

Government of Western Australia Department of Water and Environmental Regulation

# **Annual Audit Compliance Report Form**

Environmental Protection Act 1986, Part V Division 3

Once completed, please submit this form either via email to <u>info@dwer.wa.gov.au</u>, 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:	L4275/1982/15	Licence file number:	2011/000451-3
Licence holder name:	Mid West Ports Authority		
Trading as:	Mid West Ports Authority		
ACN:	73 384 989 178		
Registered business address:	PO Box 1856, Geraldton WA 6531		
Reporting period:	01/07/2019 <b>to</b> 30/06/2020		

# 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)

 $\Box$  Yes – please complete:

- section C;
- section D (if required); and
- sign the declaration in Section F.

 $\boxtimes$  No – please complete:

- section C;
- section D (if required);
- section E; and
- sign the declaration in Section F.

# 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
58: Bulk material loading or unloading; premises on which clinker, coal, ore, ore concentrate or other bulk granular material (other than salt) is loaded	12,475,330 tonnes of licenced commodities.
	Note: this excludes Grain, Petroleum, Fertilisers, General Cargo, Stockfeed and Livestock.
onto or unloaded from vessels by an open material	Note: MWPA reported a total of <u>14,234,319 tonnes</u>
loading system	annual throughput when all commodities handled are
	combined.
58A: Bulk material loading or unloading: premises	
on which salt is loaded onto or unloaded from	0 Tonnes
vessels by an open material loading system	

# 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.

Prescribed premises category	Actual Part 2 waste discharge quantity
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:	Prescribed premises category / approved premises production	Date(s) of non- compliance:	Annual reporting period
	capacity		

Details of non-compliance:

L4275/1982/15 Prescribe Premises 'assessed production / design capacity' is 44,000 tonnes per day (cumulative). In August 2019, MWPA was advised by DWER licencing officers that the approved premises production capacity should be read as a cumulative daily limit. At the time MWPA did not have an adequate mechanism to accurately monitored and measure the total daily throughput and therefore reported a potential non-compliance as part of the 2018 19 AACR.

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 noncompliance took place.

MWPA does not believe there to have been any environmental impacts associated with this noncompliance. All handling and storage of bulk materials has occurred in compliance with L4275/1982/15.

MWPA implemented a tracking mechanism in December 2019 to accurately monitored and measure the total daily throughput

MWPA has confirmed that the daily production capacity exceeded 44,000 tonnes fifty-three (53) times between December 1, 2019 and June 30, 2020.

Cause (or suspected cause) of non-compliance:

MWPA's historical interpretation of this requirement was that the daily production capacity should be reported and calculated as an annualize daily average and therefore never identified that there were days that exceeded 44,000 tonnes. (For example; the 2019 20 daily production for licenced products, if calculated as an annualize daily average, is only 34,178 tonnes.)

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

MWPA initiated an internal investigation to understand actual and peak daily throughput tonnages. This investigation has established a method for tracking and reporting on daily production throughput.

MWPA has been in an ongoing dialogue with DWER with respect to this issue. Now that the Port Master Plan has been finalised and approved by the Minister for Ports, MWPA intends to submit a licence amendment. This amendment will be designed to allow for future growth needs and align more accurately with current peak daily throughputs. A Licence amendment scoping meeting is planned for Mid-September, with the intention of submitting an application to DWER by the end of 2020.

Section E – Details of non-compliance with licence condition		
Was this non-compliance previously reported to DWER?		
⊠ Yes, and		
Reported to DWER verbally Date: ongoing between Aug 2019 to June 2020		
Reported to DWER in writing Date: 30 / 08 / 2019		

Condition no:	3.2.1	Date(s) of non- compliance:	12/07/2019 – 24/07/2019
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Details of non-compliance:

Table 3.2.1 of the Licence states emissions monitoring of particles as TSP shall be continuous during shiploading events.

On Friday 12/07/2019 the HiVol situated at the Port Way compliance monitoring station, allocated for TSP monitoring, failed and was unable to be restarted. MWPA had no spare equipment to deploy as a replacement, and a rental HiVol was unable to be delivered until the 25/07/2019. During this 14-day period three concentrate ships were loaded with bulk materials including; Zinc over Berth 6 in rotainer boxes, Copper Concentrate over Berth 6 in rotainer boxes and Lead sulphide concentrate (HPM) over Berth 4.

