



## Application for Works Approval Amendment

### Part V Division 3 of the *Environmental Protection Act 1986*

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<b>Works Approval Number</b>	W6769/2023/1
<b>Works Approval Holder</b>	Onslow Iron Pty Ltd
<b>ACN</b>	649 012 395
<b>File Number</b>	DER2022/000623
<b>Premises</b>	West Pilbara Iron Ore Project M08/480, M08/484, G08/88, L08/67, L08/68, L08/69 and L08/181 CANE WA 6710  As defined by the premises maps attached to the issued works approval
<b>Date of Report</b>	3 September 2024
<b>Decision</b>	Revised works approval granted

**Alana Kidd**

**MANAGER, GREEN ENERGY**

officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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## 1. Decision summary

Works Approval W6769/2023/1 is held by Onslow Iron Pty Ltd (Onslow Iron) for the West Pilbara Iron Ore Project (the Premises), located at Mining Tenements M08/480, M08/484, G08/88, L08/67, L08/68, L08/69 and L08/181 in Cane WA 6710.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Works Approval W6769/2023/1 has been granted.

The Revised Works approval issued as a result of this amendment consolidates and supersedes the existing Works Approval previously granted in relation to the Premises.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

### 2.2 Amendment summary

On 15 May 2024, the Works Approval Holder submitted an application to the department to amend Works Approval W6769/2023/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

This amendment is limited only to changes to Category 54 activities from the existing Works Approval. No changes to the aspects of the existing W6769/2023/1 relating to Category 5, 12, 52, 57, 64, 73 and 77 have been requested by the Works Approval Holder.

The following amendments are being sought:

- Increase Category 54 Sewage facility with an assessed production capacity from 220 m<sup>3</sup>/day to 223 m<sup>3</sup>/day of treated effluent and from 130 m<sup>3</sup>/day to 137 m<sup>3</sup>/day of reverse osmosis reject effluent (brine).
- Relocation of the Upper Cane effluent treatment plant (WWTP) and treated wastewater spray field 1.1 km north of the existing location.
- Seek approval to use RO reject (brine) from the Reverse Osmosis (RO) plant for contingency dust suppression within disturbed areas.
- Expand the daily treated effluent irrigated from the Upper Cane WWTP to the Upper Cane irrigation spray field from 2.5 m<sup>3</sup>/day to 5.25 m<sup>3</sup>/day.
- Build a new 20 m<sup>3</sup>/day RO plant in the Upper Cane Area.
- Irrigate 6.4 m<sup>3</sup>/day of reject reverse osmosis water to the Upper Cane irrigation spray field (therefore increasing the Upper Cane discharge limits from 2.5 m<sup>3</sup>/day to 11.65 m<sup>3</sup>/day).
- Increase the size of the Upper Cane irrigation spray field from 0.0365 ha to minimum 0.78 ha.

The Works Approval was issued on 25 May 2023, and the Works Approval Holder has requested changes to the works approval infrastructure at the Upper Cane non-process infrastructure area to cater for a larger workforce.

## Relocation of the Upper Cane WWTP and new RO plant

The Works Approval Holder is proposing an amendment to relocate the Upper Cane WWTP and Irrigation Spray field, addition of a Reverse Osmosis (RO) plant, and to increase the size of the Upper Cane Irrigation Spray Field, as per Figure 1: Location of Upper Cane WWTP and Irrigation Spray Field.

As per the original works approval W6769/2023/1, a 2.5 m<sup>3</sup>/day below-ground submerged aeration filter (SAF) system will be replaced by a 5.25 m<sup>3</sup>/day system. This proposed WWTP amendment will have the same type of treatment as already approved under W6769/2023/1 but with a larger capacity.

The plant will treat sewage and wastewater from the Upper Cane NPI area, including the workshop ablutions and the administration office, with no changes to the environmental commissioning plan approved in the application for W6769/2023/1. The irrigation spray field will be expanded to cover a minimum 0.78 hectares.

No modifications or alterations will be made to the originally specified procedures and operations. The process description and operational aspects of the Wastewater Treatment Plant (WWTP) expansion will remain the same as detailed in the approved works approval application W6769/2023/1.

The treated effluent from the expansion will be disposed of through the same irrigation system approved in Works Approval W6769/2023/1. However, the designated irrigation spray field will be expanded to accommodate the increased discharge volume. Up to 5.25 m<sup>3</sup> of treated effluent will be produced per day at Upper Cane, along with up to 6.4 m<sup>3</sup>/day of RO reject, resulting in a combined maximum total of 11.65 m<sup>3</sup>/day for irrigation. The RO plant will be fitted with flow meters to measure the volume of potable water, and RO reject produced.

