



## Annual Audit Compliance Report Form

*Environmental Protection Act 1986, Part V*

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

Department of Water and Environmental Regulation  
Locked Bag 33 Cloisters Square  
PERTH WA 6850

Section A – Licence Details			
Licence number:	L8937/2015/1	Licence file number:	DER2015/002837
Licence holder:	Pilbara Ports Authority		
Trading as:	Pilbara Ports Authority		
ACN:	ABN 94 987 448 870		
Registered address:	The Esplanade, Port Hedland WA 6721		
Reporting period:	01/ 07 / 2017      to      30 / 06 / 2018		

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>
58	19,925,209 tonnes

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>
N/A	N/A

**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:	7	Date(s) of non-compliance:	1/10/2017 7/10/2017 11/10/2017 12/10/2017 18/10/2017 26/03/2018 10/04/2018 24/04/2018 14/05/2018 22/05/2018
Details of non-compliance:			
<p>PPA accepted iron ore product to the Premises that did not have moisture content at or above the dust extinction moisture (DEM).</p> <p>DWER issued a Notice of Alleged Breaches of the <i>Environmental Protection Act 1986</i> to PPA on 9 July 2018 regarding these non-compliances (your ref: DER2015/002837). The following correspondence also references this matter:</p> <ul style="list-style-type: none"> <li>• 20 July 2018: PPA issued a response to DWER (our ref: A631785).</li> <li>• 3 August 2018: DWER issued a response to PPA's letter (your ref: DER2015/002837).</li> <li>• 16 August 2018: PPA issued a response to DWER (our ref: A641381).</li> </ul> <p>This matter remains under investigation by DWER. Please refer to Attachment 1 for copies of the above-mentioned correspondence.</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.			
Refer above			
Cause (or suspected cause) of non-compliance:			
Refer above			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Refer above			
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: 31/10/2017, 31/01/2018, 26/04/2018, 26/07/2018	

## 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:	9	Date(s) of non-compliance:	14/08/2017 21/09/2017 27/09/2017 6/10/2017 10/10/2017 14/10/2017 17/10/2017 2/11/2017 5/11/2017 14/11/2017 10/12/2017 13/04/2018 26/04/2018 13/05/2018 1/06/2018 3/06/2018
Details of non-compliance:			
<p>Bulk granular material was out-loaded from the Premises which had a moisture content below the weighted average DEM level for that product.</p> <p>DWER issued a Notice of Alleged Breaches of the <i>Environmental Protection Act 1986</i> to PPA on 9 July 2018 regarding these non-compliances (your ref: DER2015/002837). The following correspondence also references this matter:</p> <ul style="list-style-type: none"> <li>• 20 July 2018: PPA issued a response to DWER (our ref: A631785).</li> <li>• 3 August 2018: DWER issued a response to PPA's letter (your ref: DER2015/002837).</li> <li>• 16 August 2018: PPA issued a response to DWER (our ref: A641381).</li> </ul> <p>This matter remains under investigation by DWER. Please refer to Attachment 1 for copies of the above-mentioned correspondence.</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>			
Refer above			
Cause (or suspected cause) of non-compliance:			
Refer above			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Refer above			

Section E – Details of Non-Compliance with Licence Condition	
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: 31/10/2017, 31/01/2018, 29/03/2018, 26/04/2018, 26/07/2018

**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:	12	Date(s) of non-compliance:	July 2017, August 2017, September 2017, November 2017, December 2017 and January 2018
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**Details of non-compliance:**

Emissions monitoring of particles as PM<sub>10</sub> was not “continuous” over the required 24 hour averaging period at a number of monitoring locations throughout the year. “Continuous” is defined in L8937 as a data recovery rate of at least 90%. The National Environment Protection (Ambient Air Quality) Measure Technical Paper No. 5 Data Collection and Handling (Peer Review Committee 2001) requires a minimum 75% data capture to produce a valid 24 hour average. For BAM 1020 instruments (M5 and M7) that is eighteen (18) hourly beta readings per day, for e-samplers (M6) that is 108 ten minute average readings per day. Where this was not achieved the data capture result was set to zero for the purposes of the calculation. Furthermore, PRC indicates that each calendar quarter should be compliant with data capture targets. Therefore data has been presented and assessed for each quarter period for both PPA Boundary Monitors and Taplin Street.

Table: FY2017/18 data capture summary – 24 hour average concentration of PM10

	M5 (Utah North)	M6 (Utah South)	M7 (Utah West)
<b>Q1 2017/18</b>	100	100	59.7
<b>Q2 2017/18</b>	96.7	98.4	91.0
<b>Q3 2017/18</b>	85.6	83.3	83.3
<b>Q4 2017/18</b>	96.7	96.7	100.0
<b>Annual</b>	90.9	94.6	83.5

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.

