

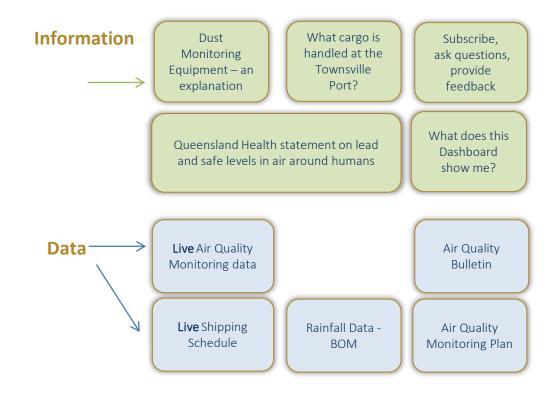
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#### Air Quality Dashboard | June | 2023

#### AIR QUALITY MONITORING IN TOWNSVILLE

Air Quality Monitoring in Townsville is conducted separately by both the Department of Environment and Science (DES), and Port of Townsville Limited.





#### **Shipping Movements in June 2023**

Date In/Out	Vessel Name	Cargo	Berth
31 May 2023 - 02 Jun 2023	HARRISBURG	FUELS (IMPORT)	1
31 May 2023 - 01 Jun 2023	DOVER HIGHWAY	MOTOR VEHICLES (IMPORT)	3 NTH
02 Jun 2023 - 06 Jun 2023	SONNE		10
02 Jun 2023 - 03 Jun 2023	FLORA DELMAS	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH
05 Jun 2023 - 06 Jun 2023	GOLDEN AXIS	FUELS (IMPORT)	1
05 Jun 2023 - 07 Jun 2023	YANGTZE GRACE	SUGAR (EXPORT)	9
06 Jun 2023 - 08 Jun 2023	JAWAN	FODDER (EXPORT)	10
07 Jun 2023 - 08 Jun 2023	NADI CHIEF	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
07 Jun 2023 - 10 Jun 2023	EASTGATE	METAL PIPES (IMPORT)	3 STH
07 Jun 2023 - 08 Jun 2023	EFFICIENCY OL	CONCENTRATES (EXPORT)	8
07 Jun 2023 - 08 Jun 2023	SEA HAWK	CONCENTRATES (EXPORT)	11
08 Jun 2023 - 10 Jun 2023	PACIFIC CONDOR	TYRES (IMPORT) COPPER ANODE (EXPORT)	3 NTH
08 Jun 2023 - 09 Jun 2023	SEA HAWK	CONCENTRATES (EXPORT)	11
08 Jun 2023 - 09 Jun 2023	KONDILI	CEMENT (IMPORT)	4
09 Jun 2023 - 10 Jun 2023	SEA HAWK	CONCENTRATES (EXPORT)	8
09 Jun 2023 - 09 Jun 2023	TRITON LEADER	MOTOR VEHICLES (IMPORT)	10
09 Jun 2023 - 10 Jun 2023	OCEAN UTE	FODDER (EXPORT)	10
09 Jun 2023 - 10 Jun 2023	ANL DHAMBI	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
10 Jun 2023 - 12 Jun 2023	KONDILI	CEMENT (IMPORT)	4
10 Jun 2023 - 13 Jun 2023	EFFICIENCY OL	CONCENTRATES (EXPORT)	3 STH
10 Jun 2023 - 13 Jun 2023	MAYE MANX	FERTILIZER (EXPORT)	8
12 Jun 2023 - 14 Jun 2023	MAERSK CANCUN	FUELS (IMPORT)	1
14 Jun 2023 - 15 Jun 2023	PALANCA MIAMI	BITUMEN (IMPORT)	1
14 Jun 2023 - 14 Jun 2023	GENIUS HIGHWAY	MOTOR VEHICLES (IMPORT)	4
15 Jun 2023 - 15 Jun 2023	GALLOWAY EXPRESS	CATTLE (EXPORT)	4
16 Jun 2023 - 18 Jun 2023	ROSLYN	SUGAR (EXPORT)	9
17 Jun 2023 - 17 Jun 2023	BRAHMAN EXPRESS	CATTLE (EXPORT)	4

