



## Application for Works Approval

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

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<b>Works Approval Number</b>	W6951/2024/1
<b>Applicant</b>	Pilbara Iron Company (Services) Pty Ltd
<b>ACN</b>	107 210 248
<b>File number</b>	DER2024/000341
<b>Premises</b>	<p>Mt Brockman, Nammuldi and Silvergrass Iron Ore Mines AML70/4, ALM70/272, G47/01242, G47/01243, L47/140, L47/388, L47/141, L47/647, LGE G848898, LG848907 and LPL N050438 within co-ordinates: E535363 N7536177; E 544071 N7257202; E553417 N7525629; E548757 N7517535; E538693 N7517627; E531400 N7517644; E527723 N7519096 and E525753 N7531802 MT SHEILA WA 6751</p> <p>As defined by the Premises map in Schedule 1 of the issued Works Approval</p>
<b>Date of report</b>	24 October 2024
<b>Decision</b>	Works approval granted

#### **SENIOR ENVIRONMENTAL OFFICER, INDUSTRY REGULATION**

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

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## 1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W6951/2024/1 has been granted.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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 Application summary and overview of premises

On 04 July 2024, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works associated with a wastewater treatment plant (WWTP), irrigation sprayfield (refer to section 2.2.1), and a fuel facility (refer to section 2.2.4) at the Mt Brockman, Nammuldi and Silvergrass Operations (the premises) located approximately 40 km south-east of Tom Price.

The premises relates to Category 54: *Sewage facility* and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6915/2024/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W6951/2024/1.

The proposed locations of the WWTP, irrigation sprayfield, and fuel facility are shown in Figure 1.

