, being, at the date of this Mining Agreement, the International Organisation for Standardisation ("ISO") 14001 Environmental Management Systems (AS/NZS ISO 14001).
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 6.2 - Notification of Breach	<p>If ERA becomes:</p> <ul style="list-style-type: none"> a) aware it may not be able to comply with its obligations in clause 6.1(b) or 6.1(d), ERA will: <ul style="list-style-type: none"> (i) within 7 days provide a written report to the NLC and Relationship Committee Members providing details of the event and the action taken or proposed to be taken to mitigate the results of or likelihood of the incident; and (ii) if requested by the NLC or Relationship Committee Members, immediately consult with the NLC or Relationship Committee and take all reasonable steps requested by the NLC or Relationship Committee Members to mitigate the results or likelihood of the incident, including by monitoring, remediation and reporting on the likelihood of a recurrence of such an event; and (b) aware it is in breach of its obligations under clause 6.1(b) or 6.1(d) (an Event), ERA will: <ul style="list-style-type: none"> (i) where such Event is capable of rectification or remedy, immediately rectify or remedy the Event; (ii) immediately provide an interim report regarding the Event to the NLC and Relationship Committee Members by phone, fax or e-mail; (iii) within 7 days provide a written report to the NLC and Relationship Committee regarding the Event, including details of the Event and the action taken or proposed to be taken to mitigate the results of the Event; and (iv) if requested by the NLC or Relationship Committee Members, immediately consult with the NLC and Relationship Committee and take all reasonable steps requested by the NLC and Relationship Committee Members to mitigate the results of the Event, including by monitoring, remediation and reporting on the likelihood of a recurrence of such an event, provided in the case of either 6.2(a)(ii) and 6.2(b)(iv)

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			that such action is not inconsistent with a request or direction from the MTC or relevant regulatory agency.
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 6.5 - Disposal of Mining Property within the Ranger Project Area	(a) If ERA, or a Related Body Corporate of ERA, wishes to permanently dispose of Mining Property within the Ranger Project Area (including by burying such Mining Property), ERA will give to the Relationship Committee: (i) notice of the proposed disposal, with such notice to include basic details of the Mining Property proposed to be disposed of; (ii) particulars as to the method of disposal; (iii) particulars as to whether the disposal is contemplated in the Rehabilitation Plan; and (iv) particulars as to any environmental impacts that may arise due to the disposal. (b) ERA will consider any comments that the Relationship Committee may have on environmental management and rehabilitation issues associated with disposal. ERA will adopt a collaborative approach to dealing with such issues.
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 7.2 - ERA Support for Traditional Owner Business	ERA is supportive of Traditional Owners' objective to develop business opportunities and entrepreneurial skills and capabilities, and will assist the Traditional Owners to achieve this objective by: (d) offering Traditional Owners the opportunity to purchase Local Assets in accordance with clause 7.6; and (e) offering Traditional Owners the opportunity to purchase Fixed Assets in accordance with clause 7.7.

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Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 7.3 - Business Development Strategy	<p>(a) ERA will, in consultation with the Business Entity and the Relationship Committee, develop a business development strategy (the Business Development Strategy) which will be aimed at:</p> <ul style="list-style-type: none"> (i) developing strategies and mechanisms whereby ERA can assist the Business Entity and other Traditional Owner Entities, including through supporting training and development in a range of fields; and (ii) developing a joint approach between ERA and Traditional Owners in minimising adverse impacts on Traditional Owners from cessation of Mining Operations and Final Close Out. <p>(b) The Parties acknowledge that Traditional Owners have expressed particular interest in the following business opportunities, such opportunities to be discussed during development of the Business Development Strategy:</p> <ul style="list-style-type: none"> (i) archaeology; (ii) provision of art works; (iii) cultural heritage matters; (iv) servicing in Jabiru; (v) tourism; (vi) landscaping; (vii) rehabilitation; and (viii) commercial contracts associated with the Operations including workers' camps. <p>(c) The Parties and the Business Entity will discuss the development of the Business Development Strategy at meetings of the Relationship Committee. The Parties will aim to have the Business Development Strategy finalised within 12 months of the Commencement Date. Once the Business Development Strategy is finalised, ERA will implement the strategy in conjunction with the Relationship Committee and the Business Entity.</p>
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 7.6 - Local Asset Disposals	<p>(a) If ERA wishes to sell to a third party (which, for the purpose of this clause, does not include a transfer or sale of assets to a Related Body Corporate of ERA or a joint venture in which ERA or its Related Bodies Corporate have an interest):</p> <ul style="list-style-type: none"> (i) light vehicles; (ii) demountable accommodation facilities; or

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			<p>(iii) another class of asset that members of the Relationship Committee agree in writing are of a type that could be used by the Business Entity for personal or community purposes and should be subject to the provisions of this clause 7.6, which are located on the Ranger Project Area or at Jabiru (Local Assets), ERA will give the NLC and Business Entity written notice of that proposed sale, with such notice to include basic details of the Local Asset proposed to be sold.</p> <p>(b) ERA will provide written notice pursuant to clause 7.6(a) at least 30 days before the Local Assets are either sold or to be transported from the site of the Operations to another location for sale (Notice Period).</p> <p>(c) If a Traditional Owner Entity is interested in purchasing the Local Asset, it can advise ERA of this before the end of the Notice Period. If the Traditional Owner Entity does advise ERA within this time that it is interested in purchasing the Local Asset, then ERA and that entity will have discussions regarding the terms of a proposed sale within the Notice Period or such longer period as may be agreed, but neither party will be under an obligation to agree to the sale or purchase of the Local Asset.</p> <p>(d) ERA will advise at the Relationship Committee meetings of any planned upcoming Local Asset sales. However, for the avoidance of doubt, a Local Asset may be sold even if it has not first been raised at a Relationship Committee meeting, provided the other provisions of this clause 7.6 are complied with by ERA.</p>
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 7.7 - Sale of Fixed Assets	<p>(a) If ERA wishes to sell to a third party (other than a transfer or sale of assets to a Related Body Corporate of ERA or a joint venture in which ERA or its Related Body Corporate have a majority or controlling interest), or otherwise permanently dispose of a Fixed Asset, ERA will give the Business Entity written notice of that proposed sale or disposal with such notice to include basic details of the Fixed Asset proposed to be sold or disposed of.</p> <p>(b) ERA will provide the written notice pursuant to clause 7.7(a) at least 30 days before the Fixed Assets are either sold or are to be disposed of (Notice Period).</p> <p>(c) If the Business Entity is interested in purchasing the Fixed Assets and advises ERA of this before the end of the Notice Period, then ERA and the Business Entity may have discussions regarding the terms of a proposed sale, within the Notice Period or such longer period as may be agreed, but neither party will be under an obligation to agree to the sale or purchase of the Fixed Asset.</p> <p>(d) The purchase of the Fixed Asset by the Business Entity shall be subject to the terms of any subleases ERA has in relation to the Fixed Asset.</p>

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			<p>(e) The NLC acknowledges that unless ERA and the Business Entity otherwise agree, the Fixed Assets will be sold on an 'as is, where is' basis, and to the maximum extent permitted by law ERA gives no warranty or undertaking as to the state or fitness for purpose of any Fixed Asset.</p> <p>(f) If ERA and the Business Entity do not agree on the terms for the sale and purchase of a Fixed Asset within the Notice Period, or such longer period as is agreed, ERA may sell the Fixed Asset to a third party or otherwise dispose of the Fixed Asset.</p>
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 8.1 - Acknowledgement	The Parties acknowledge that Traditional Owners have a strong interest in the rehabilitation of the Ranger Project Area. The Parties also acknowledge that it is ERA's responsibility at law to meet any legal obligations regarding rehabilitation on the Ranger Project Area.
Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 8.2 - Conduct of Rehabilitation Works	<p>(a) ERA supports the involvement of the Traditional Owners in the undertaking of rehabilitation works for the Operations in accordance with the provisions of this clause 8.</p> <p>(b) ERA is at all times itself able and entitled to perform rehabilitation on the Ranger Project Area. Alternatively, ERA may choose to engage contractors to carry out the rehabilitation.</p> <p>(c) If ERA chooses to invite third parties to tender to undertake rehabilitation works on the Ranger Project Area, then ERA will conduct that tender and give preference to a Traditional Owner Entity in awarding such contracts in the same manner as provided under clause 7.4 for the award of other Local Jabiru Contracts.</p> <p>(d) If ERA does not decide to perform certain rehabilitation works itself, and also decides not to put the work out to third party tender, but wishes to enter into an agreement with a particular third party to undertake certain rehabilitation works, then ERA will:</p> <p>(i) advise the Relationship Committee members and the Business Entity in writing of this intention, and provide them with the basic details of the rehabilitation work to be performed (such as the nature of the rehabilitation work, and when it needs to be completed) but not the price or other commercially sensitive or confidential information that may have been provided by a third party;</p> <p>(ii) The Business Entity and other Traditional Owner Entities will have 30 days from receipt of such notice to submit a proposal (including price) for undertaking the rehabilitation work</p> <p>(iii) If a Traditional Owner Entity does submit such a proposal within the 30 day period, ERA must consider that proposal and in deciding whether to accept the Traditional Owner Entity's proposal or the third party proposal, ERA must generally</p>

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			apply the same preference principles that apply to a tender process under clause 7.4; and
			(iv) if the Traditional Owner Entity does not submit a proposal within the 30 day period, ERA may enter a contract with a third party for the performance of the work.
			(e) Clauses 7.4(a), 7.4(b) and 7.5 will apply to any tenders issued for rehabilitation related works as if the references in those clauses to "Local Jabiru Contracts" were references to "rehabilitation works contracts in relation to the Operations".
			(f) Nothing in this clause 8.2 prevents ERA contracting with a third party in relation to rehabilitation work on the Ranger Project Area if ERA enters a contract with a Traditional Owner Entity pursuant to this clause 8.2 but that contract does not cover all the rehabilitation works ERA requires to be undertaken at that time.

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Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 12.10 - Reports	<p>(a) ERA will provide the NLC and Relationship Committee with a report (Project Report) at the first Quarterly meeting of the Relationship Committee after 1 July each Year. The Project Report will include sufficient information and details to enable the Relationship Committee, the Traditional Owners and other Local Aboriginal People and the NLC to understand the nature and impacts of the Operations in relation to the preceding calendar year, including particulars of:</p> <ul style="list-style-type: none"> (i) the nature and scope of the Operations, means by which the Operations have been undertaken, the minerals mined and processed and the effects of the Operations upon the Environment and on the Traditional Owners and other Local Aboriginal People; (ii) total Operations costs, which need not include more detail than a person listed on the Australian Securities Exchange is required to provide in its annual report to the Australian Securities Exchange; (iii) implementation and results of implementing the Environmental Management Plan or Mine Management Plan; (iv) Environmental monitoring, such as soil analysis, erosion studies and water quality analysis; (v) any incident involving non-compliance with an Environmental Authorisation or any unauthorised event occurring on the Ranger Project Area which affected or may affect the Environment (such as the occurrence of wild fire), and where ERA considers that no such incident has occurred it will provide a certificate to that effect; (vi) action taken in compliance with requirements of Applicable Laws, Environmental Authorisations or this Mining Agreement in relation to Rehabilitation including progressive rehabilitation requirements; and (vii) outcomes pursuant to the Business Development Strategy and Local Aboriginal employment and training and business development plans and outcomes. <p>(b) A Project Report may, and will where necessary in order to comply with the requirements of clause 12.10(a) and this clause, include maps, plans and photographs.</p> <p>(c) The Parties acknowledge that reports provided by ERA in compliance with the Environmental Requirements and Environmental Authorisations may form the basis of the Project Reports.</p> <p>(d.) ERA will, within 3 months after the Termination Date (or such longer period as the NLC in writing allows) furnish the NLC with a final Project Report for the period not already included in a previous Project Report. This clause survives termination of this Mining Agreement.</p>

