Ref: CMS18095

Prof. Matthew Tonts
CHAIR
Environmental Protection Authority
Prime House
8 Davidson Terrace
JOONDALUP WA 6027

Dear Prof. Tonts

Section 38F(1) and (2) – Notice Requesting Further Information – Eneabba Rare Earth Refinery Project

I refer to the request from your department that Iluka Midwest Ltd provide a response to your notice requesting further information under section 38F of the *Environmental Protection Act 1986* regarding the Eneabba Rare Earth Refinery Project (Your Ref: CMS18095) .

Please find attached Iluka's response to the notice and the completed Proposal Content Document for the Eneabba Rare Earth Refinery Project.

As set out in the Eneabba Rare Earth Refinery (ERER) Section 38 Referral Supporting Document, there are a number of decision-making processes that apply to the Proposal. Iluka does not consider there are any restrictions or constraints pursuant to those processes that would result in impacts of the Proposal not being adequately regulated.

As detailed in the attached tables, the various Decision Making Authorities (DMAs) have comprehensive statutory requirements and decision-making processes to mitigate potential impacts of the Proposal on the environment and ensure that the EPA objectives for environmental factors can be met.

Iluka will provide this document and the ERER Section 38 Referral Supporting Document to the relevant DMAs for confirmation of their ability to regulate the potential impacts. Iluka will request the relevant DMAs provide this confirmation to Iluka and the EPA by the date specified in the notice.

Yours faithfully

Angela Bishop
Manager Environmental Approvals

1 December 2021

Attached:

1. Iluka Eneabba Rare Earth Refinery – Response to Notice Requiring Further Information – Decision Making Authorities (DMAs)
2. Iluka Eneabba Rare Earth Refinery – Proposal Content Document

Table 1(A) – Department of Water and Environmental Regulation (DWER) – Part V of the *Environmental Protection Act 1986* (EP Act) – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**

1 (a) DMA statutory decision-making processes that can mitigate all identified potential impacts of the proposal on the environment and how the EPAs factor objectives will be met	Decision making processes under Part V of the EP Act will be key to ensure that the potential impacts of the Proposal are being adequately regulated. The EP Act provides for the prevention, control and abatement of pollution and environmental harm, through Part V Division 1 – Pollution and environmental harm offences and Division 3 – Prescribed premises, works approvals and licences.
	
	The following impacts and associated factor objective can be considered and regulated by DWER under Part V of the EP Act.
	Terrestrial Environmental Quality
	EPA Objective: to maintain the quality of land and soils so that environmental values are protected
	Potential Impacts:
	• Contamination of soils through spills of feed material, products or reagents.
	• Contamination of soils by process wastes as a result of incorrect disposal, failure of In-Ground TSFs, spill or leakage from In-Ground TSF pipelines or loss of containment.
	Inland Waters
	EPA Objective: to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected
	Potential Impacts:
	• Alteration of the surface water regime due to diversion of flows and flooding.
	• Alteration of the groundwater regime resulting in localised changes to groundwater levels as a result of seepage, i.e. mounding.
	• Impact to surface and groundwater quality from:
	  ○ Spills of feed material or product within the refinery area.
	  ○ Leaks/spills of process reagents and hydrocarbons.
	  ○ Leaks/spills from water treatment systems.
	  ○ Seepage from the In-Ground TSFs.
	  ○ Leaks/spills from tailings and return water transfer pipelines.
	Human Health
	EPA Objective: To protect human health from significant harm
	Potential Impacts:
	• Ingestion of groundwater (as drinking water).
	Flora and Vegetation
	EPA Objective: to protect flora and vegetation so that biological diversity and ecological integrity are maintained
	Potential Impacts:
	• Loss or degradation of vegetation condition due to dust and gaseous emissions.
	• Loss or degradation of vegetation condition due to hazardous materials spillage.
	Terrestrial Fauna
	EPA Objective: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained
	• Indirect impacts on adjacent fauna habitats as a result of increased particulate emissions.

Table 1(A) – Department of Water and Environmental Regulation (DWER) – Part V of the *Environmental Protection Act 1986* (EP Act) – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences	
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EPA Information Request	**Iluka's Response**
	• Indirect impacts on individual fauna as a result of noise emissions. **Air Quality** **EPA objective:** to maintain air quality and minimise emissions so that environmental values are protected Potential Impacts: • Adverse impacts on human health and amenity at sensitive receptors due to particulate emissions. • Adverse impacts on human health at sensitive receptors due to gaseous emissions. • Adverse impact on regional air quality due to atmospheric pollution. The EPA objectives for the above factors can be met through the Part V process as detailed below. The EP Act requires a works approval to be obtained before constructing a prescribed premises and makes it an offence to cause an emission or discharge unless a licence or registration is held for the premises. The Proposal is a prescribed premises and will be subject to a works approval and licence. DWER's regulatory framework ensures that works approvals and licences are issued subject to conditions that ensure there is no unacceptable impact or risk of harm to public health or the environment. Section 62A of the EP Act defines the kinds of conditions that can be set in Part V works approvals and licences. The following will therefore apply to the Proposal: *Works Approval:* • A Works Approval will be applied for to regulate construction and commissioning of the Proposal, including (but not limited to): o incorporation of pollution control equipment for the Proposal, specifically waste gas treatment control equipment and dust control infrastructure; and o the TSF Designs. *Licence:* • Existing Environmental Operating Licence L5646/1994/10 (Licence) applies to the site and includes conditions that: o require TSFs to be erosion resistant non-polluting structures, surface water runoff from processing areas to captured for reuse, pipelines to be bunded, for water monitoring to be conducted and amounts of tails disposed recorded and reported. o require fugitive emission to be managed in accordance with the Eneabba Dust Management Plan and the containment of infrastructure. The licence can be amended to incorporate the hazardous material and dust management of the Proposal to mitigate impacts to flora and vegetation.

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EPA Information Request	**Iluka's Response**
	Iluka will apply for an amendment to the Licence to incorporate the Proposal. If DWER determines necessary, following its assessment of Iluka's application and internal risk assessment process, additional conditions can be incorporated into the Licence in respect to pollution control infrastructure, controls or monitoring. These could apply to any of the Proposal components or potential impacts/risks, for example in respect to: ○ the TSF; ○ hazardous materials and dust; or ○ air quality. Iluka expects the EPA will be very familiar with the operation of the Part V regime and manner in which DWER will regulate this Proposal.
1 (b) Please ensure details on the public consultation and appeals process are provided, or if this is not applicable, provide information regarding any public consultation that has been undertaken to date.	The Part V EP Act decision making process is comprehensive and there is a high degree of public participation and transparency. Sections 54(2)(b), 54(2a), 57(2)(b), and 57(2a) of the EP Act provides opportunity for the public to provide comment on applications for works approvals and licences. Works approval and licence amendment applications are made available (online) by DWER. The works approval and eventually Licence amendment application for the Proposal will be published and available for public comment. Under section 102 of the EP Act, within 21 days of Iluka being notified of the decision on the works approval and Licence amendment any person may appeal about any specification of that approval. Appeals must be lodged with the Appeals Convenor, with a decision being made by the Minister. Appeals can be lodged against: • The conditions of a works approval or licence • An amendment to a works approval or licence • Refusal to grant or transfer a works approval or licence • Revocation or suspension of a works approval or licence It is noted that an appeal cannot be lodged for the following: • The decision to grant a works approval or licence • Where a works approval or licence is amended, anything not connected with that amendment • The duration or boundaries of the works approval or licence, unless these are amended DWER has numerous publicly available policies and procedures in respect to the Part V EP Act process. These are available at https://www.der.wa.gov.au/our-work/licences-and-works-approvals. As noted above, Iluka expects the EPA will be very familiar with the operation of the Part V regime and associated guidance materials.

Table 1(A) – Department of Water and Environmental Regulation (DWER) – Part V of the *Environmental Protection Act 1986* (EP Act) – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences	
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EPA Information Request	**Iluka's Response**
2. The standard that other DMAs will regulate to, and what the environmental outcomes will be	DWER has developed the following guidance statements in relation to its functions and standards under Part V of the Act: • Guidance Statement – Regulatory principles, *Environmental Protection Act 1986*, Part V: Effective and efficient Regulation (DER, 2015) • Guidance Statement – Setting Conditions, Division 3, Part V, *Environmental Protection Act 1986* (DER 2015) • Guidance Statement – Environmental Siting, Part V, Division 3, *Environmental Protection Act 1986*, (DER 2016) • Guidance Statement – Decision Making, Part V, Division 3, *Environmental Protection Act 1986*, (DER 2017a) • Guidance Statement – Risk Assessment, Part V, Division 3, *Environmental Protection Act 1986*, (DER 2017b) • Guidance Statement – Land Use Planning, Part V, *Environmental Protection Act 1986*, (DER 2017c). • State-wide Policy No 5 – Environmental Water Provisions Policy for Western Australia (WRC, 2000). • Guideline - Air Emissions. Draft for External Consultation (DWER 2019). • Guideline - Dust: Draft for External Consultation (DWER 2021). In accordance with Part V, Division 1 of the EP Act, the environmental outcome of the EP Act is to prevent pollution and environmental harm.
3. A gap analysis as to whether all potential significant impacts are identified by other DMA processes and whether there are any restrictions within those processes being relied on to address those impacts	The Part V works approval and licence regime considers impacts and risks to the environment (as broadly defined in section 3 of the EP Act) and public health. It is a comprehensive and rigorous process, underpinned by risk assessment. The potential impacts of the Proposal that will be considered by Part V of the EP Act, are detailed above. Those impacts outside the scope of Part V of the EP Act (which are very limited) are covered by other DMAs, as detailed in Table 7.
4. The expected compliance monitoring and review process under the relevant DMA processes	As set out above, DWER's regulatory framework ensures that works approvals and licences are subject to conditions that ensure there is no unacceptable impacts or risk of harm to public health or the environment. Section 62A of the EP Act defines the kinds of conditions that can be set in Part V works approvals and licences. DWER has very broad condition setting powers, and will apply conditions proportionate to the risk a particular prescribed premises may present. DWER actively monitors compliance with works approvals and licences. The following are some of the key compliance monitoring and review processes utilised by or available to DWER under Part V of the EP Act: • Environmental Compliance Report – a typical condition of works approvals • Annual Environmental Report – a typical condition of licences • Regulatory Inspection to independently determine compliance – pursuant to comprehensive enforcement powers under the EP Act • Field Assessments (Inspections and Sampling Programs) to independently determine compliance – pursuant to comprehensive enforcement powers under the EP Act • Instrument Reviews and Audits – pursuant to the works approval and licence condition amendment powers under the EP Act • Annual Audit Compliance Reporting – a standard condition of all licences