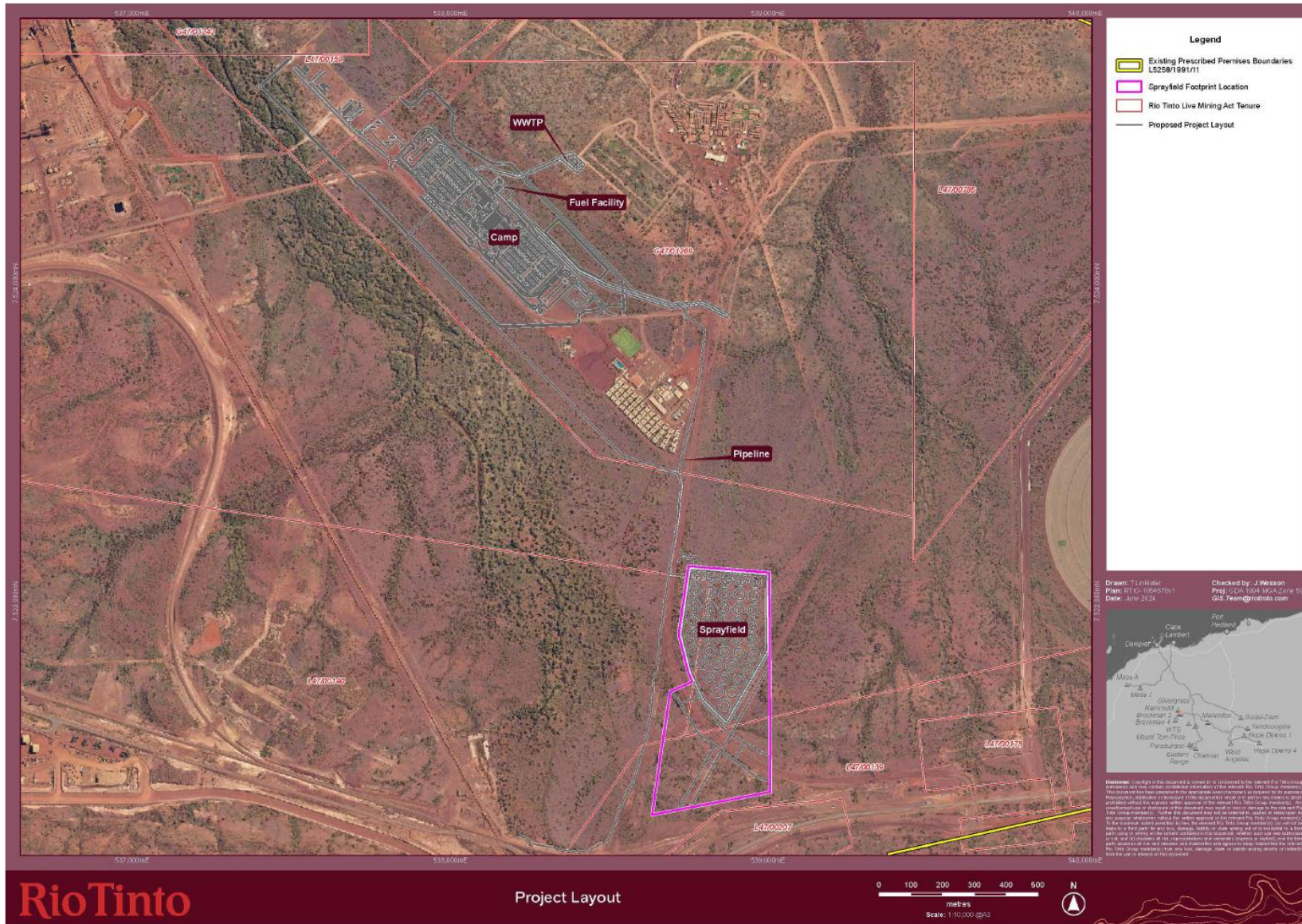


Figure 1: Project layout of WWTP, irrigation sprayfield, and fuel facility



## 2.2.1 WWTP

The applicant is proposing to install and operate a WWTP with an irrigation sprayfield (comprising up to four cells totalling 10 hectares (ha) in size) to treat sewage from the 1,300-bed multipurpose Corella Camp.

A Sequencing Batch Reactor (SBR) WWTP and associated irrigation sprayfield is to be installed and operated with a maximum throughput of 390 m<sup>3</sup>/day. The WWTP will be operational 24 hours per day, seven days a week. The WWTP footprint is about 0.23 ha and a 25 ha sprayfield footprint area has been designated for smaller field cells. Within this proposed sprayfield footprint an area up to four cells will be constructed and operated.

Raw sewage from the village transfer stations is delivered into the rotary screen which is installed on an elevated platform. The screened sewage then gravitates into the tank. A level switch activates the screen motor when a predetermined liquid level is attained within the screen body. A rotating auger inside the screen carries separated solids up the inclined cylindrical screen and deposits them through a chute to a screening bin located below the screen.

The screened sewage entering the Recirculating Anoxic Buffer (RAB) tank is mixed with a recycled, nitrified liquor (from the downstream Aeration / Decant (A/D) tank) in an environment conducive to denitrification, which demands a substrate source and anoxic conditions. The recycle flow enters the RAB tank through a nozzle to provide a mixing function. After a suitable average anoxic residence time to provide for adequate denitrification, the blended liquor is pumped forward into the A/D tank.

The discharged effluent remains in the effluent tank for a chlorine contact period to ensure adequate disinfection, and then a discharge pump pumps the contents to the sprayfield for final disposal. Any overflow from the RAB, A/D or Effluent Tanks flows via gravity to the spill containment tank from where the overflow liquid can be returned to the WWTP using a portable submersible pump.

The expected treated effluent target concentrations for the WWTP are shown in Table 1 below:

**Table 1: Target discharge criteria for the proposed WWTP**

Parameter	Design Value	National Water Quality Management Strategy (NWQMS) Discharge Criteria
Biochemical Oxygen Demand	<20 mg/L	20 – 30 mg/L
Total Suspended Solids	<30 mg/L	25 – 40 mg/L
Total Phosphorus	<8 mg/L	< 8 mg/L
Total Nitrogen	<30 mg/L	20 – 50 mg/L
pH	6.5 - 8.5	-
<i>E. coli</i>	<1,000 cfu/100 mL	< 10,000 cfu/100ml

## 2.2.2 Commissioning Phase

Once constructed, the WWTP will be commissioned for a period of about 13 weeks. There will be two key stages of environmental commissioning – wet commissioning and biological commissioning.

### Stage 1 – Wet Commissioning

Wet commissioning makes use of potable or process water (not sewage) and incorporates two phases:

- Pre-energisation – which includes earthing tests, insulation resistance tests, continuity tests and cable point to point tests.
- Post energisation - includes voltage checks, phase rotation checks, motor direction checks, motor current draw, electrical switchgear function tests. The plant is run through all its operational sequences to validate the PLC program. All tanks and pipework are leak tested the pump performance verified with flow tests. Wet commissioning requires about three days and is performed prior to the plant receiving a local government approval to operate.

### Stage 2 – Biological Commissioning

After completion of wet commissioning the sewage from the village is introduced to the WWTP. Additionally, healthy activated sludge from a nearby WWTP may potentially be added to the WWTP to accelerate the growth of the working biomass in the WWTP. During this period, WWTP performance and sample results will be monitored. Once commissioning is completed, monitoring of discharge quality will reduce to quarterly and volumes will continue to be monitored monthly.

### **2.2.3 Nutrient loadings and sizing for irrigation spray field**

Treated effluent will be discharged via an irrigation system to an on-site sprayfield. Based on the design capacity of the WWTP, the sprayfield has been designed with an area of 10 ha. The applicant has determined this area to ensure nutrient (nitrogen and phosphorus) application rates do not exceed the application criteria for *Risk Category D* which is specified in *Water Quality Protection Note 22: Irrigation with nutrient-rich wastewater (WQPN 22)* the maximum application rates being 480 kg/ha/year for Nitrogen and 120 kg/ha/year for Phosphorus.

