



Application for Licence Amendment

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

Licence Number	L9280/2021/1
Licence Holder	Atlas Iron Pty Ltd
ACN	110 396 168
File Number	INS-0002152 (APP-0029493)
Premises	Sanjiv Ridge G45/339, L45/407, L45/408, L45/410 and M45/1257 NULLAGINE WA 6758 Shire of East Pilbara As defined by the Premises map attached to the revised licence.
Date of Report	30 October 2025
Decision	Revised licence granted

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Amendment summary	1
2.3 The new Class 3 Centurion SBR WWTP unit	1
2.3.1 Wastewater treatment process	2
2.3.2 WWTP treated effluent	3
2.3.3 RO brine water	3
2.3.4 Expansion of irrigation sprayfield	3
2.3.5 Environmental commissioning of WWTP SBR Unit	4
2.4 Part IV of the EP Act	5
3. Risk assessment	5
3.1 Source-pathways and receptors	5
3.1.1 Emissions and controls	5
3.1.2 Receptors	8
3.2 Risk ratings	10
4. Consultation	14
5. Conclusion	14
5.1 Summary of amendments	14
References	15
Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions	16
 Table 1: Expected treated effluent water quality	 3
Table 2: Licence holder controls	5
Table 3: Sensitive receptors and distance from prescribed activity	8
Table 4. Risk assessment of potential emissions and discharges from the premises during construction/installation, commissioning and operation	10
Table 5: Consultation	14
Table 6: Summary of licence amendments	14
 Figure 1: Wastewater treatment process overview. <i>Source: Atlas Iron</i>	 2
Figure 2. Map of WWTP, sprayfield irrigation area and irrigation camp lawn	4

1. Decision summary

Licence L9280/2021/1 is held by Atlas Iron Pty Ltd (licence holder) for Sanjiv Ridge (the Premises), located at mining tenements G45/339, L45/408, L45/407, L45/410 and M45/1257 in the Shire of Nullagine, Western Australia.

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 licence L9280/2021/1 has been granted.

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 18 June 2025, the licence holder submitted an application to the department to amend licence L9280/2021/1 under section 59 and 59B of the *Environmental Protection Act 1986 (EP Act)*. The following amendments are being sought:

- Upgrade the existing Wastewater Treatment Plant (WWTP) unit through the installation of a new Class 3 Centurion Sequential Batch Reactor (SBR) unit;
- Increase the volume of treated effluent to 65 m³/day and reduce reverse osmosis (RO) water (brine) to 35 m³/day, for a cumulative discharge total of 100m³/day to the irrigation sprayfield; and
- Expansion of the existing irrigation sprayfield to up to three hectares (ha).

The commencement of the Stage 2 development of Sanjiv Ridge and further expansion of existing pits in the Stage 1 development requires an anticipated increase in the workforce from 180 to 240 staff. To support the additional workforce, Atlas has proposed to upgrade the existing sewage facility by installing a new upgraded WWTP unit to replace the current unit, as well as expanding the existing irrigation sprayfield to support the discharge of additional treated wastewater.

The WWTP, sprayfield and associated infrastructure are located within the Stage 1 project area. The Stage 2 project area is still being developed and does not form part of this amendment. This amendment is limited only to changes to Category 85 activities from the existing licence. No changes to the aspects of the existing licence relating to Category 5 and 89 have been requested by the licence holder.

2.3 The new Class 3 Centurion SBR WWTP unit

The existing WWTP was constructed in September 2020 under works approval W6043/2017/1. The facility comprised of a Class 3 low risk Iconic Wastewater SBR Solution unit with a three stage bardenpho process and a treatment capacity of 45 m³/day. The existing WWTP is currently authorised to discharge 60 m³/day of RO brine with treated effluent of 45 m³/day, allowing up to 105 m³/day to be discharged to the irrigation sprayfield.

The licence holder is proposing to install an upgraded WWTP to support the increasing workforce required to maintain the operations. The new WWTP unit will comprise of a fully containerised Class 3 low risk Centurion SBR WWTP unit. The licence holder has requested to increase the treated effluent to 65 m³/day and to reduce the volume of RO brine to 35 m³/day, allowing up to 100 m³/day to be discharged to the irrigation sprayfield. There are no changes to

the existing discharge locations authorised under condition 8 of the licence, namely the irrigation sprayfield area, irrigation camp lawn and the turkey's nest.

