



## 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, 88 Colin Street, WEST PERTH WA 6005		
Reporting period:	01 / 07 / 20 to 30 / 06 / 21		

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	1,579,588 dmt processed ore 1,248,294 tonnes tailings produced
Category 52: Power Station	6.9MW
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	25113kL
Category 64: Class II putrescible and inert landfill	4800 m <sup>3</sup>

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:	Since March 2020
Details of non-compliance:			
Unauthorised emission from the Premises due to suspected seepage from the Tailings Management Facility (TMF) discharging into a nearby creek.			
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.			
The environmental impact was considered to be minor.			
Cause (or suspected cause) of non-compliance:			
Initial ponding water was identified following significant rain events in early 2020.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Works were undertaken to install interception trenches at the northern and southern sides of the TMF to return seepage to the process water pond for reuse and stop any discharge flowing into the natural creek line. As agreed with DWER, two additional shallow monitoring bores were installed downstream of the TMF to assess water quality. Sampling started in October 2021 and will continue for a period of 6 months.			
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: Initially in March 2020	

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:	23/03/2021
Details of non-compliance:			
<p>Unauthorised emission of process water.</p> <p>On the 23<sup>rd</sup> of March 2021 water was being transferred inside of the Central pit from a pit-sump (Stage 1) to another area in the pit (Stage 2), when the pipework displaced, and pit water was discharged into the surrounding area flowing into the Pilgangoora creek.</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>			
The area impacted was approximately 0.39 hectares and the environmental impact was considered to be minor.			
Cause (or suspected cause) of non-compliance:			
The spill was caused because the discharge line was not securely anchored and moved outside of the initial discharge point during the operation of the pump.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>On the day of the event the pump was turned off, the line disconnected, and samples taken of the spill for analysis.</p> <p>To prevent a reoccurrence, actions included:</p> <ul style="list-style-type: none"> <li>• Pipeline was anchored using pickets.</li> <li>• Mining Supervisors checklists were updated to assess correct setup of the pipeline, including its anchoring.</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: 25/03/21	

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:	18/03/2021
Details of non-compliance:			
<p>Unauthorised emission of processing water into the sediment pond and into the surrounding creek.</p> <p>On the 18<sup>th</sup> of March 2021 between 11.00am and 12.00pm, the processing pond overflowed into the sediment pond which in turn overflowed discharging water into the adjacent creek.</p>			
<p>What was the actual (or suspected) environmental impact of the non-compliance?</p> <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 area impacted was 0.2 hectares, and the environmental impact was considered to be minor.</p>			
Cause (or suspected cause) of non-compliance:			
<p>The spill occurred during a shutdown due to an imbalance between the water supplied from production bores and a lower abstraction from the processing pond, which caused the overflow.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>On the same day of the event, bores supplying the processing pond were shut down and water levels reduced.</p> <p>To prevent a reoccurrence, actions included:</p> <ul style="list-style-type: none"> <li>• Recalibration of visual and audible alarms for the levels of the process pond.</li> <li>• Pond was dredged to increase storage 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: 25 / 03 / 2021	

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:	21/04/2021
Details of non-compliance:			
<p>Unauthorised emission of process water.                      At approximately 19:00 on the 23<sup>rd</sup> April 2021 the Process Water pond overflowed and spilled into the sediment pond. Subsequently, the sediment pond reached its 300mm freeboard and overflowed into the creek.</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>			
The immediate area impacted was approximately 100m <sup>2</sup> and then confined to the creek.			
Cause (or suspected cause) of non-compliance:			
The cause of the non-compliance was a continue feed of process water pond from the bores during a shutdown, whilst the TMF return decant water was shutoff. This led to the process water pond overflowing.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<ul style="list-style-type: none"> <li>• Install flood light so the control-room operators can visually monitor levels through CCTV.</li> <li>• Implementation of new communication procedure between control-room operators on process water pond levels to trigger emergency response plans.</li> <li>• Dredge pond 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: 27 / 04 / 21	

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:	2	Date(s) of non-compliance:	06/09/2020
Details of non-compliance:			
<p>Use of water from the Oily Water Separator (OWS) as dust suppression, exceeding the approved limit for Total Recoverable Hydrocarbons (TRH).                      The Power Station OWS outflow water was sampled on the 6<sup>th</sup> of September 2020 and recorded a TRH result of 17.1 mg/L. Prior to the elevated result becoming known, a small quantity of OWS outflow water was utilised for dust suppression at the Pilgangoora Operation in an already highly disturbed environment.</p>			
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.			
The environmental impact was considered very minor as the use of that water for dust suppression was limited to an internal haul road.			
Cause (or suspected cause) of non-compliance:			
The cause of the non-compliance was an incorrect sampling technique and delays on the water samples turn around.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>Use of the Power Station Oily Water Separator outflow water ceased immediately following receipt of the monitoring results.</p> <p>To prevent recurrences of this non-compliance a number of actions were undertaken including;</p> <ul style="list-style-type: none"> <li>• Communication with the Water Cart operators to empty tank into an evaporation lined pond.</li> <li>• Develop a new safe-work-instruction (SWI) for the oily water separator sampling technique.</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: 23 / 09 / 20	

