



## Annual Audit Compliance Report Form

*Environmental Protection Act 1986, Part V Division 3*

Once completed, please submit this form either via email to [info@dwer.wa.gov.au](mailto:info@dwer.wa.gov.au), or to the below postal address:

Department of Water and Environmental Regulation  
Locked Bag 10  
Joondalup DC WA 6919

Section A – Licence details			
Licence number:	L9056/2017/1	Licence file number:	DER2017/000318
Licence holder name:	Pilgangoora Operations Pty Ltd		
Trading as:	Pilbara Minerals Pty Ltd		
ACN:	616 560 395		
Registered business address:	Level 2, 146 Colin Street, WEST PERTH WA 6005		
Reporting period:	01 / 07 / 23 to 30 / 06 / 24		

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 in 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.	
Prescribed premises category	Actual production quantity
Category 5: Processing Plant	2,272,475 dmt processed ore 1,488,661 tonnes tailings produced
Category 52: Power Station	7.73MW (NPI)
Category 73: Bulk storage of chemicals (diesel)	927m <sup>3</sup> in aggregate

<b>Section D – Statement of actual Part 2 waste discharge quantity</b>	
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 54: Camp Wastewater Treatment Plant	50,688kL (NPI)
Category 64: Class II putrescible and inert landfill	5,982 tonnes (NPI)

Section E – Details of non-compliance with licence condition			
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:	1	Date(s) of non-compliance:	Multiple
Details of non-compliance:			
<p>Standing Water Levels (SWL) for the Ambient groundwater monitoring bores TMFMB01, TMFMB02, TMFMB04, TMFMB05, PMB001 and PMB002 are at/or above the limit and trigger levels for operating licence L9056/2017/1.</p> <ul style="list-style-type: none"> <li>• <b>TMFMB01</b> has recorded a reading of 4.96mbgl for the month of April, 4.84mbgl for the month of May and 4.62mbgl for the month of June 2024, all exceeding the licence limit of 5mbgl.</li> <li>• <b>TMFMB02</b> has recorded multiple readings throughout the 2023 / 2024 reporting period, all exceeding the licence limit of 5mbgl (as per attachment 4 Condition 12 Ambient groundwater)</li> <li>• <b>TMFMB04</b> has recorded multiple readings throughout the 2023 / 2024 reporting period, all exceeding the licence trigger level of 5mbgl. (as per attachment 4 Condition 12 Ambient groundwater)</li> <li>• <b>TMFMB05</b> has recorded a reading of 3.26mbgl for the month of March, 4.29mbgl for the month of April and 3.48mbgl for the month of June 2024, all exceeding the licence trigger threshold of 5mbgl.</li> <li>• <b>PMB021</b> has recorded a reading of 4.80mbgl for the month of June, exceeding the licence limit of 5mbgl.</li> <li>• <b>PMB022</b> has recorded a reading of 4.65mbgl for the month of July (2023), 2.86mbgl for the month of March, 2.78mbgl for the months of April / May and 2.49mbgl for the month of June, all exceeding the licence limit of 5mbgl.</li> </ul> <p>Hydrographs for all trigger levels and quality exceedances are provided in Appendix 1. Refer to Attachment 4 Condition 12-Ambient Groundwater</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>			
No environmental impact has resulted from these elevations in groundwater.			