There was no actual environmental impact due to this non-compliance, because monitoring does not increase the risk of emissions or discharges. Furthermore, dust monitoring data was still available for dust management during much of the data outages at the M5 and M7 monitors. These instruments house both a beta attenuation monitor (BAM) and a Real Time Unit (RTU). The BAM component uses the principle of beta ray attenuation to determine a concentration of particulate matter in air at an hourly frequency in accordance with AS 3580.9.11. The RTU uses a nephelometer to determine a concentration of particulate matter in air at a 10 minute frequency. Most of the data outages at M5 and M7 were for the BAM data only, while RTU data was still available for real time management of operations and dust sources.

Cause (or suspected cause) of non-compliance:

## Section E – Details of Non-Compliance with Licence Condition

The primary cause of data loss at the M7 monitoring station was power supply interruptions followed by instrument stabilization. Power interruptions were caused by ageing batteries connected to the solar power supply. Following each power supply interruption the BAM unit automatically undergoes an instrument stabilization period which can take up to an hour. Therefore even a very short interruption to power supply causes loss of at least one hourly BAM reading. Intermittent flow faults also contributed to data losses at the monitor. A faulty temperature sensor was replaced on 4 September 2017.

In January 2018 the monitoring stations at M5, M6 and M7 were shutdown for a minimum of 4 days to protect the equipment from impacts of Tropical Cyclone Joyce. Following this, the M6 monitor experienced various faults, the cause of which could not be identified, which resulted in further data losses. Various components of the monitor were replaced sequentially until the issue was resolved.

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

Ecotech, a specialist contractor, provides all of PPA's dust monitoring equipment through a rental agreement and also provides services, including preventative maintenance, operation and troubleshooting. In a recent contract renewal PPA introduced financial penalties for inadequate data capture to improve dust monitor performance. Furthermore, at M7 the entire bank of twelve batteries were replaced on 9 August 2017 to improve power supply reliability.

Was this non-compliance previously reported to DWER?

☒ Yes, and

☐ Reported to DWER verbally

Date:     /     /

☒ Reported to DWER in writing

Date: 29/09/2017, 30/11/2017, 31/01/2018, 28/03/2018

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:	12	Date(s) of non-compliance:	30/08/2017 23/09/2017 25/04/2018
Details of non-compliance:			
<p>A number of 24 hour samples were not obtained from High Volume Air Samplers (HVAS):</p> <ul style="list-style-type: none"> <li>- 30/08/2017 – scheduled 1 in 6 day sample at M8 and M9</li> <li>- 23/09/2017 – scheduled 1 in 6 day sample at M9</li> <li>- 25/04/2018 – ship-loading of manganese at M8 and M9</li> </ul>			
<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>There was no actual environmental impact due to this non-compliance, because monitoring does not increase the risk of emissions or discharges.</p>			
Cause (or suspected cause) of non-compliance:			
<ul style="list-style-type: none"> <li>- 30/08/2017 – human error, filter papers were not deployed.</li> <li>- 23/09/2017 – mains power failure resulted in the M9 monitor not operating for the required period of time</li> <li>- 25/04/2018 – the <i>MV Anangel Progress</i> received a split cargo of iron ore (93,382 tonnes) and manganese (18,509 tonnes). HVAS were activated to obtain a sample for ship-loading of this vessel, however a change to the cargo load plan moved manganese loading outside of the HVAS run time.</li> </ul>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<ul style="list-style-type: none"> <li>- 30/08/2017 – filter papers were deployed the following day on 31/08/2017</li> <li>- 23/09/2017 – maintenance team restored the mains power to the unit</li> <li>- 25/04/2018 – internal process to communicate changes to cargo loading has been strengthened between Landside Operations and Environment teams</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: 29/09/2017, 30/11/2017 and 31/05/2018	



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:	16	Date(s) of non-compliance:	1 August 2017 20 September 2017 26 September 2017 21 October 2017 27 October 2017 27 May 2017
Details of non-compliance:			
Biodegradable hydraulic oil was discharged from PPA's Cavotec Moormaster system at Utah Point berth into harbour waters on six occasions during the Reporting Period. The Cavotec Moormaster system comprises 13 Cavotec units, each with a hydraulically powered vacuum pad that couples with the vessel's hull to safely moor the vessel to the berth face during ship loading.			
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>PPA considers the environmental impact of these emissions to be negligible, due to:</p> <ul style="list-style-type: none"> <li>- the biodegradable nature of the hydraulic oil</li> <li>- the limited volumes discharged (the volume discharged in each event ranged from 2 litres to 200 litres)</li> <li>- large tidal movements and strong currents experienced in Port Hedland causing rapid dispersion and encouraging natural degradation</li> </ul>			
Cause (or suspected cause) of non-compliance:			
The discharges were due to a failure of a component of one of the Cavotec units (e.g. valve, o-ring, compression fitting, hardline, or flexible hose).			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>The Cavotec units undergo regular scheduled maintenance in accordance with manufacturer specifications, including:</p> <ul style="list-style-type: none"> <li>- 8 weekly off line inspections of the winch assembly, truck assembly and hydraulic power pack, with any issues either rectified immediately or planned in</li> <li>- 24 weekly lubrication inspections and repairs of the hydraulic power pack.</li> </ul> <p>Furthermore PPA is progressively replacing each of the hydraulic hard lines under the wharf which connect the truck assembly to the hydraulic power pack.</p>			
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: 18 August 2017, 26 September 2017, 9 October 2017, 3 November 2017, 9 November 2017, 14 June 2018	