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Agreement	Ranger Uranium Mining Project Mining Agreement 2013 (NLC and ERA)	Clause 15.1 - Use of Materials	(a) Subject to clause 15.1(b), ERA may discover, mine, recover treat, process or use Materials sourced from the Ranger Project Area: (i) as is necessary for the proper and efficient implementation of the Operations; and (ii) in accordance with Applicable Laws. (b) ERA will not: (i) remove any Materials, Low Grade Ore or Tailings from the Ranger Project Area; or (ii) use Low Grade Ore or Tailings from the Ranger Project Area for the purposes of construction, including building and road works, without the consent of the NLC. (c) In the event that ERA wishes to use any Materials, Low Grade Ore or Tailings in the circumstances described in clauses 15.1(b)(i) or 15.1(b)(ii), ERA will provide particulars (a Proposal) identifying: (i) locations where ERA proposes to source Materials, Low Grade Ore or Tailings to be removed from the Ranger Project Area or for the purposes of construction and the proposed destination location; (ii) the proposed use of Materials, Low Grade Ore or Tailings to be removed from the Ranger Project Area or for the purposes of construction; and (iii) any measures adopted by ERA to protect the Environment, to the Relationship Committee Members and to the NLC at least 30 days prior the proposed removal or use detailed in the Proposal. (d) Relationship Committee Members and the NLC must consider any Proposal and the NLC may: (i) consent to the Proposal; (ii) consent to the Proposal on conditions, where such conditions may include consideration of matters relating to: (A) Cultural Heritage, the Environment or Rehabilitation; and (B) payment of a royalty for Materials used, at rates negotiated in good faith between the Parties. (e) Except with the consent of the NLC, which consent will not be unreasonably withheld, where it is necessary for the proper and efficient implementation of the Operations, ERA will not take, direct or use any: (i) timber on the Ranger Project Area; or (ii) surface water outside the Operations Area and within the Ranger Project Area.
Agreement	Ranger 'Section 44' Agreement between the Commonwealth of Australia and Northern Land Council	Clause 3.1	<p>This Agreement will continue in full force and effect until it is terminated on the earlier of:</p> <p>(a) 8 January 2026;</p> <p>(b) the date this Agreement is terminate by mutual agreement between the parties; or</p> <p>(c) the date of Final Close Out</p> <p>(Termination Date)</p>
Agreement	Ranger 'Section 44' Agreement between the	Clause 4.1	<p>On the Termination Date:</p> <p>(a) the Commonwealth must, within 60 days of the Termination Date, pay to the NLC all moneys then due and payable and comply with any obligation or meet any</p>

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	Commonwealth of Australia and Northern Land Council		<p>liability which may have arisen or accrued prior to the Termination Date and which has not</p> <p>been complied with or met at the Termination Date;</p> <p>(b) except as provided in this clause or otherwise provided in this Agreement neither party shall have any claim against the other of them in respect to any matter or thing contained in or arising out of this Agreement, but this provision shall be without prejudice to the liability of either party in respect of any antecedent breach, unlawful activity or default; and</p> <p>(c) the Commonwealth must ensure that ERA vacates the Ranger Project Area, except to the extent ERA is authorised to undertake rehabilitation or revegetation after the Termination Date.</p>
Agreement	Ranger 'Section 44' Agreement between the Commonwealth of Australia and Northern Land Council	Clause 7.2	Subject to the provisions of the Mining Agreement, the Commonwealth and ERA shall be at liberty at any time during the currency of this Agreement and six months after its termination to remove from the Ranger Project Area all property referred to in sub-clause 7.1 which is owned by them or any of them.
Agreement	Ranger 'Section 44' Agreement between the Commonwealth of Australia and Northern Land Council	Clause 8.1	The Commonwealth will ensure that ERA complies with the New s 41 Authority, including the Environmental Requirements.
Agreement	Ranger 'Section 44' Agreement between the Commonwealth of Australia and Northern Land Council	Clause 11.1	The Commonwealth will ensure that all Rehabilitation work in the Ranger Project Area is undertaken by ERA in accordance with the New s41 Authority and the Government Agreement.
Agreement	Ranger 'Section 44' Agreement between the Commonwealth of Australia and Northern Land Council	Clause 11.2	If, for any reason, ERA fails to carry out the whole or part of the said Rehabilitation work, the Commonwealth will carry out any part of the work not carried out by ERA.
Agreement	Ranger 'Section 44' Agreement between the Commonwealth of Australia and Northern Land Council	Clause 11.3	The Commonwealth will require a Risk Management approach to Rehabilitation, Close Out, any post-Close Out actions and any actions after the termination or revocation of the New s41 Authority, which will be implemented in consultation with the Traditional Aboriginal Owners and the Ranger Minesite Technical Committee.
Agreement	Ranger s. 44 Agreement - "Extension Agreement"	N/A	The s. 44 Agreement is extended for a further 26 years (21 years mining, 5 years' rehabilitation) and the parties are required to agree on a new s.44 agreement.

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Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 20.1	E.R.A. undertakes to rehabilitate the Ranger Project Area in accordance with the conditions and restrictions of the News 41 Authority.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 20.2	Rehabilitation of the Ranger Project Area shall not be delayed until the Date of Cessation of Mining Operations but shall be carried out progressively by E.R.A. throughout this Agreement so that, whenever a part of the Ranger Project Area which has been used for the purposes of the Venture is determined by E.R.A. to be no longer required for those purposes, rehabilitation of that part shall commence as soon as is reasonably practicable after that part ceases to be required for the purposes of the Venture.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 20.4	The cost of rehabilitation after the Date of Cessation of Mining Operations shall be met in the first instance out of funds held in the Ranger Rehabilitation Special Account and by payment by the Commonwealth either directly to a person, not being E.R.A., who is carrying out or has carried out rehabilitation work or to reimburse E.R.A. for the cost of rehabilitation borne by it from time to time.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 20.5	E.R.A. will undertake a Risk Management approach to Rehabilitation, Close Out and any post Close Out actions which will be implemented in consultation with the Traditional Aboriginal Owners, and the Ranger Minesite Technical Committee.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.1	The Plan of Rehabilitation as amended from time to time pursuant to this clause shall set out in a form suitable for costing a detailed description of the work which would be required to be done by E.R.A. to rehabilitate the Ranger Project Area if Mining Operations were to cease at the date of the preparation of the Plan of Rehabilitation as so amended and shall include a schedule of the work which would be required to be done in each of the 5 years, the first of which commences on the date of the preparation of the Plan of Rehabilitation as so amended.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.2	On the Changeover Date, immediately before the Date of Cessation of Mining Operations, and at the end of every six month period (or such other period, not being less than 6 months, as the Minister may, by writing under his hand, determine) commencing on 1 September 1980, E.R.A. shall review the Plan of Rehabilitation or the Plan of Rehabilitation as amended as the case may be and make such amendments or further amendments thereto as may be necessary.

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			Immediately on completion of the review, E.R.A. shall prepare a written report thereon.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.3	In the preparation of an amended Plan of Rehabilitation, regard shall be had, inter alia, to: (a) the conditions and restrictions of the New s41 Authority, (b) the provisions of the Renegotiated s 44 Agreement, (c) the views of the Supervising Scientist and of any Supervising Authority with which E.R.A. has consulted, and (d) the provisions of this Agreement.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.4	As soon as an amended Plan of Rehabilitation has been prepared, E.R.A. shall submit it to the Minister and send a copy of the plan to the Commonwealth.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.5	The Minister shall within 60 days after receiving an amended Plan of Rehabilitation: (a) accept the amended Plan of Rehabilitation as so submitted and notify E.R.A. of this action, or (b) refer the amended Plan of Rehabilitation to E.R.A. together with his suggestions, for further consideration.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.6	Where an amended Plan of Rehabilitation has been so referred to E.R.A., E.R.A. shall, immediately after receipt of the amended Plan of Rehabilitation, give further consideration to the amended Plan of Rehabilitation having regard to the suggestions of the Minister and, within the time fixed by the Minister not being less than 30 days after the receipt of that amended plan, or such further time as the Minister may be writing under his hand allow, again submit the amended plan, with or without alterations, to the Minister, together with E.R.A.'s comments on the suggestions of the Minister.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.7	Within 30 days of the expiration of the time fixed or of any further time allowed, as the case may be, by the Minister under clause 21.6 or of the date on which an amended Plan of Rehabilitation is again submitted to the Minister, whichever is earlier, the Minister shall accept the amended Plan of Rehabilitation as so submitted or accept the amended Plan of Rehabilitation after making such alterations as he sees fit. In either case, the Minister shall notify E.R.A. of the action taken by him.

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Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.8	E.R.A. shall ensure that the provisions of the Plan of Rehabilitation, or of the Plan of Rehabilitation as amended from time to time and accepted by the Minister pursuant to this clause, are strictly observed except to the extent that observance would be contrary to law.
Agreement	"Government Agreement" between Cth, ERA and the Atomic Energy Commission under the Atomic Energy Act 1953	Clause 21.9	When the Minister has accepted an amended Plan of Rehabilitation, E.R.A. shall forward a copy of the Plan of Rehabilitation as amended and accepted by the Minister to the Supervising Scientist.
Agreement	Complementary Agreement between the Commonwealth of Australia, Northern Land Council and ERA under the Aboriginal Land Rights (Northern Territory) Act 1976	Clause 5.1 - Consequential Amendments and Compliance	The Commonwealth and ERA agree to amend the agreement now operating between the Commonwealth and ERA dated 9 January 1979 as amended ("the Government Agreement") so that it reflects the Section 44 Agreement and is consistent with the Mining Agreement at all times.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 2.2 - Operations	Regardless of anything contained elsewhere in this Schedule, ERA shall comply with other conditions and restrictions determined pursuant to the Complementary Agreement. In the event of any inconsistency with other conditions or restrictions in this Schedule, those referred to in this condition and restriction shall prevail.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 2.3 - Operations	Subject to 2.2, in undertaking the operations, ERA shall comply with: a) this Authority including the Environmental Requirements, b) applicable laws including the Environmental Authorisations, c) the Complementary Agreement, d) the Government Agreement and e) the Mining Agreement.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 2.4 - Operations	Subject to 2.2, if it is not possible or practicable for ERA to comply with all the requirements in 2.3, the following principles shall apply to determine the order of compliance: a) the Environmental Requirements and applicable laws shall prevail over the Government Agreement and the Mining Agreement, b) if the relevant applicable law is a law of the Northern Territory, the applicable law shall prevail over the Environmental Requirements except where the Minister, in any particular case, and after taking into consideration the underlying rationale of the Environmental Requirements, and after consulting the relevant Northern Territory Minister, takes action under the Atomic Energy Act 1953; and

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			c) if the relevant applicable law is a law of the Commonwealth, the applicable law shall prevail over the Environmental Requirements.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 4.1 - Information to be kept by ERA and supplied to the Minister	ERA shall keep proper documents, records and books of account of the operations.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 5.1 - Termination of Mining Operations and the Section 41 Authority	ERA shall cease/suspend all mining operations permitted under this Authority: a) by 8/1/2021, b) immediately Section 44 Agreement is terminated/declared void/of no effect, c) no later than 6mths after: i) a court determines that this Authority is not in keeping with 25A.2, 25A.3 and 25A.5 of Section 44 Agreement, ii) the variation of this Authority is not in keeping with the Atomic Energy Act 1953/ Complementary Agreement, d) no later than 9mths after failure of Commonwealth/ERA to execute an agreement to amend the Section 44 Agreement/Mining Agreement in keeping with the Complementary Agreement, e) at any time after the Mining Agreement is executed there is no Mining Agreement in force other than because of a breach/default by the NLC, f) unless the Commonwealth and NLC agree in writing one year after notice is given by the NLC to the Commonwealth under 21.2A of Section 44 Agreement following a decrease in the determined rate payable into the Aboriginals Benefit Reserve pursuant to a determination under section 63 Aboriginal Land Rights (NT) Act 1976.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 5.2 - Termination of Mining Operations and the Section 41 Authority	Following the end of mining operations pursuant to 5.1 or action taken under the Atomic Energy Act 1953, ERA shall continue to comply with and observe its obligations under this Authority and ERA's rights under this Section 41 Authority to access, occupy or use the Ranger Project Area shall be limited to such purposes and this Authority shall, subject to 6 (Rehabilitation), continue until the earlier of: a) the date of final close out, b) 8 January 2026 or c) the date this Authority is terminated or withdrawn.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 5.3 - Termination of Mining Operations and the Section 41 Authority	If the Mining Agreement, Government Agreement or Section 44 Agreement is terminated, the Minister may terminate this Authority.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 6.1 - Rehabilitation	ERA shall promptly undertake and complete the rehabilitation of the Ranger Project Area in accordance with Appendix A (Environmental Requirements) of this Schedule.