Table 1(A) – Department of Water and Environmental Regulation (DWER) – Part V of the *Environmental Protection Act 1986* (EP Act) – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	DWER's enforcement and compliance powers are arguably more comprehensive than those available to the EPA.
5. Confirmation from DMAs regarding consultation and the ability to regulate potential impact	Iluka has engaged extensively with all relevant DMAs, including DWER, as detailed in Section 3 of the referral document. There have been no objections raised during consultation regarding the implementation of the Proposal utilising regulatory mechanisms that are available to the DMAs, in lieu of a Part IV assessment. This document and the ERER Section 38 Referral Supporting Document will be provided to the relevant DMAs for confirmation of their ability to regulate the potential impacts.

Table 1(B) – DWER – Part V of the EP Act – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
1. The ability of the DMA to consider the impact of the proposal	
- Are there any restrictions on the DMA's consideration of a proposal's activities?	No. The Proposal is consider a prescribed premise and Part V of the EP Act (Works Approvals and Licences) regulates those activities considered a prescribed premise. See 1(a) in Table 1(A)
- Is the decision-making process constrained to particular geographical locations?	No
- Does the decision-making process only consider a particular type of impact?	No. Part V of the EP Act considers impacts associated with pollution and environmental harm from activities of a prescribed premise. See 3 in Table 1(A).
2. The process that the DMA uses to assess the potential impacts of the activity on the environment	
- Is the assessment on a case by case, or activity category, basis?	Case by case basis
- What opportunity does the public have to comment in/about the decision-making process?	See 1(b) in Table 1(A).
3. The relevant considerations which the DMA can take into account in decision making	
- Can and does the DMA take the EPA's factor objectives (or related objectives and principles) into account in decision making?	Yes, see 1(a) Table 1(A).
- What elements of the environment are relevant to the decision-making?	The relevant environmental elements to the decision-making are associated with the prevention, control and abatement of pollution and environmental harm. DWER has published detailed policy and guidance in this regard.
- Are there any potential environmental impacts outside the scope of the DMA's decision making?	Part V of the EP Act considers impacts associated pollution and environmental harm from activities of a prescribed premise..
4. The conditions that may be applied as a result of the decision-making process	
- Are there standard conditions relating to the environment that are imposed in all cases?	Yes, see 1(a) and 4 in Table 1(A).

Table 1(B) – DWER – Part V of the EP Act – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
- What special conditions relating to the environment can the DMA authority impose? In what circumstances? Does the DMA have sufficiently broad powers to impose conditions, including those provided for in section 45A of the EP Act?	See 1(a) and 4 in Table 1(A).
- What compliance monitoring of environmental conditions is carried out?	See 4 in Table 1(A).
- What review of whether the environmental conditions achieve environmental outcomes is carried out?	See 4 in Table 1(A).

Table 2(A) – DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
1 (a) DMA statutory decision-making processes that can mitigate all identified potential impacts of the proposal on the environment and how the EPAs factor objectives will be met	Part V of the EP Act also contains a process that regulates clearing of native vegetation. The EP Act provides for the conservation, preservation, protection, enhancement and management of the environment specifically in respect to native vegetation, through Part V Division 2 – Clearing of native vegetation and Schedule 5 – Principles for clearing native vegetation. Under the EP Act it is an offence to clear native vegetation unless the clearing is done in accordance with a Native Vegetation Clearing Permit (NVCP), or an exemption applies. The following impacts can be considered by DWER under Part V of the EP Act. **Flora and Vegetation** **EPA Objective:** To protect flora and vegetation so that biological diversity and ecological integrity are maintained Potential Impacts: • Fragmentation and reduction of vegetation due to land clearing • Loss of significant flora • Loss or degradation of vegetation condition due to altered fire regimes. • Loss or degradation of vegetation condition due to increased abundance of weeds. • Loss or degradation of condition of surface and groundwater dependent ecosystems. • Loss or degradation of vegetation condition due to spread of weeds or Dieback. **Terrestrial Fauna** **EPA Objective:** To protect terrestrial fauna so that biological diversity and ecological integrity are maintained • Loss of fauna habitat as a result of land clearing. • Loss of foraging habitat for Carnaby's Cockatoo. • Loss and changed condition of drainage habitat as a result of changed surface water conditions as a result of the Proposal. The EPA objectives for the above factors can be met through the NCVP assessment and approval process. NVCPs include enforceable conditions that, amongst other things, typically manage the authorised extent of vegetation clearing, significant flora, fauna habitat, changes to surface and groundwater and the introduction of weeds and rehabilitation. Iluka holds an existing NVCP (6915/3) that covers the regrowth vegetation on topsoil stockpiles located within the Disturbance Footprint. NVCP 6915/3 can be amended to include the additional 5.4 ha of revegetation required to be cleared for the Proposal.
1 (b) Please ensure details on the public consultation and appeals process are provided, or if this is not applicable, provide information regarding any public consultation that has been undertaken to date.	As noted for the Part V works approval and licensing regime above, the NVCP decision making process is comprehensive and there is a high degree of public participation and transparency. Assessments are undertaken on a case by case basis, with reference to statutory clearing principles. Applications, both for new NVCPs and amendments, are published by DWER for public comment. Should the Proposal not be assessed, an amendment application will be submitted for Iluka's existing NVCP 6915/3 , and the application would be available for public comment. Decisions on clearing matters under Part V of the EP Act can also be appealed. Appeals can be lodged by any person within 21 days of the NVCP holder being notified of the decision. The types of decisions that members of the public can appeal are when DWER:

Table 2(A) – DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	• grant (or an undertaking to grant) a new NVCP amendment of an existing NVCP (other than an administrative amendment, such as to correct clerical errors or to implement a ministerial determination). DWER has numerous publicly available policies and procedures in respect to the Part V EP Act NVCP process. These are available at https://www.der.wa.gov.au/our-work/clearing-permits. As noted above, Iluka expects the EPA will be very familiar with the operation of the Part V NVCP regime and associated guidance materials.
2. The standard that other DMAs will regulate to, and what the environmental outcomes will be	DWER's decision making process is subject to statutory clearing principles. DWER has also developed the following guidance statements in relation to its functions and standards under Part V of the Act: • Environmental Protection (Clearing of Native Vegetation Regulations) 2004. • A guide to the assessment of applications to clear native vegetation (DWER 2014). • Guideline - Native vegetation clearing referrals (DWER 2021) • A guide to native vegetation clearing processes under the assessment bilateral agreement (DWER 2014). In accordance with section 51C of the EP Act the environmental outcome is for all clearing to be authorised by a valid permit or exemption. In making a decision on a clearing permit, regard is given to the clearing principles contained in Schedule 5 of the EP Act which closely align with the EPA's objectives for Flora and Vegetation and Terrestrial Fauna. For this reason, the EPA's objectives for Flora and Vegetation will be met through implementation of the Proposal in accordance with amended NVCP 6915/3.
3. A gap analysis as to whether all potential significant impacts are identified by other DMA processes and whether there are any restrictions within those processes being relied on to address those impacts	The Part V NVCP regime considers impacts and risks to the environment associated with clearing of native vegetation. It is a comprehensive and rigorous process, underpinned by statutory clearing principles. The potential impacts of the Proposal that are considered by the Part V NVCP regime, are detailed above. Those impacts outside the scope of clearing of native vegetation are covered by other DMAs as detailed Table 7.
4. The expected compliance monitoring and review process under the relevant DMA processes	Analogous to the Part V works approval and licensing regime, DWER has very broad condition setting powers in respect to NVCPs, and will apply conditions proportionate to the risk that clearing of native vegetation presents in the circumstances. DWER actively monitors compliance with NVCPs. The following are some of the compliance monitoring and review processes utilised by or available to DWER under Part V of the EP Act: • Site Inspections to independently determine compliance – pursuant to comprehensive enforcement powers under the EP Act • Annual Compliance Reports – a typical condition of NVCPs • Desktop Assessments (satellite imagery) to independently determine compliance – pursuant to comprehensive enforcement powers under the EP Act • Instrument Reviews and Audits – pursuant to the NVCP condition amendment powers under the EP Act • Annual Compliance Reporting – a typical condition of NVCPs

Table 2(A) – DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	As noted above, DWER's enforcement and compliance powers are arguably more comprehensive than those available to the EPA.
5. Confirmation from DMAs regarding consultation and the ability to regulate potential impact	Iluka has engaged extensively with all relevant DMAs, including DWER and DMIRS (who have delegated authority under Section 20 of the EP Act to administer the clearing provisions for mining activities on State Agreement Act), as detailed in Section 3 of the referral. There have been no objections raised during consultation regarding the implementation of the Proposal utilising regulatory mechanisms that are available to the DMAs, in lieu of a Part IV assessment. This document and the ERER Section 38 Referral Supporting Document will be provided to the relevant DMAs for confirmation of their ability to regulate the potential impacts.