Sludge produced by the WWTP will be collected and periodically removed by a licensed waste carrier for offsite disposal in accordance with the *Environmental Protection (Controlled Waste) Regulations 2004*.

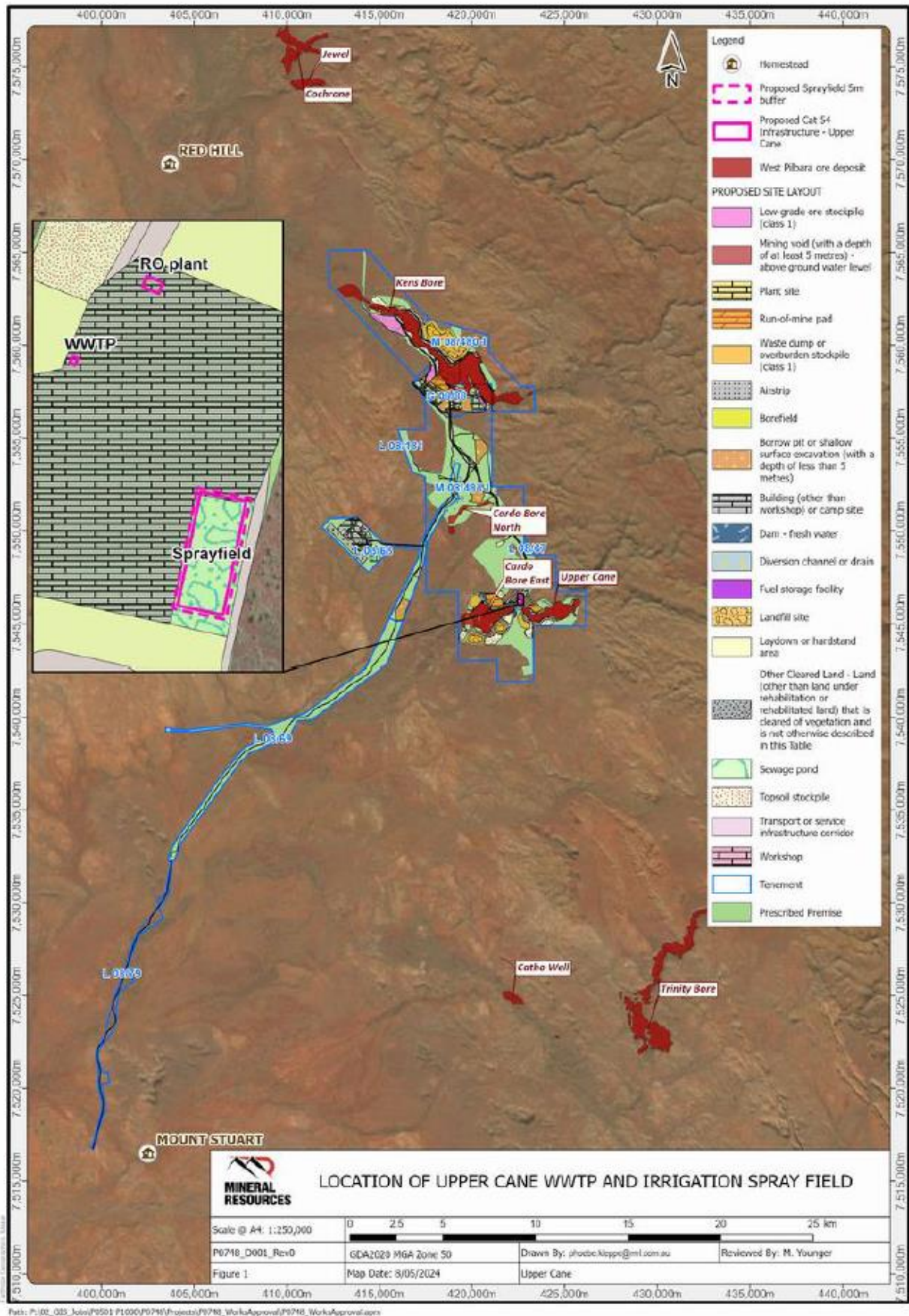


Figure 1: Location of Upper Cane WWTP and Irrigation Spray Field

### 3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

#### 3.1 Source-pathways and receptors

##### 3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 1 below.

Table 1 also details the proposed control measures the Works Approval Holder has proposed to assist in controlling these emissions, where necessary.