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Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Schedule 8.1 - Variation	The Minister may, with the consent of ERA, amend or revise the conditions and restrictions contained in this Schedule to ensure that at all times this Authority is consistent with the Commonwealth's obligations under the Section 44 Agreement.
Authorisation	Ranger Authorisation under the Atomic Energy Act 1953 - Section 41 Authority	Section 41C (5)	Commencing 9 January 2000, subject to the conditions and restrictions set out or referred to in the Schedule, ERA was conferred an authority under section 41 of the Act to carry on operations in accordance with that section on the Ranger Project Area for a period of 26 years.
Authorisation	Variation of Authorisation 0108	Schedule 2 - Authorised Operations at the Ranger Mine	<p>2.1 In addition to the obligation under the Environmental Requirements, the Operator is authorised to operate in accordance with the conditions and requirements set out in this Authorisation. In particular, the Operator is authorised to:</p> <p>2.1.1 Conduct mining operations and rehabilitation activities in accordance with the latest approved Mining Management Plan, Water Management Plan and Mine Closure Plan, and all subordinate plans referenced therein, submitted in accordance with the processes set out in the Annexes.</p> <p>2.1.2 Undertake material excavation and management in accordance with the provisions of SCHEDULE 3.</p> <p>2.1.4 Operate the tailings dam and Pit #1 and Pit #3 tailing repositories and to carry out such associated activities as may be required for their operation, in accordance with SCHEDULE 5.</p> <p>2.1.6 Dispose of water by direct release from Retention Pond 1, and via the Corridor Creek Wetland Filter, in accordance with SCHEDULE 7.</p> <p>2.1.7 Dispose of water from Retention Pond 2 by irrigation within areas which are approved by the Director, in accordance with SCHEDULE 7.</p> <p>Dispose of water from pit dewatering bores by flood irrigation within areas which are approved by the Director.</p> <p>2.1.9 Pump water from Magela Creek to Retention Pond 2 subject the approval of the Director and subject to the conditions of SCHEDULE 7.</p>
Authorisation	Variation of Authorisation 0108	Schedule 3 - Material Excavation and Management	<p>3.2 Prior to the commencement of excavation of sand and gravel for ancillary purposes, the Operator shall ensure that:</p> <p>3.2.1 a plan of the proposed operations is submitted to a Mining Officer for approval. This plan shall depict the extent of the proposed borrow areas and the location of associated roads or other developments. It shall also include details of proposed rehabilitation; and</p> <p>3.2.2 such works are to be undertaken in accordance with the approved plan and rehabilitation works are to be carried out as soon as is reasonably practicable.</p>

Instrument	Title	Section	Obligation
Authorisation	Variation of Authorisation 0108	Schedule 5 - Operation of Tailings Repositories	<p>5.1 In addition to the obligation under the Environmental Requirements, the Operator shall:</p> <p>5.1.1 to the maximum extent possible, deposit tailings in tailings repositories in such a way as to result in the maximum practicable dry density; and</p> <p>5.1.2 minimise dusting from the surface of the tailings by ensuring that exposed surfaces of tailings are maintained in a coherent near saturated condition,</p> <p>5.2 During the period of 1 May to 30 November the Operator shall not allow the water level in the tailings dam to exceed the certified crest height as approved by the Director less a 6 hour Probable Maximum Precipitation event of 1,250mm.</p>
Authorisation	Variation of Authorisation 0108	Schedule 6 - Other Services, Operations and Requirements	<p>6.1 In addition to the obligations under the Environmental Requirements, the Operator shall ensure that:</p> <p>6.1.1 The NT Minister is notified as soon as is practicable, of any infringement of the conditions and requirements of this Authorisation.</p>
Authorisation	Variation of Authorisation 0108	Schedule 7 - Water Management	<p>7.1 The operator shall comply with the requirements and conditions of the Ranger Mine Water Quality Objectives in Annex C as approved by the Director in accordance with the advice of the Supervising Scientist.</p> <p>7.2 The Operator shall submit the Water Management Plan for the approval of the Director in accordance with Annex D.4.</p> <p>7.3 The Operator shall operate a water management system in accordance with the latest approved Mining Management Plan and Water Management Plan.</p> <p>7.4 The Operator shall:</p> <p>7.4.1 maintain up-to-date versions of drawings depicting the current surface runoff drainage system;</p> <p>7.4.2 instruct all appropriate personnel involved in the operation of the water management system in the details of its operation and in the implementation of contingency procedures;</p> <p>7.4.3 ensure that any discharge of waters from the Ranger mine site does not compromise the Ranger Mine Water Quality Objectives as detailed in Annex C;</p> <p>7.4.4 in relation to the disposal of treated water by irrigation, the Operator shall:</p> <p>7.4.4.1 record daily, in a log book kept specifically for this purpose:</p> <ul style="list-style-type: none"> - the volume of water discharged by each section of the irrigation systems; - the times of commencement and of cessation of irrigation; and - any observed adverse effects of irrigation. <p>7.4.4.2 undertake a daily inspection of the irrigation areas to detect any waterlogging, seepage, or other visible adverse effects during irrigation.</p>

Instrument	Title	Section	Obligation
			7.5 The Operator shall maintain to the satisfaction of the NT Minister and for examination by a Mining Officer, all records and data associated with the operation and monitoring of the water management system for the life of the mine up to and including rehabilitation and post closure.
Authorisation	Variation of Authorisation 0108	Schedule 8 Environmental and Radiation Monitoring and Reporting	<p>8.1 In compliance with Environmental Requirements 13.1 and 13.2 relating to monitoring and analysis, the Operator shall:</p> <p>8.1.1. submit all plans and reports in accordance with the requirements of Annex D, as updated from time to time by the Director;</p> <p>8.1.2 implement the environmental and radiation monitoring programs included in Annex E and Annex F as updated from time to time and approved by the Director; and</p> <p>8.1.3 conduct contingency monitoring in a manner approved by the Director in the event of the malfunction of monitoring equipment.</p> <p>8.2 The obligations on the operator of the mine imposed by SCHEDULE 8 will cease in respect of any part of the Ranger Project Area over which a close-out certificate is issued by the Minister subject to the Supervising Scientist and the NLC agreeing that the specific part of the Ranger Project Area has met the aims and objectives for rehabilitation.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 1 - Environmental Protection	<p>1.1 The company must ensure that operation at Ranger are undertaken in such a way as to be consistent with the following primary environmental objectives:</p> <p>a) maintain the attributes for which Kakadu National Park was inscribed on the World Heritage list;</p> <p>b) maintain the ecosystem health of the wetlands listed under the Ramsar Convention on Wetlands (i.e. the wetlands within Stages I and II of Kakadu National Park;</p> <p>c) protect the health of Aboriginals and other members of the regional community; and</p> <p>d) maintain the natural biological diversity of aquatic and terrestrial ecosystems of the Alligator Rivers Region, including ecological processes.</p>

Instrument	Title	Section	Obligation
			<p>1.2 In particular, the company must ensure that operations at Ranger do not result in:</p> <ul style="list-style-type: none"> a) damage to the attributes for which Kakadu National Park was inscribed on the World Heritage list; b) damage to the ecosystem health of wetlands listed under the Ramsar Convention on Wetlands (i.e. the wetlands within Stages I and II of Kakadu National Park); c) an adverse effect on the health of Aboriginals and other members of the regional community by ensuring that exposure to radiation and chemical pollutants is as low as reasonably achievable and conforms with relevant Australian law, and in particular, in relation to radiological exposure, complies with the most recently published and relevant Australian Standards, codes of practice, and guidelines; d) change to biodiversity, or impairment of ecosystem health, outside of the Ranger Project Area. Such change is to be different and detrimental from that expected from natural biophysical or biological processes operating in the Alligator Rivers Region; and e) environmental impacts within the Ranger Project Area which are not as low as reasonably achievable, during mining excavation, mineral processing, and subsequently during and after rehabilitation.
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 2 - Rehabilitation	<p>2.1 Subject to subclauses 2.2 and 2.3, the company must rehabilitate the Ranger Project Area to establish an environment similar to the adjacent areas of Kakadu National Park such that, in the opinion of the Minister with the advice of the Supervising Scientist, the rehabilitated area could be incorporated into the Kakadu National Park.</p> <p>2.2 The major objectives of rehabilitation are: a) revegetation of the disturbed sites of the Ranger project area using local native plant species similar in density and abundance to those existing in adjacent areas of Kakadu National Park, to form an ecosystem the long-term viability of which would not require a maintenance regime significantly different from that appropriate to adjacent areas of the Park. b) stable radiological conditions on areas impacted by mining so that, the health risk to members of the public, including Traditional Owners, is as low as reasonably achievable; members of the public do not receive a radiation dose which exceeds applicable limits recommended by the most recently published and relevant Australian standards, codes of practice, and guidelines; and there is a minimum of restrictions on the use of the area; c) erosion characteristics which, as far as can reasonably be achieved, do not vary significantly from those of comparable landforms in surrounding undisturbed areas.</p>

Instrument	Title	Section	Obligation
			2. 3 Where all the major stakeholders agree, a facility connected with Ranger may remain in the Ranger Project Area following the termination of the Authority, provided that adequate provision is made for eventual rehabilitation of the affected area consistent with principles for rehabilitation set out in subclauses 2.1, 2.2 and 2.3.
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 3 - Water Quality	3.1 The company must not allow either surface or groundwater arising or discharged from the Ranger Project Area during its operation, or during or following rehabilitation, to compromise the achievement of the primary environmental objectives.
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 3 - Water Quality	3.2 The company must, to the extent necessary to achieve the primary environmental objectives, take steps to minimise the volume of contaminated water that is required to be managed on site, minimise the load of contaminants within that water, and to concentrate and contain contaminants within the site.
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 3 - Water Quality	Background values for key variables in water quality, including values for conductivity, pH and uranium, are determined by the Supervising Scientist from time to time and communicated to the company and other major stakeholders. Should the values for these variables measured at Gauging Station GS8210009 or other key locations show trends away from or be abruptly divergent from those background values and if, in the opinion of the Minister with the advice of the Supervising Scientist, the results may be attributable to mining operations, then the company must undertake investigations and remedial actions as required by the Supervising Authority after consultation with the Supervising Scientist and other major stakeholders.
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 3 - Water Quality	3. 4 Process water must be totally contained within a closed system except for: a) losses through natural or enhanced evaporation, b) seepage of a quality and quantity that will not cause detrimental environmental impact outside the Ranger Project Area and c) subject to 3.1, 3.2 and 3.3, process water which has been treated to achieve a quality which: i) conforms to a standard practice or procedure recommended by the Supervising Scientist and ii) is not less than that of the water to which it is to be discharged.
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 4 - Air Quality	4.2 Air quality must be managed in such a way that there is no physical or chemical detriment to any known site of Aboriginal culture or heritage.

Instrument	Title	Section	Obligation
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 5 - Radiological Protection	<p>5.1 The company must implement a system to control the radiological exposure of people and the environment arising from its mining and milling activities. The system and the dose limits must comply, at a minimum, with relevant Australian standards, codes of practices, and guidelines. Subject to 5.3, the company must achieve the following outcomes:</p> <p>a) radiation doses to company employees and contractors must be kept as low as reasonably achievable and must always remain less than the dose limit for workers,</p> <p>b) radiation doses to people who are not company employees or contractors must be kept as low as reasonably achievable and must always remain less than the dose limit for members of the public and</p> <p>c) ecosystems surrounding the Ranger Project Area must not suffer any significant deleterious radiological impacts.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 6 - Storage, Use and Disposal of Hazardous Substances and Wastes	<p>6.1 All hazardous substances (including chemicals, reagents, fuels and oils) must be stored, used and disposed of in conformance with relevant Australian law and in accordance with any standards, practices or procedures advised by the Supervising Authority or the Minister with the advice of the Supervising Scientist to minimise the risk to human health and ecosystem health.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 6 - Storage, Use and Disposal of Hazardous Substances and Wastes	<p>6.2 The company must ensure that wastes will not result in any detrimental environmental impact outside of the Ranger Project Area, and that the environmental impacts within the Ranger Project Area are as low as reasonably achievable.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 6 - Storage, Use and Disposal of Hazardous Substances and Wastes	<p>6.3 From the date of the Authority the company must prepare and maintain records of the location, state and chemical characteristics of all hazardous substances and wastes contained, used and disposed of on the Ranger Project Area. The company must take all reasonable steps to include in the record details of hazardous substances contained, used or disposed of on the Ranger Project Area before the date of the Authority.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 7 - Management of Excavated Material	<p>7.1 All excavated material must be managed such that there is no detrimental environmental impact outside of the Ranger Project Area, and that environmental impacts within the Ranger Project Area are as low as reasonably achievable.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 9 - Rehabilitation Plan	<p>9.1 The company must prepare a rehabilitation plan which is approved by the Supervising Authority and the Minister with the advice of the Supervising Scientist, the implementation of which will achieve the major objectives of rehabilitation as set out in subclause 2.2, and provide for progressive rehabilitation.</p> <p>9.2 All progressive rehabilitation must be approved by the Supervising Authority or the Minister with the advice of the Supervising Scientist and subject to the NLC agreeing that the aim and objectives for rehabilitation as described in clause 2 are met.</p>