The WWTP SBR unit will be constructed off site and installed at the existing WWTP compound located in Figure 2. No additional clearing of native vegetation will be required for the installation of the new WWTP as the compound and associated pipework is already within the cleared premises of the accommodation camp.

2.3.1 Wastewater treatment process

The raw influent received from the accommodation camp will undergo a comprehensive treatment process to meet the discharge parameter limits specified in Table 10 of licence L9280/2021/1. The influent will firstly pass through an inlet screen to remove inorganic materials before entering the primary tank. The screened influent will be directed to the balance tanks, where agitation by external pumps will prevent the settling of solids.

The screened influent will be transferred to the SBR tank, where it will undergo a series of processes including aerobic and anaerobic treatment, mixing, chemical dosing, clarification and decanting. The treated effluent will then be circulated through a chlorine contact tank, where it is dosed with sodium hypochlorite to achieve a free chlorine residual between 0.2 to 2 mg/L.

Finally, the treated effluent will be stored in the irrigation tanks and discharged to the irrigation sprayfield as required.

Excess sludge will be directed to a sludge tank, where it will be dewatered using a sludge press to separate and remove excess liquid. The extracted liquid will be returned to the WWTP for further processing, while the remaining sludge will be disposed of at the approved onsite Class II landfill.

The wastewater treatment process of the new WWTP SBR unit is shown below in Figure 1.

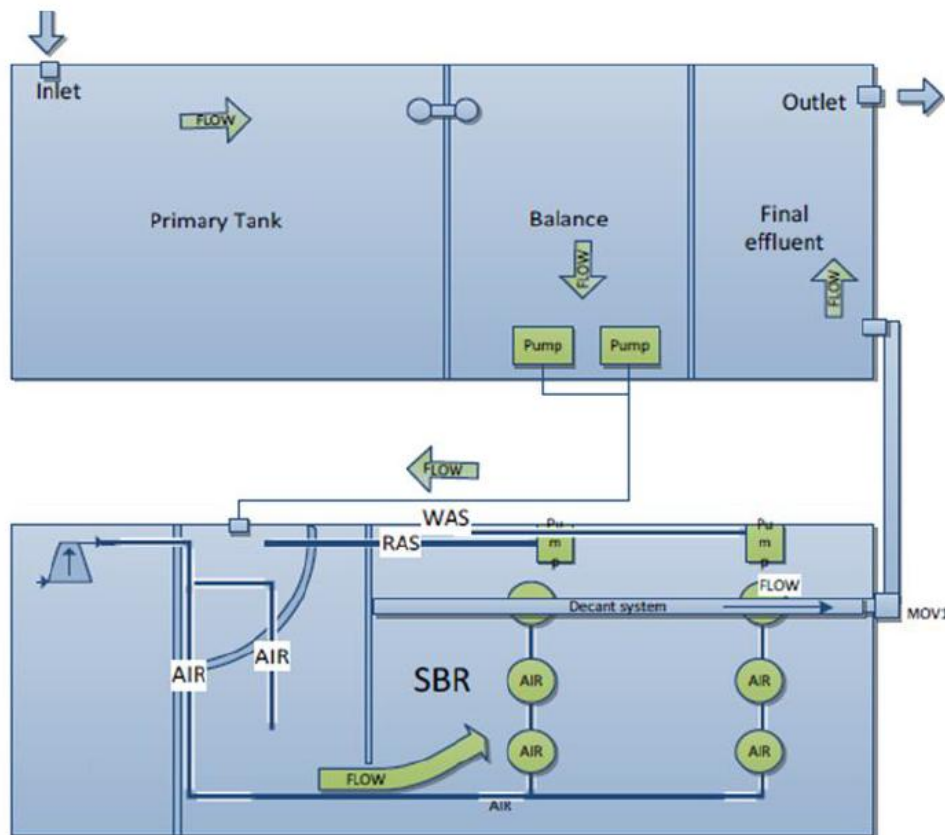


Figure 1: Wastewater treatment process overview. Source: Atlas Iron

2.3.2 WWTP treated effluent

The licence holder expects the effluent from the WWTP to be treated to a Low Exposure Risk level (DoH, 2024). There will be minimal changes to the current discharge limit concentrations in the licence, however Total Phosphorus (TP) is expected to reduce from 10 mg/L to 8 mg/L. The expected maximum discharge capacity of effluent (treated wastewater and RO brine) to the irrigation sprayfield will reduce from 105 m³/day to 100 m³/day.