Date In/Out	Vessel Name	Cargo	Berth
17 Jun 2023 - 19 Jun 2023	ADF	ARMY EQUIPMENT (IMPORT)	10
17 Jun 2023 - 19 Jun 2023	ADF		8
17 Jun 2023 - 18 Jun 2023	FAIRCHEM SWORD	CAUSTIC SODA (IMPORT)	4
18 Jun 2023 - 18 Jun 2023	GOLDEN PRELUDE	FUELS (IMPORT)	1
18 Jun 2023 - 22 Jun 2023	IRIE IRIS	COPPER CONCENTRATES (IMPORT)	3 NTH
18 Jun 2023 - 19 Jun 2023	THERESA MICRONESIA	MOLASSES (EXPORT)	4
20 Jun 2023 - 22 Jun 2023	VENTURE III	FUELS (IMPORT)	1
21 Jun 2023 - 22 Jun 2023	LAUTOKA CHIEF	CONTAINERS (IMPORT)	4
21 Jun 2023 - 21 Jun 2023	GLOUCESTER EXPRESS	CATTLE (EXPORT)	10
21 Jun 2023 - 22 Jun 2023	DUGONG ACE	MOTOR VEHICLES (IMPORT)	9
22 Jun 2023 - 25 Jun 2023	WHITEWING	ZINC CONCENTRATES (EXPORT)	8
22 Jun 2023 - 23 Jun 2023	KEN VOYAGER	CONCENTRATES (EXPORT)	11
22 Jun 2023 - 23 Jun 2023	LUGA	CEMENT (IMPORT)	4
23 Jun 2023 - 24 Jun 2023	BBC ELISABETH	CONCENTRATES (EXPORT)	3 NTH
23 Jun 2023 - 26 Jun 2023	KEN VOYAGER	CONCENTRATES (EXPORT)	10
25 Jun 2023 - 26 Jun 2023	LOUISA SCHULTE	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH
25 Jun 2023 - 26 Jun 2023	AETOS	UREA (IMPORT)	8
25 Jun 2023 - 28 Jun 2023	DAT MERCURY	FUELS (IMPORT)	1
26 Jun 2023 - 28 Jun 2023	THOR NIRAMIT	FERTILIZER (EXPORT)	8
26 Jun 2023 - 27 Jun 2023	IGUAZU HIGHWAY	MOTOR VEHICLES (IMPORT)	9
26 Jun 2023 - 28 Jun 2023	ANL KOKODA	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
27 Jun 2023 - 29 Jun 2023	EMMA OLDENDORFF	CONCENTRATES (EXPORT)	3 STH
28 Jun 2023 - 29 Jun 2023	JASA MURNI	MOTOR VEHICLES (IMPORT)	10
29 Jun 2023 - 30 Jun 2023	BLUE GRASS MARINER	FUELS (IMPORT)	1
29 Jun 2023 - 29 Jun 2023	SOFRANA TOURVILLE	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH





First established in 1864, the Port of Townsville operates eight berths handles around \$8 billion in trade; servicing more than 136 ports around the globe.

# Port of Townsville Overview

In 2020-21, the Port of Townsville delivered strong financial results and continued to roll-out major infrastructure investments despite the impacts of the ongoing global pandemic, COVID-19. In a year where supply chains across the world have been tested, a total of 7.7 million tonnes of freight passed over our wharves, which was a 6.3 per cent decrease on last year. With a focus on cost management, the Port also reported a \$14.33 million net profit for 2020/21, see the Annual Report.

The role of mining, resources and agricultural industries have never been more significant with our growth primarily driven by exports of mineral concentrates (down 8.14%), fertiliser (up 9.7%) and livestock (down 6%). Townsville is the number one port in Australia for copper, zinc, lead and sugar exports and services 75% of the Northern Australia population. More than 20 shipping lines operate out of the Townsville Port offering more than 40 different services. Townsville is also a strategic Navy port and facilitates cruise ship visits.