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:	2	Date(s) of non-compliance:	3/10/2020
Details of non-compliance:			
<p>Unauthorised discharge of sewage. On the 4th of October 2020 between 04.00am and 06.00am approximately 2500 litres of sewage were spilt from the overtopping main sewer pit at the accommodation camp.</p>			
<p>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.</p>			
<p>An area of approximately 433m<sup>2</sup> of already disturbed land was impacted. The environmental impact was considered to be minor.</p>			
Cause (or suspected cause) of non-compliance:			
<p>The cause of the non-compliance was a failure of the duty maceration pumps due to one pump tripping out and the other running but not pumping.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>On the same day of the event, remedial actions were undertaken which included pumping out the sump and hosing down the area. Bioremediation of the soil was not able to be carried out due to the high number of underground services in the area.</p> <p>To prevent recurrences of this non-compliance a number of actions were undertaken including:</p> <ul style="list-style-type: none"> <li>• Posters on every toilet wall of what is accepted in the sewage system</li> <li>• Weekly checks of the water levels of the sewage pits and the correct operation of the system.</li> <li>• New pumps installed with duty standby</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: 5/10/2020	



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:	Jul20 – Jun21
Details of non-compliance:			
Inspectors noted that a section of the tailings thickener was unbunded, as it was not captured by the concrete pad where the rest of the processing plant is placed.			
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.			
Cause (or suspected cause) of non-compliance:			
The original design of the containment bunds around the Tailings Thickener only included the pipelines and pumps of this tank.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
PLS proposed as an alternative spill control the use of a nearby sediment pond as the designated containment control for the Tailings Thickener tank. This was discussed with DWER, and a licence amendment application was lodged to reflect this change.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input checked="" type="checkbox"/> Reported to DWER verbally		Date: 21 / 04 / 21 - DWER Inspection 24 / 06 / 21 – Meeting at DWER office	
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 29 / 06 / 2021	

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:	14	Date(s) of non-compliance:	18/10/20; 6/9/20; and 10/1/21
Details of non-compliance:			
Some exceedances of the trigger levels for Gross Alpha and Gross Beta activities were not immediately reported to DWER as per Condition 14.			
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.  POPL has undertaken all Gross Alpha, Gross Beta, Radium 226 and 228 testing in accordance with Condition 12, and all results have confirmed that Radium 226 and Radium 228 levels remain below the Condition 12 trigger levels. There was no licence limit exceeded.  Note: Trigger levels were updated in the latest version of license L9056/2017/1, as of 24/03/21			
Cause (or suspected cause) of non-compliance:			
Whilst all relevant monitoring data for the Gross Beta results has been reported to DWER in accordance with Condition 21, the reporting of the results reaching the trigger level was not completed in accordance with Condition 14 due to an error within the POPL monitoring database (INX-InViron). Investigation by POPL has revealed that the external laboratory changed the naming convention for Gross Beta without informing POPL. As a result, the automated database notifications were not activated in these instances.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
POPL completed a database review and communicated with both the database provider, the external laboratory and POPL employees the requirements and expectations for respecting naming conventions of Environmental Samples.			
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: 4 / 3 / 21	

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:	18	Date(s) of non-compliance:	Jan-Jun 2021
Details of non-compliance:			
Some SWL exceedances non-compliances (TMFB01, TMFB02, TMFB04, TMFB05) were not reported to DWER within 7 days as required by Condition 18.			
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.			
Water ponding around the TSF was captured in interception trenches and reused at the Process Plant, or as dust suppression at the TMF. The environmental impact was considered to be minor.			
Cause (or suspected cause) of non-compliance:			
Based on the initial results it is suggested that TMFMB01 and TMFMB02 groundwater levels could be impacted by seepage from the TMF; while raising groundwater levels of TMFMB04 and TMFMB05 are more likely to be the result of natural seasonal variation, including onsite annual rainfall above average for the past two years.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>PLS engaged a consultant hydrogeologist with extensive experience in the Pilgangoora Project to review the monitoring data and provide an assessment of the potential causes of the elevated groundwater levels.</p> <p>PLS will continue monitoring of the standing water levels and water quality for a further 12 months prior to any decision on the need to install recovery bores around the TMF. During this period PLS will continue to implement the current controls including the operations of the newly installed northern and southern interception trenches and the operation of Production Bores PWB004 and PWB002.</p> <p>In order to maintain compliance with the Operating Licence (L9056/2017), in addition to the measures already implemented, PLS applied for a licence amendment to remove the SWL limits on bores that were identified as being impacted by rainfall events.</p>			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input checked="" type="checkbox"/> Reported to DWER verbally		Date: 24 / 06 / 2021 Meeting at DWER office	
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 29 / 06/ 2021	

**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:		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.