Calculations to determine predicted nutrient application rates have been based on the expected treated wastewater (effluent) quality supplied from the WWTP providers as <30 mg/L for Total Nitrogen and <8 mg/L for Total Phosphorus.

Based on the expected treated effluent quality, the predicted application rates will be 427.1 kg/ha/year for Nitrogen and 113.9 kg/ha/year for Phosphorus. Depth to groundwater in vicinity of the spray field is about 30 m below ground level (mbgl).

### **2.2.4 Fuel Facility**

Two (2) 110 kL bulk fuel (diesel) tanks are proposed to be installed on the northern side of Corella Camp for the provision of diesel fuel during the construction and operation of the camp.

The ground directly below the delivery/refuelling apron will be compacted to 95% Maximum Dry Density (MDD). A 0.75 mm high density polyethylene (HDPE) liner will be installed below the delivery/refuelling apron. Rollover bunds will be constructed on all sides of the delivery/refuelling apron. Two (2) concrete-filled facility bollards will be installed either side of the delivery/refuelling apron to prevent vehicle collision and Windrows ~700 mm high at 2:1 batter will surround the sides of the fuel facility. A diagram of the layout of the fuel facility is shown in Figure 2.

The installation of the 2x 110 kL bulk fuel tanks does not trigger Category 73 under Schedule 1 of the EP Regulations. The applicant holds existing Licence L5258/1991/11 which includes Category 73. Once the Fuel Facility associated with this works approval W6951/2024/1 is constructed, the applicant can amend Licence L5258/1991/11 to increase the design capacity of Category 73.