Instrument	Title	Section	Obligation
			<p>9.3 The company's obligations under clause 9 will cease in respect of any part of the Ranger project area over which a close-out certificate is issued by the Supervising Authority subject to the Supervising Scientist and the NLC agreeing that the specific part of the Ranger Project Area has met the requirements of clause 2.</p> <p>9.4 Where agreements under 9.2 or 9.3 cannot be reached the Minister will make a determination with the advice of the Supervising Scientist.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 10 - Protection of Soil, Vegetation and Fauna	<p>10.1 All operations should be managed to minimise, to the maximum extent practicable, and to the satisfaction of the Supervising Authority or the Minister with the advice of the Supervising Scientist: a) the disturbance of soil, vegetation and fauna within the Ranger Project Area; and b) the risk to fauna as a result of drinking contaminated water.</p> <p>10.2 The company must ensure that the operations at Ranger will not result in any adverse impact on Kakadu National Park through the introduction of exotic fauna and flora.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 11 - Management of Tailings	<p>11.1 During mining operations and prior to final placement, covering and rehabilitation of the tailings, tailings must be securely contained in a manner approved, by the Supervising Authority or the Minister with the advice of the Supervising Scientist, which prevents detrimental environmental impact.</p> <p>11.2 By the end of operations all tailings must be placed in the mined out pits.</p> <p>11.3 Final disposal of tailings must be undertaken, to the satisfaction of the Minister with the advice of the Supervising Scientist on the basis of best available modelling, to ensure that:</p> <ul style="list-style-type: none"> i) the tailings are physically isolated from the environment for at least 10,000 years, ii) any contaminants arising from the tailings will not result in any detrimental environmental impacts for at least 10,000 years and iii) radiation doses to members of the public will comply with relevant Australian law and be less than limits recommended by the most recently published and relevant Australian standards, codes of practice, and guidelines effective at the time of the final tailings disposal.
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 12 - Best Practicable Technology	<p>12.1 All aspects of the Ranger Environmental Requirements must be implemented in accordance with BPT.</p>

Instrument	Title	Section	Obligation
			12.2 Where there is unanimous agreement between the major stakeholders that the primary environmental objectives can be best achieved by the adoption of a proposed action which is contradictory to the Environmental Requirements, and which has been determined in accordance with BPT, that proposed action should be adopted. Where agreement can not be reached the Minister will make a determination with the advice of the Supervising Scientist.12.2
			12.3 All environmental matters not covered by these Environmental Requirements must be dealt with by the application of BPT.
			12.4 BPT is defined as: that technology from time to time relevant to the Ranger Project which produces the maximum environmental benefit that can be reasonably achieved having regard to all relevant matters including: a) the environmental standards achieved by uranium operations elsewhere in the world with respect to i) level of effluent control achieved and ii) the extent to which environmental degradation is prevented, b) the level of environmental protection to be achieved by the application/adoption of the technology and the resources required to apply/adopt the technology so as to achieve the maximum environmental benefit from the available resources, c) evidence of detriment or lack of detriment to the environment, d) the physical location of the Ranger Project, e) the age of equipment and facilities in use on the Ranger Project and their relative effectiveness in reducing environmental pollution and degradation and f) social factors including the views of the regional community and possible adverse effects of introducing alternative technology.
			12.5 Proposals to amend or introduce operational approaches, procedures or mechanisms must be supported by a BPT analysis. The rigour of the BPT analysis must be equal with the potential environmental significance of the proposal. The BPT analysis must involve consultation with and have regard to the views of the major stakeholders and copies of the BPT analysis must be provided to each of the major stakeholders.
			12.6 A precautionary approach is to be exercised in the application of BPT in order to achieve outcomes consistent with the primary environmental objectives.
Authorisation	Variation of Authorisation 0108 (Annex A)	Clause 13 - Environmental Monitoring	13.1 During operations the company must carry out a comprehensive monitoring program, as required by the Supervising Authority or the Minister with the advice of the Supervising Scientist, which; a) includes monitoring stations on Magela Creek upstream and downstream of the mine at Gauging Stations GS8210028 and GS8210009 and such other sites as may be approved or required by the Supervising Authority or the Minister with the advice of the Supervising Scientist; and b) is sufficient to allow interpretive analysis of impacts from operations.

Instrument	Title	Section	Obligation
			<p>13.2 The company must ensure proper analysis of monitoring results to the satisfaction of the Supervising Authority or the Minister with the advice of the Supervising Scientist and:</p> <p>a) must make data and reports available to the major stakeholders; and</p> <p>b) must make reports of monitoring results and analysis, other than commercial-in-confidence matters, available to members of the Advisory Committee established under the <i>Environment Protection (Alligator Rivers Region) Act 1978</i>.</p> <p>13.3 The company must carry out a monitoring program approved by the Supervising Authority or the Minister with the advice of the Supervising Scientist following cessation of operations until such time as a relevant close-out certificate is issued under clause 9.3.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	14 - Staffing	14.1 The company must employ adequate numbers of competent, appropriately qualified and experienced staff to ensure that it can provide the required level of protection to the environment, human health and Aboriginal culture and heritage.
Authorisation	Variation of Authorisation 0108 (Annex A)	15 - Research	The company must undertake research with a view to maximising the level of environmental protection at Ranger. Plans and results of environmental research by the company will be provided to the Technical Committee established under the <i>Environment Protection (Alligator Rivers Region) Act 1978</i> to enable the committee to effectively co-ordinate environmental research in the region.
Authorisation	Variation of Authorisation 0108 (Annex A)	16 - Reporting Incidents	<p>16.1 The company must directly and immediately notify the Supervising Authority, the Supervising Scientist, the Minister and the Northern Land Council of all breaches of any of these Environmental Requirements and any mine-related event which:</p> <p>a) results in significant risk to ecosystem health;</p> <p>b) which has the potential to cause harm to people living or working in the area;</p> <p>c) which is of or could cause concern to Aboriginals or the broader public.</p>
Authorisation	Variation of Authorisation 0108 (Annex A)	18 - Environmental Management Report	18.1 The company must prepare an Environmental Management Report which is approved by the Supervising Authority and the Minister with the advice of the Supervising Scientist. Approval may be given conditionally. The company must submit the Environmental Management Report to the NLC at the same time as submitting it for approval. The Environmental Management Report must be prepared in accordance with guidelines as determined by the major stakeholders. The report must provide details of: a) the company's environmental management over the preceding 12 month period; b) the company's proposals for complying with the Environmental Requirements and all applicable environmental laws over the following 12 months.

Instrument	Title	Section	Obligation
			<p>18.2 The report required under clause 18.1 must deal specifically with the following matters:</p> <ul style="list-style-type: none"> a) water management; b) land management; c) protection of cultural sites; d) counter disaster and emergency procedures; e) environmental research; f) environmental monitoring, including any environmental monitoring required by the Supervising Authority; g) social impact monitoring; h) hazardous substances and industrial waste management; i) radiation monitoring and management; j) air quality management; k) tailings management; l) excavated material management; m) environmental planning and operating systems, including employment and training programs; and n) rehabilitation. <p>18.3 The company must ensure that the Environmental Management Report is updated and submitted at such times as are required by the Supervising Authority or the Minister with the advice of the Supervising Scientist, and no less than annually.</p> <p>18.4 The company must comply with the proposals set out in each Environmental Management Report as approved and subject to any conditions set by the Supervising Authority or the Minister with the advice of the Supervising Scientist.</p>
Authorisation	Variation of Authorisation 0108 (Annex B)	Annex B - Submission of Mine Closure Plan	<p>B.1 This Annex sets out a process for the submission and assessment of the Mine Closure Plan as agreed in writing between the NT Minister and the Commonwealth Minister in accordance with section 34 of the <i>Mining Management Act</i>.</p> <p>B.2 The Operator must comply with the submission and content requirements set out in Annex B.3 to B.8 inclusive.</p> <p>B.4 On or before 1 October in each of the following years, the Operator must review the Mine Closure Plan and submit an updated Mine Closure Plan for approval.</p> <p>B.5 If the Operator at any other time finds it necessary to amend the Mine Closure Plan, the Operator must as soon as practicable notify the Commonwealth Minister and NT Minister of the circumstances requiring amendment and submit an amended plan for approval.</p>

Instrument	Title	Section	Obligation
Authorisation	Variation of Authorisation 0108 (Annex B)	Annex B - Content of a Mine Closure Plan	B.6 Subject to the terms and conditions of the Authority, the Mine Closure Plan must be prepared in accordance with the mine closure guidelines accepted by the Commonwealth Minister.
			B.7 The Mine Closure Plan must demonstrate closure activities will achieve the relevant Environmental Requirements, and include, but is not limited to, the following elements ... [contained within the Variation].
			B.8 In the case of an updated or amended Mine Closure Plan, the additions or amendments to the version previously approved must be clearly identified in the updated or amended Mine Closure Plan.
			B.9 Upon receipt of a Mine Closure Plan (including any updated or amended version), the NT Minister will forward a copy of the Mine Closure Plan to the Supervising Scientist, Northern Land Council (NLC), and Gundjeihmi Aboriginal Corporation (GAC) for consideration.
			B.10 The Commonwealth Minister, the NT Minister, the Supervising Scientist, NLC, and GAC may request additional information from the Operator.
			B.11 The Supervising Scientist, NLC, and GAC will each write to the Commonwealth Minister and the NT Minister setting out their advice as to whether the Commonwealth Minister and the NT Minister should approve the Mine Closure Plan, and reasons for their advice.
			B.12 The NT Minister will forward copies of the advice received to the Operator as soon as possible after receiving them. The Operator may, in turn, provide any written comment to the Commonwealth Minister and NT Minister.
Authorisation	Variation of Authorisation 0108 (Annex B)	Annex B - Approval of the Mine Closure Plan	B.13 The Commonwealth Minister and the NT Minister must assess the Mine Closure Plan and may approve, or refuse to approve, all or part of the Mine Closure Plan.
			B.14 In deciding whether to approve or refuse to approve the Mine Closure Plan, the Commonwealth Minister and the NT Minister must take into consideration the advice provided by the Supervising Scientist, NLC, and GAC and any written comment or response to that advice provided by the Operator.
			B.15 The NT Minister will decide whether to approve, or refuse to approve, all or part of the Mine Closure Plan and will write to the Commonwealth Minister to advise of his own decision, and seek the Commonwealth Minister's decision and advice.
			B.16 After receiving the written notice of the decision of the NT Minister, and taking that decision, the terms of the Authority and the advice and comments received into account, the Commonwealth Minister shall decide to approve or refuse to approve the Mine Closure Plan.

Instrument	Title	Section	Obligation
			B.17 Upon making a decision, the Commonwealth Minister will notify the Operator and the NT Minister of his/her decision in writing.
			B.18 The Mine Closure Plan will take effect from the date of the Commonwealth Minister's written notice of approval or partial approval and will continue in effect until the approval of an updated or amended Mine Closure Plan.
Authorisation	Variation of Authorisation 0108 (Annex C)	Annex C - Conditions for the release of process water distillate from the Ranger mine brine concentrator	B.19 If the Commonwealth Minister is not satisfied that the Mine Closure Plan , or part thereof, should be approved, the Commonwealth Minister will, by written notice, advise the Operator and the NT Minister that approval has been refused either in whole or part.
			B.20 Where the Commonwealth Minister refuses to approve the whole or part of the Mine Closure Plan, the written notice will: a) outline the specific chapter or sections of the Mine Closure Plan that the Minister refuses to approve; and b) request the Operator to submit an amended Mine Closure Plan in accordance with this Annex.
			C.2.1 Distillate may only be released from the process water circuit when continuously monitored electrical conductivity in the distillate stream does not exceed 20us/cm.
			C.2.2 Distillate may only be released to Corridor Creek into or upstream of GCMBL or to the RP1 catchment upstream of the RP1 weir;
			C.2.3 Distillate may only be released to Corridor Creek when total ammonia nitrogen (TAN), as measured at GCMBL, does not exceed 0.7mg/L unless another cause is identified;
			C.2.4 Distillate may only be released to the RP1 catchment when TAN, as measured at the RP1 weir, does not exceed 0.7mg/L unless another cause is identified; and
			C.2.5 Discharge of process water distillate shall not cause flow past Sleepy Cod Dam or RP1 Weir when there is no flow in Magela Creek.

