



## Annual Audit Compliance Report Form

*Environmental Protection Act 1986, Part V*

Section A – Licence Details			
Licence number:	L9280/2021/1	Licence file number:	DER2020/000597
Licence holder:	Atlas Iron Pty Ltd		
Trading as:	Atlas Iron Pty Ltd		
ACN:	110 396 168		
Registered address:	1314 Hay Street West Perth WA 6005		
Reporting period:	01/07/2023 to 30/06/2024		

Section B – Statement of Compliance with Licence Conditions
Did you comply with all of your licence conditions during the reporting period? (please tick the appropriate box)
<input type="checkbox"/> Yes – please complete: <ul style="list-style-type: none"><li>• section C;</li><li>• section D if required; and</li><li>• sign the declaration in Section F.</li></ul>
<input checked="" type="checkbox"/> No – please complete: <ul style="list-style-type: none"><li>• section C;</li><li>• section D if required;</li><li>• section E; and</li><li>• sign the declaration at Section F.</li></ul>

Section C – Statement of Actual Production	
Provide the actual production quantity for this reporting period. Supporting documentation is to be attached.	
<b>Prescribed Premises Category</b>	<b>Actual Production Quantity</b>
Category 5: Processing or beneficiation of metallic or non-metallic ore	5,058,571 tonnes per annual period

Section D – Statement of Actual Part 2 Waste Discharge Quantity	
Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.	
<b>Prescribed Premises Category</b>	<b>Actual Part 2 Waste Discharge Quantity</b>
Category 85: Sewage facility	42.43 m <sup>3</sup> /day of effluent, plus 56.72 m <sup>3</sup> /day of RO discharge
Category 89: Putrescible landfill site	166.93 tonnes per annual period

Section E – Details of Non-Compliance with Licence Condition
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Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.			
Condition no:	Condition 1, Table 1	Date(s) of non-compliance:	July 2023
Details of non-compliance:			
<p>L9280/2021/1 was amended on 29 May 2023. The amendment increased the permissible volume of wastewater and reverse osmosis (RO) brine discharge from a combined total of 60 m<sup>3</sup>/day to 105 m<sup>3</sup>/day. This included an increase in the RO brine limit from 15 m<sup>3</sup>/day to 60 m<sup>3</sup>/day. The treated wastewater component of the total limit remained at 45 m<sup>3</sup>/day.</p> <p>During the months of July, August, January, March, and May, treated effluent exceeded licence limits, while RO brine exceeded the allowable limit between November and January.</p>			
Month	Treated Effluent	RO Brine	Irrigation Sprayfield
Jul 2023	51	59	75
Aug 2023	56	50	62
Sep 2023	23	52	33
Oct 2023	28	46	25
Nov 2023	28	68	25
Dec 2023	38	101	56
Jan 2024	45	64	33
Feb 2024	41	36	26
Mar 2024	49	43	40
Apr 2024	44	40	26
May 2024	48	50	30
Jun 2024	43	53	39
Annual Average (m <sup>3</sup> /day)	42.4	56.7	41.0
Licence design capacity (m <sup>3</sup> /day)	45	60	105
<p><b><u>Treated Effluent Exceedance</u></b></p> <p>During the reporting period, the volume of treated effluent exceeded the licence limit during July, August, January, March, and May with averages of 51, 56, 45, 49, and 48 m<sup>3</sup>/day, respectively. Investigation of these exceedances determined that there are likely multiple causes for the potential increase in treated wastewater effluent volumes.</p>			
<p><b><u>RO Brine Exceedance</u></b></p> <p>During the reporting period from November 2023 to January 2023, the volume of RO brine produced exceeded 60 m<sup>3</sup>/day, reaching a monthly average for the year of 68, 101, and 64 m<sup>3</sup>/day, respectively.</p>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<p><b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			

**Treated Effluent Exceedance**

Analysis of the treated effluent is conducted on a quarterly basis as part of the Waste Water Treatment Plant (WWTP) monitoring schedule listed in Table 6 of Condition 14.

Discharge to land limits in Table 10 of Schedule 3 stipulates an annual discharge limit for Total Nitrogen (TN) and Total Phosphorus (TP) of 480 and 120 kg/ha/year. For the reporting period, TN and TP were calculated to be 42.55 and 10.34 kg/ha/year, respectively.

This is below the total annual limits, suggesting that any potential increase in treated effluent would have minimal impact on discharge quality.