This non-compliance was reported to DWER in MWPA's Quarterly Air Quality Monitoring Report submitted to DWER on the 27/08/2019.

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 noncompliance took place.

There were no environmental impacts as a result of this environmental monitoring non-compliance. The Port Way compliance monitoring station is equipped with a HiVol that monitors for particles as PM10 and these filters are analyses for metals. A TEOM real-time air quality monitor is also situated at the Port Way monitoring site and continuously monitors particulates as PM10.

During the 14-day period, that TSP monitoring did not occur, a total of 35,151 tonnes of bulk materials were loaded. Of this 29,221 WMT were loaded via containers on Berth 6 and 5,930 WMT were loaded with the Berth 4 shiploader. Rotainer boxes are considered the best practice for loading bulk materials with respect to reducing fugitive dust emissions.

PM10 filers were analysed and returned results of;

- Particulates = 25μg/m<sup>3</sup> or lower against a target of 50μg/m<sup>3</sup>
- Lead = 0.21µg/m<sup>3</sup> or lower against a target of 0.5µg/m<sup>3</sup>
- Copper = 0.1µg/m<sup>3</sup> or lower against a target of 1.0µg/m<sup>3</sup>

PM10 monitoring indicates there were low dust conditions during this monitoring period.

Cause (or suspected cause) of non-compliance:

Incident IN-17823 was investigated and the cause of the non-compliance was attributed to the age and high use of this equipment.

MWPA had also experienced issues with the units it held as spares and as such the spares were unserviceable at the time of the incident.

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		
MWPA completed an asset audit, developed an asset replacement strategy and submitted a Capital request.		
In 2020 two new HiVols have been installed at Port Way and four operational HiVols have been retained as spares to prevent a similar situation occurring.		
Was this non-compliance previously reported to DWER?		
⊠ Yes, and		
Reported to DWER verbally Date:		
Reported to DWER in writing Date: 27 / 08 / 2019		

Condition no:	3.2.1	Date(s) of non- compliance:	25/08/2019
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Details of non-compliance:

Table 3.2.1 of the Licence states emissions monitoring of particles as TSP shall be continuous during ship loading events.

On Sunday 25/08/2019, on the second day of a copper concentrate shipment, the Operations assistant completing the monitoring task did not redeploy TSP filters and only deployed PM10 filters at the four MWPA compliance monitoring stations.

Therefore, TSP sampling was not continuous during ship loading, with one full day of monitoring missed.

This non-compliance was reported to DWER in MWPA's Quarterly Air Quality Monitoring Report submitted to DWER on the 19/11/2019.

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 noncompliance took place.

There were no environmental impacts as a result of this environmental monitoring non-compliance. All compliance monitoring stations are equipped with HiVol that monitors for particles as PM10 and these filters are analyses for metals. A TEOM real-time air quality monitor is also situated at each of the monitoring sites and continuously monitor particulates as PM10.

Over the 25<sup>th</sup> and 26<sup>th</sup> of August 11,730 WMT of copper concentrates were loaded via containers on Berth 6. Rotainer boxes are considered the best practice for loading bulk materials with respect to reducing fugitive dust emissions.

PM10 filers were analysed and returned;

• Copper results in a range from 0.01 to 0.17  $\mu$ g/m<sup>3</sup> against a target of 1.0 $\mu$ g/m<sup>3</sup>

PM10 monitoring indicates there were some elevated dust levels at the Connell Road monitoring station on the 25/08/2019 however this was attributed to beach sand accumulation and high wind speeds therefore rotainer operations on Berth 6 were not considered a contributing factor.

Cause (or suspected cause) of non-compliance:

Incident IN-17843 was investigated and the Contributing Factors identified were:

- There are two different types of samples required by the licence (Background and Concentrate) and this seems to have created a point of confusion with less experienced operators;
- The nature of the Operations shift pattern and frequency of concentrate shipments can result in Operators not having conducted both Background and Concentrate samples routinely, creating an opportunity for Operators to become less practiced in the air monitoring program;
- The method of handing over air quality monitoring from the Environmental Officer to Operations on weekends was identified as being ineffective in clearly stating what filters needed to be deployed.

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

Improvements were made to clarify and communicate sampling requirements. The actions taken included:

- Refresher training being conducted with each of the Operations assistants;
- Signage was placed in the sample prep room explaining the difference between a 'Background' and 'Concentrate' samples as a prompt and quick reminder;
- A copy of the HiVol monitoring procedure was reinstated on the notice board in the prep room for reference.