Table 1: Expected treated effluent water quality

Parameter	Current discharge limit	Anticipated concentration
Biochemical Oxygen Demand (BOD)	20 mg/L	<20 mg/L
Total Suspended Solids (TSS)	30 mg/L	<30 mg/L
Total Dissolved Solids (TDS)	2,500	N/A
Total Nitrogen (TN)	30 mg/L	<30 mg/L
Total Phosphorus (TP)	10 mg/L	<8 mg/L
E.coli	1,000 cfu/100mL	<1000 mg/L
pH	6.5-8.5	6.5 – 8.5
Free Chlorine	N/A	0.2 – 2.0 mg/L

2.3.3 RO brine water

The treated effluent will be blended with the RO brine water generated from the WWTP prior to being discharged to the irrigation sprayfield. The quality of the RO brine water is brackish with a maximum Total Dissolved Solids (TDS) limit of <2,500 mg/L and remains unchanged from what has previously been assessed under the licence. Quarterly TDS sampling of the RO brine water discharged to the camp lawn is consistently under this threshold with values ranging from 800 to 860 mg/L in 2025. The licence holder has stated that not all RO brine water will be discharged to the irrigation field, with an estimated rate of approximately 10 m³/day. The remaining RO brine water will continue to be utilised for dust suppression and stored in the turkey's nest.

2.3.4 Expansion of irrigation sprayfield

To accommodate the increased nutrient loading from the increased production capacity of the WWTP, the licence holder has proposed to expand the existing irrigation field to approximately 3 ha inclusive of a 0.51 ha (5 m wide) fire break to allow for potential spray drift. The overall size was determined through the consideration of the nutrient application rates described in the *Water Quality Protection Note 22: Irrigation with Nutrient- Rich Wastewater (DoW, 2008)* which determined an active irrigation area of 2.43 hectares is required to prevent nutrient overloading of phosphorus.

The expansion will be located on previously cleared land and therefore no additional clearing is proposed. The sprayfield expansion will continue to have the same design previously approved under works approval W6043/2017/1 including;

- A perimeter fence with a 5 m wide firebreak between the sprinkler system and the perimeter;
- Warning signs placed on the fencing around the perimeter; and

- Sprinkler heads that have been selected to maximum droplet size.

2.3.5 Environmental commissioning of WWTP SBR Unit

The upgraded WWTP will undergo a commissioning period not exceeding 90 calendar days. Commissioning will comprise of dry testing, wet testing and biological start-up phases. Additionally, monitoring will be undertaken to measure emission and discharge parameters during commissioning as specified in licence L9280/2021/1.



Figure 2. Map of WWTP, sprayfield irrigation area and irrigation camp lawn.

L9280/2021/1

2.4 Part IV of the EP Act

Atlas Iron Pty Ltd has previously been assessed under *Part IV of the EP Act* with two Ministerial Statements (MS) being published as a result of the assessments:

- MS 1125 published on 12 March 2020; and
- MS 1197 published on 13 September 2022.

MS 1125 was published for the Corunna Downs Project (Stage 1). Stage 1 comprises of the development and operation of an open cut iron ore mine and associated mining infrastructure, waste rock dumps, a borefield and an accommodation camp. Stage 1 is still currently being developed.

MS 1197 was published for the Sanjiv Ridge Project (Stage 2), an expansion of Sanjiv Ridge. The expansion consists of three new pits, four waste rock dumps and a 4 km haul road connecting it to Stage 1 and is still undergoing development.

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 2020a).

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 2 below. Table 2 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls
Construction and installation			
Dust	Installation of WWTP unit Expansion of sprayfield Vehicle movements on unsealed surfaces	Air/windborne	• An existing control on the licence - all pipe work installed at the irrigation sprayfield will be above ground requiring minimal ground disturbance; and • Construction of WWTP will be offsite and will be installed in the existing WWTP compound.
Operation			