Commodities/cargo that passes over the Townsville Port's berths include:

#### **Imports**

Containers and general cargo, motor vehicles, tyres, bulk products - cement, sulphuric acid, fertiliser, sulphur, zinc concentrate and petroleum (fuel) products.

#### Exports

General cargo, containers, timber, cattle, tallow, refined metal products, bulk products - sugar, molasses, fertiliser and mineral concentrates (zinc, copper, lead).



delivering sustainable prosperity

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OR

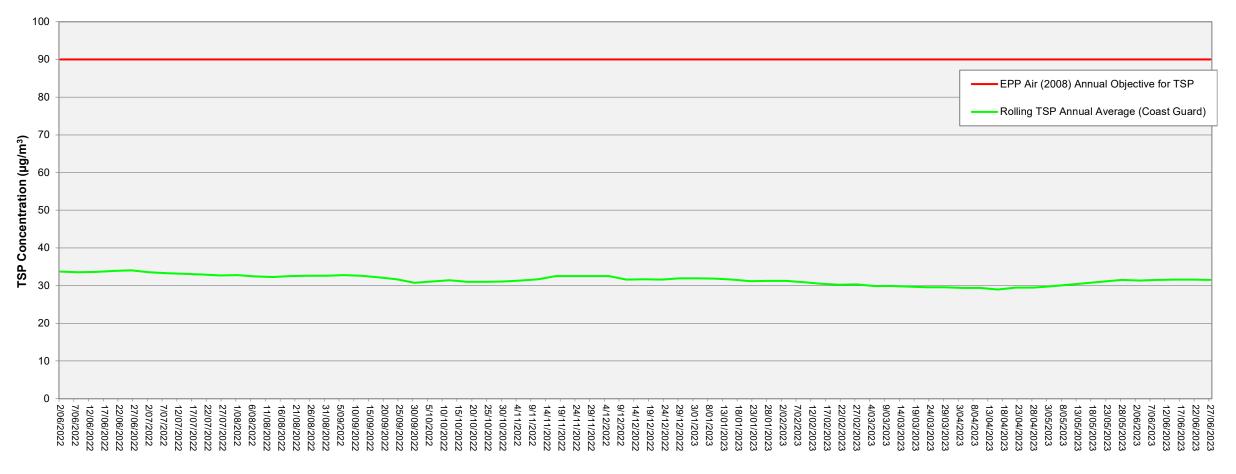
Phone 07 4781 1500 and asked to be added to the list.

#### Ask a Question / Provide Feedback

Send your enquiry or feedback to <a href="mailto:community@townsvilleport.com.au">community@townsvilleport.com.au</a>