Table 2(B) – DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
1. The ability of the DMA to consider the impact of the proposal	
- Are there any restrictions on the DMA's consideration of a proposal's activities?	Yes. Part V of the EP Act (Clearing of Native Vegetation) is restricted to those activities associated with the clearing of native vegetation.
- Is the decision-making process constrained to particular geographical locations?	No
- Does the decision-making process only consider a particular type of impact?	Yes. Part V of the EP Act (Clearing of Native Vegetation) considers impact associated with the clearing of native vegetation. See 3 in Table 2(A).
2. The process that the DMA uses to assess the potential impacts of the activity on the environment	
- Is the assessment on a case by case, or activity category, basis?	Case by case basis
- What opportunity does the public have to comment in/about the decision-making process?	See 1(b) in Table 2(A).
3. The relevant considerations which the DMA can take into account in decision making	
- Can and does the DMA take the EPA's factor objectives (or related objectives and principles) into account in decision making?	Yes, see 3 in Table 2(A).
- What elements of the environment are relevant to the decision-making?	The relevant environmental elements to the decision-making are associated with the clearing of native vegetation.
- Are there any potential environmental impacts outside the scope of the DMA's decision making?	Impacts that are not related to the clearing of vegetation are outside the scope of the DMA's decision making.
4. The conditions that may be applied as a result of the decision-making process	
- Are there standard conditions relating to the environment that are imposed in all cases?	Yes, see 1(a) and 4 in Table 2(A).

Table 2(B) – DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
- What special conditions relating to the environment can the DMA authority impose? In what circumstances? Does the DMA have sufficiently broad powers to impose conditions, including those provided for in section 45A of the EP Act?	See 1(a) and 4 in Table 2(A).
- What compliance monitoring of environmental conditions is carried out?	See 4 in Table 2(A).
- What review of whether the environmental conditions achieve environmental outcomes is carried out?	See 4 in Table 2(A).

Table 3(A) – Radiological Council – *Radiation Safety Act 1975* – Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP)	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**

1 (a) DMA statutory decision-making processes that can mitigate all identified potential impacts of the proposal on the environment and how the EPAs factor objectives will be met	Outside of the EP Act, a number of regulatory regimes administered by various DMAs are available to manage the identified potential impacts of the Proposal and meet the objectives of the EPA's environmental factors. This includes the *Radiation Safety Act 1975*. The Act regulates the keeping and use of radioactive substances, irradiating apparatus and certain electronic products, and matters incidental thereto through approval of a Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP) and appointment of a radiation safety officer required by the Regulations. These will supplement the comprehensive regulation of the Proposal under the Part V works approval and licence, and NVCP regimes specifically in relation to radiation.
	
	The following impacts can be considered by the Radiological Council/Minister under the *Radiation Safety Act 1975*.
	Terrestrial Environmental Quality
	EPA Objective: to maintain the quality of land and soils so that environmental values are protected
	Potential Impacts:
	• Contamination of soils through spills of feed material, products or reagents.
	• Contamination of soils by process wastes as a result of incorrect disposal, failure of In-Ground TSFs, spill or leakage from In-Ground TSF pipelines or loss of containment.
	Inland Waters
	EPA Objective: to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected
	Potential Impacts:
	• Impact to surface and groundwater quality from:
	  ○ Spills of feed material or product within the refinery area.
	  ○ Leaks/spills of process reagents and hydrocarbons.
	  ○ Leaks/spills from water treatment systems.
	  ○ Seepage from the In-Ground TSFs.
	  ○ Leaks/spills from tailings and return water transfer pipelines.
	Human Health
	EPA Objective: To protect human health from significant harm
	Potential Impacts:
	• Inhalation of radon gas.
	• Inhalation of radionuclides in dust.
	• Ingestion of groundwater (as drinking water).
	• Direct gamma exposure from contaminated light vehicles.
	• Ingestion of animals or plants exposed to radiation.
	• Direct gamma radiation.
	Flora and Vegetation
	EPA Objective: To protect flora and vegetation so that biological diversity and ecological integrity are maintained
	Potential Impacts:

Table 3(A) – Radiological Council – *Radiation Safety Act 1975* – Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP)	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	• Adverse impacts on vegetation as a result of radiation emissions from solid waste disposal. • Loss or degradation of vegetation condition due to dust and gaseous emissions • Loss or degradation of vegetation condition due to hazardous materials spillage **Terrestrial Fauna** **EPA Objective:** To protect terrestrial fauna so that biological diversity and ecological integrity are maintained Potential Impacts: • Adverse impacts on fauna as a result of radiation emissions from solid waste disposal. **Air Quality** **EPA Objective:** To maintain air quality and minimise emissions so that environmental values are protected Potential Impacts: • Adverse impacts on human health and amenity at sensitive receptors due to particulate emissions. • Adverse impacts on human health at sensitive receptors due to gaseous emissions. • Adverse impact on regional air quality due to atmospheric pollution. Specifically, a RMP and RWMP is a condition of the Eneabba site Radiation Registration, issued under Section 36 of the *Radiation Safety Act 1975*. Once approved by the Radiological Council of WA, RMP and RWMP for the ERER will have enforceable requirements for the management of radiation impacts on the environment, including surface and groundwater management, containment of waste, fauna, and human health. Additionally the RWMP has specific requirements for the decommissioning, rehabilitation and closure. This DMA process, when considered with the other DMA processes, meets the above EPA objectives. Noting that the EPA objective for Human Health addresses the possible impacts to human health arising from the emission of radiation, the objective for this factor is entirely met by this DMA process. The *Radiation Safety Act 1975* regime operates concurrently with the *Mines Safety and Inspection Act 1994 and Mines Safety and Inspection Regulations 1995* to ensure comprehensive regulation of radiation in a mining context. Radiation safety for mining operations is co-regulated by the Council and the Department of Mines, Industry Regulation and Safety (DMIRS). Although the *Mines Safety and Inspection Regulations 1995* takes precedence over *the Radiation Safety (General) Regulation 1983*, radiation Safety Act takes precedence for all matters incidental to the keeping and use of radioactive substances, irradiating apparatus and certain electronic products. Once mining operations cease, the site will remain registered under the *Radiation Safety Act 1975* until the Radiological Council approves the release of the site and terminates the registration.
1 (b) Please ensure details on the public consultation and appeals process are provided, or if this is not	The *Radiation Safety Act 1975* applies to certain categories of activities that involve radiation. The requirements of RMPs and RWMPs are tailored to the specific circumstances of the regulated activities.

Table 3(A) – Radiological Council – *Radiation Safety Act 1975* – Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP)	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
applicable, provide information regarding any public consultation that has been undertaken to date.	While the regime does not include mandatory public comment or appeal processes, Iluka has undertaken extensive community and public engagement across both the Eneabba and wider Geraldton communities for the Proposal. The following groups have been engaged with: • Eneabba Progress Association. • Eneabba Parents and Citizens Association Inc. • Eneabba residents letterbox drop with Phase 2 Project newsletter. • Article in the Carnamah Mat & Eneabba News – a local weekly newsletter. • A community sentiment scan to gauge community feedback on the Phase 2 Project. • Article published in the MidWest Times newspaper. • Meetings in Geraldton with Yamatji Southern Regional Corporation in May and July 2021, plus ongoing engagement via remote modes. • Four community listening posts undertaken across Geraldton in September and October 2020 (Geraldton Library, QEII Community Centre, and at the Rocks Laneway). • Project presentation to Geraldton local businesses at the MWCII monthly 'Business After Hours' networking event held in September 2020. • Eneabba community sentiment interviews in August 2021. • Proposal presentation to Eneabba residents in August 2021. • Community forum providing an open house opportunity for the Proposal team to meet members of the Eneabba community and present the Proposal. Public consultation engagement opportunities will continue with engagement activities including (inter alia): • Regular updates in local newspapers and newsletters. • Maintaining Iluka's 'Eneabba Engage' website, email addresses and community information line. • Engagement with Yamatji Southern Regional Corporation specifically on the Proposal integrated into broader ongoing engagement on relationship development. • Community forums and other engagement focused on specific themes of strong interest including environmental management, radiation safety, socio-economic development. This engagement included the potential for and management of radiation associated with the Proposal. The public will have a further opportunity for comment in this regard when the Referral Document is published by the EPA.
2. The standard that other DMAs will regulate to, and what the environmental outcomes will be	The Radiological Council is an independent statutory authority appointed under the *Radiation Safety Act 1975* in Western Australia to assist the Minister for Health to protect public health and to maintain safe practices in the use of radiation. The Radiation Health Unit of the Department of Health (DoH) acts as the secretariat for the Radiological Council as authorised officers under the *Radiation Safety Act 1975*. Numerous policies and guidance are published by the Radiological Council and available on its website: http://www.radiologicalcouncil.wa.gov.au/ Further information is also published by DoH. The Radiological Council and Minister implement the following Commonwealth Code of Practice under its functions under *Radiation Safety Act 1975*:

Table 3(A) – Radiological Council – *Radiation Safety Act 1975* – Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP)	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	• Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Code of Practice and Safety Guide for Radiation Protection and radioactive waste management in mining and mineral processing (2005) (RPS9) In accordance with Part II Section 10(1) of the *Radiation Safety Act 1975* the Minister is charged with the duty of protecting the health and safety of the public against the dangers of radiation but is required at all times to have regard to the expressed views of the Radiological Council. The RMP and RWMP (Iluka, 2021e) include enforceable requirements for the management of radiation impacts on the environment, including fauna, human health, surface and groundwater management and containment of waste. The EPA's objectives for environmental factors will be met through implementation of the RMP and RWMP. The outcome of this DMA process is that human health will be protected from significant harm associated with radiation impacts.
3. A gap analysis as to whether all potential significant impacts are identified by other DMA processes and whether there are any restrictions within those processes being relied on to address those impacts	The *Radiation Safety Act 1975* regime considers impacts and risks to people and the environment associated with radiation. It is a comprehensive and rigorous process, which requires the implementation of both a RMP and RWMP. The potential impacts of the Proposal that are considered by the *Radiation Safety Act 1*975, are detailed above. Those impacts outside the scope of *Radiation Safety Act 1975* are covered by other DMAs as detailed in Table 7.
4. The expected compliance monitoring and review process under the relevant DMA processes	The *Radiation Safety Act 1975* regime requires the implementation of an approved RMP and RWMP. These are site specific plans that respond to the particular radiation risks associated with the Proposal. The RMP and RWMP require annual reporting of performance through the annual environmental radiation report. The RMP and RWMP are reviewed by Radiological Council every two years, or as the mining or processing activities change. The following compliance monitoring and review processes are available under the *Radiation Safety Act 1975*: • Site Inspections to independently determine compliance – pursuant to comprehensive enforcement powers under the *Radiation Safety Act 1975* • Sampling Programs to independently determine compliance – pursuant to comprehensive enforcement powers the *Radiation Safety Act 1975* • Desktop Assessments (satellite imagery) to independently determine compliance – pursuant to comprehensive enforcement powers under the *Radiation Safety Act 1975* • Review of Management Plans – pursuant to amendment powers under the *Radiation Safety Act 1975* • Review of Risk Assessment – pursuant to amendment powers under the Radiation Safety Act 1975
5. Confirmation from DMAs regarding consultation and the ability to regulate potential impact	Iluka has engaged extensively with all relevant DMAs, including the Department of Health Radiation Heath Unit acting as the secretariat for the Radiological Council, as detailed in Section 3 of the referral. There have been no objections raised during consultation regarding the implementation of the Proposal utilising regulatory mechanisms that are available to the DMAs, in lieu of a Part IV assessment. This document

Table 3(A) – Radiological Council – *Radiation Safety Act 1975* – Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP)	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	and the ERER Section 38 Referral Supporting Document will be provided to the relevant DMAs for confirmation of their ability to regulate the potential impacts.

Table 3(B) – Radiological Council – *Radiation Safety Act 1975* – Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP)	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
1. The ability of the DMA to consider the impact of the proposal	
- Are there any restrictions on the DMA's consideration of a proposal's activities?	Yes, the *Radiation Safety Act 1975* specifically considers radiation matters associated within impact to human health and the environment. See 1(a) in Table 3(A).
- Is the decision-making process constrained to particular geographical locations?	No
- Does the decision-making process only consider a particular type of impact?	Yes, the *Radiation Safety Act 1975* specifically considers radiation matters associated within impact to human health and the environment. See 3 in Table 3(A).
2. The process that the DMA uses to assess the potential impacts of the activity on the environment	
- Is the assessment on a case by case, or activity category, basis?	Case by case basis
- What opportunity does the public have to comment in/about the decision-making process?	See 1(b) in Table 3(A).
3. The relevant considerations which the DMA can take into account in decision making	
- Can and does the DMA take the EPA's factor objectives (or related objectives and principles) into account in decision making?	Yes, see 3 in Table 3(A).
- What elements of the environment are relevant to the decision-making?	The relevant environmental elements to the decision-making are associated with radiation matters impacting human health and the environment.
- Are there any potential environmental impacts outside the scope of the DMA's decision making?	Controls in respect of non-radioactive material.
4. The conditions that may be applied as a result of the decision-making process	
- Are there standard conditions relating to the environment that are imposed in all cases?	Yes, see 1(a) and 4 in Table 3(A).
- What special conditions relating to the environment can the DMA authority impose? In what circumstances? Does the DMA have sufficiently broad powers to impose conditions, including those provided for in section 45A of the EP Act?	See 1(a) and 4 in Table 3(A).
- What compliance monitoring of environmental conditions is carried out?	See 4 in Table 3(A).

Table 3(B) – Radiological Council – *Radiation Safety Act 1975* – Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP)	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
- What review of whether the environmental conditions achieve environmental outcomes is carried out?	See 4 in Table 3(A).

Table 4(A) – Department of Mines, Industry Resources and Safety (DMIRS)– *Mines Safety and Inspection Act 1994* – RMP and RWMP	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**

1 (a) DMA statutory decision-making processes that can mitigate all identified potential impacts of the proposal on the environment and how the EPAs factor objectives will be met	Outside of the EP Act, a number of regulatory regimes administered by various DMAs are available to manage the identified potential impacts of the Proposal and meet the objectives of the EPA's environmental factors. This includes the *Mines Safety and Inspection Act 1994 and Mines Safety and Inspection Regulations 1995* (**MSIR**). The Act and MSIR regulates the mining, processing, storage and disposal of naturally occurring radioactive materials through approval of a RMP and RWMP; the requirement to provide reports of radiation dose assessments to workers and critical groups of members of the public; appointment of a radiation safety officer; and auditing that these systems are effectively implemented. These will supplement the comprehensive regulation of the Proposal under the Part V works approval and licence, and NVCP regimes specifically in relation to radiation.
	
	The following impacts can be considered by DMIRS under the *Mines Safety and Inspection Act 1994*.
	Terrestrial Environmental Quality
	EPA Objective: to maintain the quality of land and soils so that environmental values are protected
	Potential Impacts:
	• Contamination of soils through spills of feed material, products or reagents.
	• Contamination of soils by process wastes as a result of incorrect disposal, failure of In-Ground TSFs, spill or leakage from In-Ground TSF pipelines or loss of containment.
	Inland Waters
	EPA Objective: to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected
	Potential Impacts:
	• Impact to surface and groundwater quality from:
	  ○ Spills of feed material or product within the refinery area.
	  ○ Leaks/spills of process reagents and hydrocarbons.
	  ○ Leaks/spills from water treatment systems.
	  ○ Seepage from the In-Ground TSFs.
	  ○ Leaks/spills from tailings and return water transfer pipelines.
	Human Health
	EPA Objective: To protect human health from significant harm
	Potential Impacts:
	• Inhalation of radon gas.
	• Inhalation of radionuclides in dust.
	• Ingestion of groundwater (as drinking water).
	• Direct gamma exposure from contaminated light vehicles.
	• Ingestion of animals or plants exposed to radiation.
	• Direct gamma radiation.
	Flora and Vegetation
	EPA Objective: To protect flora and vegetation so that biological diversity and ecological integrity are maintained

Table 4(A) – Department of Mines, Industry Resources and Safety (DMIRS)– *Mines Safety and Inspection Act 1994* – RMP and RWMP	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	Potential Impacts: • Adverse impacts on vegetation as a result of radiation emissions from solid waste disposal. • Loss or degradation of vegetation condition due to dust and gaseous emissions • Loss or degradation of vegetation condition due to hazardous materials spillage **Terrestrial Fauna** **EPA Objective:** To protect terrestrial fauna so that biological diversity and ecological integrity are maintained Potential Impacts: • Adverse impacts on fauna as a result of radiation emissions from solid waste disposal. **Air Quality** **EPA Objective:** To maintain air quality and minimise emissions so that environmental values are protected Potential Impacts: • Adverse impacts on human health and amenity at sensitive receptors due to particulate emissions. • Adverse impacts on human health at sensitive receptors due to gaseous emissions. • Adverse impact on regional air quality due to atmospheric pollution. Specifically, a RMP (inclusive of a RWMP) is a requirement under Division 2 Part 16.7 of the MSIR. Once approved by the State Mining Engineer, the RMP will have enforceable requirements for the management of radiation impacts on the environment, including surface and groundwater management, containment of waste, fauna, and human health. Additionally the RWMP has specific requirements for the decommissioning, rehabilitation and closure. Note that Division 2 Part 16.8 (1) of the MSIR requires each person at a mine to ensure that the RMP for the site is complied with. This DMA process, when considered with the other DMA processes, meets the above EPA objectives. Noting that the EPA objective for Human Health addresses the possible impacts to human health arising from the emission of radiation, the objective for this factor is entirely met by this DMA process.
1 (b) Please ensure details on the public consultation and appeals process are provided, or if this is not applicable, provide information regarding any public consultation that has been undertaken to date.	The Part 16 of the MSIR applies to certain activities that involve radiation. The requirements of RMPs and RWMPs are tailored to the specific circumstances of the regulated activities. While the regime does not include mandatory public comment or appeal processes, Iluka has undertaken extensive community and public engagement across both the Eneabba and wider Geraldton communities for the Proposal. The following groups have been engaged with: • Eneabba Progress Association. • Eneabba Parents and Citizens Association Inc. • Eneabba residents letterbox drop with Phase 2 Project newsletter. • Article in the Carnamah Mat & Eneabba News – a local weekly newsletter. • A community sentiment scan to gauge community feedback on the Phase 2 Project. • Article published in the MidWest Times newspaper.