## 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:	16	Date(s) of non-compliance:	18 July 2017 19 July 2017 1 November 2017 20 November 2017 7 December 2017 6 January 2018
Details of non-compliance:			
<p>Process water potentially containing product residue was discharged from the Utah Point prescribed premises either into harbour waters or onto adjacent land.</p> <ul style="list-style-type: none"> <li>- 18 July 2017 – 50 litres of process water containing iron ore sediment was discharged from the shiploader conveyor CV07 into the harbour due to the shiploader not being positioned over the tundish during cleaning</li> <li>- 19 July 2017 – 50 litres of process water containing iron ore sediment was discharged from the CV06 gallery into the harbour due to a leak in the sealant</li> <li>- 19 July 2017 – 50 litres of process water containing iron ore sediment was discharged from the back of wharf spoon drain into the harbour due to a leak in an expansion joint</li> <li>- 1 November 2017 – 50 litres of process water containing iron ore and spodumene sediment was discharged from sump ST7 onto unsealed ground within the prescribed premise and then onto sealed ground outside the prescribed premise due to the inflow from cleaning exceeding the capacity of the pump</li> <li>- 20 November 2017 – 300 litres of process water containing iron ore and spodumene sediment was discharged from Transfer Station 3 into the harbour during cleaning works prior to maintenance works to fully seal the area and prevent risk of future discharge</li> <li>- 7 December 2017 – 100 litres of process water containing iron ore sediment was discharged from the shiploader conveyor CV07 into the harbour due to dust suppression water accumulating on the outload circuit during a maintenance shutdown and the shiploader not being positioned over the tundish when the conveyors were ramped up</li> <li>- 6 January 2018 – 50 litres of process water containing iron ore sediment was discharged from the back of wharf spoon drain to the harbour during cleaning out of residual sediment</li> </ul>			
<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>PPA considers the environmental impact of these emissions to be negligible, due to:</p> <ul style="list-style-type: none"> <li>- the limited volumes discharged over the annual period</li> <li>- extreme tidal movements experienced in Port Hedland causing rapid dispersion</li> </ul>			
Cause (or suspected cause) of non-compliance:			
<p>The discharges generally occurred during plant cleaning or as a result of running up conveyors holding stagnant water after a shutdown period.</p>			

## Section E – Details of Non-Compliance with Licence Condition

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

PPA has made significant investment in improving containment and cleaning systems to reduce discharges of process water.

- In 2015 PPA engineered a tundish and installed it on the CV06 structure to act as a funnel to capture wash down water from the rear end of the shiploader conveyor (CV07) during cleaning.
- In 2016 250 meters of wall alongside CV06 was further sealed in order to prevent discharge to harbour during cleaning
- In 2017 small gaps in Transfer Station 3, located on the Utah wharf and above harbour waters, were sealed to prevent risk of discharge during cleaning. Cleaning of the existing structure prior to installation works resulted in one of the discharges reported.
- In 2018 concrete divider walls were installed in wharf sumps, to increase the settling rate of sediment, reduce the sediment load entering the back of wharf drain and reduce the requirement for cleaning and risk of discharge from this drain
- In 2018 a project to automate all dust suppression sprays located on conveyor belts and in transfer stations has commenced, so that the sprays turn on with the conveyor. This will prevent product from becoming excessively muddy during breaks in conveying, and will reduce the clean up effort required.

Furthermore, PPA has updated its shutdown completion checklist to include the following checks to reduce the risk of discharges during commissioning:

- Inspect conveyor belts for water build up from cleaning or dust suppression sprays
- Ensure shiploader is parked over tundish, and CV07 appropriately positioned

Was this non-compliance previously reported to DWER?

☒ Yes, and

☐ Reported to DWER verbally

Date:     /     /

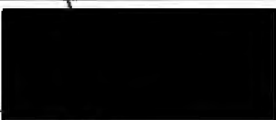
☒ Reported to DWER in writing

Date: 2/08/2017, 08/11/2017, 6/12/2017, 20/12/2017, 11/01/2018

### 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)	Roger Johnston	Name: (printed)	
Position:	Chief Executive Officer	Position:	
Date:	20/9/2018	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.