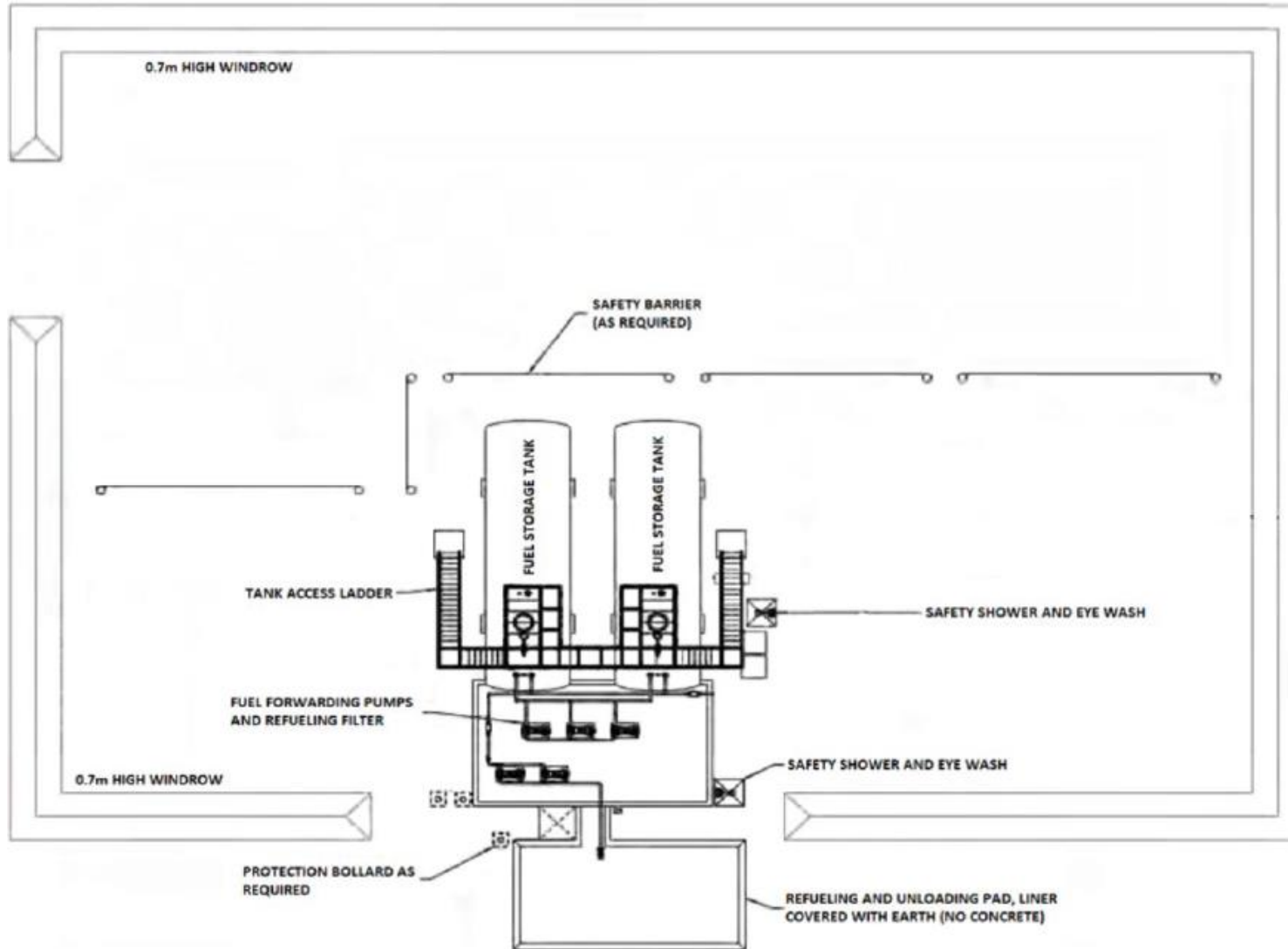


Figure 2: Layout of fuel facility and Light Vehicle refuelling

## 2.3 Part IV of the EP Act

The Nammuldi-Silvergrass Iron Ore Project was referred to the Environmental Protection Authority (EPA) by Hamersley Iron Pty Limited (the original proponent). The proposal was to mine the Marra Mamba iron ore deposits at the Nammuldi and Silvergrass areas. The original proponent was authorised to develop the Nammuldi-Silvergrass Iron Ore Project under Ministerial Statement (MS), which was published in 2000, and a subsequent MS 925 in 2013.

Clearing of up to 85 ha is required for the construction of the WWTP, sprayfield footprint and associated infrastructure. The clearing to enable the construction of the Corella Camp and the prescribed activities is authorised by MS 925.

## 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 construction and operation which have been considered in this decision report are detailed in Table 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

**Table 2: Proposed applicant controls**

Emission	Sources	Potential pathways	Proposed controls
<b>Construction</b>			
Dust	Construction of WWTP, irrigation sprayfield, and fuel facility	Air/windborne	<ul style="list-style-type: none"> <li>Clearing will be managed to ensure that areas are only cleared as required.</li> <li>Rehabilitation of cleared areas is implemented as construction is completed.</li> <li>Dust suppression will be implemented (including use of water trucks, control of vehicle movements / restricted speeds).</li> <li>Works that have the potential to generate high dust levels may be restricted during times of high winds.</li> <li>Construction Environmental Management Plan (CEMP) will be implemented and adhered to.</li> <li>Standard management procedures are expected to effectively mitigate the risk of dust emissions during construction.</li> </ul>



Emission	Sources	Potential pathways	Proposed controls
Noise		Air/windborne	<ul style="list-style-type: none"> <li>• <i>Environmental Protection (Noise) Regulations 1997</i> and standard operating procedures are expected to effectively mitigate the risk of noise during construction.</li> <li>• CEMP will be implemented and adhered to.</li> <li>• Construction activities limited to daylight hours only.</li> <li>• Specific controls are not proposed.</li> </ul>
Spills and leaks of hydrocarbons		Surface runoff Seepage to soil and groundwater	<ul style="list-style-type: none"> <li>• No controls proposed by the applicant.</li> </ul>
<b>Operation (Category 54)</b>			
Odour	Operation of the WWTP and irrigation sprayfield	Air/windborne	<ul style="list-style-type: none"> <li>• The WWTP will be appropriately designed and operated to mitigate the risk of odour emissions.</li> <li>• Inspection and maintenance will be undertaken.</li> </ul> <p><b>This emission has been screened from further assessment, due to the distance to sensitive human receptors.</b></p>
Raw sewage		Surface runoff Seepage to soil and groundwater	<ul style="list-style-type: none"> <li>• The WWTP will be appropriately designed and operated to mitigate the risk of sewage spills.</li> <li>• Surface water management structures (including perimeter bund and sumps) will ensure any spills are contained.</li> <li>• Spill response will be provided.</li> <li>• Inspection and maintenance will be undertaken.</li> <li>• Standard management procedures are expected to effectively mitigate the risk of unauthorised sewage emissions.</li> </ul>
Treated Effluent		Surface runoff Seepage to soil and groundwater	<ul style="list-style-type: none"> <li>• The WWTP will be appropriately designed and operated to mitigate the risk of treated effluent spills.</li> <li>• The treated effluent will be disposed of to an appropriately sized sprayfield, as per WQPN 22 guidance.</li> <li>• Surface water management structures</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
			<p>(windrows where appropriate).</p> <ul style="list-style-type: none"> <li>• Spill response will be provided.</li> <li>• Inspection and maintenance will be undertaken.</li> <li>• Level of treatment will not exceed target values specified in Australian Guidelines for Sewerage Systems – Effluent Management (ANZECC 1997).</li> <li>• Standard management procedures are expected to effectively mitigate the risk of elevated nutrient levels in soil / seepage to groundwater as a result of discharge of inadequately treated effluent.</li> </ul>
<b>Operation (Fuel Facility)</b>			
Spills and leaks of hydrocarbons	<p>From vehicles and equipment used in construction phase</p> <p>Operation of the bulk fuel facility</p>	<p>Surface runoff</p> <p>Seepage to soil and groundwater</p>	<ul style="list-style-type: none"> <li>• Hydrocarbons will be managed via relevant legislation (including Australian Standard AS 1940-2004: Storage and handling of flammable and combustible liquids) as well as the requirements of the existing Licence L5258/1991 (e.g. Condition 2: Stormwater management).</li> <li>• Fuel storage tanks will be designed and constructed to AS 1940-2004: The storage and handling of flammable and combustible liquids.</li> <li>• Management structures (bunding / secondary containment) will be installed at all hydrocarbon storage and refuelling facilities to ensure any spills are contained.</li> <li>• Appropriate labelling of storage areas and storage containers.</li> <li>• Spill response will be provided.</li> <li>• Suitable impact or collision protection installed around the facility to prevent vehicle impacts.</li> <li>• The fuel storage area will have a roll-over bund installed to prevent release of hydrocarbons in the event of a spill or leak during refuelling.</li> <li>• Overfill protection will be provided by an alarm sounding and the flow of liquid being stopped before the tank overflows.</li> <li>• Appropriate incident response equipment (spill kit, fire extinguishers) will be installed within the fuel storage.</li> <li>• Leak detection system will be installed</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
			<p>with an audible alarm.</p> <ul style="list-style-type: none"> <li>• Refuelling apron to be established on compacted and lined surface.</li> <li>• Diesel storage tanks to be double walled.</li> <li>• Any potentially contaminated surface water will be directed to installed grates and sumps which will be pumped out periodically and removed off-site to a licensed facility.</li> </ul>