Table 4(A) – Department of Mines, Industry Resources and Safety (DMIRS)– *Mines Safety and Inspection Act 1994* – RMP and RWMP	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	• Meetings in Geraldton with Yamatji Southern Regional Corporation in May and July 2021, plus ongoing engagement via remote modes. • Four community listening posts undertaken across Geraldton in September and October 2020 (Geraldton Library, QEII Community Centre, and at the Rocks Laneway). • Project presentation to Geraldton local businesses at the MWCII monthly 'Business After Hours' networking event held in September 2020. • Eneabba community sentiment interviews in August 2021. • Proposal presentation to Eneabba residents in August 2021. • Community forum providing an open house opportunity for the Proposal team to meet members of the Eneabba community and present the Proposal. Public consultation engagement opportunities will continue with engagement activities including (inter alia): • Regular updates in local newspapers and newsletters. • Maintaining Iluka's 'Eneabba Engage' website, email addresses and community information line. • Engagement with Yamatji Southern Regional Corporation specifically on the Proposal integrated into broader ongoing engagement on relationship development. • Community forums and other engagement focused on specific themes of strong interest including environmental management, radiation safety, socio-economic development. This engagement included the potential for and management of radiation associated with the Proposal. The public will have a further opportunity for comment in this regard when the Referral Document is published by the EPA.
2. The standard that other DMAs will regulate to, and what the environmental outcomes will be	DMIRS implements the Commonwealth Code of Practice (Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Code of Practice and Safety Guide for Radiation Protection and radioactive waste management in mining and mineral processing (2005) (RPS9) and the following in administering Part 16 of the MSIR (Division 2 - Mining and processing of radioactive material): • Managing naturally occurring radioactive material (NORM) in mining and mineral processing. • DMIRS - NORM-1 Applying the system of radiation protection to mining operations • DMIRS - NORM-2.1 Preparation of a radiation management plan – exploration • DMIRS - NORM-2.2 Preparation of a radiation management plan – mining and processing • DMIRS - NORM-3.1 Monitoring NORM – pre-operational monitoring requirements • DMIRS - NORM-3.2 Monitoring NORM – operational monitoring requirements • DMIRS - NORM-3.3 Monitoring NORM – air monitoring strategies • DMIRS - NORM-3.4 Monitoring NORM – airborne radioactivity sampling • DMIRS - NORM-3.5 Monitoring NORM – measurement of particle size • DMIRS - NORM-4.1 Controlling NORM – dust control strategies • DMIRS - NORM-4.2 Controlling NORM – management of radioactive waste • DMIRS - NORM-4.3 Controlling NORM – transport • DMIRS - NORM-V Dose assessment • DMIRS - NORM-6 Reporting requirements

Table 4(A) – Department of Mines, Industry Resources and Safety (DMIRS)– *Mines Safety and Inspection Act 1994* – RMP and RWMP	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	• DMIRS - NORM-7 Boswell – assessment and reporting database In accordance with section 3 , the objects of the *Mines Safety and Inspection Act 1994* include reducing hazards relating to mines, expressly including hazardous substances at mines, by eliminating those risks, or imposing effective controls in order to minimize them. The RMP and RWMP (Iluka, 2021e) include enforceable requirements for the management of radiation impacts on the environment, including fauna, human health, surface and groundwater management and containment of waste. The EPA's objectives for environmental factors will be met through implementation of the RMP and RWMP. The outcome of this DMA process is that human health will be protected from significant harm associated with radiation impacts.
3. A gap analysis as to whether all potential significant impacts are identified by other DMA processes and whether there are any restrictions within those processes being relied on to address those impacts	In conjunction with the *Radiation Safety Act 1975*, the *Mines Safety and Inspection Act 1994* and MSIR regime considers impacts and risks to people and the environment associated with radiation in a mining context. It is a comprehensive and rigorous process, which requires the implementation of both a RMP and RWMP. The potential impacts that are considered by the *Mines Safety and Inspection Act 1994*, are detailed above. Those impacts of the Proposal outside the scope of *Mines Safety and Inspection Act 1994* are covered by other DMAs as detailed in Table 7.
4. The expected compliance monitoring and review process under the relevant DMA processes	The *Mines Safety and Inspection Act 1994* and MSIR regime require the implementation of an approved RMP and RWMP. These are site specific plans that respond to the particular radiation risks associated with the Proposal. The RMP and RWMP require annual reporting of performance through the annual environmental radiation report. The RMP and RWMP are reviewed by DMIRS every two years, or as the mining or processing activities change. The following compliance monitoring and review processes are available under the *Mines Safety and Inspection Act 1994 and MSIR*: • Site Inspections to independently determine compliance – pursuant to comprehensive enforcement powers under the *Mines Safety and Inspection Act 1994 and MSIR* • Sampling Programs to independently determine compliance – pursuant to comprehensive enforcement powers under the *Mines Safety and Inspection Act 1994 and MSIR* • Desktop Assessments (satellite imagery) to independently determine compliance – pursuant to comprehensive enforcement powers under the *Mines Safety and Inspection Act 1994 and MSIR* • Review of Management Plans – pursuant to amendment powers under the *Mines Safety and Inspection Act 1994 and MSIR* • Review of Risk Assessment – pursuant to amendment powers under the Mines Safety and Inspection Act 1994 and MSIR
5. Confirmation from DMAs regarding consultation and the ability to regulate potential impact	Iluka has engaged extensively with all relevant DMAs, including DMIRS, as detailed in Section 3 of the referral document. There have been no objections raised during consultation regarding the implementation of the Proposal utilising regulatory mechanisms that are available to the DMAs, in lieu of a Part IV assessment. This document and the ERER Section 38 Referral Supporting Document will be provided to the relevant DMAs for confirmation of their ability to regulate the potential impacts.

Table 4(B) – Department of Mines, Industry Resources and Safety (DMIRS)– *Mines Safety and Inspection Act 1994* – RMP and RWMP	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
1. The ability of the DMA to consider the impact of the proposal	
- Are there any restrictions on the DMA's consideration of a proposal's activities?	Yes, the *Mines Safety and Inspection Act 1994* specifically considers radiation matters associated within impact to human health and the environment within a mine site. See 1(a) in Table 4(A).
- Is the decision-making process constrained to particular geographical locations?	No
- Does the decision-making process only consider a particular type of impact?	Yes, the *Mines Safety and Inspection Act 1994* specifically considers radiation matters associated within impact to human health and the environment within a mine site. See 3 in Table 4(A).
2. The process that the DMA uses to assess the potential impacts of the activity on the environment	
- Is the assessment on a case by case, or activity category, basis?	Case by case basis
- What opportunity does the public have to comment in/about the decision-making process?	See 1(b) in Table 4(A).
3. The relevant considerations which the DMA can take into account in decision making	
- Can and does the DMA take the EPA's factor objectives (or related objectives and principles) into account in decision making?	Yes, see 3 in Table 4(A).
- What elements of the environment are relevant to the decision-making?	The relevant environmental elements to the decision-making are associated with radiation matters impacting human health and the environment.
- Are there any potential environmental impacts outside the scope of the DMA's decision making?	Controls in respect of non-radioactive material.
4. The conditions that may be applied as a result of the decision-making process	
- Are there standard conditions relating to the environment that are imposed in all cases?	Yes, see 1(a) and 4 in Table 4(A).
- What special conditions relating to the environment can the DMA authority impose? In what circumstances? Does the DMA have sufficiently broad powers to impose conditions, including those provided for in section 45A of the EP Act?	See 1(a) and 4 in Table 4(A).
- What compliance monitoring of environmental conditions is carried out?	See 4 in Table 4(A).
- What review of whether the environmental conditions achieve environmental outcomes is carried out?	See 4 in Table 4(A).

Table 5(A) – Department of Jobs, Tourism, Science and Innovation (DJTSI) – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**

1 (a) DMA statutory decision-making processes that can mitigate all identified potential impacts of the proposal on the environment and how the EPAs factor objectives will be met	Outside of the EP Act, a number of regulatory regimes administered by various DMAs are available to manage the identified potential impacts of the Proposal and meet the objectives of the EPA's environmental factors. This includes the *Mineral Sands (Eneabba) Agreement Act 1975* (State Agreement). The Act ratifies the agreement between the State of Western Australia and Iluka Midwest Limited with respect to the mining and concentrating of mineral sands and the production of heavy minerals, amongst other things. This will supplement the comprehensive regulation of the Proposal under the Part V works approval and licence, and NVCP regimes from a whole of Proposal perspective.
	