Was this non-compliance previously reported to DWER?

#### $\boxtimes$ Yes, and

Reported to DWER verbally	Date:
$\boxtimes$ Reported to DWER in writing	Date: 27 / 08 / 2019

Condition no:	3.2.1	Date(s) of non- compliance:	31/10/2019	
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Details of non-compliance:

Table 3.2.1 of the Licence states in Note 2: Continuous monitoring is permitted to include gaps equating to no more than 2 hours in every 24-hour monitoring period as required for the changing of HiVol sampler filter papers.

The Port Way TEOM recorded an invalid result on 31/10/2019. The day prior the Port Way TEOM recorded a significantly high dust day with the daily average PM10 being recorded at 158  $\mu$ g/m<sup>3</sup>. The high level of particulate material caused the filter inside the TEOM to be overloaded (>70%) and the TEOM was fixed on a reading of 64 $\mu$ g/m<sup>3</sup>. As this reading was recorded for more 80% of the monitoring period on the 31/10/2019, the results were deemed invalid.

This non-compliance was reported to DWER in MWPA's Quarterly Air Quality Monitoring Report submitted to DWER on the 19/11/2019.

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 environmental impact associated with this equipment error.

There were no ships in port on the 30/10/2019 and on the 31/10/2019 one ship commenced loading of zinc concentrates via rotainers on Berth 6, continuous monitoring of particles as PM10 and TSP were undertaken via HiVol monitors during this period.

Cause (or suspected cause) of non-compliance:

Incident IN-20048 was investigated to identify the cause of the high dust levels at Port Way on the 30/10/2019. No vessels were in the Port on this date.

The Operations Log made multiple entries in relation to dust alarms at Port Way. It was noted that no dust emission activities were occurring in the Port premises. Winds throughout the day averaged 7 knots and were predominantly from a west-south-westerly direction (averaging 225 degrees). Upon assessment of the Envirosuite data, the dominate zone of influence was from the CBH Operations storage sheds and truck loadout facilities.

Automatic alerts established in EnviroSuite alerted key personnel of the high filter loads which were acted on as part of the normal monitoring round.

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

No actions were required as the alert system worked as intended.

Was this non-compliance previously reported to DWER?

 $\boxtimes$  Yes, and

$\boxtimes$ Reported to DWER verbally	Date:
$\boxtimes$ Reported to DWER in writing	Date: 19 /11 / 2019

Section E – Details of non-compliance with licence condition
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Condition no:	3.2.1	Date(s) of non- compliance:	16/12/2019	
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Details of non-compliance:

Table 3.2.1 of the Licence states in Note 2: Continuous monitoring is permitted to include gaps equating to no more than 2 hours in every 24-hour monitoring period as required for the changing of HiVol sampler filter papers.

Port Way TEOM aircon failed on approximately 15th December after 5 days of above 40-degree temperatures, this resulted in the TEOM housing reaching an operating temperature of 60 degrees. The TEOM started recording invalid data from 10:25am on the 16th December. The AS 3580.9.16:2016 states that the operating temperature shall not exceed 40 degrees, therefore the 24-hour period data for the 16<sup>th</sup> of December was deemed invalid.

This non-compliance was reported to DWER in MWPA's Quarterly Air Quality Monitoring Report submitted to DWER on the 29/01/2020.

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 environmental impact associated with this equipment error. There was one ship being loaded with zinc concentrates via rotainers on Berth 6 on the 16<sup>th</sup> of December. Continuous monitoring of particles as PM10 and TSP were undertaken at Port Way via HiVol monitors during this period.

Cause (or suspected cause) of non-compliance:

Incident IN-21798 was investigated, and the cause of the equipment failure was attributed to the extended period of hot weather and the age of the air conditioning unit.

The failure of the air conditioning unit and increased temperature should have triggered the TEOM to initiate an automatic shutdown sequence in order to protect the equipment, however this did not occur.

Automatic alerts have been established in EnviroSuite to alert key personnel to equipment issues such as high temperature. This Alert was not triggered.

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

The aircon unit failure was reported to maintenance, who immediately installed the unit held as a critical spare. Once the aircon was installed the TEOM returned to normal operation within 2 hours.