**Table 1: Works Approval Holder controls**

Emission	Sources	Potential pathways	Proposed controls
<b>Construction</b>			
Dust	WWTP relocation and pipelines, spray field expansion.	Air/windborne	<ul style="list-style-type: none"> <li>Applicant proposed controls are sufficient control measures. Potential impacts will be managed as per Ministerial Statement 1203 requirements (<b>MS1203</b>)</li> <li>Earthworks restricted to areas required for construction activities.</li> <li>Routine maintenance and housekeeping practices.</li> </ul>
Noise	Reverse Osmosis (RO) plant	Air/windborne	<ul style="list-style-type: none"> <li>All equipment and machinery will be regularly maintained in accordance with manufacturer specifications.</li> <li>Compliance with the <i>Environmental Protection (Noise) Regulations 1997</i>.</li> <li>Construction activities will be in accordance with the Australian Standard (AS) 2436-2010 Guide to noise and vibration control on construction, demolition and maintenance sites.</li> </ul>
<b>Operations including commissioning and TLO</b>			
			<ul style="list-style-type: none"> <li>Units are all to be enclosed.</li> <li>Units maintained in accordance with manufacturer's specifications.</li> <li>Installed on either concrete or compact ground.</li> <li>Installed with systems to monitor the tank</li> </ul>

Emission	Sources	Potential pathways	Proposed controls												
Sewage, partially treated sewage and/or nutrient and brine rich treated effluent	Overtopping of sewage holding tanks and RO brine tanks	Discharges to land	<p>volume levels, an alarm system will notify the operator of high-risk volumes and reduce the risk of an overflow event occurring.</p> <ul style="list-style-type: none"> <li>Flow meters installed.</li> <li>Sludge produced collected for disposal offsite in accordance with the <i>Environmental Protection (Controlled Waste) Regulations 2004</i>.</li> <li>Expected treated effluent target concentrations to meet: <table data-bbox="1002 689 1369 1126"> <tr> <td>BOD</td> <td>&lt;20 mg/L</td> </tr> <tr> <td>TSS</td> <td>&lt;30 mg/L</td> </tr> <tr> <td>Total Nitrogen</td> <td>&lt;30 mg/L</td> </tr> <tr> <td>Total Phosphorus</td> <td>&lt;8 mg/L</td> </tr> <tr> <td><i>E.coli</i></td> <td>&lt;1,000 cfu/100 mL</td> </tr> <tr> <td>pH</td> <td>6.5 – 8.5 pH units</td> </tr> </table> </li> </ul>	BOD	<20 mg/L	TSS	<30 mg/L	Total Nitrogen	<30 mg/L	Total Phosphorus	<8 mg/L	<i>E.coli</i>	<1,000 cfu/100 mL	pH	6.5 – 8.5 pH units
	BOD	<20 mg/L													
TSS	<30 mg/L														
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Total Phosphorus	<8 mg/L														
<i>E.coli</i>	<1,000 cfu/100 mL														
pH	6.5 – 8.5 pH units														
Rupture of Pipes	Discharges to land	<ul style="list-style-type: none"> <li>Pipelines visually monitored for leaks.</li> <li>Treatment chemicals stored in impermeable bunds or stored in self-bunded tanks/containers.</li> <li>Spill kits made available at the fuel/chemical locations and employees trained in their use.</li> </ul>													
Brine and nutrient rich treated effluent	Irrigation to spray	Discharges to land	<ul style="list-style-type: none"> <li>The irrigation spray field would be to an area of minimum 0.78 ha.</li> <li>Electrical conductivity recorded at the RO reject tank allowing early indication of quality of reject that will be combined with treated effluent for irrigation.</li> <li>All irrigation areas have a perimeter fence, with a lockable gate and safety signage displayed on the fencing.</li> <li>5 m spray drift buffer.</li> <li>Inspection of spray field to ensure no visible runoff outside the spray field.</li> <li>Any brine discharge for dust suppression will only go to pre disturbed areas.</li> </ul>												

### 3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Works Approval Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 below provides a summary of potential environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

**Table 2: Environmental receptors and distance from prescribed activity**

Environmental receptors	Distance from prescribed activity
<i>Rights in Water and Irrigation Act 1914</i>	The proposed Premises is located within the Proclaimed Pilbara Groundwater Area and Surface Water Area.
Groundwater	<p>Across the Kens Bore Deposit water supply area, groundwater quality within the fractured Channel Iron Deposit and alluvial aquifers is fresh with pH ranging from neutral to slightly alkaline.</p> <p>Depth to groundwater is approximately 15 to 45 mbgl.</p> <p>The salinity levels are in between 500-3000mg/l.</p>
Surface water bodies	<p>The supporting document states the following:</p> <ul style="list-style-type: none"> <li>The project area is intersected by the ephemeral Red Hill Creek and Cane River, tributaries to the Red Hill Sub-Catchment (of the larger Robe River Catchment) and Cane River Catchments respectively that flow from the Hamersley Ranges (PSM 2022a).</li> <li>Most of the project infrastructure is located within the Red Hill Creek Sub-Catchment, with the southern end of the Kens Bore Pit and Infrastructure Area on the fringe of the Red Hill Creek Floodplain. The Airport, Accommodation Resort and Upper Cane NPI are located within northern Cane River Catchment (PSM 2022a).</li> <li>Three surface water pools (semi-permanent and permanent) have been identified in the wider Project Area that experience ephemeral flows, typically during summer rainfall events (PSM 2022a). These pools align with the area of GDEs associated with rainfall events from the Hamersley Ranges.</li> <li>Within the proposed Project area there are no known beneficial users of surface water.</li> </ul>
Priority Ecological Communities	<p><i>Triodia pisolitica</i> (previously <i>Triodia</i> sp. Robe River) assemblages of mesa of the West Pilbara located within proposed Premises boundary.</p> <p>CPF to the nearest PEC is approximately 2.6 km.</p> <p><b>Potential impacts to PEC - managed under</b></p>