	A State Agreement Act proposal will be submitted for approval, under Section 7 of the State Agreement. The proposal addresses "measures to be taken for the protection and management of the environment including rehabilitation and/or restoration of the mined areas, the prevention of the discharge of tailings, slimes, pollutants or overburden into the surrounding country, water courses, lakes or underground water supplies" Section 6B (3)(i), which must be implemented once approved by the Minister for State Development
	
	The following impacts can be considered by the Minister under the State Agreement.
	Terrestrial Environmental Quality
	EPA Objective: to maintain the quality of land and soils so that environmental values are protected
	Potential Impacts:
	• Contamination of soils through spills of feed material, products or reagents.
	• Contamination of soils by process wastes as a result of incorrect disposal, failure of In-Ground TSFs, spill or leakage from In-Ground TSF pipelines or loss of containment.
	Inland Waters
	EPA Objective: to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected
	Potential Impacts:
	• Alteration of the surface water regime due to diversion of flows and flooding.
	• Alteration of the groundwater regime resulting in localised changes to groundwater levels as a result of seepage, i.e. mounding.
	• Impact to surface and groundwater quality from:
	  ○ Spills of feed material or product within the refinery area.
	  ○ Leaks/spills of process reagents and hydrocarbons.
	  ○ Leaks/spills from water treatment systems.
	  ○ Seepage from the In-Ground TSFs.
	  ○ Leaks/spills from tailings and return water transfer pipelines.
	Human Health
	EPA Objective: To protect human health from significant harm
	Potential Impacts:
	• Ingestion of groundwater (as drinking water).
	Flora and Vegetation
	EPA Objective: to protect flora and vegetation so that biological diversity and ecological integrity are maintained

Table 5(A) – Department of Jobs, Tourism, Science and Innovation (DJTSI) – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	Potential Impacts: • Fragmentation and reduction of vegetation due to land clearing. • Loss of significant flora. • Loss or degradation of vegetation condition due to dust and gaseous emissions. • Loss or degradation of vegetation condition due to altered fire regimes. • Loss or degradation of vegetation condition due to hazardous materials spillage. • Loss or degradation of vegetation condition due to increased abundance of weeds. • Loss or degradation of condition of surface and groundwater dependent ecosystems. • Loss or degradation of vegetation condition due to spread of weeds or Dieback. **Air Quality** **EPA objective:** to maintain air quality and minimise emissions so that environmental values are protected Potential Impacts: • Adverse impacts on human health and amenity at sensitive receptors due to particulate emissions. • Adverse impacts on human health at sensitive receptors due to gaseous emissions. • Adverse impact on regional air quality due to atmospheric pollution. **Terrestrial Fauna** **EPA Objective:** To protect terrestrial fauna so that biological diversity and ecological integrity are maintained • Loss of fauna habitat as a result of land clearing. • Loss of foraging habitat for Carnaby's Cockatoo. • Loss and changed condition of drainage habitat as a result of changed surface water conditions as a result of the Proposal. • Indirect impacts on adjacent fauna habitats as a result of increased particulate emissions. • Indirect impacts on individual fauna as a result of noise emissions. The Mineral Sands Agreement Rehabilitation Coordination Committee (MSARCC) is comprised of the DJTSI, DWER, Department of Biodiversity, Conservation and Attractions, Department of Agriculture and DMIRS. This Committee was formed in 1977 for the purposes of providing advice to the Minister (via DJSTI) on environmental and rehabilitation matters. This DMA process, when considered with the other DMA processes, meets the above EPA objectives. Rehabilitation and restoration of the Proposal area will be managed through the proposal approved under the State Agreement, which includes measures to be taken for the protection and management of the environment including rehabilitation and/or restoration of the mined areas, the prevention of the discharge of tailings, slimes, pollutants or overburden into the surrounding country, water courses, lakes or underground water supplies" Section 6B (3)(i). The information required by the State Agreement proposal which outlines, amongst other things: • Rehabilitation standards. • Native vegetation completion criteria.

Table 5(A) – Department of Jobs, Tourism, Science and Innovation (DJTSI) – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	• TSF design. • Final surface water drainage design.
1 (b) Please ensure details on the public consultation and appeals process are provided, or if this is not applicable, provide information regarding any public consultation that has been undertaken to date.	The State Agreement proposal is tailored to the specific circumstances of the Proposal. While the State Agreement regime does not include mandatory public comment or appeal processes, DJTSI practice requires proponents to detail in a proposal the stakeholder engagement that has been carried out on the project. Iluka has undertaken extensive community and public engagement across both the Eneabba and wider Geraldton communities for the Proposal. The following groups have been engaged with: • Eneabba Progress Association. • Eneabba Parents and Citizens Association Inc. • Eneabba residents letterbox drop with Phase 2 Project newsletter. • Article in the Carnamah Mat & Eneabba News – a local weekly newsletter. • A community sentiment scan to gauge community feedback on the Phase 2 Project. • Article published in the MidWest Times newspaper. • Meetings in Geraldton with Yamatji Southern Regional Corporation in May and July 2021, plus ongoing engagement via remote modes. • Four community listening posts undertaken across Geraldton in September and October 2020 (Geraldton Library, QEII Community Centre, and at the Rocks Laneway). • Project presentation to Geraldton local businesses at the MWCII monthly 'Business After Hours' networking event held in September 2020. • Eneabba community sentiment interviews in August 2021. • Proposal presentation to Eneabba residents in August 2021. • Community forum providing an open house opportunity for the Proposal team to meet members of the Eneabba community and present the Proposal. Public consultation engagement opportunities will continue with engagement activities including (inter alia): • Regular updates in local newspapers and newsletters. • Maintaining Iluka's 'Eneabba Engage' website, email addresses and community information line. • Engagement with Yamatji Southern Regional Corporation specifically on the Proposal integrated into broader ongoing engagement on relationship development. Community forums and other engagement focused on specific themes of strong interest including environmental management, radiation safety, socio-economic development. This engagement included all Proposal components and phases. The public will have a further opportunity for comment in this regard when the Referral Document is published by the EPA. As the State Agreement is legislation that specifically applies to Iluka's Eneabba activities, there are no relevant DJTSI policies or procedures to refer to. All decision making requirements are contained within the Act.

Table 5(A) – Department of Jobs, Tourism, Science and Innovation (DJTSI) – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
2. The standard that other DMAs will regulate to, and what the environmental outcomes will be	The State Agreement is intended to facilitate the mining and processing of heavy minerals by Iluka to the maximum degree possible. However, it is express that the State Agreement does not derogate from environmental protection requirements. Further, the proposal regime embeds protection and management of the environment in implementation of the Proposal, including rehabilitation and restoration (closure). The EPA's objectives will be met through implementation of the Proposal in accordance with the State Agreement proposal.
3. A gap analysis as to whether all potential significant impacts are identified by other DMA processes and whether there are any restrictions within those processes being relied on to address those impacts	The State Agreement proposal regime considers all impacts and risks to the environment, as well as broader matters set out in the Act. It is a comprehensive and rigorous process that includes all phases of the Proposal, including closure. The potential impacts that are considered by the State Agreement, are detailed above. Those impacts of the Proposal outside the scope of the State Agreement are covered by other DMAs as detailed in Table 7.
4. The expected compliance monitoring and review process under the relevant DMA processes	DTJSI is an active regulator and conducts regular State Agreement proposal assessments . Eneabba is inspected on an annual basis by the MSARCC to review activities occurring on the site and provide advice. Additionally annual environmental reports are provided to MSARCC, as required under Clause 8(2) of the State Agreement Act, for review and advice provided.
5. Confirmation from DMAs regarding consultation and the ability to regulate potential impact	Iluka has engaged extensively with all relevant DMAs, including DTJSI and the Minister for State Development, as detailed in Section 3 of the referral document. There have been no objections raised during consultation regarding the implementation of the Proposal utilising regulatory mechanisms that are available to the DMAs, in lieu of a Part IV assessment. This document and the ERER Section 38 Referral Supporting Document will be provided to the relevant DMAs for confirmation of their ability to regulate the potential impacts.

Table 5(B) – Department of Jobs, Tourism, Science and Innovation (DJTSI) – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
1. The ability of the DMA to consider the impact of the proposal	
- Are there any restrictions on the DMA's consideration of a proposal's activities?	No, the *Mineral Sands (Eneabba) Agreement Act 1975* specifically considers those activities associated with the State Agreement Proposal. See 1(a) in Table 5(A).
- Is the decision-making process constrained to particular geographical locations?	No
- Does the decision-making process only consider a particular type of impact?	No, the *Mineral Sands (Eneabba) Agreement Act 1975* specifically considers those activities associated with the State Agreement Proposal and impacts to the environment. See 3 in Table 5(A).
2. The process that the DMA uses to assess the potential impacts of the activity on the environment	
- Is the assessment on a case by case, or activity category, basis?	Case by case basis
- What opportunity does the public have to comment in/about the decision-making process?	See 1(b) in Table 5(A).

Table 5(B) – Department of Jobs, Tourism, Science and Innovation (DJTSI) – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
3. The relevant considerations which the DMA can take into account in decision making	
- Can and does the DMA take the EPA's factor objectives (or related objectives and principles) into account in decision making?	Yes, see 3 in Table 5(A).
- What elements of the environment are relevant to the decision-making?	The relevant environmental elements to the decision-making are associated with impact to the environment as per Section 6B (3)(i) of the State Agreement Act.
- Are there any potential environmental impacts outside the scope of the DMA's decision making?	The scope of the potential environmental impacts is defined *by* Section 6B (3)(i) of the State Agreement Act.
4. The conditions that may be applied as a result of the decision-making process	
- Are there standard conditions relating to the environment that are imposed in all cases?	Yes, see 1(a) and 4 in Table 5(A).
- What special conditions relating to the environment can the DMA authority impose? In what circumstances? Does the DMA have sufficiently broad powers to impose conditions, including those provided for in section 45A of the EP Act?	See 1(a) and 4 in Table 5(A).
- What compliance monitoring of environmental conditions is carried out?	See 4 in Table 5(A).
- What review of whether the environmental conditions achieve environmental outcomes is carried out?	See 4 in Table 5(A).