### 3.1.2 Receptors

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

Table 3 and Figure 3 below provides a summary of potential human and 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 3: Sensitive human and environmental receptors and distance from prescribed activity**

Human receptors	Distance from prescribed activity
Hamersley Pastoral Lease (Transient occupation; no permanent resident located within the lease)	The prescribed premises is within the pastoral lease.
Environmental receptors	Distance from prescribed activity
Threatened and Significant Flora	<p>Threatened flora surround and are located within the prescribed premises. The following species occur within 5 km of the proposed WWTP, Sprayfield, and Fuel Facility.</p> <ul style="list-style-type: none"> <li>• <i>Sida sp. Barlee Range</i></li> <li>• <i>Ptilosus subspinescens</i></li> <li>• <i>Vittadinia sp. Coondwanna Flats</i></li> <li>• <i>Sid asp. Hammersley Range</i></li> </ul> <p>The applicant has also identified <i>Rostellularia adscendens var. latifolia</i> (P3) 770 m outside of the premises boundary.</p>
Threatened and Significant Fauna	<p>Threatened fauna surround and are located within the prescribed premises. The following species occur within 5 km of the WWTP, Sprayfield, and Fuel Facility:</p> <ul style="list-style-type: none"> <li>• <i>Pseudomys chapmani</i> (Western Pebble-mound Mouse)</li> <li>• <i>Macroderma gigas</i> (Ghost Bat)</li> </ul> <p>The applicant has identified from surveys several</p>

	<p>other significant fauna species that occur within and around the premises boundary:</p> <ul style="list-style-type: none"> <li>• <i>Falco peregrinus</i> (Peregrine Falcon)</li> <li>• <i>Dasyurus hallucatus</i> (Northern Quoll)</li> <li>• <i>Liasis olivaceus barroni</i> (Pilbara Olive Python)</li> <li>• Pilbara leaf-nosed Bat (<i>Rhinonictoris aurantia 'Pilbara form'</i>)</li> </ul>
<p>Threatened Ecological Communities and Priority Ecological Communities (PEC)</p>	<p>The Themeda Grassland and the Brockman Iron cracking clay communities are two PEC's under 2 km north of the premises boundary.</p> <p>However, they are 14 km from the WWTP, Sprayfield, and Fuel Facility.</p>
<p>Surface Water</p>	<p>Two tributaries to Duck Creek, (which is in turn a tributary of the Ashburton River), flow adjacent the Project Area – these are referred to as the eastern and western tributaries. The distances from each of the prescribed activities to the nearest of the two Duck Creek tributaries are included below.</p> <p>WWTP – 220 m from western tributary</p> <p>Sprayfield footprint – 315 m from western tributary</p> <p>Fuel facility – 435 m from western tributary</p>
<p>Groundwater</p>	<p>Groundwater flow is from east to west along the valley between the existing Nammuldi and Brockman 2 mining operations.</p> <p>Reports done by the applicant have reported groundwater depth ranges to be between 25 and 50 mbgl. Water quality is typically fresh, with a neutral to alkaline pH and high carbonate concentrations in some areas, associated with the presence of calcrete bands.</p> <p>The applicant has used groundwater bores located about 2.7 km west of the proposed WWTP, to indicate the depth to groundwater which is about 542 mRL or 45 mbgl.</p>
<p>Aboriginal Sites and Heritage Places</p>	<p>The boundary of the Prescribed Premises falls within the Eastern Guruma Native Title Claim area (WAD6208/1998).</p> <p>One Aboriginal Site of Significance known as 'Kartajirri (Duck Creek)' which cuts through the prescribed premises.</p> <p>There are 18 Heritage sites present within 1 km of the WWTP, Sprayfield, and Fuel Facility which consist of artefacts/scatter, modified trees, rock shelters, and quarries.</p>