Instrument	Title	Section	Obligation
		Clause C.3 - Conditions for release of pond water permeate	<p>C.3.1 The Electrical Conductivity (EC) of the permeate streams from the plant is to be continuously monitored and not to exceed 200 uS/cm during discharge of treated water;</p> <p>C.3.2 Treated pond water may be discharged to land application or into, or upstream of, RP1, GCMBL or DJKRP. Release to DJKRP shall be only during periods of flow in Magela Creek;</p> <p>C.3.3 Discharge of treated pond water shall not exceed the guidelines for U and Ra of 40 ug/L and 100mBq/L, respectively</p> <p>C.3.4 The discharge of treated pond water from the treatment plant shall be discontinued when water quality at Magela Creek compliance point MG009 is above action level for any key parameter unless investigations have identified another cause; and</p> <p>C.3.5 Discharge of treated pond water shall not cause flow past Sleepy Cod Darn or RP1 Weir when there is no flow in Magela Creek</p>
		Clause C.4 - Criteria for direct release of water from RP2 to Magela Creek	<p>C.4.1 The flow rate in Magela Creek at GS8210009 shall be greater than 20 m3/s before water may be released.</p> <p>C.4.2 The water release rate shall also be restricted so that the total load of those constituents listed in Table 1 does not exceed the additional annual load limits specified in Table 1 in any twelve-month period commencing in September.</p> <p>C.4.3 Results of analyses performed for the water release monitoring program are to be forwarded weekly to the Director.</p>
		Clause C.5 - Criteria for releases of water from RP1 and Dialkmarra Billabong	<p>C.5.1 The water release rates shall also be restricted so that the total load of those constituents listed in Table 1 (as described in this section of the Authorisation) does not exceed the additional annual load limits specified in Table I in any twelve-month period commencing in September.</p>
Authorisation	Variation of Authorisation 0108 (Annex D)	Annex D.10 - Rehabilitation Progress Report	<p>D.10.1 The Operator shall provide the members of the Minesite Technical Committee a Rehabilitation Progress Report at least twice per Year,</p> <p>D.10.2 The Rehabilitation Progress Report must include, but is not limited to, the information shown in Table 3 (as set out in this section of the Authorisation) and any additional information that demonstrates the current status of key rehabilitation activities.</p> <p>D.10.3 The Rehabilitation Progress Report may take the format of a written report or a presentation to the Minesite Technical Committee.</p>

Instrument	Title	Section	Obligation
Application	Application: Pit 3 Tailings Deposition (July 2019)	Acceptance Letter (18 July 2019)	<p>Additional information provided on 14 June and the amended application provided on 3 July 2019 are acceptable to the department except for the tailings level change. The department is still considering the request to increase the final tailings level to -15mRL and will advise of the decision in due course.</p> <p>In line with the application, you are approved to:</p> <ul style="list-style-type: none"> - Commence depositing dredged tailings sub-aqueously, while continuing sub-aerial deposition of mill tailings (and dredged tailings as required); and - Implement a Maximum Operating Level (MOL) of +3.5mRL for water in Pit 3. <p>Further recommendations and comments on this application are included in Attachment A. These must be considered while undertaking any future activities.</p> <hr/> <p>Appendix A - NLC & GAC</p> <ul style="list-style-type: none"> - We note the need for additional work in order to assess potential impacts of mine contaminants on the offsite environment, including additional modelling integrating all potential contaminant sources, and the need for a method to verify that 95% of tailings pore water is extracted and treated. We expect this work will be completed prior to the approval of Pit 3 backfill.

Instrument	Title	Section	Obligation
			<p>Appendix A - SSBERA has committed to a number of activities within the Application which the Supervising Scientist consider critical to the on-going stakeholder confidence in the rehabilitation of the mine site. These commitment should be tracked through the existing stakeholder forums.</p> <ul style="list-style-type: none"> • In-situ tailings characterisation 2019 – to inform an update to the consolidation model • In-situ tailings characterisation 2020 – to inform the proposed postdeposition activities such as wicking requirements. • Updated tailings consolidation modelling incorporating, the new deposition methods and results from in-situ tailings characterisation. • Deposition plan to be included in the Pit 3 Operations and Maintenance Manual which will outline detailed monitoring to track progress against plan. • Monitoring to include, but not be limited to: <ul style="list-style-type: none"> o Regular depth measurements under the diffuser to confirm solids level rise, o Regular suspended solids measurements of the decant water, o Regular total dissolved solids measurements of the process water, o Monthly bathymetry surveys to assess maximum tailings level using, o 6 monthly geophysical surveys to assess tailings characteristics, o 12 monthly CPT testing to assess tailings characteristics. • Independent modelling of tailings consolidation for Pit 1 to be completed to provide confidence in the approach used for tailings consolidation modelling in Pit 3. • Process water to be transferred back to TSF in case of water level exceeding the MOL. • Groundwater monitoring network to be established in 2019 which collects groundwater level and chemistry data (approved in the RWMP). • Calibration-constrained uncertainty analysis on the groundwater solute egress model.

Instrument	Title	Section	Obligation
Application	Application: Pit 3 Tailings Deposition (July 2019)	Application Section 4.1 - Description of proposed method	<p>a) Mill Tailings: Subaerial deposition of mill tailings will continue from an increased number of spigots. Tailings will be discharged from spigots on the east wall of Pit 3 to better distribute the tailings (BPT Option M2). Discharge will be through one spigot at any one time.</p> <p>b) Dredge Tailings: Dredge tailings from the TSF will be deposited in Pit 3 using the subaqueous deposition system currently being tested in the deposition trial (BPT Option D2). The existing subaerial discharge points will be maintained as a backup option during diffuser down time, diffuser maintenance periods and planned pontoon movement operations.</p> <ul style="list-style-type: none"> • Tailings will be extracted from the TSF using two dredges, the existing Rock Crush dredge (3.9M3/annum) and a new Damen CSD500S dredge (4.7M m3/annum) to be commissioned mid-2019. The new dredge will increase the dredging capacity to meet the target date of end of December 2020 for the completion of tailings transfer. • Pumping will be via separate HDPE pipelines to Pit 3 (each pipeline sized to match flow from the dredge being served). • Floating sections of pipeline will allow discharge over all parts of Pit 3. • Each pipeline will be fitted with a novel diffuser (Figures 15 and 16, Section 2.3) to reduce the velocity of slurry at the discharge point and reduce coarse and fine tailings segregation. • Each diffuser will be designed for the slurry flow from each dredge. The second diffuser will be larger to accommodate the higher tailings transfer rate from the second dredge, but the configuration will be essentially the same for both diffusers. • Both diffusers will be supported by a single pontoon. • The diffusers will be systematically moved across Pit 3 (using diesel powered winches) following a deposition plan to ensure an even deposition across the pit. • A dredge tailings deposition monitoring program will include: <ul style="list-style-type: none"> o Regular depth measurements under the diffuser to ensure it does not get beached and to confirm the solids level rise is according to that estimated in the deposition plan. o Suspended solids measurements of the decant water to confirm that fine solids are not being drawn into the suction of the process water return pumps. o Monthly bathymetry to monitor the settled tailings surface and validate against predicted levels. <p>It is estimated that the maximum height of the tailings surface at the end of consolidation will be approximately -15m RL once the transfer of mill and dredge tailings is complete.</p>

Instrument	Title	Section	Obligation
Application	Application: Pit 3 Tailings Deposition (July 2019)	Application Section 4.2 - Tailings Deposition Schedule	The remaining tailings in the TSF will be transferred to Pit 3 by the end of 2020. Up to June 2019, approximately 311,000 m ³ /month will be transferred to Pit 3 by the existing dredge. The transfer rate will increase to approximately 638,000 m ³ /month following the commissioning of the second dredge in July 2019. The transfer rate will then be maintained at about 638,000 m ³ /month until December 2020, when all tailings will be removed from the TSF. Approximately 205 kt/month of ore will be processed by the mill until mill closure in December 2020. The mill tailings (approx. 262,000 m ³ /month) will continue to be deposited into Pit 3 until closure of the mill.
Application	Application: Pit 3 Tailings Deposition (July 2019)	Application Section 4.3 - Monitoring Program	The monitoring objectives associated with Pit 3 tailings deposition are to monitor: <ul style="list-style-type: none"> • The tailings solids level and distribution across Pit 3; • Water quality of process water as an indicator of the final tailings source term for groundwater contaminate transport modelling ; • Suspended solids in the return water that is being sent to the BC for treatment; and • Changes in groundwater head and solute concentrations, within each hydrogeological unit, for comparison against expected changes in the groundwater system between Pit 3 and Magela Creek, both during Pit 3 backfilling and after Pit 3 closure. To achieve these objectives, the monitoring program will include the following components Pit 3 Monitoring: Monthly (2019-2020): • Bathymetry of Pit 3; • TSS in process water return; • Process water TDS. Groundwater Monitoring 2019 to Closure: <ul style="list-style-type: none"> • Biannual monitoring of thirteen existing bores adjacent to Pit 3 to capture pre and post-wet season groundwater quality. • Biannual monitoring of four new bores between Pit 3 and Magela Creek: o three new bores to be installed in 2019; and o one new bore to be installed on the north-eastern edge of the Pit 3 cap following completion of backfilling at this location.

Instrument	Title	Section	Obligation
Application	Application: Pit 3 Tailings Deposition (July 2019)	Section 5 - Next Steps	<p>A summary of each activity that has been developed to a feasibility study level will be included in the next update of the Ranger Mine Closure Plan. More detailed information regarding the closure of Pit 3 will be addressed in separate applications to the MTC and will cover the following final steps in the closure of Pit 3:</p> <ul style="list-style-type: none"> • Transfer of residual tailings and contaminated material from the TSF for Pit 3 that could not be recovered by dredging; • Subaqueous installation of prefabricated vertical drains (wicks), similar to those which have been installed in Pit 1; • Subaqueous installation of a geotextile layer to provide the required geotechnical strength and allow access for backfill; • Subaqueous preloading with a layer of waste rock, to activate the wicks; • Dewatering of Pit 3 in preparation for final backfill operations; and • Bulk backfill with waste rock material. <p>More detailed information about the final landform, surface treatment, erosion control and revegetation will be addressed in a separate application to the MTC.</p>
Application	Application: Pit 3 Tailings Deposition (July 2019)	Acceptance Letter (29 August 2019)	Deposit tailing in Pit 3 to an average interim level of -15mRL. This level is for discharges from the fixed spigot points situated along the south and eastern pit perimeter.
Application	Application to Operate a Brine Squeezer (January 2019)	Acceptance Letter (8 April 2019)	The application and additional documents provided are acceptable to the Department. ERA is approved to operate the Brine Squeezer with the proviso that this plant complies with the water discharge requirements of the Ranger Authorisation.
Application	Application to Operate a Brine Squeezer (January 2019)	Application Section 1 - Introduction	<p>Integrate brine squeezer technology into the existing water management system to meet the release water quality conditions and Ranger Water Management Plan objectives 3 and 4:</p> <ul style="list-style-type: none"> • Minimise unnecessary additions to the pond water and process water inventories; and • Optimise pond and process water treatment and disposal mechanisms (Reid, 2017). <p>Once the brine squeezer is commissioned and the results of the testing demonstrate that it meets release water quality, the Ranger Water Management Plan will be updated to include the additional infrastructure.</p>
Application	Application to Operate a Brine Squeezer (January 2019)	Application Section 4.2 - Location	The brine squeezer plant will be located in the southern section of the site's sand blast yard, between the laterite plant and WTP2. The plant's piping feed water will be at WTP2 (brine feed) and output to WTP1 (brine squeezer permeate and residue disposal). Power will be provided by a suitably sized transformer. Limited vegetation clearing may be required for construction and this would be managed through ERA's land disturbance permit process.

Instrument	Title	Section	Obligation
Application	Application to Operate a Brine Squeezer (January 2019)	Application Section 4.3 - Plant Specifications	<p>The Osmoflo brine squeezer plant will incorporate three RO trains in a two on, one standby configuration, each sized for treating 1.3 to 1.5 ML/day. Each train has its own high pressure pump, crossflow pump and 60 pressure vessels arranged in a single stage. Each vessel has four membranes installed. The brine squeezer feed is separated into two streams, permeate and reject within the membrane. Dissolved solids from the feed are concentrated in the reject, while low TDS permeate passes through as permeate. A crossflow pump recirculates the reject stream across the membranes to recover further permeate. The brine squeezer is designed to operate at recovery rates between 80 – 90%.</p> <p>The contract between ERA and Osmoflo includes required targets to be met including:</p> <ul style="list-style-type: none"> • Permeate quality to be equal to or better than current WTP permeate. • Permeate yield to be at least 83% of the feed brine volume from the up stream water treatment plants, and cleaning waste to be no greater than 5% of the feed brine volume. • A nominal plant capacity of 3.0 ML/day. • An overall availability of 99% (factoring in 3 train installation with 2 trains operating). <p>The brine squeezer will also have the ability to operate the third train simultaneously, if required (with reduced overall availability) to produce an instantaneous capacity equivalent to 4.5 ML per day.</p>
Application	Application to Operate a Brine Squeezer (January 2019)	Application Section 4.4 - Commissioning Schedule	<p>Commissioning of the plant is expected to be in late February 2019. Following commissioning, the brine squeezer will enter a trial phase to ensure that the plant achieves permeate water quality and stable operation. Given familiarity with most of the components of the brine squeezer (i.e. the conventional reverse osmosis stage), this trial phase is expected to be relatively short – less than thirty days. At the conclusion of the trial phase, the brine squeezer permeate discharge will be managed as per the revised criteria in Iles, (2018). Alternatively, if the revised permeate discharge conditions have not been approved, ERA will submit a separate application to the MTC for brine squeezer permeate discharge. In either case, changes will be made to the Ranger Water Management Plan to incorporate the operation of this infrastructure. Until such time that discharge conditions are approved, squeezer permeate will be managed in the same manner as water treatment plant brines – i.e. recycled to RP2 or directed to the process water inventory, based on operational requirements.</p>
Application	Application to Operate a Brine Squeezer (January 2019)	Application Section 4.4 - Commissioning Schedule	<p>Brine Squeezer contractual maximum treated water concentrations and parameters: Max Value Electrical Conductivity - 200 uS/cm Max Value Uranium - 20 ug/L</p>