	<b>Ministerial Statement (MS)1203</b>
Priority Flora	<p>Priority 3 – <i>Solanum sp.</i> Red Hill within proposed Premises Boundary.</p> <p>Priority 3 – <i>Indigofera rivularis</i> within proposed Premises boundary.</p> <p>Priority 3 – <i>Triodia pisolitica</i> found within the proposed Premises boundary.</p> <p><b>Potential impacts to vegetation and flora - managed under Ministerial Statement (MS)1203</b></p>
Aboriginal Sites and Heritage Places	<p>Lodged sites adjacent to the proposed Premises boundary.</p> <p><b>Potential impacts to Aboriginal Cultural Heritage- managed under Ministerial Statement (MS)1203</b></p>
Red Hill Pastoral Lease	<p>The project occurs on the Red Hill Pastoral Lease. Land in this area is used for cattle grazing.</p>

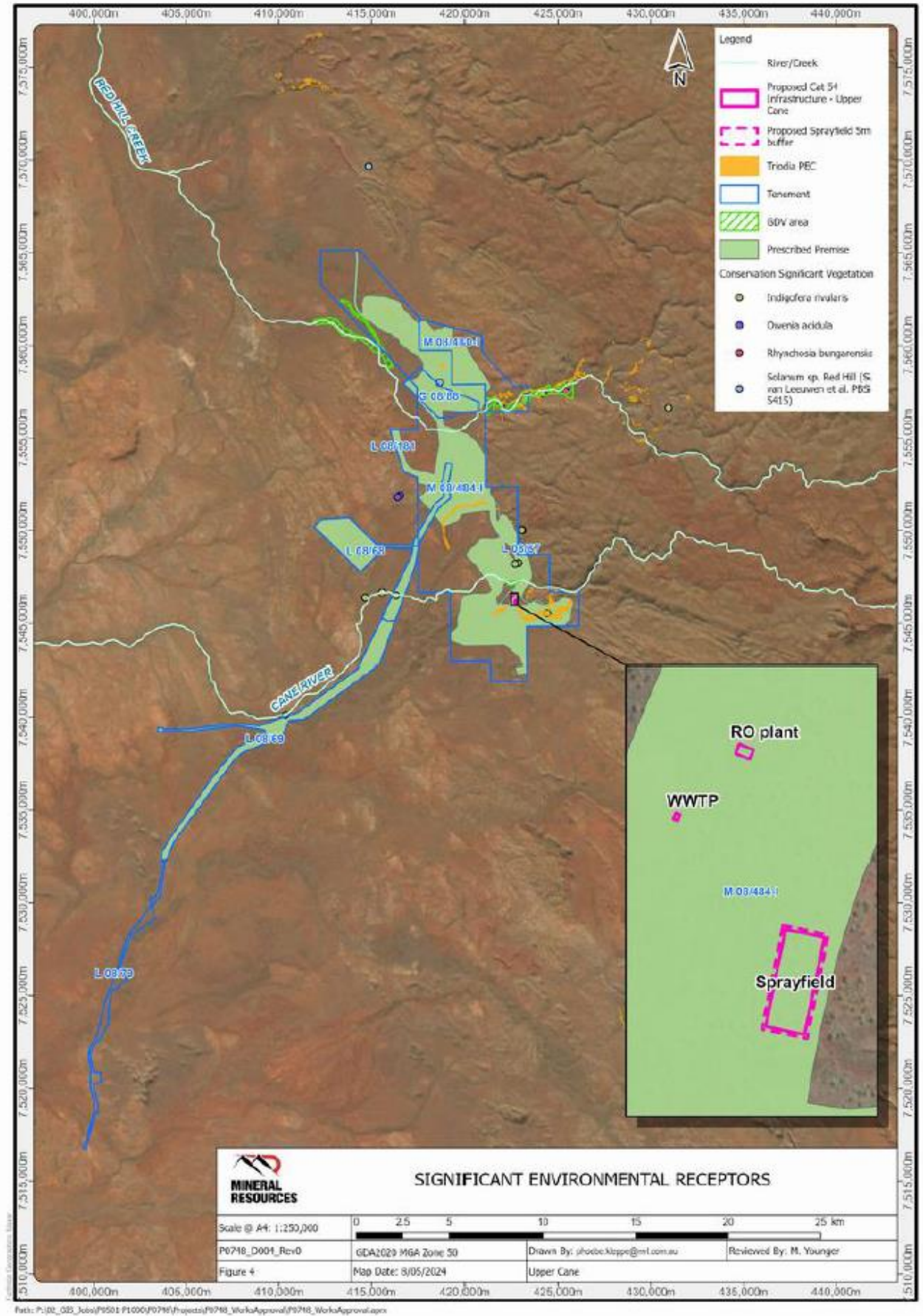


Figure 2: Distance to sensitive receptors

## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and considers potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Works Approval Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Works Approval Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the Works Approval Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The Revised Works Approval W6769/2023/1 that accompanies this Amendment Report authorises emissions associated with the construction of the Premises. The Works Approval Holder also has obligations under the *EPBC Act* - Decision Notice 2009/4706; and Part IV of the *EP Act* (MS 1203).

The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

**Table 3: Risk assessment of potential emissions and discharges from the Premises construction and operation**

Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Works Approval Holder's controls sufficient?	Justification for additional regulatory controls	Regulatory controls <sup>2</sup> of works approval
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls				
<b>Construction</b>								
Works associated with the construction of the following infrastructure: <ul style="list-style-type: none"><li>• WWTP relocation and pipelines, spray field.</li><li>• Reverse Osmosis (RO) plant</li></ul>	Dust	Air/windborne pathway causing impacts to amenity  Smothering vegetation impacting photosynthesis	There are PECs and three priority 3 flora located within the premises boundary.  Lodged Aboriginal Sites and Heritage Places located approx. 445m from WWTP/RO and 241 m from spray field	Refer to Section 3.1	Minimal impact to onsite environments C = Slight The risk event could occur at some time L = Possible <b>Low Risk</b>	Y	The previous assessment determined the construction phase risk of fugitive dust emissions.  The Delegated Officer formed the view that there are no aspects of the proposed construction under the works approval that would cause the risk profile for fugitive dust emissions to change for the previous assessment. The types of controls determined in the previous assessment are adequate and appropriate to control fugitive dust during construction works.  Therefore, the Delegated Officer (DO) considers that further risk assessment is not required, and existing controls are sufficient to manage the risk.	No additional controls