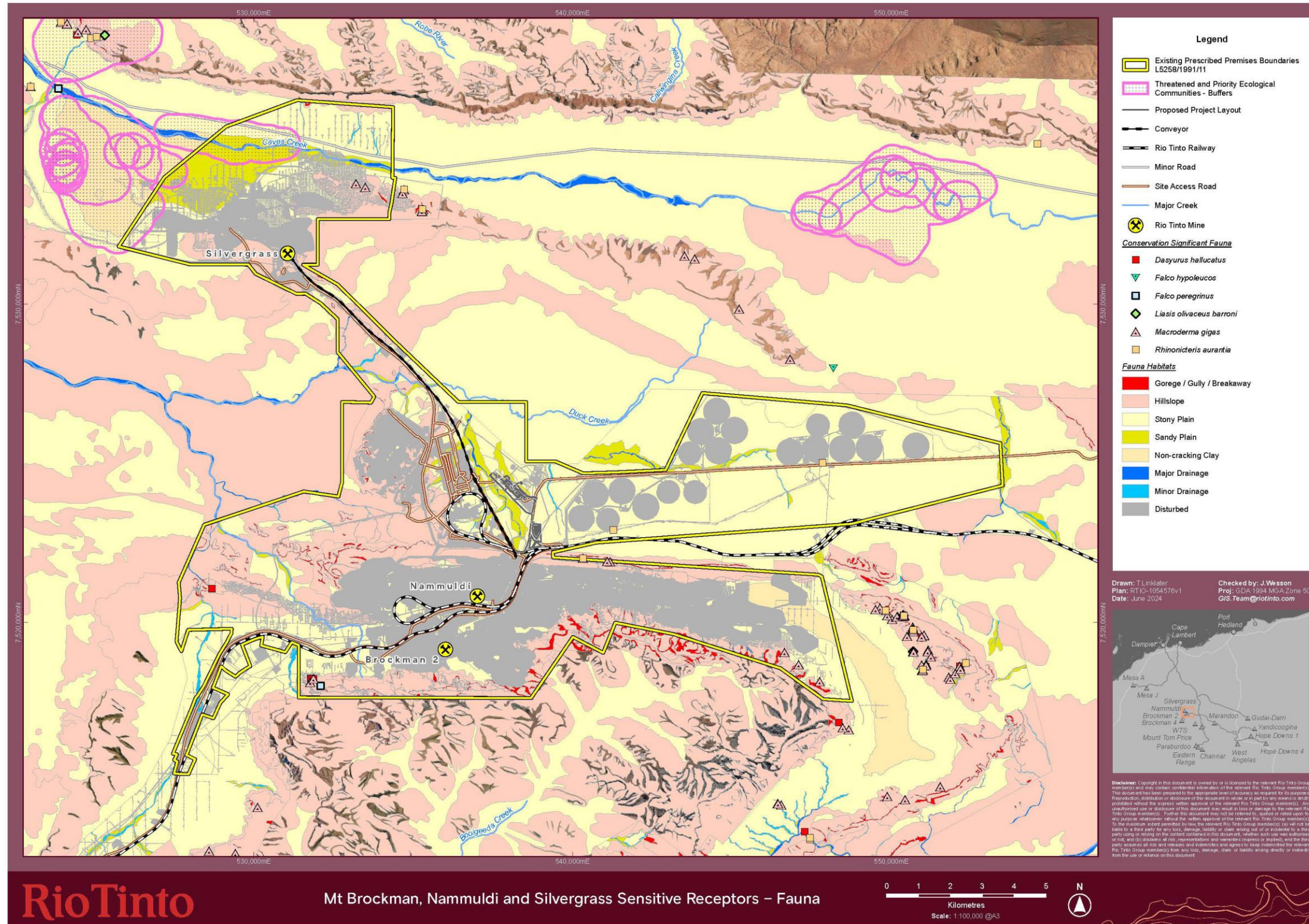


Figure 3: Distance to sensitive receptors



## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account 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 applicant 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 applicant'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 applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

Works approval W6951/2024/1 that accompanies this decision report authorises construction, commissioning, and time-limited operations. The conditions in the issued works approval, as outlined in Table 4 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

An amendment to existing Licence L5258/1991/11 is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the premises i.e. Operation of WWTP, discharge of effluent in sprayfield, and storage of hydrocarbons. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