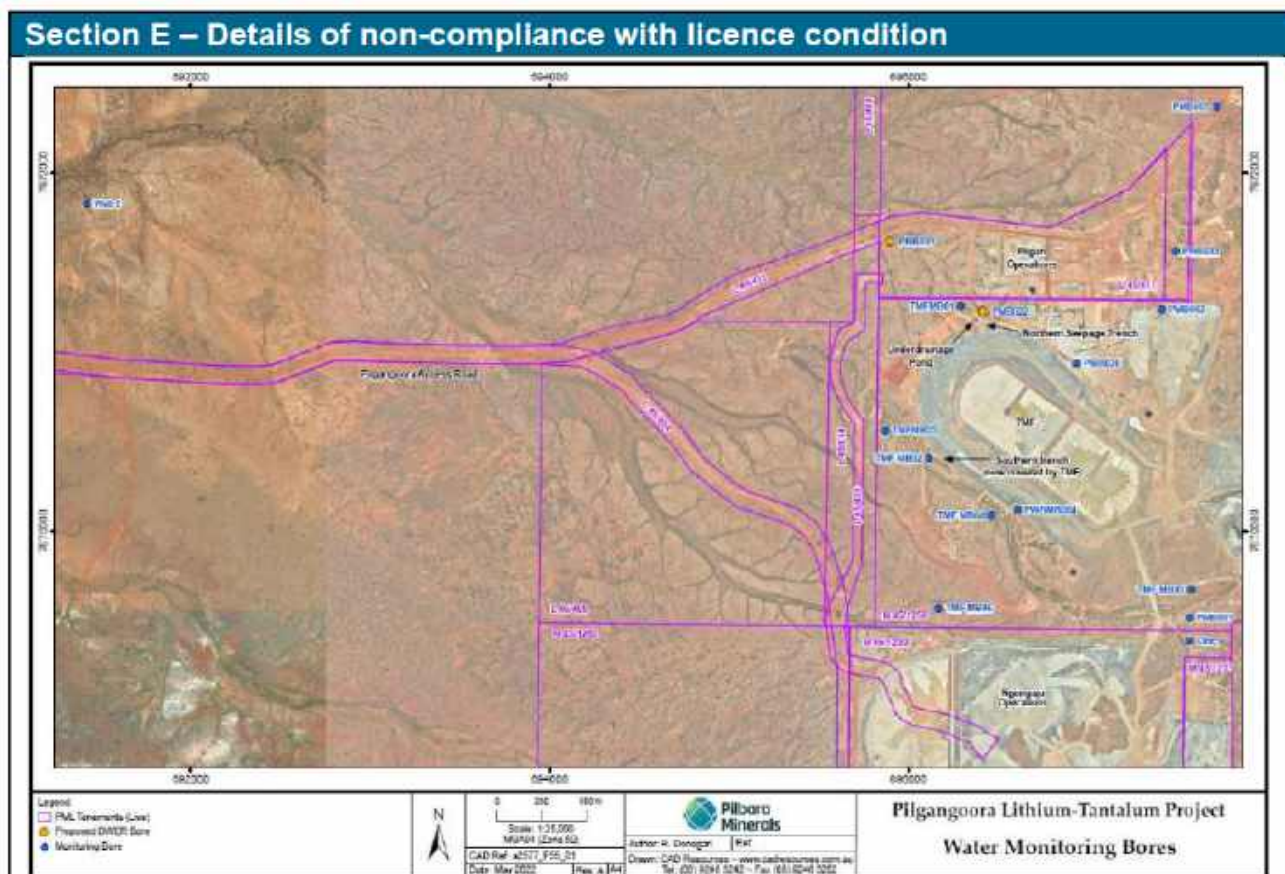


Figure 6: Location of TMF monitoring bores


**Cause (or suspected cause) of non-compliance:**

Seepage from the Pilgan Tailings Management Facility (TMF) has resulted in mounding within close proximity to the facility. SWL fluctuations vary depending on which cell is receiving tailings, with levels increasing more in areas nearer to the active cell. Additionally, SWL is significantly affected by rainfall recharge, typically rising during the wet season and falling during the dry months. This combination of factors has led to SWL exceeding the established licence limits and trigger levels.