# Hi-Volume Sampler – General total dust levels (one in six days) at Coast Guard Site June 2022 – June 2023

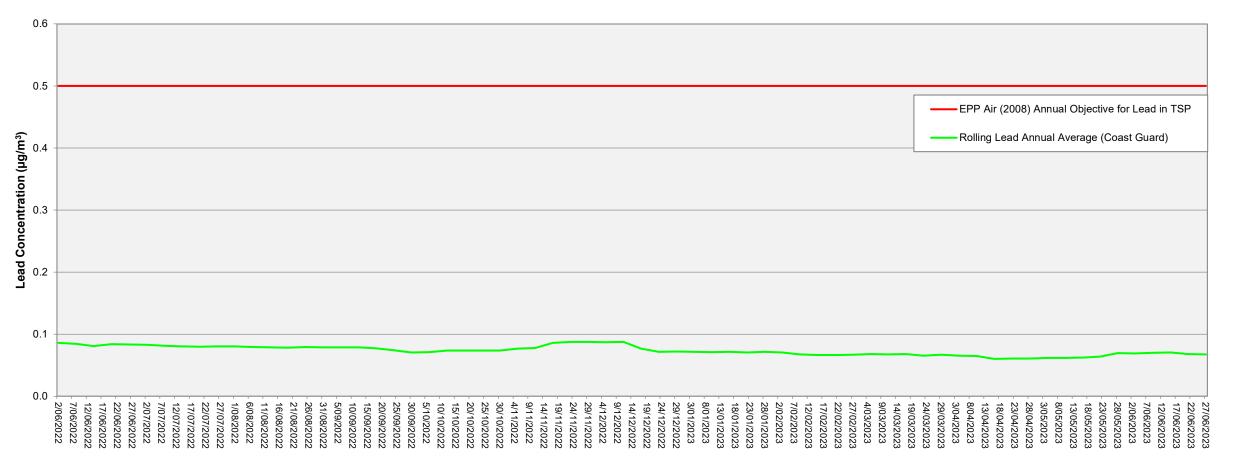




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



#### Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site June 2022 – June 2023

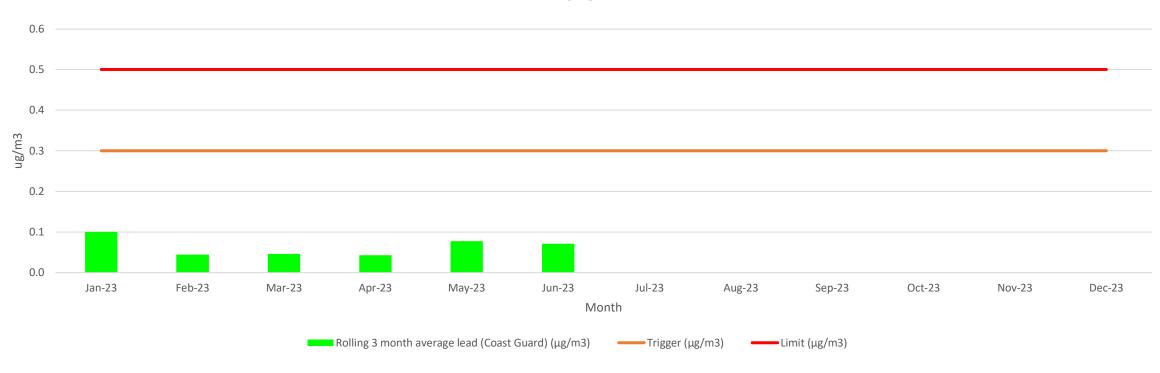




Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



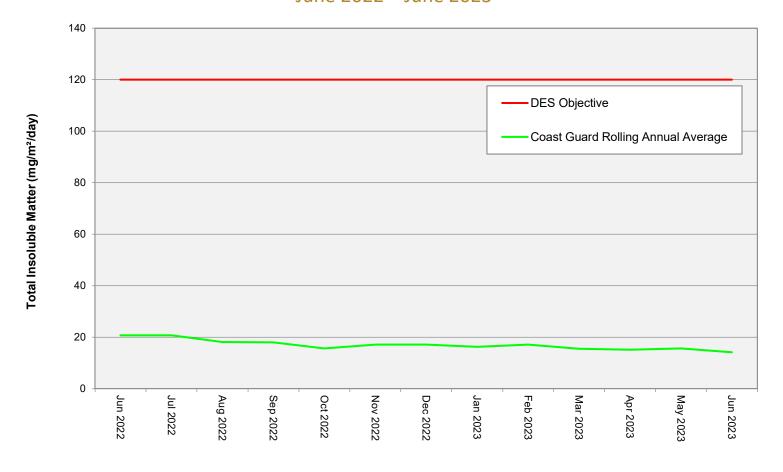
#### Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2023



Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result



#### Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site June 2022 – June 2023