All other water quality parameters (Conductivity, pH, BOD, TDS, and E.Coli) were within the discharge to land limits except for Total Suspended Solids (TSS). On January 2, 2024, the analysis for TSS was 49 mg/L, above the 30 mg/L defined in Table 10 of Schedule 3. The increase in TSS was attributed to a buildup of sediment in the irrigation tanks. This sediment was pumped out of the irrigation tanks and upon resampling on April 9, 2024, this result returned was 11mg/L, below the 30 mg/L defined in Table 10 of Schedule 3.

**RO Brine Exceedance**

While the RO brine may have exceeded the licence limit from November 2023 to January 2024, it should be noted that on September 27, 2023, the RO brine was diverted from the irrigation sprayfield to Turkey's Nest 04 (TN04) to be utilised for dust suppression as well as to the camp lawn for irrigation. Any increased volumes produced during this period that could not be attributed to a faulty flowmeter would have minimal impact on the sprayfield vegetation due to the diversion of the RO brine. During this period vegetation at the spray field continued to be monitored and there was no discernable difference in vegetation health or condition, due to the diversion of the RO brine. Electrical Conductivity (EC) of treated effluent discharged to the sprayfield maintained a fresh to brackish limit between 600 to 1700 uS/cm.

Though exceedances in treated effluent and RO brine have been recorded, the total monthly volume discharged to the irrigation sprayfield remained below the daily limit of 105 m3/day.

Cause (or suspected cause) of non-compliance:

**Treated Effluent Exceedance**

For July and August 2023, it was identified that the flow meter being used to record daily volumes was producing faulty readings. An alternative flow meter was installed on October 10, 2023, to determine the accuracy of the current meter and has been used since to monitor monthly averages. For January, March, and May 2024, the occupancy of the accommodation village was significantly higher than normal and at times at maximum capacity, contributing to the increased volumes of treated effluent.

An independent audit by a third party WWTP specialist was also conducted on November 13, 2024, to provide a comprehensive overview of the WWTP and RO system. Several recommendations consider occupancy limits, flow meter and weather events. This has been provided to the Atlas Maintenance team for consideration where some of these actions were implemented soon after receiving this report.

**RO Brine Exceedance**

Investigations conducted by the Atlas Maintenance Team determined that both a faulty flowmeter and relief plumbers watering the camp lawn with potable water were the causes of the increased volume of RO brine produced.

Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:

**Treated Effluent Exceedance**

To date, several actions have been implemented to reduce the potential for treated effluent exceedances.



- An independent audit for both the WWTP and the Water Treatment Plant (WTP) was completed by Tristar on November 13, 2023.
- Reviewed the monitoring results against the camp occupancy capacity to determine effect of potentially increased influent.
- Ad hoc testing of treated effluent is being conducted monthly to ensure chemical parameters do not exceed limits defined in Table 10 of Schedule 3.
- Flowmeter accuracy has been reviewed by the Atlas Maintenance team.
- A new RO and WWTP has been budgeted for FY25 and approved for installation. These new systems will have increased capability to accommodate the maximum capacity of the accommodation camp, as well as identify potential issues quicker reducing maintenance response times.

#### **RO Brine Exceedance**

- The identified faulty flowmeter for the RO Brine was replaced on December 30, 2023, and monthly averages have not exceeded the licence limit since then.
- Further investigation by the Atlas Maintenance Team identified several potable water leaking faucets from different sources around the accommodation village, resulting in excess potable water produced and thus RO brine produced. This has since been rectified and can be seen in RO volumes reduced each month.
- It should also be noted that on September 27, 2023, the RO brine was diverted from the irrigation sprayfield to TN04 to be utilised for dust suppression.

Was this non-compliance previously reported to DWER?

☐ Yes, and

☐ Reported to DWER verbally

Date:

☐ Reported to DWER in writing

Date:

### **Section F – Declaration**

I/We declare that the information in this Annual Audit Compliance Report is true and correct and is not false or misleading in a material particular<sup>1</sup>. I/We consent to the Annual Audit Compliance Report being published on the Department of Water and Environmental Regulation's (DWER) website.

Signature <sup>2</sup> :		Signature:	
Name: (printed)		Name: (printed)	
Position:		Position:	
Date:	30/07/2024	Date:	
Seal (if signing under seal):			

<sup>1</sup> It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular.

<sup>2</sup> AACRs can only be signed by the licence holder or an authorised person with the legal authority to sign on behalf of the licence holder.