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

- Four new seepage recovery bores were drilled in September 2024 (servicing the Pilgan Tailings Management Facility) and are currently being pump tested.
- Approvals for the new Tailing Storage Facility (TSF) 3 and 16 associated facility monitoring bores obtained
- Construction of new TSF3 commenced. Facility scheduled to be commissioned Quarter 1 of 2026
- Transition of the Pilbara Minerals Limited water database from **InViron** to **Preserve (INX)**, commenced May 2024
- Tailings Deposition and Decant Return Improvement Projects undertaken during the 2024 financial year
- Seepage Modelling and Draft Seepage Recovery Plan, scheduled for Quarter 4 of 2024; and


Section E – Details of non-compliance with licence condition	
<ul style="list-style-type: none"> <li>• Pumping out clay lined Sediment Pond West and returning water back into the processing circuit</li> <li>• Review of DWER operating licence triggers and limits as set by L9056/2017/1, scheduled for Quarter 4 of 2024 (post submission of 2024 AER)</li> </ul>	
Was this non-compliance previously reported to DWER?	
<input checked="" type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input checked="" type="checkbox"/> Reported to DWER in writing	Date: 17 / 06 / 24

Section E – Details of non-compliance with licence condition			
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:	1	Date(s) of non-compliance:	9 <sup>th</sup> June 2024
Details of non-compliance:			
Ambient groundwater monitoring bore PMB022 returned a Total Dissolved Solids (TDS) result, exceeding the operating licence L9056/2017/1 limit.			
<ul style="list-style-type: none"> <li>PMB022 has recorded a TDS reading of 4140mg/L for the month of June 2024, exceeding the licence limit of 4000mg/L.</li> </ul>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
No environmental impact has resulted from this elevation in groundwater quality.			
			
Cause (or suspected cause) of non-compliance:			
The cause of the elevated levels are due to evapo-concentration of run-off from the primary rejects contained at the Sediment Pond West, and seepage water from tailings water from the Pilgan Tailings Management Facility (TMF).			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			


Section E – Details of non-compliance with licence condition	
<ul style="list-style-type: none"> <li>Installation of sump and pump at Primary Rejects area to prevent water entering Sediment Pond West, which is adjacent to bore PMB022.</li> <li>Installation of a 'seepage' trench at the Pilgan TMF</li> <li>Improving tailings densities as per licence limits</li> <li>Four new seepage recovery bores were drilled in September 2024 (servicing the Pilgan Tailings Management Facility) and are currently being pump tested.</li> </ul>	
Was this non-compliance previously reported to DWER?	
<input checked="" type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input checked="" type="checkbox"/> Reported to DWER in writing	Date: 26 / 06 / 24

Section E – Details of non-compliance with licence condition			
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:	1	Date(s) of non-compliance:	23 <sup>rd</sup> May 2024
Details of non-compliance:			
Ambient groundwater monitoring bore PMB022 returned both Fluoride and Vanadium results, exceeding the operating licence L9056/2017/1 limits.			
<ul style="list-style-type: none"> <li>PMB022 has recorded a Fluoride result of 7mg/L for the month of May 2024, exceeding the licence limit of 2mg/L.</li> <li>PMB022 has recorded a Vanadium result of 0.29mg/L for the month of May 2024, exceeding the licence limit of 0.2mg/L.</li> </ul>			
What was the actual (or suspected) environmental impact of the non-compliance?			
NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
No environmental impact has resulted from this elevation in groundwater.			
			
Cause (or suspected cause) of non-compliance:			
The elevations are believed to be as a result of evapo-concentration of run-off from the primary rejects stockpile contained at the Sediment Pond West, and seepage of tails water at the Pilgan TMF.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			

Section E – Details of non-compliance with licence condition	
<ul style="list-style-type: none"> <li>Installation of sump and pump at Primary Rejects area to prevent water entering Sediment Pond West, which is adjacent to bore PMB022.</li> <li>Installation of a 'seepage' trench at the Pilgan TMF</li> <li>Improving tailings densities as per licence limits</li> <li>Four new seepage recovery bores were drilled in September 2024 (servicing the Pilgan Tailings Management Facility) and are currently being pump tested.</li> </ul>	
Was this non-compliance previously reported to DWER?	
<input checked="" type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input checked="" type="checkbox"/> Reported to DWER in writing	Date: 30 /05 / 24