Emission	Sources	Potential pathways	Proposed controls
Spills and leaks of raw or partially treated sewage	Operation of the WWTP and irrigation sprayfield	Direct discharge to land from spills/leaks of WWTP tanks and pipeline leaks/bursts	• All pipework will be maintained and inspected regularly to ensure leaks and defects are rectified; • Balance tank will have a contingency storage of up to two days of normal flow; • Approximately three days of storage will be maintained in the treated wastewater tank should irrigation not be able to occur; • Effluent will flow to sprayfield by automated systems; • Spill recovery and clean up materials will be accessible at all times; • Implementation of the WWTP Management Plan (950-EN-PLN-002) and WWTP Care and Maintenance Plan (950-EN-PLN-001). This will include the following management measures: ○ Inline testing and sample ports. ○ Daily checks on system performance including manufacturer recommended parameters and discharge volume, pH, chlorine, irrigation tank levels, sprayfield outlets and irrigation pumps. ○ Contingency tanks to allow for additional storage. ○ Periodic sludge removal. ○ Chlorination of treated effluent • Volumetric flowmeter will be maintained on WWTP inlet and outlet pipes and discharge points; • Existing controls on the licence include; ○ use of earthen bunding, high level alarms (audible and visible) and aboveground pipework; ○ maintaining a 5 m buffer between the sprayfield area and perimeter fence; ○ controls when irrigating via

Emission	Sources	Potential pathways	Proposed controls
			the irrigation sprayfield; ○ vegetation condition monitoring; and ○ monitoring of the WWTP irrigation water prior to discharge to comply with discharge limits.
Hydrocarbon spills and leaks (chemicals used in wastewater and water treatment)	Storage of hydrocarbons used in the WWTP processes.	Direct discharge to land via surface water runoff and spills/leaks.	• Adherence to <i>Hydrocarbon Management Procedure (90-EN-PRO-0008 and Hydrocarbon (and Chemical) Spill Management Procedure (950-EN-PRO-0007)</i>. This will include the following management measures: ○ Storage facilities not located near waterways or drainage lines. ○ Refuelling on impermeable pads. ○ No mobile refuelling within 30 m of a watercourse, dry break hoses used and spill kits carried with vehicles. ○ Vehicles will be washed down on wash pads with oil/water separators and impervious pads. ○ Washdowns that take place outside of washdown areas shall be in designated areas with contaminated soil removed regularly for disposal. ○ Personnel will be trained in spill response • A register will be maintained onsite and inventory audits will be regularly undertaken; • Spill recovery and cleaning materials will be accessible at all times; and • Hydrocarbon storage facilities will be contained with impermeable bunds consistent with AS1940:2017 and regularly inspected for evidence of leaks or spills.

Emission	Sources	Potential pathways	Proposed controls
Contaminated stormwater	Operation of irrigation sprayfield	Overland runoff from sprayfield following storm events	- A five-meter firebreak will be maintained between the edge of the sprinkler and the perimeter fence of the sprayfield; and - An existing control on the licence - vegetation condition monitoring.
Treated effluent blended with RO brine water	Irrigation of treated wastewater	Surface run-off and/or infiltration to land and groundwater Spray drift via air/wind	- A five-meter firebreak will be maintained between the edge of the sprinkler and the perimeter fence of the sprayfield; - Sprinkler heads will have maximised droplet size; - Existing controls on the licence include; - Vegetation condition monitoring; and - All pipe work installed at the irrigation sprayfield will be above ground; and - Monitoring of the WWTP irrigation water prior to discharge to comply with discharge limits

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020a), the delegated officer has excluded employees, visitors and contractors of the licence holders 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 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 2020b)). There have no human receptors identified.

Table 3: Sensitive receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Conservation significant fauna– <i>Dasyurus hallucatus</i> - Northern Quoll (endangered) <i>Rhinonictis aurantius</i> (Pilbara) - Pilbara Leaf-nosed Bat (vulnerable) <i>Macroderma gigas</i> - Ghost Bat (vulnerable) <i>Pseudomys chapmani</i> - Western Pebble-mound Mouse (P4) <i>Dasycercus blythi</i> - Brush-tailed Mulgara (P4)	Records of fauna located approximately 159 m north of the irrigation sprayfield Records of fauna located approximately 195 m east of the camp lawn Records of fauna located approximately 534 m northeast of turkey's nest (TN4)