The TEOM received a full service and calibration. During this service it was identified that the TEOM temperature sensor was not functioning correctly. The temperature sensor was replaced.

A new aircon unit was purchased to ensure there was a critical spare in stock during the summer period.

Was this non-compliance previously reported to DWER?			
⊠ Yes, and			
Reported to DWER verbally     Date:			
Reported to DWER in writing Date: 29 / 01 / 2019			

Condition no:	3.2.1	Date(s) of non- compliance:	18 - 19/04/2020
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Details of non-compliance:

Table 3.2.1 of the Licence states emissions monitoring of particles as TSP and PM10 shall be continuous during ship loading events.

Port Way Air Quality Monitoring Station was found to have no power on 19 April. The power was switched off at approximately 0710 hours on the 19<sup>th</sup> of April. Due to the power outage, the Concentrate Sample, including both TSP and PM10, being conducted on the 18 April were invalid due to the short run time and concentrate samples scheduled for the 19 April were unable to be deployed.

Lead as particulates PM10 and TSP and Copper as PM10 were to be monitored continuously during this concentrate ship loading event.

This non-compliance was reported to DWER in MWPA's Quarterly Air Quality Monitoring Report submitted to DWER on the 28/07/2020.

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 environmental impact associated with this equipment error. Whilst the HiVol sampling was deemed invalid for 48hrs; the TEOM only lost power for 8.35hrs.The TEOM recorded a full 24hrs of PM10 data on the 18<sup>th</sup> of April, recording a time weighted average of 35µg/m<sup>3</sup>.

There was one ship being loaded with Copper concentrate (HPM) on Berth 4. The wind conditions between the 18<sup>th</sup> and 19<sup>th</sup> ranged from south easterly to westerly conditions which would have resulted in the Port Way monitoring site representing up wind conditions and the ship loading on Berth 4 would have had little influence on this monitoring site.

Monitoring results from the other three compliance monitors indicated little to no metals impact form loading operations with higher PM10 levels recorded on the 19<sup>th</sup> of April as summarized below:

- Lemon Road: PM10 = 21 μg/m3, Pb = 0.02 μg/m3, Cu = 0.02 μg/m3
- Berth 1: PM10 20 = μg/m3 Pb = 0.005 μg/m3, Cu = 0.001 μg/m3
- Connell Road: PM10 = 35 μg/m3 Pb = 0.04 μg/m3, Cu = 0.03 μg/m3
- Licence Targets being PM10 =  $50\mu g/m^3$ , Pb =  $0.5\mu g/m^3$ , Cu =  $1.0\mu g/m^3$

Cause (or suspected cause) of non-compliance:

Incident IN-25769 was investigated, and the cause of power outage was the result of this monitoring station being supplied power by an external party. This external party planned a power outage without assessing the impact or informing MWPA.

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

The external party was contacted and requested to forward any planned maintenance or outages in advance to MWPA.

Section E – Details of non-compliance with licence condition			
Was this non-compliance previously reported to DWER?			
🛛 Yes, and			
Reported to DWER verbally     Date:			
Reported to DWER in writing Date: 28 / 07 / 2019			

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:	3.2.1	Date(s) of non- compliance:	29/04/2020
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Details of non-compliance:

During the retrieval of a Concentrate HiVol Sample on 29 April, the Berth 1 PM10 filter paper was lost in the field due to high wind conditions. A Copper concentrate ship loading event was occurring on Berth 4. The loss of this filter paper resulted in not completely achieving Condition 3.2.1 of the Environmental Licence; which requires particulates, copper and lead as PM10 to be monitored continuously during concentrate ship loading events.

This non-compliance was reported to DWER in MWPA's Quarterly Air Quality Monitoring Report submitted to DWER on the 28/07/2020.

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 noncompliance took place.

There was no environmental impact associated with this equipment error.

There was one ship being loaded with copper concentrates via the ship loader on Berth 4.

Only one PM10 sample was impacted and monitoring of particles as PM10 and TSP were undertaken at all other compliance monitoring stations.

Continuous PM 10 monitoring via the TEOM real time monitor at Berth 1 recorded a time weighted average of  $23.55 \mu g/m^3$ .

Cause (or suspected cause) of non-compliance:

Incident IN-25777 was investigated. There were consistently strong easterly wind conditions experienced, with gusts up to 56km/h being recorded at the Bureau of Meteorology Geraldton weather station.