**Table 4: Risk assessment of potential emissions and discharges from the premises during construction, commissioning and operation**

Risk events					Risk rating <sup>1</sup>	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls / DWER Comments
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			
<b>Construction phase</b>								
Construction of WWTP, irrigation sprayfield, and fuel facility  Movement of vehicles on unsealed roads	Dust	<b>Pathway:</b> Air/windborne <b>Impact:</b> Smothering of native vegetation inhibiting photosynthesis/ growth cycle.  Reduction in amenity and health of local fauna.	Native vegetation  Aboriginal Heritage Sites  Threatened and Significant Fauna	Refer to Section 3.1	C = Minor L = Possible <b>Medium Risk</b>	Y	No condition imposed.  The general provisions of the EP Act applies.	The applicant's controls for dust emissions during construction should be sufficient in minimising any impacts to the environment.
	Noise	<b>Pathway:</b> Air/windborne <b>Impact:</b> Reduction in amenity and health of local fauna.	Threatened and Significant Fauna	Refer to Section 3.1	C = Slight L = Unlikely <b>Low Risk</b>	Y	No conditions imposed.  The <i>Environmental Protection (Noise) Regulations 1997</i> applies.	Construction activities will occur over a short timeframe. Any impacts to fauna is considered slight and will be short-lived (temporary).
	Minor hydrocarbon spills or leaks	<b>Pathway:</b> Direct discharge to land; seepage to ground and underlying groundwater; and/or run-off into ephemeral drainage lines <b>Impact:</b> Adverse effects on local soils and groundwater quality  Reduction in amenity and health of local fauna.	Native vegetation  Underlying groundwater (25-50 mbgl)	Refer to Section 3.1	C = Minor L = Possible <b>Medium Risk</b>	N/A	No conditions imposed.  The <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> applies.	N/A.
<b>Commissioning and operational Phase – Category 54</b>								
Commissioning and operation of the WWTP and	Treated effluent	<b>Pathway:</b> Direct discharge to land; seepage to ground and	Native vegetation	Refer to Section 3.1	C = Moderate L = Possible	Y	Condition 5 - Environmental commissioning	The Delegated Officer has added conditions to supplement the existing

Risk events					Risk rating <sup>1</sup>	Applicant controls sufficient?	Conditions <sup>2</sup> of works approval	Justification for additional regulatory controls / DWER Comments
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			
irrigation sprayfield		underlying groundwater; and/or run-off into ephemeral drainage lines	Duck Creek tributaries		<b>Medium Risk</b>		requirements	controls which should be sufficient in managing any related emissions or discharges from the WWTP.
	Raw Sewage	<b>Impact:</b> Adverse effects on local soils and groundwater quality  Reduction in amenity and health of local fauna and flora.	Underlying groundwater (25-50 mbgl)	Refer to Section 3.1	C = Moderate L = Possible <b>Medium Risk</b>	Y	Condition 6 – Authorised discharge points during commissioning  Condition 7 - Monitoring during environmental commissioning  Condition 14 - Operational requirements for infrastructure and equipment  Condition 15 – Authorised discharge points during time limited operations  Condition 16 - Monitoring during time limited operations	
<b>Fuel facility</b>								
Operation of the fuel facility, refuelling of equipment and vehicles	Hydrocarbon spills or leaks	<b>Pathway:</b> Direct discharge to land; seepage to ground and underlying groundwater; and/or run-off into ephemeral drainage lines  <b>Impact:</b> Adverse impacts to soils, native vegetation, surface water and/or groundwater quality	Native vegetation  Duck Creek tributaries  Underlying groundwater (25-50 mbgl)	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Y	Condition 14 - Operational requirements for infrastructure and equipment  The <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> applies.	The Delegated Officer finds the existing controls to be sufficient in managing any related emissions or discharges from this proposal..

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

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

## 4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

**Table 5: Consultation**

Consultation method	Comments received	Department response
Application advertised on the department's website on 26 August 2024	None received.	N/A.
Local Government Authority advised of proposal on 22 August 2024	None received.	N/A.
Wintwari Guruma Aboriginal Corporation (WGAC) advised of proposal on 22 August 2024	None received.	N/A.
Department of Health (DOH) advised of proposal 27 August 2024	DOH provided comments on 12 September 2024.  DOH commented on the wastewater system and water supply for the proposed camp, providing advice on requirements of the <i>Government Sewerage Policy 2019</i> .  Further comments on requirements for food, water, and public health were provided to DWER.	DOH comments were noted by DWER.
Department of Biodiversity, Conservation and Attractions (DBCA) advised of proposal 22 August 2024	DBCA provided comments on 09 September 2024.  DBCA has noted and understands that the current application is related to current works in the Nammuldi-Silvergrass expansion project.  Advises that appropriate mitigation measures should be implemented by the proponent to demonstrate the avoidance and/or minimisation of impacts on conservation significant flora and fauna values known from the Brockman Syncline proposal area.	DBCA comments were taken into consideration in the risk assessment.
Applicant was provided with draft documents on 04 October 2024	Applicant provided comments on 17 October 2024.  Refer to Appendix 1.	Refer to Appendix 1.