<i>Macrotis lagotis</i> - Greater Bilby (vulnerable) <i>Smithopsis longicaudata</i> - Long-tailed Dunnart (P4)	
Conservation significant flora – <i>Cochlospermum macnamarae</i> (P1) <i>Schoenus coultasii</i> (P1) <i>Acacia levata</i> (P3) <i>Heliotropium murinum</i> (P3) <i>Nicotiana umbratica</i> (P3) <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3) <i>Rothia indica</i> subsp. <i>Australis</i> (P3) <i>Stylidium weeliwolli</i> (P3) <i>Swainsona thompsoniana</i> (P3) <i>Ptilotus mollis</i> (P4)	Located approximately 100 m east of the irrigation sprayfield Recorded 310 m north of the camp lawn
Remnant native vegetation	Remnant native vegetation adjacent to WWTP and irrigation sprayfield.
Surface waterbody Coongan River	Situated 561 m east of the irrigation sprayfield Situated 700 m east of the camp lawn Situated 800 m east from the WWTP
Surface water lines Two minor non-perennial surface water lines running adjacent to activity area	Situated 425 m northwest and 362 m southeast from the WWTP Situated 510 m west and 403 m south from the irrigation sprayfield Situated 528 m west and 256 m southeast from the camp lawn
Groundwater Pilbara Groundwater Area	The premises boundary occurs within the Proclaimed Pilbara under the <i>Rights in Water and Irrigation Act 1914</i> . The groundwater underlying the premises ranges between 3 to 10 metres below ground level (mbgl) in low-lying elevations. Groundwater quality ranges between 42 and 1,800 TDS mg/L
Cultural receptors	Distance from prescribed activity
Aboriginal heritage site – Artefact scatter (Lodged site ID 38588) Unregistered site	Situated 167 m west of the irrigation sprayfield Situated 171 m northwest of the camp lawn Situated 198 m north of the turkey's nest (TN4) Situated 86 m northwest of the WWTP

3.2 Risk ratings

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

Where the licence 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 licence holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the licence holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The revised licence L9280/2021/1 that accompanies this amendment report authorises emissions associated with the operation of the premises i.e. Category 5: Processing or beneficiation of metallic or non-metallic ore, Category 85: Sewerage Facility and Category 89: Putrescible landfill site. The conditions in the revised licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the premises during construction/installation, commissioning and operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
Construction/installation								
Installation of WWTP Expansion of sprayfield Vehicle movements on unsealed surfaces	Dust	Pathway: Air/windborne Impact: health and amenity, and/or smothering of vegetation	Aboriginal Heritage Site 86 m northwest of WWTP Conservation significant flora species located 100 m east of irrigation sprayfield Adjacent native vegetation	Refer to Section 3.1.	C =Slight L = Rare Low Risk	Y	Condition 2 (Table 2): Design and construction/installation requirements Condition 3: Submission of ECR Condition 4: Requirements of ECR Condition 26: Complaints record management	Dust emissions are expected to have a minimal impact during installation given all pipework is already installed aboveground and the WWTP will be constructed off site. Standard conditions relating to the submission of an ECR following construction/installation of the WWTP have been included on the licence.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
Commissioning and Operation								
Storage of hydrocarbons used for the WWTP processes.	Hydrocarbon spills and leaks (chemicals used in wastewater and water treatment)	Pathway: Direct discharge to land via surface water runoff and spills/leaks Impact: Ecosystem disturbance and/or impacting surface water and groundwater quality	Coongan River (561m east of irrigation sprayfield) Conservation significant flora species located 100 m east of irrigation sprayfield Groundwater (3 to 10 mbgl)	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 (Table 1): Operational requirements Condition 2 (Table 2): Design and construction/installation requirements	The Delegated Officer considers the licence holder controls for managing spills of hazardous material suitable for mitigating risk. Spills and leaks of hydrocarbons are regulated under the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>
Operation of WWTP and irrigation sprayfield	Spills and leaks of raw or partially treated sewage	Pathway: Direct discharge to land from spills/leaks of WWTP tanks and pipeline leaks/burst Impact: Soil/sediments contaminated by raw sewage and impacts to underlying groundwater	Coongan River (561m east of irrigation sprayfield) Groundwater (3 to 10 mbgl) Conservation significant flora species located 100 m east of irrigation sprayfield Adjacent native vegetation Aboriginal Heritage Site 86 m northwest of WWTP	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1 (Table 1): Operational requirements Condition 2 (Table 2): Design and construction/installation requirements <u>Condition 6 (Table 3):</u> Environmental commissioning requirements <u>Condition 7 (Table 4):</u> Authorised discharge point during commissioning Condition 8 (Table 5): Emissions and discharge monitoring during commissioning <u>Conditions 9 and 10:</u> Commissioning reporting Condition 11 (Table 6): Waste processing	Applicant controls regarding spill management have been imposed in the licence. Commissioning conditions have been added for the irrigation sprayfield requirements and authorised discharge points.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
Operation of irrigation sprayfield	Contaminated Stormwater	Pathway: Overland runoff from sprayfield following storm events Impact: Overland flow following a spill or leak event may cause ecosystem disturbance and impacts to surface water quality of nearby waterbodies.	Coongan River (561m east of irrigation sprayfield) Groundwater (3 to 10 mbgl) Conservation significant flora species located 100 m east of irrigation sprayfield Adjacent native vegetation Aboriginal Heritage Site located 167 metres west of irrigation sprayfield	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 (Table 1): Operational requirements Condition 2 (Table 2): Design and construction/installation requirements	N/A
Irrigation of treated wastewater	Treated effluent blended with RO brine water	Pathway: Surface run-off and/or infiltration to land/groundwater and spray drift via air/wind Impact: Deterioration of surface water and groundwater quality Impact to health and growth of surrounding vegetation causing a reduction in soil quality	Coongan River (561m east of irrigation sprayfield) Groundwater (3 to 10 mbgl) Conservation significant flora species located 100 m east of irrigation sprayfield Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1 (Table 1): Operational requirements Condition 2 (Table 2): Design and construction/installation requirements Condition 6 (Table 3): Environmental commissioning requirements Condition 7 (Table 4): Authorised discharge point during commissioning Condition 8 (Table 5): Emissions and discharge monitoring during commissioning	Monitoring of wastewater discharge, vegetation monitoring in and surrounding the sprayfield and requirements when irrigating wastewater has previously been implemented in the licence under conditions 13, 16, 22, 23 and 24. Additional conditions proposed by the licence holder have been imposed in the licence.