Table 6(A) – DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**

1 (a) DMA statutory decision-making processes that can mitigate all identified potential impacts of the proposal on the environment and how the EPAs factor objectives will be met	Outside of the EP Act, a number of regulatory regimes administered by various DMAs are available to manage the identified potential impacts of the Proposal and meet the objectives of the EPA's environmental factors. This includes the Dangerous Goods Dangerous Goods Site Licence under the *Dangerous Goods Safety Act 2004* and *Dangerous Good Safety (Storage and Handling of Non-explosives) Regulations 2007*. These will supplement the comprehensive regulation of the Proposal under the Part V works approval and licence, and NVCP regimes specifically in relation to dangerous goods.
	
	The following impacts can be considered by DMIRS under the *Dangerous Goods Safety Act 2004*.
	Flora and Vegetation
	EPA Objective: to protect flora and vegetation so that biological diversity and ecological integrity are maintained
	Potential Impacts:
	• Loss or degradation of vegetation condition due to hazardous materials spillage
	Terrestrial Environmental Quality
	EPA Objective: to maintain the quality of land and soils so that environmental values are protected
	Potential Impacts:
	• Contamination of soils through spills of feed material, products or reagents.
	• Contamination of soils by process wastes as a result of incorrect disposal, failure of In-Ground TSFs, spill or leakage from In-Ground TSF pipelines or loss of containment.
	Inland Waters
	EPA Objective: to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected
	Potential Impacts:
	• Impact to surface and groundwater quality from:
	  ○ Spills of feed material or product within the refinery area.
	  ○ Leaks/spills of process reagents and hydrocarbons.
	  ○ Leaks/spills from water treatment systems.
	  ○ Seepage from the In-Ground TSFs.
	  ○ Leaks/spills from tailings and return water transfer pipelines.
	
	A Dangerous Goods site must store hazardous material within a compound or other system that enables the containment and recovery of any spilled or leaked dangerous goods. The hazardous material required for the Proposal will require a Dangerous Goods Site Licence authorised by DMIRS and therefore will have to include containment measures to restrict spillages/leaks that may impact flora and vegetation or other aspects of the environment.
	
	This DMA process, when considered with the other DMA processes, meets the above EPA objectives.

Table 6(A) – DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
1 (b) Please ensure details on the public consultation and appeals process are provided, or if this is not applicable, provide information regarding any public consultation that has been undertaken to date.	While the *Dangerous Goods Safety Act 2004* does not include mandatory public comment or appeal processes, DMIRS requires proponents to detail in a licence applications the stakeholder engagement that has been carried out on the project. Iluka has undertaken extensive community and public engagement across both the Eneabba and wider Geraldton communities for the Proposal. The following groups have been engaged with: • Eneabba Progress Association. • Eneabba Parents and Citizens Association Inc. • Eneabba residents letterbox drop with Phase 2 Project newsletter. • Article in the Carnamah Mat & Eneabba News – a local weekly newsletter. • A community sentiment scan to gauge community feedback on the Phase 2 Project. • Article published in the MidWest Times newspaper. • Meetings in Geraldton with Yamatji Southern Regional Corporation in May and July 2021, plus ongoing engagement via remote modes. • Four community listening posts undertaken across Geraldton in September and October 2020 (Geraldton Library, QEII Community Centre, and at the Rocks Laneway). • Project presentation to Geraldton local businesses at the MWCII monthly 'Business After Hours' networking event held in September 2020. • Eneabba community sentiment interviews in August 2021. • Proposal presentation to Eneabba residents in August 2021. • Community forum providing an open house opportunity for the Proposal team to meet members of the Eneabba community and present the Proposal. Public consultation engagement opportunities will continue with engagement activities including (inter alia): • Regular updates in local newspapers and newsletters. • Maintaining Iluka's 'Eneabba Engage' website, email addresses and community information line. • Engagement with Yamatji Southern Regional Corporation specifically on the Proposal integrated into broader ongoing engagement on relationship development. Community forums and other engagement focused on specific themes of strong interest including environmental management, radiation safety, socio-economic development. This engagement included all Proposal components and phases, including closure. The public will have a further opportunity for comment in this regard when the Referral Document is published by the EPA.
2. The standard that other DMAs will regulate to, and what the environmental outcomes will be	The dangerous goods facilities for the Proposal will be designed and constructed in compliance with legislative requirements under the *Dangerous Goods Safety Act 2004*, all facilities will remain in compliance during their operational life and be operated in a safe manner and people, property and the environment are protected from dangerous goods incidents. DMIRS has numerous publicly available policies and procedures in respect to the *Dangerous Goods Safety Act 2004* which outline the standard that DMIRS will regulate to. These are available at

Table 6(A) – DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility	
EPA – Section 38F(1) and (2) – Notice Requiring Further Information	
EPA Information Request	**Iluka's Response**
	https://www.dmp.wa.gov.au/Dangerous-Goods/Dangerous-goods-safety-6506.aspx. The EPA's objectives will be met through implementation of the Proposal in accordance with the requirements of the *Dangerous Goods Safety Act 2004* and Dangerous Goods Site Licence. The environmental outcome of the *Dangerous Goods Safety Act 2004* is ensure the safe storage, handling and transport of dangerous goods preventing impacts to both people and the environment.
3. A gap analysis as to whether all potential significant impacts are identified by other DMA processes and whether there are any restrictions within those processes being relied on to address those impacts	The *Dangerous Goods Safety Act 2004* regime considers impacts and risks to both people and the environment associated with dangerous goods. It is a comprehensive and rigorous regime, which contains both positive duties and the requirement for a Dangerous Goods Site Licence for the Proposal. The potential impacts that are considered by the *Dangerous Good Safety Act 2004*, are detailed above. Those impacts of the Proposal outside the scope of *Dangerous Good Safety Act 2004* are covered by other DMAs as detailed in Table 7.
4. The expected compliance monitoring and review process under the relevant DMA processes	DMIRS has very broad condition setting powers, and will apply conditions on a Dangerous Goods Site Licence proportionate to the risk a premises may present. DMIRS actively monitors compliance of mine sites and the dangerous goods regimes. The following are some of the compliance monitoring and review processes utilised by or available to DMIRS under the *Dangerous Good Safety Act 2004*: ○ Site Inspections to independently determine compliance – pursuant to comprehensive enforcement powers under the *Dangerous Goods Safety Act 2004* ○ Desktop Assessments (satellite imagery) to independently determine compliance – pursuant to comprehensive enforcement powers under the *Dangerous Goods Safety Act 2004* ○ Instrument Reviews and Audits – pursuant to amendment powers under the *Radiation Safety Act 1975* ○ Risk Assessment Review – pursuant to amendment powers under the *Radiation Safety Act 1975* ○ Review of Emergency Plans – pursuant to amendment powers under the *Radiation Safety Act 1975* ○ Manifest and Site Plan Review – pursuant to amendment powers under the *Radiation Safety Act 1975*
5. Confirmation from DMAs regarding consultation and the ability to regulate potential impact	Iluka has engaged extensively with all relevant DMAs, including DMIRS, as detailed in Section 3 of the referral document. There have been no objections raised during consultation regarding the implementation of the Proposal utilising regulatory mechanisms that are available to the DMAs, in lieu of a Part IV assessment. This document and the ERER Section 38 Referral Supporting Document will be provided to the relevant DMAs for confirmation of their ability to regulate the potential impacts.

Table 6(B) – DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
1. The ability of the DMA to consider the impact of the proposal	

Table 6(B) – DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility	
EPA - Interim Guidance - Taking decision making processes into account in EIA	
EPA Guidance	**Iluka's Response**
- Are there any restrictions on the DMA's consideration of a proposal's activities?	Yes, the *Dangerous Good Safety Act 2004* specifically considers those activities associated with the management of Dangerous Goods. See 1(a) in Table 6(A).
- Is the decision-making process constrained to particular geographical locations?	No
- Does the decision-making process only consider a particular type of impact?	Yes, the *Dangerous Good Safety Act 2004* specifically considers those activities associated with the management of Dangerous Goods and impacts to the environment. See 3 in Table 6(A).
2. The process that the DMA uses to assess the potential impacts of the activity on the environment	
- Is the assessment on a case by case, or activity category, basis?	Case by case basis
- What opportunity does the public have to comment in/about the decision-making process?	See 1(b) in Table 6(A).
3. The relevant considerations which the DMA can take into account in decision making	
- Can and does the DMA take the EPA's factor objectives (or related objectives and principles) into account in decision making?	Yes, see 3 in Table 6(A).
- What elements of the environment are relevant to the decision-making?	The relevant environmental elements to the decision-making are associated with dangerous goods impacts to the environment.
- Are there any potential environmental impacts outside the scope of the DMA's decision making?	Impacts that are not related to the handling, storage and transport of dangerous goods are outside the scope of the DMA's decision making.
4. The conditions that may be applied as a result of the decision-making process	
- Are there standard conditions relating to the environment that are imposed in all cases?	Yes, see 1(a) and 4 a in Table 6(A).
- What special conditions relating to the environment can the DMA authority impose? In what circumstances? Does the DMA have sufficiently broad powers to impose conditions, including those provided for in section 45A of the EP Act?	See 1(a) and 4 in Table 6(A).
- What compliance monitoring of environmental conditions is carried out?	See 4 in Table 6(A).
- What review of whether the environmental conditions achieve environmental outcomes is carried out?	See 4 in Table 6(A).