Section E – Details of non-compliance with licence condition			
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:	3	Date(s) of non-compliance:	6 <sup>th</sup> April 2024
Details of non-compliance:			
<p>Waste Water discharge point from combined effluent and RO Brine mixing tank(Carlindi Camp) returned a Total Dissolved Solids(TDS) result, exceeding the operating licence L9056/2017/1 limit.</p> <ul style="list-style-type: none"> <li>• WWTP has recorded a TDS result of 4640mg/L for the month of April 2024, exceeding the licence limit of 4000mg/L.</li> </ul>			
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>			
<p>No environmental impact has resulted from this elevation in water quality as the area is confined to the sprayfield.</p>			
			
Cause (or suspected cause) of non-compliance:			
<p>The elevated TDS levels are thought to be the result of excessive RO brine water, reporting to a low level effluent tank at the time of sampling. The low level of treated effluent was attributed to little to no inflow from the accommodation facility at the time of sampling. This led to the overall dilution rate being low in the effluent tank and therefore high TDS levels.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			

Section E – Details of non-compliance with licence condition	
<ul style="list-style-type: none"> <li>Rectified blending controls in the treated effluent storage facility prior to release of effluent</li> <li>Completing regular site-based testing of the blended effluent to ensure blending controls are working as designed</li> </ul>	
Was this non-compliance previously reported to DWER?	
<input checked="" type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input checked="" type="checkbox"/> Reported to DWER in writing	Date: 01 /05 / 24

Section E – Details of non-compliance with licence condition			
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:	5	Date(s) of non-compliance:	October, November 2022 April 2023
Details of non-compliance:			
<p>Discharge of tailings to the Pilgan Tailings Management Facility (TMF) below the minimum solids concentration rate as per operating licence L9056/2017/1.</p> <ul style="list-style-type: none"> <li>Tailings discharged at a density concentration of 45% October 2022</li> <li>Tailings discharged at a density concentration of 48% November 2022</li> <li>Tailings discharged at a density concentration of 49.4% April 2023</li> </ul> <p>Note: Although exceedances are outside of the reporting period, this has been added to this AACR as they were identified and reported to DWER in October 2023.</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> <p>The environmental impact was considered low as it was confined to the Pilgan Tailings Management Facility (TMF).</p>			
			
Cause (or suspected cause) of non-compliance:			
<p>During operations multiple equipment (Filter Press 1 and 2, plant) were using excessive water. The excess water needed to be discharged and due to the Process Water Pond being at full capacity, the water was diverted to the tailings thickener, therefore compromising the tailings density to the Pilgan TMF.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			

Section E – Details of non-compliance with licence condition	
<ul style="list-style-type: none"> <li>Dedicated line installed and re-circulates excess water to feed the Filter Press, instead of Raw water therefore reducing the need to divert excess water to the tailings thickener</li> <li>Prepare additional filter cloth replacement parts, inspect and replace at regular basis intervals to be able to handle the processed water</li> <li>Process Water Pond dredging planned to increase capacity</li> <li>Removal of weeds in Process Water Pond planned to increase capacity</li> </ul>	
Was this non-compliance previously reported to DWER?	
<input checked="" type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input checked="" type="checkbox"/> Reported to DWER in writing	Date: 31 /10 / 23

**Section E – Details of non-compliance with licence condition**

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:	1	Date(s) of non-compliance:	8 <sup>th</sup> August, 2024
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Details of non-compliance:

Ambient groundwater monitoring bore PMB022 returned Sulfate, Fluoride and Vanadium results, exceeding the operating licence L9056/2017/1 limits and bore PWE033 returned Fluoride results exceeding the licence limit.

- PMB022 has recorded a Sulfate result of 1060mg/L for the month of November 2022, exceeding the licence limit of 1000mg/L.
- PMB022 has recorded a Fluoride result of 4.1mg/L for the month of May 2023, exceeding the licence limit of 2mg/L.
- PMB022 has recorded a Vanadium result of 0.24mg/L for the month of May 2023, exceeding the licence limit of 0.2mg/L.
- PWE033 has recorded a Fluoride result of 4.6mg/L for the month of Feb 2023, exceeding the licence limit of 2mg/L.

Note: Although exceedances are outside of the reporting period, this has been added to this AACR, as they were identified and notified to DWER in August 2023.