Instrument	Title	Section	Obligation
Application	Application to Operate a Brine Squeezer (January 2019)	Application Section 4.5 - Operating Phase	<p>On-line, continuous measurement of permeate conductivity will be used to detect problems with plant operation. Probes for continuous measurement of conductivity will be calibrated weekly.</p> <p>As per the current water treatment plants, when online conductivity exceeds a threshold that is lower than the agreed contractual criteria in Table 16 for conductivity for permeate discharge, permeate from the brine squeezer will be automatically diverted to the pond water inventory.</p> <p>Weekly samples of permeate from the plant will be taken and analysed for major cations.</p>
Application	Pit 1 Notification Final in-pit tailings level and Pit 1 Closure Strategy (March 2016)	Acceptance Letter (April 2017)	<p>Pit 1 bulk backfill operations approved based on an average tailings level in the pit of 7mRL. In addition to providing its support for the final in-pit tailings level, the Supervising Scientist made a number of modelling and monitoring recommendations to inform assessment in terms of whole-of-site environmental impact and demonstration that rehabilitation can achieve the Environmental Requirements. I expect to see these recommendations addressed in the mine closure plan.</p>
Application	Pit 1 Final in-pit tailings level and Pit 1 Closure Strategy (March 2016)	SSB Assessment Report - Ranger Pit 1 Final Tailings Deposition Level to +7mRL, February 2017.	<p>SSB supported approval of average tailings level of 7mRL subject to:</p> <p>Bulk backfilling - Prior to the commencement of any further Pit 1 backfill works ERA must provide a detailed Pit 1 backfill plan for the approval of the Director with the advice of the Supervising Scientist. The plan must demonstrate how the work will reconcile assumptions made in the tailings consolidation model and should include a detailed method and schedule for fill placement, and a comprehensive monitoring program for tailings consolidation, including settlement surveys and water balance measurements.</p> <p>Landform design - Prior to commencing the placement of the final six million tons of backfill in Pit 1 ERA must have obtained approval for the final landform design from the Director with the advice of the Supervising Scientist. The design must specifically address issues including plant available water, the potential for plant root interactions with tailings and the formation of gullies over the top of tailings.</p>

Instrument	Title	Section	Obligation
Application	Application to progress Pit 1 final landform (March 2019)	Section 1 - Introduction	<p>Continue with the Pit 1 backfill strategy in April 2019 to promote accelerated consolidation settlement and recovery of process water from the decant location and in preparation for initial tree planting of the Pit 1 landform surface scheduled to commence in early 2021.</p> <p>The original application (March 2018) addressed approval conditions 1 and 2: Condition 1 - ERA must provide a detailed Pit 1 Backfill plan demonstrating how work will reconcile assumption made in the tailings consolidation model and a detailed method and schedule for placement; and Condition 2 - Prior to commencing the placement of the final six million tonnes of backfill in Pit 1 ERA must obtain approval for the final landform design. The design must specifically address issues including plant available water, potential for plant root interactions with tailings and formation gullies over the top of tailings.</p>
Application	Application to progress Pit 1 final landform (March 2019)	2.2 - Pit 1 Closure Strategy	<p>ERA has developed a closure strategy for Pit 1 that includes project-specific control measures to address the identified risks and ensure that there is minimal risk of harm to the environment, communities and individuals.</p> <p>Key elements of the Pit 1 closure strategy summarised below:</p> <ul style="list-style-type: none"> • The removal of pit tailings flux during tailings consolidation to reduce the risk of contaminants entering groundwater or surface waters and potentially impacting RPA or offsite aquatic ecosystems. • The placement of mineralised waste rock material (2s material) below the water table to reduce the risk of contaminants impacting RPA or offsite aquatic ecosystems, and below a layer of 1s material to ensure any gamma radiation is sufficiently attenuated. • Construction of a surface layer of non-mineralised 1s material with special consideration given to the physical characteristics and thickness of the material required to support a self-sustaining native ecosystem similar to target reference ecosystems, thus reducing the risk of revegetation failure. • A final landform including drainage channels to manage erosion for the Pit 1 catchment and reduce the risk of mobilised sediments or other contaminants impacting RPA or offsite aquatic ecosystems. • Monitoring and research to continue to improve on the trials and modelling already completed. This will further reduce the risks associated with aspects of the Pit 1 closure strategy and will also inform the closure strategy for the rest of the final landform and RPA.

Instrument	Title	Section	Obligation
Application	Application to progress Pit 1 final landform (March 2019)	8 - Monitoring and Research	In order to progress the backfill, ERA has committed to implementing monitoring and research programs, as described in the Pit 1 Progressive Rehabilitation Monitoring Framework (Appendix 8). Lessons learned from the monitoring and research outcomes from Pit 1 will be incorporated into the site monitoring plan as required under an adaptive management framework. The outcomes of the monitoring and studies will be used to address relevant KKNs. The proposed Pit 1 monitoring during and after construction of the Pit 1 final landform allows an adaptive management approach to Pit 1 rehabilitation, whereby the monitoring program will provide ongoing feedback on the performance of the rehabilitation to identify any issues and inform maintenance activities.
Application	Application to progress Pit 1 final landform (March 2019)	DPIR Acceptance (1 May 2019)	<p>Approval granted to progress placement of the final layer of the Pit 1 Landform. Please note that the Pit 1 Progressive Rehabilitation Monitoring Framework is expected to be implemented and continue to be under discussion with the planned Monitoring Evaluation and Research Review Working Group. Please refer to the Supervising Scientist Branch letter in Appendix A for further considerations.</p> <p>Appendix A - SSBWe recommend the priority items for the Monitoring Evaluation and Research Review Working group's consideration include: • Monitoring to inform waste rock consolidation properties, weathering and soil formation, • Monitoring to understand and validate WAVES modelling to predict Plant Available Water (PAW), and to identify opportunities for maximising PAW. • Other items identified in Table 2 of our review of the Pit 1 Progressive Rehabilitation Monitoring Framework (attached). It is expected that ERA will use the Monitoring Evaluation and Research Review Working Group to maximise the opportunity to obtain data and information throughout and after the construction of the Pit 1 Landform. Failure to acquire these data and information may impact on our ability to support the construction of the final landform.</p>
Application	Application: Ranger 3 Deeps Exploration Decline Decommissioning (September 2018)	Acceptance Letter (April 2019)	I have approved the application and you may now proceed to undertake the works in accordance with the plan set out in your application.
Application	Application: Ranger 3 Deeps Exploration Decline Decommissioning (September 2018)	2 - Purpose	The progressive closure of the Ranger 3 Deeps exploration decline and portal is required to undergo approval by the MTC. The purpose of this application is to provide the MTC with information on the proposed decommissioning strategy for the decline, including the major activities and schedule.

Instrument	Title	Section	Obligation
Application	Application: Ranger 3 Deeps Exploration Decline Decommissioning (September 2018)	3.3 - Commitments in the MTC Application to Construct the Decline	<p>In addition to the general obligations in the ERs, the initial MTC application for construction of the decline included closure commitments, which were made prior to the construction of the decline and not assessed using Best Practicable Technology (BPT) (Jacobsen, 2011). Table 1 shows the commitments made in Jacobsen (2011) and how they have been addressed in the Decommissioning Plan.</p> <p>This includes:</p> <ul style="list-style-type: none"> • In 2018 all hire equipment will be removed from site. If items can't be decontaminated these will be purchased by ERA. As part of the 2018 program small pumps and fans will be installed for 2019 C&M period. • Mid-2020 all surface vent bags, poly pipe, cables and concrete will be removed to one metre below the final landform (including shaft collar and portal multi-plate tunnel). All pipes, cables and vent bag to be removed from the first 100 m of decline. • In 2018 the base of the ventilation raise will be tightly backfilled with waste rock. This will allow backfilling of the shaft in 2020 from surface. In 2020 the first 300 m of decline will be tightly backfilled with waste rock.
Application	Application: Ranger 3 Deeps Exploration Decline Decommissioning (September 2018)	4 - The Proposal	<p>Stage 1 will involve a 2018 works program commencing with the removal of mine infrastructure in the vicinity of the ventilation shaft access at -260 mRL; backfilling the base of the ventilation shaft with waste rock; and, allowing the decline to naturally flood to -20 mRL (c. 1.3 years). A reduced level of C&M until 2021 will maintain the water level in the decline at -20 mRL (below the weathered zone). Final closure activities after January 2021 will include:</p> <ul style="list-style-type: none"> • Backfilling the ventilation shaft from the surface, plugging with cemented rock fill to prevent subsidence and removal of surface concrete structures. • Tightly backfilling the top 350 metres of the decline (including portal), commencing below the weathered zone and above the controlled water level to eliminate surface subsidence. • Removal of the steel multi-plate portal down to ground level (the final landform surface).

Instrument	Title	Section	Obligation
Application	Application: Ranger 3 Deeps Exploration Decline Decommissioning (September 2018)	4.1 - 2018 Works Program	<p>The 2018 works program (which is detailed in Section 6), incorporates removal of infrastructure including pumping, and electrical equipment within the vicinity of the base of the ventilation shaft and subsequent backfilling of the vent shaft access. An outline of these works includes:</p> <ul style="list-style-type: none"> • Install water level monitoring equipment in the vicinity of the base of ventilation shaft and monitor water level. • Decline is dewatered and pumping terminated. • Grout standpipe holes (if required), however INTERA, 2018 indicates this is not necessary. • Remove existing pumps, wait for decline to flood and install small pump at -20 mRL. • Backfilling of the -260 mRL ventilation shaft access. • Removal of refuge chambers (remove 8 and 12 person, relocate 4 person). • Removal of 1.5 Mva power system, connect to Ranger grid. • Demobilisation.
Application	Application: Ranger 3 Deeps Exploration Decline Decommissioning (September 2018)	4.2 - Care and Maintenance	<p>C&M activities include:</p> <ul style="list-style-type: none"> • Decline is allowed to flood to around -20 mRL. • Small pump dewater sump 1, water is discharged into the existing portal pond, which overflows into RP2. • Water level rise in decline is monitored by the decline monitor installed near base of shaft at -260 mRL and from existing surface monitoring bores. • Power supply to the decline is from the Ranger mine grid. • Forced ventilation is operated as required. A small 15-30 kW fan delivering 10 m³/sec. • Sump 1 pumps are inspected by site personal on weekly/as required basis. • The radon alpha prism traffic light monitoring system will remain in operation, (requires an annual calibration). • The leaky feeder radio system will remain in operation for the first leg of the decline.
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	DPIR Acceptance Letter (April 2018)	Civil works proposed in this application is acceptable to the Department.

Instrument	Title	Section	Obligation
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	3.1 Proposed New Crest Level	ERA is seeking a reduction in the certified crest height to 51.0 mRL. The purpose of this application is to enable ERA to: continue to transfer tailings from the tailings dam to Pit 3 for final storage at an optimum transfer rate; continue to return process water from Pit 3 to the tailings dam at a rate required that will not impact on dredging; and continue to transfer process water to both the processing plant and brine concentrator.
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	3.2.2 Construction Materials	All notching and construction of associated access ramps will be undertaken in accordance with the construction scope appended to Saunders (2017a).
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	3.2.3.1 Clay core (Zone 1A)	<p>Sampling and laboratory tests of the clay core material include:</p> <ul style="list-style-type: none"> • 3 clay U-tube samples x 3 depths • 3 disturbed samples x 3 depths <p>Laboratory tests:</p> <ul style="list-style-type: none"> • Permeability by laboratory testing: 3 no. at each depth (on undisturbed samples) • 3 x hydrometer and Atterberg limits • 3 x moisture content tests • 2 x triaxial tests • 2 x consolidation tests <p>Field tests:</p> <ul style="list-style-type: none"> • 2 tests: 1 m x 1 m x 1 m size pit • Soak well tests by filling with water and measuring the draw down over time • 2 x dynamic cone penetration (DCP) test if possible
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	3.2.3.2 Filter Zone 2B	<ul style="list-style-type: none"> • 3 zone 2B disturbed samples @ 3 depths <p>Laboratory tests:</p> <ul style="list-style-type: none"> • 2 x particle size distribution and Atterberg limits (no tests required if the samples are non-plastic) • 1 x hydrometer analysis if the samples are plastic • 3 x moisture content