	Noise	Noise and vibration impact on fauna habitats	Native fauna	Refer to Section 3.1	Minimal impact to onsite environments C = Slight The risk event will probably not occur in most circumstances L = Unlikely <b>Low Risk</b>	Y	<i>Environmental Protection (Noise) Regulations 1997</i> applies.  The applicant also has obligations under <i>EPBC Act - Decision Notice 2009/4706</i> and associated Fauna Management Plan (refer to section 2.3.1)	No additional controls
<b>Commissioning and Operation (including time-limited-operations operations)</b>								
<b>Category 54:</b> Upper Cane NPI WWTP	Sewage, partially treated sewage and/blended effluent composed of treated sewage and RO brine  Raw brine – potential for spillage	Overtopping causing contamination  Pipeline leaks/spills causing contamination	Soil Vegetation Groundwater	Refer to Section 3.1	Low level impact to onsite environments C = Minor The risk event could occur at some time L = Possible <b>Medium Risk</b>	Y	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> applies.  Condition 1 - Design / construction requirements. Condition 16 – Time limited operation requirements.	No additional controls
<b>Ancillary to prescribed activity:</b> Operation of the Reverse Osmosis (RO) treatment Plant	Contaminated stormwater	Direct discharges from rainfall ingress to WWTP and spray fields	Soil Vegetation Surface water bodies	Refer to Section 3.1	Mid level impact to onsite environments C = Moderate The risk event will probably not occur in most circumstances L = Unlikely <b>Medium Risk</b>	Y	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> apply. Condition 16 – Time limited operation requirements.	No additional controls

Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Works Approval Holder's controls sufficient?	Justification for additional regulatory controls	Regulatory controls <sup>2</sup> of works approval
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls				
RO brine discharge direct for dust suppression	Mixture of brine mixed with nutrient rich treated effluent Raw undiluted brine spillage Tank overtopping	Discharge to spray field Spillage Raw brine run off to vegetation	Soil Vegetation Groundwater	Refer to Section 3.1	Mid level impact to onsite environments C = Moderate The risk event could occur at some time L = Possible <b>Medium Risk</b>	Y	Condition 1 - Design / construction requirements. Conditions 6 and 17 – Authorised discharge points. Conditions 7 and 18 – Emission limit for TDS Conditions 8 and 19 – WWTP monitoring. Condition 16 – Time limited operation requirements. Any brine discharge for dust suppression will only go to pre disturbed areas.	No additional controls