## 5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## References

1. Australian and New Zealand Environment and Conservation Council (ANZECC) 1997, *Australian Guidelines for Sewerage Systems – Effluent Management*, Perth, Western Australia
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water (DoW) 2008, *Water Quality Protection Note 22: Irrigation with nutrient-rich wastewater (WQPN 22)*, Perth, Western Australia
4. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
5. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
6. Rio Tinto Iron Ore (Rio Tinto) 2024, *Mt Brockman, Nammuldi & Silvergrass Iron Ore Mine (L5258/1991/11) Corella Camp Project*, Perth, Western Australia.



## Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
Condition 1, Table 1, Item 1	<p>A minor design change is required to the Corella Camp WWTP system. An opportunity has been identified to truck construction ablutions generated at surrounding Greater Brockman operations to the Corella Camp WWTP for treatment. A truck unloading pump facility is proposed to be added to the Corella Camp WWTP which provides direct connection, via camlock between a tanker truck and the inlet to the WWTP. This enables the delivery and treatment of sewage imported from satellite locations.</p> <p>Given the timing of the scheduled construction activities (Q2 2025) and the time the camp is expected to reach full room occupancy the WWTP will have available capacity to accept the construction waste for treatment.</p> <p>The applicant has requested the inclusion of the following equipment:</p> <ul style="list-style-type: none"> <li>• Camlock valve;</li> <li>• Truck unloading pump;</li> </ul>	The department has included the requested equipment to Table 1 for the design and construction / installation requirements for the Corella Camp WWTP.
	The applicant notes that the WWTP will be subject to construction, commissioning and time limited operations while the system is stabilising, as such the applicant requests that the reference to emission output "standards" be replaced with "targets".	The department has made the requested change.
Condition 1, Table 1, Item 2	<p>A 25 ha sprayfield footprint has been designated for use, within this proposed sprayfield footprint area up to four cells (totalling 10 hectares) will be constructed and operated. The intent of the sprayfield footprint is to allow minor changes to the location, sizing and orientation of the cell/s within the footprint location. The sprayfield cells, totalling a combined area of 10 ha, will be limited to the sprayfield footprint as shown in Schedule 1, Figures 2 and 4.</p> <p>The applicant requests the design and construction requirements for the sprayfield reflect this.</p>	<p>The department has changed this to read –</p> <ul style="list-style-type: none"> <li>• Comprising up to four cells totalling 10 hectares in size within the sprayfield footprint, with above ground sprinkler units;</li> </ul> <p>The infrastructure location has also been updated to 'within the sprayfield footprint shown in Schedule 1, Figures 2 and 4' as requested by the applicant.</p>

Condition	Summary of applicant's comment	Department's response
Condition 7, Table 4	The applicant requests the monitoring frequency during environmental commissioning for discharge volumes be changed to daily readings rather than continuous monitoring. Telemetry is not proposed as part of the design scope, the continual recording of flow volumes and pH will not be achievable.	The department has updated this condition so that the monitoring frequency for flow volume and pH is daily.
Condition 12(a)	The applicant has proposed an administrative update to change from "authorised" to "required".	The department has not made this change. This is the standard wording for this condition.
Condition 14, Table 5, Item 1	The daily inspection of the WWTP is proposed during commissioning. The applicant requests the removal of daily inspections during time limited operations. Inspection and maintenance requirements will be as per the supplier's operation and maintenance procedure.	The department has updated this condition to remove reference to 'daily'.
Condition 16, Table 7	The applicant requests the monitoring frequency during time limited operations for discharge volumes be changed to weekly readings rather than continuous monitoring. Telemetry is not proposed as part of the design scope, the continual recording of flow volumes will not be achievable.	The department has updated this condition so that the monitoring frequency for flow volume is weekly.
	The applicant requests the monitoring frequency for pH, BOD, TSS, TN, TP and E. coli be revised to quarterly during time limited operations. The commissioning compliance report will demonstrate the facility is trending towards the specified discharge parameters. In addition, the camp occupancy is expected to be staggered during time limited operations which will represent peaks and troughs of effluent entering the system. It is expected the system will take a few weeks to stabilise. Quarterly monitoring will more accurately account for these trends in changing effluent levels.	The department has not made the requested change. The time limited operations period is 180 days. Monthly monitoring during this period will allow six sample analyses to be undertaken and provided to the department. Monitoring of the WWTP will revert to quarterly once the WWTP is authorised under Licence L5258/1991/11.
-	The applicant requests that all conditions where a discharge point or sprayfield location is shown that 'within the sprayfield footprint shown in Schedule 1, Figures 2 and 4' is referenced.	The department has made the requested changes.