L9280/2021/1

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence holder's controls				
			Aboriginal Heritage Site located 167 metres west of irrigation sprayfield.				Condition 9 and 10: Commissioning reporting Condition 11 (Table 6) Waste processing Condition 13: Requirements for fencing around irrigation area and inspections Condition 15 (Table 8): Authorised discharge to land locations Condition 16: Requirements for Irrigation via the irrigation sprayfield Condition 18: Requirement for effluent discharged Condition 23: Monitoring of waste inputs and outputs Condition 24: (Table 10): Discharges to land monitoring and limits Condition 25 (Table 11): Vegetation condition monitoring	

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

Note 2: Proposed licence holder's 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
Licence holder was provided with draft amendment on 7 October 2025	See Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions.	See Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions.

5. Conclusion

Based on the assessment in this amendment report, the Delegated Officer has determined that a revised licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
Cover page	Updated registered business address. Updated date of amendment. Added Shire of East Pilbara to premises details. Updated category descriptions. Updated assessed design capacity for Category 85.
Licence history	Added amendment to summary of changes.
Table 1: Infrastructure and equipment operational requirements	Updated Category 85 site infrastructure and equipment operational requirements with WWTP upgrade and expanded irrigation sprayfield. Included secondary crushing and screening plant operational requirements.
Condition 3	Removed condition 3 as Table 2 has been updated to design and construction requirements.
Table 2: Design and construction/installation requirements	Removed secondary crushing and screening plant due to previous submission and assessment of ECR. Added wastewater treatment plant upgrade and irrigation field expansion design and construction requirements.
Compliance reporting	Added conditions 3, 4 and 5 for compliance reporting for infrastructure in Table 2.
Environmental commissioning phase	Added conditions 6, 7, 8, 9 and 10 for commission phase for WWTP and irrigation sprayfield. Added Table 3: Environmental commission requirements. Added Table 4: Authorised discharge point during commissioning. Added Table 5: Emissions and discharge monitoring during commissioning.

Condition no.	Proposed amendments
Table 6: Waste processing	Updated WWTP facility name. Updated maximum treatment capacity of the WWTP from 45m ³ /day to 65m ³ /day. Added a figure reference of the irrigation sprayfield.
Table 8: Discharges to land	Updated description of irrigation sprayfield area from 1.7 ha to 3.0 ha.
Condition 18	Added condition 18 as a previous condition required in the AER did not have a reference.
Table 10: Discharge to land monitoring and limits	Amended Table 10 to combine Table 11, Schedule 3. Added TN and TP parameters. Added concentration limits to the parameters. Decreased parameter limit of TP from 10 mg/L to 8 mg/L.
Records and reporting	Added Condition 26: Complaints record. Removed conditions 20, 21 and 22 due to restructuring/reordering.
Table 12: Annual environmental report	Updated condition and figure numbers. Referenced condition 18 to a previous requirement.
Table 13: Definitions	Added conditions for 'BOD', 'PAC', 'RAS', 'suitably qualified engineer', 'TDS', 'TN', 'TP' and 'TSS'.
Table 1: Maps	Update Figure 3: Sprayfield irrigation area, irrigation camp lawn and WWTP.
Schedule 3, Table 11: Discharge water quality	Removed Table 11 in Schedule 3 and combined with Table 10.
General	Updated figure, table and condition numbers in accordance with the amendments made.