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed Works Approval Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

## 4. Consultation

**Table 4: Provides a summary of the consultation undertaken by the department**

Consultation method	Comments received	Department response
Department of Health (DoH) was advised of proposal on 11 July 2024	Comments were received from the DoH on 6 Aug 24. An application to construct or install an apparatus for the treatment of sewage in accordance with the Health ( <i>Treatment of Sewage and Disposal of Effluent and Liquid Waste</i> ) Regulations 1974 was yet to be lodged at the time.	The DO notes there has been a delay in the construction schedule but the Applicant is aware of, and intends to submit an application for DoH approval prior.
Works Approval holder was provided with draft amendment on 7 August 2024	Works Approval holder provided response - see appendix 1	See appendix 1 for Department's comments

## 5. Decision

The Delegated Officer has determined to increase the throughput of the Category 54 Sewerage facility with an assessed production capacity 223 m<sup>3</sup>/day of treated effluent and 137 m<sup>3</sup>/day of RO reject effluent. This is based on the following:

### Relocation of the Upper Cane WWTP

The relocation and construction of the 5.25 m<sup>3</sup>/day WWTP at Upper Cane will not introduce any new emissions or discharges beyond those already identified and approved in the works approval W6769/2023/1. The updated location of the irrigation spray field is situated within the northern Cane River catchment.

### New infrastructure reverse osmosis plant in Upper Cane

A 20 m<sup>3</sup>/day RO plant is proposed at Upper Cane administration area, to provide potable water. Raw water will be pumped from nearby bores to the RO plant. The RO reject water will be directed to the irrigation tank/pump tank for co-disposal to the irrigation spray field with treated effluent.

### Irrigation with reverse osmosis brine for dust suppression

RO reject water will be used for dust suppression, if needed, in already disturbed areas at the premises during environmental commissioning and time-limited operations (TLO). This water will be utilised as necessary, with an anticipated TDS concentration below 3,100 mg/L.

### Relocation of the Upper Cane spray irrigation field

The treated effluent irrigation spray field at Upper Cane will be expanded to a minimum size of 0.78 hectares (ha).

The environmental commissioning and TLO activities of the WWTP proposed in this Amendment Application pose no additional risk to the environment.

## 6. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Works Approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## 6.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Works Approval as part of the amendment process.

**Table 5: Summary of works approval amendments**

Condition no.	Proposed amendments
Cover page	Category 54 Sewage facility design capacity changed from 220 m <sup>3</sup> /day to 223 m <sup>3</sup> /day of treated effluent, plus RO reject changed from 130 m <sup>3</sup> /day to 137 m <sup>3</sup> /day
Works Approval history	Updated works approval with the proposed amendment requested
Condition 1, Table 1, item 7	Updated with increase in capacity and spray field irrigation area
Condition 6, Table 3	Updated and inclusion of blended effluent (treated effluent & RO reject) for Upper Cane NPI WWTP
Condition 7, Table 4	Inclusion of Upper Cane NPI irrigation Spray field TDS
Condition 8, Table 5	Inclusion of Upper Cane NPI WWTP to the Final treatment tank sampling tap
Condition 17, Table 7	Updated and inclusion of blended effluent (treated effluent & RO reject) for Upper Cane NPI WWTP
Condition 18, Table 8	Inclusion of the TDS limit of 3,500mg/L for the Upper Cane NPI irrigation Spray field
Condition 19, Table 9	Inclusion of Upper Cane NPI WWTP to the Final treatment tank sampling tap
Definitions	Updated as required

## References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Risk Assessments*, Perth, Western Australia
4. Department of Water (2008) *Water Quality Protection Note 22: Irrigation with nutrient rich wastewater*, Government of Western Australia.
5. Onslow Iron Pty Ltd (Onslow Iron) 2022, *West Pilbara Iron Ore Project – Kens Bore Categories: 5, 12, 52, 54, 57, 64, 73 and 77 Supporting Document Works Approval Application Part V Environmental Protection Act 1986 (Report Reference: ENV-TS-RP-0433 Rev 0)*, 11 November 2022 (A2148955).
6. Onslow Iron 2024, *Works Approval Amendment Application - W6769/2023/1*, dated 15

May 2024 (A2278975).