A strong gust resulted in the filter paper being dislodged from the filter cartridge damaging the paper and compromising its sample integrity.

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

MWPA has revise sampling procedures to cover high wind conditions and sample retrieval options.

Was this non-compliance previously reported to DWER?

 $\boxtimes$  Yes, and

Reported to DWER verbally	Date:
Reported to DWER in writing	Date: 28/ 07/ 2019

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:	Table 3.2.1 Targets	Date(s) of non- compliance:	31 March 2020		
Details of non-com	pliance:				
Table 3.2.1 of the Lic	Table 3.2.1 of the Licence states a reportable target for Nickel of 0.14 $\mu$ g/m3 as TSP.				
On the 31 March 2020, a TSP sample returned a Nickel result of 0.19 $\mu g/m3$ at the Connell Road Air Quality Monitoring Station.					
DWER were notified	of this target exceedance in wr	iting on the 21/04/2020.			
What was the actua	al (or suspected) environmen	tal impact of the non-c	ompliance?		
<b>NOTE</b> – please attac compliance took plac	h maps or diagrams to provide i e.	insight into the precise lo	cation of where the non-		
14,015 tonnes of BHI commenced loading April 2020.	P Nickel Concentrate was being cargo at 2015hrs on the 29 Ma	loaded via rotainers on I rch 2020 and completed	Berth 6. The ship loading at 1735hrs on 01		
One day of three nickel ship loading days returned an elevated nickel result. The elevated result was only recorded at one air quality monitoring location. Based on the analysis of wind conditions it appears the slightly elevated nickel concentrations were only present for a short period of time and was limited to a very localized area of the Port Precinct.					
Cause (or suspecte	ed cause) of non-compliance	:			
<ul> <li>Incident IN-25767 was investigated in conjunction with the Stevedores to determine the following contributing factors:</li> <li>Detection Systems</li> <li>MWPA use real time dust monitors (TEOMs) and an application called EnviroSuite to initiate automated alerts as an early warning system to prevent dust exceedances. In this incident the dust concentration as PM10 was an ineffective indicator for predicting the potential for a metal exceedance. MWPA does not have real time metal concentrate monitoring capabilities.</li> </ul>					
<ul> <li>Product Conditioning</li> <li>BHP provides a 'Statement of Estimated Moisture' as an average of all the containers loaded. It was identified during the investigation that a small number of containers (4) had a moisture content of 6.7% when the target is above 8%. Four containers represent less than 1% of the total cargo and therefore not considered a root cause in this event.</li> </ul>					
<ul> <li>Weather Conditions</li> <li>Prolonged light easterly winds had previously been identified as contributing to elevated nickel concentrations at Connell and Lemmon Road monitoring stations. The lower wind speed is not reflected in the Berth Loading Signals or criteria specified in procedure HSE-PRO-028 Loading Metal Concentrates via Containers.</li> </ul>					
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DWER were provided an investigation summary report on the 21/05/2020.

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

The sample was re-analysed by laboratory and the result came back as 0.15 ug/m3, slightly reduced however still an exceedance.

The Stevedore shall request product conditioning data from BHP (i.e. individual container moisture levels) prior to shipping. This will enable stevedores to identify drier product and manage loading operations accordingly e.g. via close monitoring of wind direction and speeds.

MWPA have set loading restrictions for low wind speeds in an ENE to SSE direction for Nickel loading on Berth 6. MWPA procedure HSE-PRO-028 Loading Metal Concentrates via Containers and Berth Loading Signals have been updated to reflect this change.

Was this non-compliance previously reported to DWER?

Xes, a	and
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Reported to DWER verbally

Reported to DWER in writing

Date: Date: 21/04/2020 and 21/05/ 2020

Condition no:	4.3.1	Date(s) of non- compliance:	27/11/2019
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Details of non-compliance:

Condition 4.3.1 requires MWPA to comply with notification requirements of Table 4.3.1 including any incident which has caused, is causing or may cause pollution.

On the 27/11/2019, whilst deploying passive water sampling equipment, MWPA's Environmental officer observed a plume of discolored water under Berth 4. The origin of the plume appeared to be at the interface of Berths 3 and 4.

MWPA did not notify DWER in accordance with condition 4.3.1.

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.

In accordance with Licence conditions 2.2.1 and 2.3.1 the water was being discharged into Geraldton Harbour at the approved emission point SW7.