References

1. Atlas Iron Pty Ltd 2025, *Attachment 3A: Licence Amendment – Environmental Commissioning Plan, Sanjiv Ridge DSO Project*, Perth, Western Australia
2. Atlas Iron Pty Ltd 2025, *Attachment 3B: Licence Amendment Supporting Information, Sanjiv Ridge DSO Project*, Perth, Western Australia
3. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Department of Water and Environmental Regulation (DWER) 2020b, *Guideline: Environmental Siting*, Perth, Western Australia.
6. Department of Health (DoH) 2024, *Guidelines for the non-potable use of recycled water in Western Australia*, Perth, Western Australia.
7. Department of Water (DoW) 2008, *Water Quality Protection Note: Irrigation with nutrient-rich wastewater (WQPN 22)*, Perth, Western Australia.

Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions

Condition	Summary of licence holder's comment	Department's response
Licence amendment comments		
Cover page	Requested to amend registered business address to reflect current place of business. The business relocated from the Perth office to the West Perth office on 3 April 2024.	Noted and amended.
Table 1: Infrastructure and equipment operational requirements - Irrigation sprayfield	Licence holder was to advise the frequency of visual inspection. Licence holder confirmed visual inspections of the pipework at the irrigation sprayfield will occur weekly.	Noted and added.
Table 2: Design and construction/installation requirements - Class 3 low risk Centurion SBR WWTP unit	Requested to amend 'the perimeter of WWTP will be fenced to prevent unauthorised access' to 'the perimeter of the WWTP will be signposted to prevent unauthorised access' The licence holder determined the fence was not feasible due to costs, and potential restrictions to access the plant. The risk for unauthorised entry was considered low and could be adequately managed via signage.	Rationale accepted and condition amended.
Condition 3 and condition 4(c)	Requested to replace 'works approval holder' with 'licence holder'.	Noted and amended.
Table 13: Definitions - Suitably qualified engineer	Requested to amend definition to: 'means a competent professional who: (a) holds a qualification in engineering or equivalent; and (b) has a minimum of at least three years' experience working in civil, structural, environmental or wastewater engineering.' The licence holder believed the definition is overly prescriptive and inconsistent with existing approved licences.	The Delegated Officer accepts the request to change definition specific for the audit completed on the WWTP. Changes accepted are as follows: - change from five years to three years and removal of supervisory role; - change the qualification from 'bachelor's degree recognised by Engineers Australia' to 'qualification in engineering or equivalent'; and - removed 'is employed by an independent third-party external to the licence holder's business'.

Condition	Summary of licence holder's comment	Department's response
Schedule 1: Maps - Figure 2: Prescribed premises activities map - Figure 4: Tyre disposal areas - Figure 5: RO brine diversion from RO plant to turkey's nest with pipeline	Figures previously approved under the licence contained information about sensitive heritage sites. The licence holder has provided updated figures with both heritage and environmental sensitivities redated to substitute with Figures 2, 4 and 5 in the previous licence version.	Noted and updated Figures 2, 4 and 5.
Amendment report comments		
2.3.2. WWTP treated effluent	The licence holder was requested to confirm which reference is being referred to in the text. The licence holder provided a copy of the reference document.	Noted and accepted. The document has been added to the list of references.
Table 3: Sensitive receptors and distance from prescribed activity.	Licence holder provided copies of most recent fauna and flora survey reports as requested.	Noted and accepted.
Figure 3: Distance to sensitive receptors	Licence holder was to provide an updated map that details the WWTP and surrounding receptors. The licence holder provided an updated figure.	Noted and accepted. The updated map will not be added in the final report as it contains confidential features.
Table 4: Risk assessment - Operation of WWTP and irrigation sprayfield	Requested to replace reference of 'works approval' to 'licence'.	Noted and amended.