7. DWER 2023, Previous Decision Report W6769/2023/1. Issued 27 January 2023. accessed:[https://www.der.wa.gov.au/images/documents/our-work/licences-and-works-approvals/Decisions\\_W6769/W6769\\_20240508\\_AR.pdf](https://www.der.wa.gov.au/images/documents/our-work/licences-and-works-approvals/Decisions_W6769/W6769_20240508_AR.pdf) (DWER ref: A2152295)



## Appendix 1: Summary of Works Approval Holder's comments on risk assessment and draft conditions

Condition/Section	Summary of Works Approval Holder's comment	Department's response
<b>Draft Works Approval</b>		
Works Approval History	In response to the draft approval, the applicant requested to edit and reword the summary.	DWER considered the rewording and has made modifications accordingly.
Condition 1, Table 1- Item 7	Applicant requested to remove RO from Infrastructure- <ul style="list-style-type: none"> <li>- 'RO' in the description of infrastructure as this isn't Category 54 infrastructure.</li> </ul>	Item 7 has been modified to remove RO from Column 1; however, the RO reject will be co-disposed/ comingled with treated effluent from the WWTP.
Condition 6, Table 3	Request to update condition 6 to include the CPF Irrigation spray field in Table 3, as it has dropped off in this amendment	Accepted and included in Table 3
Condition 7, Table 4	Request deletion of NPI from the discharge point in Table 4	Accepted and deleted in Table 4
Condition 8, Table 5	Request to amend the reference from Figure 12 to Figure 11 for the Irrigation Spray Fields Discharge Point and to delete NPI from the description of Upper Cane WWTP.	DWER has noted and the figure has been updated accordingly
Condition 17, Table 7	Request to update condition 17 to include the CPF Irrigation spray field in Table 7, as it has dropped off in this amendment and to delete NPI WWTP from description of discharge point for Upper Cane Irrigation Spray Field in Table 7.	Accepted and updated
Condition 18, Table 8	Request to delete NPI from the discharge point description in Table 8.	Updated
Condition 19, Table 9	Request to amend the reference from Figure 12 to Figure 11 for the Irrigation Spray Fields Discharge Point and to delete 'NPI' from the description of Upper Cane WWTP.	DWER has noted and the figure has been updated accordingly
<b>Draft Amendment Report</b>		
Section 2.2 Amendment Summary	Requested to edit the descriptions detailed in bullet points for the summary of amendments being sought.	DWER has reviewed and modified as requested

Condition/Section	Summary of Works Approval Holder's comment	Department's response
Section 2.2 Amendment Summary	<p><b>Relocation of the Upper Cane WWTP and new RO Plant.</b></p> <p>Paragraph 3 – please amend last sentence to: The irrigation spray field will be expanded to cover minimum 0.78 hectares.</p>	DWER has updated as requested
<p>Section 3.1.1 Emissions and Controls</p> <p>Table 1: Works Approval Holder Controls</p>	Suggest edits to description of Emissions and Sources columns.	

## Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)				
Application type				
Works approval	<input type="checkbox"/>			
Licence	<input type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date Report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input checked="" type="checkbox"/>	Current works approval number:	W6769/2023/1	
Amendment to licence	<input type="checkbox"/>	Current licence number:		
		Relevant works approval number:	N/A	<input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:	None	<input type="checkbox"/>
Date application received	15/5/2024			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Onslow Iron Pty Ltd (ACN 649 012 395)			
Premises name	West Pilbara Iron Ore Project			
Premises location	M08/480-1, M08/484-1, G08/88, L08/67, L08/68, L08/69 and L08/181 CANE WA 6710			
Local Government Authority	Shire of Ashburton			
Application documents				
HPCM file reference number:	DER2022/000623~4			
Key application documents (additional to application form):	<ul style="list-style-type: none"> <li>• DWERDT948740- Email for amendment application</li> <li>• A2278977 - Amendment application form</li> <li>• A2278976 – Attachment 3B general arrangement</li> <li>• A2278975 – Application support doc_Rev0</li> <li>• A2278974 – Amendment application form redacted</li> <li>• A2278973 – Amendment application support doc_Rev0_redacted</li> <li>• A2278972 - Attachment 7 Soil Mapping Units</li> <li>• A2278971 – Attachment 7 Sig Env Receptors</li> <li>• A2278970 - Attachment 7 Sensitive Land Uses</li> <li>• A2278969 – Attachment 2_ Fig 2</li> <li>• A2278968 – Attachment 2_ Fig 1</li> </ul>			