Instrument	Title	Section	Obligation
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	3.2.3.3 Earthfill transition	<ul style="list-style-type: none"> • 3 zone 1C disturbed samples x 3 depths Laboratory tests: <ul style="list-style-type: none"> • 2 x particle size distribution and Atterberg limits • 1 x hydrometer analysis and Atterberg limits • 3 x moisture content tests
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	3.2.3.4 Rockfill	<ul style="list-style-type: none"> • Measurement of maximum size of the rockfill during the visit and photos with a ruler for further assessment in the office to understand the gradation of the rockfill at 3 levels.
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	3.4 Co-commitments for Crest Height Approval	<p>It is expected that the notching and subsequent reduction in the clay core crest height on the eastern embankment to 51.0 mRL will be completed in late Q2 2018. Inspection and sign-off by the tailings dam engineer is scheduled to coincide with practical completion of each stage.</p> <p>As outlined in Table 3-1, ERA will implement a sampling program of the clay core, in order to determine shear strength and permeability to validate assumptions regarding the rapid draw down and stability of the tailings dam and additionally to ascertain potential contamination issues during the deconstruction of the tailings dam.</p> <p>An appropriate QA/QC program will be implemented for the construction of the notch, refer Appendix D of the Coffey notch design.</p>

Instrument	Title	Section	Obligation
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam (March 2018) (TSF Notch East)	3.6 Environmental Protection	<p>Surface water management will be undertaken in accordance with the currently approved Ranger Water Management Plan and its successors. The clay core notching at location 1 to 51.0 mRL is a centre-line crest level and as such there is no additional impact beyond the existing toe of the tailings dam. The current surface water monitoring and management programs will continue with no change.</p> <p>Groundwater monitoring in the vicinity of the tailings dam will be undertaken in accordance with the annually approved Ranger Water Management Plan (RWMP). All existing piezometers and groundwater monitoring bores are located along the western and southern boundaries of the base of the tailings dam and remain unaffected by this activity, enabling continuity with previous monitoring.</p> <p>Contaminated Material Management and Disposal - The potentially contaminated material will be actively managed in accordance with a number of operational standards and plans. A sampling program of the in-situ clay core and upstream rock material will be undertaken to ascertain potential contamination issues during the deconstruction of the dam. Contaminated material will be stockpiled in a designated area within the disturbed mine footprint, this is a Class I (low) risk which will be actively managed.</p>
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	DPIR Acceptance Letter (January 2019)	<p>ERA is approved to complete in entirety the planned Stage 1 notch and dredge access ramp ensuring the dam crest is not excavated below the nominated crest height of 49m RL (with a clay core of 48.5m RL). Prior to each stage of reducing the tailings dam wall crest height you must notify the Department of the activity and provide the following:- The estimated levels of process water and tailings in the tailings dam at the time of the crest height reduction. These amounts should be based on the most recent site water model forecast (accounting for model uncertainty) and actual dredge transfer rates and progress;- The estimated Maximum Operation Level (MOL) in Pit 3 once the proposed reduced crest height is implemented; and- Any additional analyses necessary to address issues with potential instability of the wall associated with rapid draw-down.</p>
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	2.3.1 Surface Water Quality	<p>The proposed notching of the northern embankment will not materially change the surface water quality within the Gulungul Creek catchment. Runoff water from the northern wall currently flows to the west, into the RP1 catchment (release quality). Material removed from the northern wall during the notching will be placed in an adjacent, bunded area (see Section 3.2.2). The area will be shaped so any rainfall run-off is directed towards Retention Pond 6 (RP6).</p>

Instrument	Title	Section	Obligation
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	2.3.2 Seepage	an extensive, long-term, groundwater monitoring program exists in the vicinity of the tailings dam. Site-specific Data Quality Objectives (DQOs) and Sampling, Analysis and Quality Plan (SAQPs) have been developed for bores within the vicinity of the tailings dam.
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	3.3 Notching Location, Design and Contamination Sampling	The northern wall notching will see the compacted clay core crest height reduced to 48.5 (nominal 49.0 mRL or rockfill elevation) at the end of construction works, as per the plan view (Figure 3-5) and site plan (Figure 3-6). The earthworks will include the construction of a notch with base 49 mRL and new access ramps at the north-eastern corner and north-western corner of the notch.
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	3.3.2 Construction Materials	Appropriately graded fill material will be used in the construction of the notch. Where suitable and practical, materials extracted during the notching excavation will be reused. For example mine waste rockfill and rip rap, extracted from Zone 3A of the notch excavation will be reused to construct the ramp embankments and for erosion protection, respectively. Similarly, material obtained from Zone 2B or 3A will be reused to cover the exposed notching base surface and placed on the running surface of the ramp embankment. Once the 500 mm thick wear course material is placed over the clay core, the notch level will be at 49 mRL. A construction report will be issued upon practical completion of the notching. The report will include design drawings, as-built drawing(s), laboratory test certificates, photographs and sketches made during construction.
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	3.3.3 Inspection and Testing	The compacted mine waste rockfill placed in the ramp embankment will not be required for compliance testing, hence no testing programme will be implemented. However, physical testing (comprising Particle Size Distribution) should be allowed for the wearing course / cover materials. The tests shall be carried out by a qualified technician from a NATA registered laboratory or as directed by the Principal's Representative. The tests shall be carried out to such a degree as to satisfy the Principal's Representative that the criteria on material classification are met. The gradation of materials shall be tested in accordance with Test Method AS 1289 3.6.1 – 1995 Particle Size Distribution – Sieving. The minimum grading test frequency for wearing course materials shall be one test per 500 m ² .
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	3.3.4 Contamination Sampling	The same sampling program (and field and laboratory testing) that was implemented for the eastern wall notch will be used for the northern wall notching. Sample analysis will be completed by Australian Nuclear Science and Technology Organisation (ANSTO), and the subsequent results of the analysis used to inform the final disposal location and future decommissioning of the tailings dam.

Instrument	Title	Section	Obligation
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	3.3.4.1 Proposed field work	<p>The sampling plan described in this memo includes the field work i.e., sample retrieval and sample analysis information. Sampling for potential contamination will be performed for the clay core zone (zone 1A) only. At each sample point, clay samples at depths of 0-10 cm will be collected by hand. Samples will be packaged in a condition suitable for laboratory analysis. Two samples will be taken between the crest of 60.5 mRL and 59 mRL. Samples to be taken at the furthest distance away from the adjacent tailings and in close proximity to each other.</p> <p>A total of 14 samples will be retrieved from the clay core. Twelve samples will be retrieved on three levels between 56 mRL and 48.5 mRL. The exact levels will be unplanned and will be determined by the excavation operations and safe accessibility at the level. The lowest sampling level will be as close as possible to 48.5 mRL. Four samples will be retrieved per level for metals and radionuclide analysis. The first sample will be taken as close as possible to the edge of the clay core adjacent to the tailings. The other samples will be taken in increments of approximately 30 cm from the first sample.</p>
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	3.7 Environmental Protection	<p>Surface water management will be undertaken in accordance with the currently approved Ranger Water Management Plan and its successors. The notching to a nominal 49.0 mRL will not result in any additional impact beyond the existing toe of the tailings dam. The current surface water monitoring and management programs will continue with no change.</p> <p>Groundwater monitoring in the vicinity of the tailings dam will be undertaken in accordance with the annually approved Ranger Water Management Plan (RWMP). All existing piezometers and groundwater monitoring bores are located along the western and southern boundaries of the base of the tailings dam and remain unaffected by this activity, enabling continuity with previous monitoring.</p>
Application	Application - Ranger Tailings Dam Future MOL Amendments and Northern Wall Notching (October 2018) (TSF Notch North)	3.7.3 Contaminated Material Management and Disposal	<p>Material from these areas of the tailings dam will be contained within separate, bunded areas located between the north wall and Retention Pond 6. The potentially contaminated material will be actively managed in accordance with a number of operational standards and plans. ERA will implement the same sampling program for the northern wall notch that was completed on the eastern wall notch. Sample analysis will be completed by ANSTO, and the analysis will be used to inform the final disposal location and future decommissioning of the tailings dam. Materials from the northern notch will, be separated into stockpiles. For example, the clay core (A1) material and the upstream rock excavated from 51 mRL to 48.5 mRL will be bunded and stored separately to all other embankment materials. Contaminated material will be stockpiled in a designated area within the disturbed mine footprint, this risk which will be actively managed.</p>

Instrument	Title	Section	Obligation
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam North Wall Notch Stage 2 (April 2019)	DPIR Acceptance Letter (May 2019)	<p>ERA is approved to complete the proposed Stage 2 North Wall Notch, ensuring the minimum height of the clay core shall be 45.1mRL around the entire perimeter of the Tailings Dam, and that the clay core will be maintained at a minimum width of 4m and 45.1mRL. Comments on this application are included in Attachment A. These are to be considered during notching activities and for your Tailings Dam management in the future.</p> <p>Appendix A - DPIR</p> <p>Prior to each stage of reducing the tailings dam wall crest height you must notify the Department of the activity and provide the following:</p> <ul style="list-style-type: none"> - The estimated levels of process water and tailings in the in the tailings dam at the time of the crest height reduction. These amounts should be based on the most recent site water model forecast (accounting for model uncertainty) and actual dredge transfer rates and progress; - The estimated Maximum Operation Level (MOL) (during both the wet and dry season) in Pit 3 once the proposed reduced crest height is implemented; and - Any additional analyses necessary to address issues with potential instability of the wall associated with rapid draw-down. <p>In line with DIIS comments below, ERA must consider options to mitigate the risk of rapid water drawdown affecting the dam wall stability before the water level in the TSF is planned to be reduced below 40 m RL.</p> <p>Appendix A - NLC</p> <p>Reiterate concerns with the scarcity of information on contamination within the walls and below the TSF and encourage ERA to take advantage of opportunities to gather information on this contamination and share this with stakeholders.</p> <p>Appendix A - DIIS</p> <p>We do note that a risk of rapid water drawdown affecting the dam wall strength has been identified by Coffey when the water level reduces to 40mRL. We request that ERA formally consider and address this risk before the water level in the TSF is planned to be reduced below that level.</p> <p>Appendix A - SSB</p> <p>It is noted that ERA intends to undertake detailed contamination assessments in 2019 to inform a tailings dam contamination management application to be submitted early in 2020. It is requested that ERA consult with stakeholders on the scope of this contamination assessment to ensure it provides adequate information to facilitate the assessment of the tailings dam contamination management application.</p>

Instrument	Title	Section	Obligation
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam North Wall Notch Stage 2 (April 2019)		ERA intends to proceed with stage II of the north wall notch and seeks approval to reduce the tailings dam clay core crest height to 45.1mRL. This notch, scheduled for construction in late April 2019. In order to provide flood storage of a volume calculated in accordance with the Ranger Authorisation, the seasonal Maximum Operating Level (MOL) for this reduced crest height will be 43.8mRL during the dry season and 42.3mRL during the wet season.
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam North Wall Notch Stage 2 (April 2019)	4.3.1 Notch Construction	<p>The following recommendations are therefore made for the construction of north notch stage 2:</p> <ul style="list-style-type: none"> • A minimum safe setback distance (for construction machinery) of 3 m from the upstream embankment edge should be maintained. • During notch construction, the crest condition should be closely observed and, in reaction to any movement or appearance of cracks in the existing embankment rockfill (however unlikely), construction machinery should immediately be moved away from the cracking toward the downstream embankment face. • Analyses for east notch excavation to 51mRL are deemed relevant to the north notch at 45.6mRL, with the 5.5 m difference in base elevation considered by Coffey unlikely to be significant to overall notch stability.
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam North Wall Notch Stage 2 (April 2019)	4.3.3 Crane Pad	<ul style="list-style-type: none"> • The crane shall operate at a minimum safe setback distance of 9m from the upstream edge of the notch as shown in Figure 4-2 • Crane mats/steel plates will be required beneath the crane as indicated in section 2.7 of the scope of works attached to the north notch stage 2 design report (Appendix A) • High strength woven geotextile reinforcement (minimum ultimate strength 400kN/m) will be placed nominally 750mm to 1000mm below the crane during the construction of the crane pad.
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam North Wall Notch Stage 2 (April 2019)	4.4 Contamination Sampling	The same sampling program (and field and laboratory testing) that was implemented for the eastern wall notch and north wall notch stage 1 will be used for the north wall notch stage 2. Sample analysis will be completed by Australian Nuclear Science and Technology Organisation (ANSTO), and the subsequent results of the analysis used to inform the final disposal location and future decommissioning of the tailings dam.
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam North Wall Notch Stage 2 (April 2019)	4.6 Co-commitments for Crest Height Approval	It is expected that stage 2 of the northern wall of the tailings dam will be completed in June 2019. Inspection and sign-off by the tailings dam engineer is scheduled to coincide with practical completion of each stage. Upon completion of north wall notch stage 2, the tailings dam operations and maintenance manual (Appendix C) will be updated in accordance with ERA management of change processes. An appropriate QA/QC

Instrument	Title	Section	Obligation
			program will be implemented for the construction of the notch, refer Section 2.1 of the Coffey scope of works (in Appendix A).
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam North Wall Notch Stage 2 (April 2019)	4.8 Environmental Protection	Surface water management will be undertaken in accordance with the currently approved Ranger Water Management Plan. The current surface water monitoring and management programs will continue with no change. Groundwater monitoring in the vicinity of the tailings dam will be undertaken in accordance with the annually approved Ranger Water Management Plan (RWMP).
Application	Application to Reduce the Certified Crest Height of the Ranger Tailings Dam North Wall Notch Stage 2 (April 2019)	4.8.3 Material Management and Disposal	Any potentially contaminated material at ERA is actively managed in accordance with a number of operational standards and plans. Material excavated during the construction of north notch stage 2 will be contained within the separate, bunded area located between the north wall and Retention Pond 6 used during the construction of north notch stage 1. ERA will implement the same sampling program for the north notch stage 2 as was completed during construction of north notch stage 1 and the eastern notch. Sample analysis will be completed by ANSTO, and the analysis will be used to inform the final disposal location and future decommissioning of the tailings dam. Contaminated Upstream face and tailings hang up (remaining from north notch stage 1) - This rock armour and tailings material (Figure 4-7) must now be removed prior to the construction of north notch 2. The tailings hang-up and rock armour will be excavated and transferred via dump truck for relocation to the north east corner of the tailings dam. Contaminated Upstream face and tailings hang up (remaining from north notch stage 2) - Similar to the north notch 1, this material will be separated from the upstream rock armour visually by the project team. As this material is identified it will be managed either: <ul style="list-style-type: none"> • through side casting for later transport during this notching work or subsequent notching activities; or • direct transport as described above, using the same controls.