The plume appeared to have an elevated level of suspended solids. The plume was restricted to approximately two meters within the length of Berth 4. The plume was visible for several hours but dissipated quickly within the commercial Harbour and no visible plume left the confines of the Harbour.

Incident IN-21777 was investigated, however the cause could not be identified. Stormwater discharge point SW7 has several potential sources of inflow both within and externally of the prescribed premises boundary.

SW7 is connected to a large diameter stormwater pipe that drains the length of Marine Terrace and businesses along it before passing through the MWPA prescribe premises and discharging to the Harbour without treatment, as illustrated in the map of emissions points in L4275/1982/15. MWPA has no control of this section of the stormwater drainage system. MWPA was not aware of any activities external to its operations that may have caused a discharge into the stormwater system.

In accordance with Condition 1.2.5 a) MWPA has implemented all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and b) to treat contaminated or potentially contaminated stormwater prior to being discharged from the Premises. Stormwater, within the prescribed premises mineral's storage area and from Berths 3 and 4, is directed to a series of HumeCeptors for treatment prior to discharging via several stormwater discharge points including SW7.

During normal washdown operations the Berth 4 HumeCeptor is isolated to prevent discharge of sediment to the stormwater system. A small parcel of Zircon (4.5kt) was loaded between the 20th and 22nd of November, with washdown activities being completed on the 26<sup>th</sup>. The solids within the HumeCeptor were removed via vacuum truck services as per normal operations. Zircon is generally a heavy, coarse-grained product that does not dissolve or readily go into suspension. Any overflow water coming from the HumeCeptor following such a sand washdown is normally clear, as any solids drop into the bottom of the HumeCeptor and don't overflow.

A HumeCeptor<sup>®</sup> system is an underground, precast concrete stormwater treatment solution that utilizes hydrodynamic and gravitational separation to remove Total Suspended Solids (TSS) and entrained hydrocarbons from runoff. HumeCeptors have been certified to achieve pollutant removal efficiencies for TSS (>80%), Total Nutrients (>30%) and 98% of free oils from stormwater on an annual basis.

The last rainfall event prior to this incident occurred on the 1st of November, being 2.4mm, which would not have contributed to this incident which occurred 26 days later.

Cause (or suspected cause) of non-compliance:

This event was not identified as an incident having the potential to cause pollution. During the compilation of the AACR all incidents reported between June 2019 and July 2020 were reviewed.

Under Schedule 1 of the *Environmental Protection (Unauthorised Discharges) Regulations 2004;* sediment is listed as a material that must not be discharged into the environment and therefore could meet the definition of having potential to cause pollution.

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

MWPA reviewed the results its Passive Water and Sediment quality monitoring programs to determine if there were any adverse effects to the marine quality within the Commercial Harbour as a result of the plume:

• Passive water monitoring results, for the period Nov- $27^{Th}$  to Dec  $-12^{th}$  2019, showed a slight increase in lead (0.3µg/L) compare to baseline levels, but remained well below the Water Quality Guideline Triggers for the 99% ecosystem protection level marine water guideline for Lead which is 2.2 µg/L. (ANZECC /ARMCANZ 2000);

• The following period of passive water monitoring (Jan-29<sup>th</sup> to Feb-12<sup>th</sup> 2020) saw results return to baseline levels for lead of  $0.143 \mu g/L$ ; and

• Annual sediment sampling at the Commercial Harbour sample sites have a historical trend of Copper, Zinc and Lead being present. The 2020 sampling for Berth 3 and 4 sites, conducted between the 8<sup>th</sup> and 20<sup>th</sup> of February, returned results lower than long-term averages for Lead and Zinc, with Copper levels being lower than the previous reporting period.

ANZECC /ARMCANZ 2000 Guidelines for Fresh and Marine Water Quality recognises shipping ports and sections of harbours serving coastal cities as highly disturbed systems and recommend a 95% ecosystem protection level be applied. These results demonstrate that the plume of turbid water did not cause material environmental harm or pollution, as there was no direct or indirect alteration of the environment (water quality or sediments) to its detriment or degradation.

To prevent a recurrence of this non-compliance with notification requirements MWPA will review HSE-PRO-005 Incident Management procedure to include examples of reportable incidents.

#### 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:	CEO			Position:	
Date:	81	August	2020.	Date:	
Seal (if signing under seal):		0		0	

<sup>&</sup>lt;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>&</sup>lt;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.