	<ul style="list-style-type: none"> <li>• A2278967 – Works approval amendment cover letter</li> </ul>
<b>Scope of application/assessment</b>	
<p>Summary of proposed activities or changes to existing operations.</p>	<p>Works approval (W6769) amendment application to include construction and environmental commissioning activities associated with:</p> <ul style="list-style-type: none"> <li>• Relocation of the wastewater treatment plant (WWTP) and treated effluent spray field at the Upper Cane NPI area, approximately 1.1 km further north of the original location proposed in W6769 (Category 54);</li> <li>• Expansion to the Upper Cane WWTP for design capacity up to 5.25 m<sup>3</sup>/day (Category 54);</li> <li>• Expansion of the Upper Cane treated effluent irrigation spray field to minimum size of 0.78 hectares (Category 54);</li> <li>• Inclusion of a 20 m<sup>3</sup>/day (permeate) Reverse Osmosis (RO) plant at the Upper Cane NPI area, with co-disposal of reject from the RO Plant with treated effluent to the Upper Cane irrigation spray field (Category 54); and</li> <li>• Contingency to use RO reject for dust suppression water in disturbed areas.</li> </ul>

**Category number/s (activities that cause the premises to become prescribed premises)**

**Table 1: Prescribed premises categories**

Prescribed premises category and description	Proposed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 54: Sewage facility	220 m <sup>3</sup> /day including: <ul style="list-style-type: none"> <li>• Accommodation Resort WWTP of 200 m<sup>3</sup> /day plus 130 m<sup>3</sup> /day of RO reject wastewater (brine);</li> <li>• Central Processing Facility (CPF) WWTP of 15 m<sup>3</sup> /day; and</li> <li>• Upper Cane NPI area WWTP of 2.5 m<sup>3</sup> /day</li> </ul>	223 m <sup>3</sup> /day including: <ul style="list-style-type: none"> <li>- <i>Relocation WWTP and treated effluent spray field at the Upper Cane NPI area, approximately 1.1 km further north of the original proposed location plus 137 m<sup>3</sup> /day of RO reject;</i></li> <li>- <i>Expansion to the Upper Cane WWTP for design capacity up to 5.25 m<sup>3</sup> /day and treated effluent irrigation spray field to minimum size of 0.78 hectares, so a new total of 11.65 m<sup>3</sup> /day;</i></li> <li>- <i>Reverse Osmosis 20 m<sup>3</sup> /day (RO) plant at the Upper Cane NPI area, with co-disposal of reject from the RO Plant with treated effluent to the Upper Cane irrigation spray field. So, an increase of 7 m<sup>3</sup> /day RO reject, and additional monitoring requirements added to Upper Cane NPI plant; and</i></li> <li>- <i>Contingency to use RO reject for dust suppression water in disturbed areas.</i></li> </ul>

**Legislative context and other approvals**

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: 1203 EPA Report No: 1741
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Reference No: 2009/4706

<p>Has the applicant demonstrated occupancy (proof of occupier status)?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Certificate of title <input type="checkbox"/>                  General lease <input type="checkbox"/> Expiry:                  Mining lease / tenement <input checked="" type="checkbox"/> Expiry:                  Other evidence <input checked="" type="checkbox"/> Expiry:</p>
<p>Has the applicant obtained all relevant planning approvals?</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>	<p>Approval:                  Expiry date:                  If N/A explain why?</p>
<p>Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Clearing will be done in the implementation of the Proposal, in accordance with MS 1027.                   Additionally, clearing will be implemented as part of a Controlled Action approved under Commonwealth <i>Environmental Protection and Biodiversity Conservation Act 1999</i> – Referral No 2009/4706</p>
<p>Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Refer to above</p>
<p>Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Application reference No:                  GWL174888(2)</p>
<p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: Pilbara                  Type: Proclaimed Groundwater Area and Surface Water Area                  Has Regulatory Services (Water) been consulted?                  Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>                  Regional office: North West</p>
<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A                  Priority: N/A                  Are the proposed activities/ landuse compatible with the PDWSA (refer to <a href="#">WQPN 25</a>)?                  Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>

<p>Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><i>Mining Act 1978:</i></p> <ul style="list-style-type: none"> <li>• REG ID 35959 for the Mine Accommodation Facility;</li> <li>• REG ID 99698 for a Communications Facility; and</li> <li>• REG ID 113633 for the West Pilbara Iron Ore Project – Kens Bore Deposit - Mining Proposal.</li> </ul> <p><i>Environmental (Unauthorised Discharges) Regulations 2004.</i></p> <p><i>Environmental (Controlled Waste) Protection Regulations 2004.</i></p> <p><i>Dangerous Goods Safety Act 2004.</i></p> <p><i>Aboriginal Heritage Act 1972.</i></p> <p><i>Health Act 1911.</i></p> <p><i>Petroleum Pipelines Act 1969.</i></p> <p><i>Civil Aviation Regulations 1988.</i></p>
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>N/A</p>
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>N/A</p>
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Classification: N/A</p> <p>Date of classification: N/A</p>