Instrument	Title	Section	Obligation
Application	Application to Change Permeate Release Conditions (December 2018)	DPIR Acceptance Letter (April 2019)	<p>This proposal is acceptable to the Department. As per your proposal, details of operational controls to manage permeate production and release must be provided in an amendment to the Ranger Water Management Plan. The Supervising Scientist Branch (SSB) have detailed further management controls for permeate release at the proposed MG001 release point that must be addressed in your Ranger Water Management Plan. These controls have been provided in Attachment A.</p> <p>Attachment A - SSB</p> <p>We have no objections to the removal of the permeate discharge conditions from the Ranger Authorisation, provided that prior to removal, the management of permeate, including the additional controls proposed by ERA, are effectively incorporated into the whole of site release management system with the management strategies approved through the Ranger Water Management Plan (RWMP). These operational controls must clearly demonstrate that out of specification permeate cannot be released to the receiving environment and should include a description of the systems for monitoring, inspection and testing of critical components of the diversion system. Any changes to the permeate release system including adjustment of the permeate quality limits for permeate management must be submitted for approval as variations to the RWMP.</p> <p>Prior to discharge of permeate at MG001 the additional controls proposed by ERA to manage permeate release at MG001 must be included and approved in the RWMP. These additional controls are shown in the dot points below.</p> <ul style="list-style-type: none"> • Update of the Release Plan Calculator (RPC) to incorporate MG001 permeate releases. • Cessation of permeate release at MG001 if EC at MG009 is less than 8 $\mu\text{S}/\text{cm}$. • Cessation of permeate release at MG001 if the EC at MG009 is more than 4 $\mu\text{S}/\text{cm}$ less than the EC at MCUS. • Discharge at MG001 and DJKRP shall only occur during periods of flow in Magela Creek and only when predictions from the RPC indicate water quality objectives are not compromised.
Application	Application to Change Permeate Release Conditions (December 2018)	4.3 Recommendation for Condition C.3.1	<p>Condition C.3.1 should be removed from the Authorisation. Standard operating procedures are in place to ensure the water treatment plants are operating optimally and that water out of specification is recycled.</p>

Instrument	Title	Section	Obligation
Application	Application to Change Permeate Release Conditions (December 2018)	5.3 Recommendation for Condition C.3.2	Condition C.3..2 should be removed from the Authorisation and permeate discharges managed in accordance with the RWMP. The RWMP should be updated to allow permeate discharge to the RP1 or Corridor Creek catchments upstream of the RP1 weir and GCMBL, DJKRP and MG001. Release to DJKRP and MG001 shall be only during periods of flow in Magela Creek. Discharge to MG001 will only occur if predictions from the RPC indicate water quality objectives are not compromised and will stop if EC at MG009 drops to 8uS/cm or to 4us/cm less than EC at MCUS.
Application	Application to Change Permeate Release Conditions (December 2018)	6.3 Recommendation for Condition C.3.3	Condition C.3.3 should be removed from the Authorisation as internal system are in place to ensure optimal plant performance, and that no releases occur when the plants are operating sub-optimally.
Application	Application to Change Permeate Release Conditions (December 2018)	7.1 Recommendation for Condition C.3.4	Condition C.3.4 should be removed from the Authorisation as the condition is more stringent than that for treated process water.
Application	Application to Change Permeate Release Conditions (December 2018)	8.1 Recommendation for Condition C.3.5	Condition C.3.5 should be removed from the Authorisation as it is adequately covered by the RWMP.
Application	Application for approval to release High Density Sludge product water to the pond water treatment circuit (January 2020)	DPIR Acceptance Letter (19 Feb 2020)	ERA will implement operational controls that cease transfer of HDS product water to RP2 in the event of water quality exceeding limits stated in the application. Prior to release of treated water to GCMBL, era should demonstrate the stable operation of the refurbished HDS plant/WTP1 process, including that the quality of the treated water produced is equal to, or better than, that produced by this system previously. Include the water quality limits and controls, as well as the commitments and the Monitoring and Action Plan described in the application in future iterations of the Ranger Water Management Plan. The Ranger Water Quality Objectives will be updated to reflect the conditions for the release of process water permeate, including the proposed reduction of the TAN limit for GMCBL from 2mg/L to 0.7mg/L

Instrument	Title	Section	Obligation
Application	Application for approval to release High Density Sludge product water to the pond water treatment circuit (January 2020)	3.2 Commitments	<ul style="list-style-type: none"> • Incorporate release criteria and water management methods provided in the application and approval into the next version of the Ranger Water Management Plan. • Undertake all monitoring and management actions in accordance with the monitoring and action plan. • Notify the MTC when a threshold has been reached (as outlined in monitoring and action plan) and the action taken, or to be taken, in response. • Cease direct release from MG001 once the HDS plant has discharged to RP2. • Provide verification to stakeholders that permeate produced through direct feed of HDS product water to the pond water treatment plants is consistent with historical outputs. This must be provided prior to the discharge of direct feed permeate to the offsite environment. • Assess contaminant concentrations in GCMBL after twelve months of water release arising from HDS operations. The results of the assessment, including any required changes to water management, will be presented to the MTC.
Application	Application for approval to release High Density Sludge product water to the pond water treatment circuit (January 2020)	3.1 Approval sought	<p>Direct treatment:: HDS plant product will immediately be sent to WTP1, for subsequent filtration, reverse osmosis and wetland filter polishing</p> <ul style="list-style-type: none"> • Release of permeate arising from direct treatment to the wetland filter will be subject to the limits in Table 1 • Release of permeate arising from direct treatment will only occur in the dry season, as determined by the presence of stream flow downstream at GC2. • Permeate produced by WTP1 is not discharged to the offsite environment until such time as ERA is able to demonstrate the stable operation of the plant and that the chemical signature of the permeate is consistent with historical outputs • The feed of HDS plant product to WTP1 may be supplemented with pond water. <p>Indirect treatment: HDS plant product will be sent to the pond water inventory (RP2 only), for subsequent filtration and reverse osmosis treatment by any of the pond water treatment plants on site.</p>
Application	Application for approval to release High Density Sludge product water to the pond water treatment circuit (January 2020)	7 Monitoring and action plan	HDS product water, RP2 and WTP permeate will also subject to sampling and analysis by the ERA production laboratory on at least a daily basis, when the relevant plant is running. However these samples are not subject to the same level of quality assurance and control as the surface water monitoring samples
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	4.8.2 Earthworks material management	<p>Undertake notch earthworks in accordance with the following environmental protection measures:</p> <ul style="list-style-type: none"> - stockpile downstream rock armour with similar material removed from previous notches or within the mining 1s waste rock stockpile areas. - contain clay core material within the separate bunded area used previously for

Instrument	Title	Section	Obligation
			clay core from North Notch stage 1 & 2 - side cast upstream rock armour for storage on the upstream embankment
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	4.2.1 Phase 1 dredging and TSF clean-out	MOLs applicable to the 2020 and 2021 dry seasons and the 2020-2021 wet season: Dry season: RL36.3m Wet season: RL34.8m
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	5. Summary and commitments	Submit to the MTC the Stage 3 notch compliance report following the completion of notch construction
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	5. Summary and commitments	Update the TSF operations and maintenance manual in accordance with ERA management of change processes
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	5. Summary and commitments	Update the Ranger Water Management Plan where appropriate in accordance with ERA management of change processes.
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	5. Summary and commitments	Notify the MTC of the intention to construct a crane pad, if required, prior to the start of excavation works
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	4.6 Peer review	Undertake all relevant additional monitoring required by the Rapid Drawdown Monitoring Plan (once monitoring plan is enacted)

Instrument	Title	Section	Obligation
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	Appendix E	Prevent or mitigate environmental risks in accordance with the risk assessment provided as Appendix E in the application.
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	4.2.2.3 Maximum seasonal operating levels for Phase 2	review the process water inventory forecast at the end of each wet season to ensure TSF water levels for the upcoming dry and wet seasons are forecast to remain below the following MOLs applicable to a clay core crest level of RL37.8m: - during dry season: RL36.3m - at the start of each wet season: RL32.5m - during wet season: RL34.8m
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	4.3 notch and bund construction	submit the inventory review report to the MTC by 31 May each year providing the following information:- The water balance components for the process water inventory forecast - The rationale for the selection of the components- The sensitivity of the reforecast to the major components- The outcome of the annual review of the process water inventory forecast a) Confirmation that TSF water levels will remain below the MOLs provided above1 b) Detail on the forecast level of encroachment into one or more MOLs.- In the event of b) above; a request for approval for an increase in clay core crest height via the implementation of a clay bund. The clay bund will be constructed in accordance with the engineering and construction specification provided in the Coffey Ranger Mine Project TSF Stage 3 North Notch Design Report dated 28 February 2020.
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	5. Summary and commitments	If required, construct the clay bund during the dry season to ensure a minimum freeboard of 5.3 m at the beginning of the wet season and a MOL of RL34.8 m for the duration of the wet season
Application	Application to reduce the certified crest height of the Ranger Mine Tailings Storage Facility, North Notch Stage 3 (June 2020)	5. Summary and commitments	Submit the clay bund construction compliance report to the MTC following the completion of the clay bund.

Instrument	Title	Section	Obligation
Application	Application: Tailings Height for Pit 3 exceeds -20mRL	Acceptance Letter Pit 3 (7 August 2020)	<p>Letter received by ERA from the NT Department of Primary Industry on 7th August 2020 approving deposition of tailings above -20mRL but not above -10mRL throughout the pit ensuring that the water level in Pit 3 remains below the MOL of 3.5mRL based on:</p> <ul style="list-style-type: none"> risk to offsite environment is low If ERA requires tailings above -10mRL requested to nominate a new mRL for approval that is achievable, and that the water level in Pit 3 remains below MOL of 3.5 mRL. <p>The application for the final backfill and closure of Pit 3 should demonstrate that; objectives will be met in consideration of any changes in tailings properties, assessment of environmental risks associated with an increase in tailings above -20mRL, how these changes may effect consolidation, consideration of migrations, timeframes for pore water expression and the associated implications for water treatment, the tailings source term and containment transport.</p>
Application	Revised Application: Ranger mine tailings storage facility - subfloor material management	DPIR Acceptance Letter (July 2020)	<p>The purpose of the revised application to seek approval to exclude from further assessments the option to remove contaminated material from the TSF subfloor for final placement in Pit 3, and for the contaminated material to be left in situ in the TSF.</p> <ul style="list-style-type: none"> - long term management of sub-floor material including any remediation requirements will be included as part of the TSF deconstruction application currently planned for mid - 2023 - further work is needed to better quantify the contaminated plume beneath the TSF and to further refine the groundwater and surface water models to complete the whole of site contaminant transport modelling and to inform the future decommissioning of the TSF including the need for groundwater remediation

Instrument	Title	Section	Obligation
Application	Revised Application: Ranger mine tailings storage facility - subfloor material management	7. Summary and commitments	<p>This application is to leave the TSF subfloor contaminated material in situ</p> <ul style="list-style-type: none"> - progression of the surface water modelling for whole of site cumulative impacts - further development of the understanding of surface water and groundwater interactions and incorporating this into surface water modelling - Progression of the groundwater solute transport model with uncertainty analysis - Undertake further analysis and assessment of the TSF subfloor drilling results to evaluate the need for in situ remediation and incorporating findings into TSF deconstruction planning - Review of potential remediation options for the TSF subfloor, following the outcomes of further assessment, and incorporate findings within the TSF deconstruction application - Completion of a BPT assessment for potential remediation options following the outcomes of further assessment - Development of a strategy for final TSF deconstruction which results in the maximum environmental benefit - Submission of an application addressing the remaining management aspects for the TSF deconstruction for regulatory approval