What was the actual (or suspected) environmental impact of the non-compliance?

**NOTE** – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.

The environmental impact is considered low as the water quality is confined to the monitoring bore.

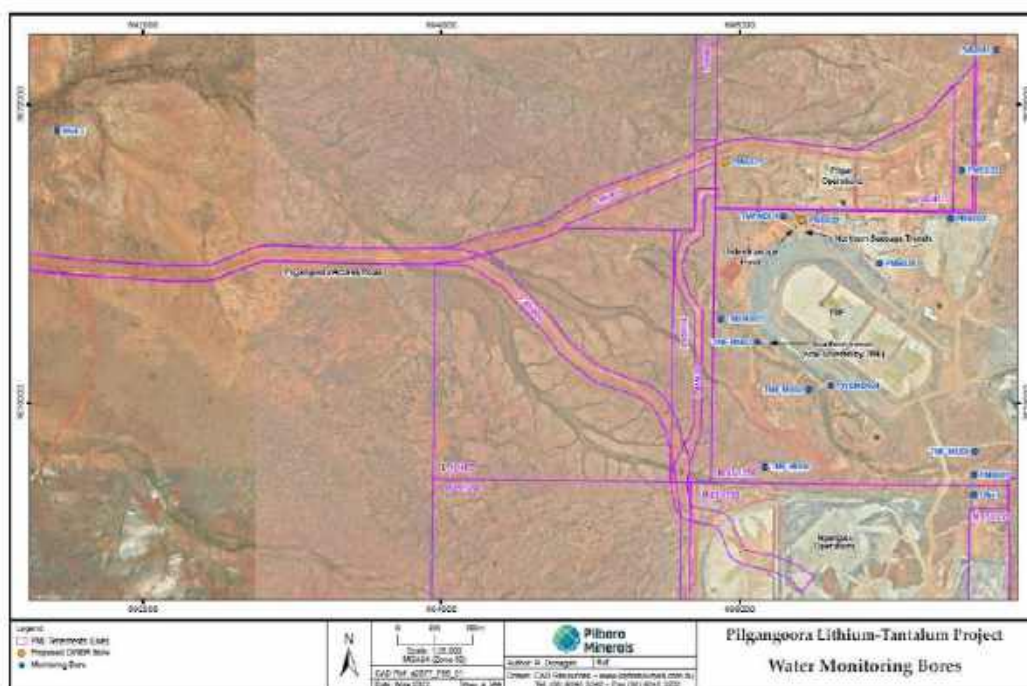


Figure 6: Location of TMF monitoring bores

Cause (or suspected cause) of non-compliance:

**Section E – Details of non-compliance with licence condition**

The elevations are believed to be as a result of evapo-concentration of run-off from the primary rejects stockpile contained at the Sediment Pond, and seepage of tails water at the Pilgan TMF.

A fluoride exceedance was detected in February 2023 for PWE033, however, further analysis showed that fluoride concentrations returned to baseline levels by the following quarter (May 2023). The cause of this isolated exceedance remains unknown, with the possibility of a sampling error. Regardless, Pilbara Minerals will continue to monitor and track fluoride levels to ensure there is no detrimental decline in water quality.

The delay reporting these events was related to an issue with the exceedance notification emails from our environmental monitoring database (INX-InViron).

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

- Installation of sump and pump at Primary Rejects area to prevent water entering Sediment Pond West, which is adjacent to bore PMB022.
- Installation of a 'seepage' trench at the Pilgan TMF
- Improving tailings densities as per licence limits
- Four new seepage recovery bores were drilled in September 2024 (servicing the Pilgan Tailings Management Facility) and are currently being pump tested.
- Continual monitoring
- Transition of the environmental monitoring database from the previous INX-InViron to the new INX-Preserve.

Was this non-compliance previously reported to DWER?

Yes, and

Reported to DWER verbally

Date: / /

Reported to DWER in writing

Date: 08 /08 / 23

**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:	

## Department of Water and Environmental Regulation

	Approvals		
Date:	24th October, 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.