Table 7 – Gap Analysis of Potential Environmental Impacts and Decision Making Authorities (DMAs)						
EPA Environmental Factors and Potential Impacts of the Proposal	**DWER - Part V of the EP Act – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences**	**DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation**	**Radiological Council – *Radiation Safety Act 1975* – RMP and RWMP**	**DMIRS– *Mines Safety and Inspection Act 1994* – RMP and RWMP**	**DJTSI – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal**	**DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility**
Flora and Vegetation						
Fragmentation and reduction of vegetation due to land clearing.		✓			✓	
Loss of significant flora.		✓			✓	
Loss or degradation of vegetation condition due to dust and gaseous emissions.	✓		✓	✓	✓	
Loss or degradation of vegetation condition due to altered fire regimes.		✓			✓	
Loss or degradation of vegetation condition due to hazardous materials spillage.	✓		✓	✓	✓	✓
Loss or degradation of vegetation condition due to increased abundance of weeds.		✓			✓	
Loss or degradation of condition of surface and groundwater dependent ecosystems.		✓			✓	
Loss or degradation of vegetation condition due to spread of weeds or Dieback.		✓			✓	
Adverse impacts on vegetation as a result of radiation emissions from solid waste disposal.			✓	✓	✓	
Terrestrial Fauna						
Loss of fauna habitat as a result of land clearing.		✓			✓	
Loss of foraging habitat for Carnaby's Cockatoo.		✓			✓	

Table 7 – Gap Analysis of Potential Environmental Impacts and Decision Making Authorities (DMAs)						
EPA Environmental Factors and Potential Impacts of the Proposal	**DWER - Part V of the EP Act – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences**	**DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation**	**Radiological Council – *Radiation Safety Act 1975* – RMP and RWMP**	**DMIRS– *Mines Safety and Inspection Act 1994* – RMP and RWMP**	**DJTSI – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal**	**DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility**
Loss and changed condition of drainage habitat as a result of changed surface water conditions as a result of the Proposal.		✓			✓	
Indirect impacts on adjacent fauna habitats as a result of increased particulate emissions.	✓				✓	
Indirect impacts on individual fauna as a result of noise emissions.	✓				✓	
Adverse impacts on fauna as a result of radiation emissions from solid waste disposal.			✓	✓		
Inland Waters						
Alteration of the surface water regime due to diversion of flows and flooding.	✓				✓	
Alteration of the groundwater regime resulting in localised changes to groundwater levels as a result of seepage, i.e. mounding.	✓				✓	

Table 7 – Gap Analysis of Potential Environmental Impacts and Decision Making Authorities (DMAs)						
EPA Environmental Factors and Potential Impacts of the Proposal	**DWER - Part V of the EP Act – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences**	**DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation**	**Radiological Council – *Radiation Safety Act 1975* – RMP and RWMP**	**DMIRS– *Mines Safety and Inspection Act 1994* – RMP and RWMP**	**DJTSI – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal**	**DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility**
Impact to surface and groundwater quality from: Spills of feed material or product within the refinery area. Leaks/spills of process reagents and hydrocarbons. Leaks/spills from water treatment systems. Seepage from the In-Ground TSFs. Leaks/spills from tailings and return water transfer pipelines.	✓		✓	✓	✓	✓
Terrestrial Environmental Quality						
Contamination of soils through spills of feed material, products or reagents.	✓		✓	✓	✓	✓
Contamination of soils by process wastes as a result of incorrect disposal, failure of In-Ground TSFs, spill or leakage from In-Ground TSF pipelines or loss of containment.	✓		✓	✓	✓	✓
Air Quality						
Adverse impacts on human health and amenity at sensitive receptors due to particulate emissions.	✓		✓	✓	✓	
Adverse impacts on human health at sensitive receptors due to gaseous emissions.	✓		✓	✓	✓	
Adverse impact on regional air quality due to atmospheric pollution.	✓		✓	✓	✓	

Table 7 – Gap Analysis of Potential Environmental Impacts and Decision Making Authorities (DMAs)						
EPA Environmental Factors and Potential Impacts of the Proposal	**DWER - Part V of the EP Act – Environmental Regulation – Division 3 – Prescribed Premises, Works Approvals and Licences**	**DWER – Part V of the EP Act – Environmental Regulation – Division 2 – Clearing of Native Vegetation**	**Radiological Council – *Radiation Safety Act 1975* – RMP and RWMP**	**DMIRS– *Mines Safety and Inspection Act 1994* – RMP and RWMP**	**DJTSI – *Mineral Sands (Eneabba) Agreement Act* 1975 – State Agreement Proposal**	**DMIRS – *Dangerous Goods Safety Act 2004* – Dangerous Goods Licence and Major Hazard Facility**
Human Health						
Inhalation of radon gas.			✓	✓		
Inhalation of radionuclides in dust.			✓	✓		
Ingestion of groundwater (as drinking water).	✓		✓	✓	✓	
Direct gamma exposure from contaminated light vehicles.			✓	✓		
Ingestion of animals or plants exposed to radiation.			✓	✓		
Direct gamma radiation.			✓	✓		

Table 1: General proposal content description

Proposal title	Eneabba Rare Earth Refinery
Proponent name	Iluka Midwest Limited
Short description	The Proposal is to construct and operate the Eneabba Rare Earth Refinery (ERER) at the existing Eneabba Mine Site, located approximately 300 km north of Perth (Figure 1). The Proposal will process rare earth concentrate and third party feedstock materials to produce approximately 17,500 tpa of rare earth oxides and carbonate. Products will be transported via road trains from Eneabba to the Port of Fremantle for containerised export. The Proposal includes the following activities: • Construction and operation of a rare earth refinery. This includes feed preparation (grinding mill), roasting and leaching, off-gas treatment, leaching, residue washing, purification, solvent extraction and product finishing. • Solid waste disposal and storage using purpose built engineered In-Ground Tailings Storage Facilities (TSFs); • Liquid waste management through the recovery, treatment and re-use of liquid waste streams; • Utilisation of existing borefield, water infrastructure and groundwater abstraction licences; • Use of supporting infrastructure and utilities including grid sourced power from the existing Eneabba mine site network, natural gas from the existing gas network pipeline connected, surface water management infrastructure and additional administration buildings and facilities; • Transport of rare earth products from Eneabba to the Port of Fremantle. Transport of rare earth products, third party concentrates and reagents to and from Eneabba will be in road trains using existing roads; • Reagent storage; and • Use of Iluka's existing Eneabba Banksia Camp within the Eneabba township for the workforce. The Proposal has a footprint of approximately 319.6 ha within a Development Envelope of 538 ha. The Proposal footprint consists entirely of cleared or rehabilitated land that has undergone disturbance for previous mining activities. The disturbance footprint incorporates the entire 319.6 ha of the Proposal, however, only up to 5.4 ha of clearing of native revegetation growing on historic topsoil stockpiles and rehabilitated shrubland and heathland will be required for the Proposal.

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Refinery elements including: • Rare earth concentrate stockpiles • Integrated refinery • In-Ground TSFs • Reverse osmosis plant • Topsoil stockpile	Figure 5 Figure 7	319.6 ha of disturbance including clearing of up to 5.4 ha of native vegetation regrowing on historical topsoil stockpiles and rehabilitated shrubland and heathland.
Infrastructure elements including: • Ancillary buildings and supporting infrastructure		
Operational elements		
Groundwater abstraction for refinery operation	Figure 5 Figure 7	Abstraction of 500,000 kLpa of water under existing groundwater licences (GWL104700 and GWL104709) allowing abstraction of up to 8,000,000 kLpa and 3,000,000 kLpa, respectively from the Arrowsmith Perth - Yarragadee North water resource.
Refinery operation		Processing of 65,000 tonnes of rare earth concentrate to produce approximately 17,500 tonnes per annum of rare earth oxides and carbonates.
In-Ground TSF Capacity		Deposition of 24 t/hr of tailings as slurry (24% solids by mass) to approximately 200,000 tpa.
Proposal elements with greenhouse gas emissions		
Peak annual average		
Scope 1	Plant and equipment: Less than 100,000 t CO_2-e	
Scope 2	Electricity use: 90,000 t CO_2-e	
Annual average life of refinery		
Scope 1	Plant and equipment: approximately 24,165 t CO_2-e per annum	

Scope 2	Electricity use: approximately 63, 515 t CO_2 -e per annum	
Commissioning		
Not applicable		
Rehabilitation		
At the completion of the proposal, infrastructure will be removed. Progressive rehabilitation would be undertaken on disturbed areas as they become available. Areas disturbed through implementation of this proposal will be designed to be safe and non-polluting and will be constructed so that their final shape, size, stability, and ability to support local native vegetation are comparable to natural landforms in the area.		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	25 years

** Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).*