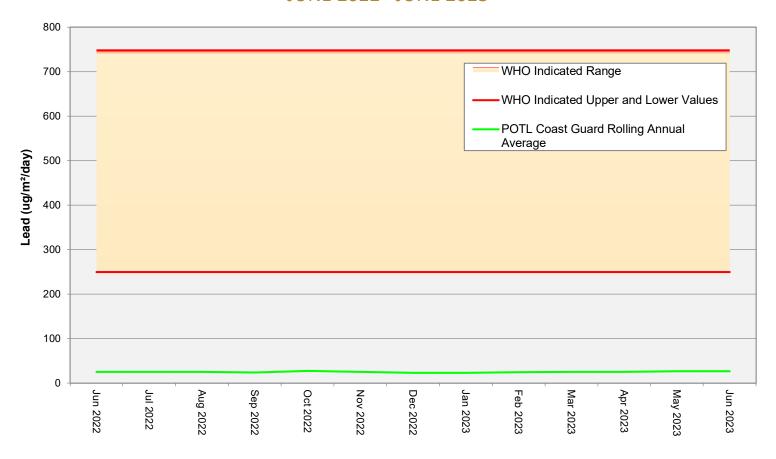




Total Insoluble Matter Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



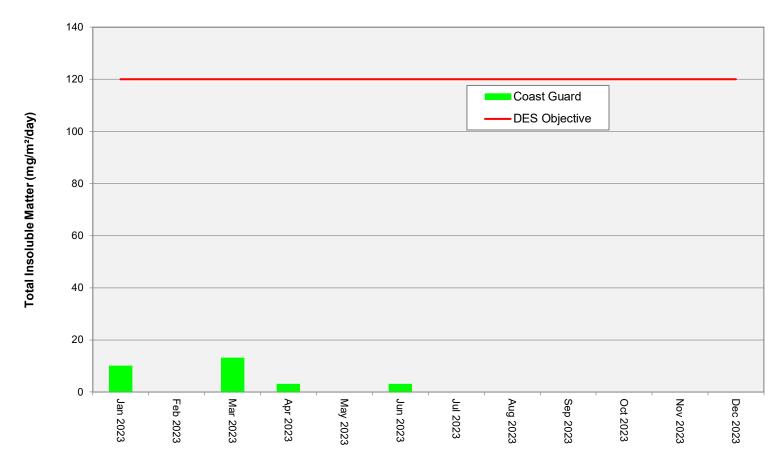
#### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site JUNE 2022– JUNE 2023



Note: Lead Concentration units = micrograms per square metre per day
Rolling annual average = the moving average of the previous 11 results and the current result.



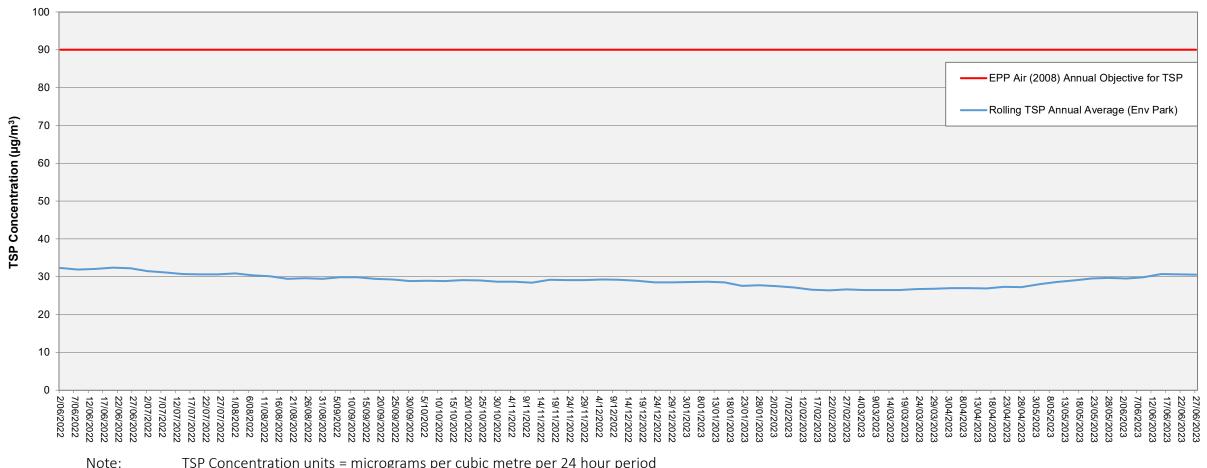
## Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2023





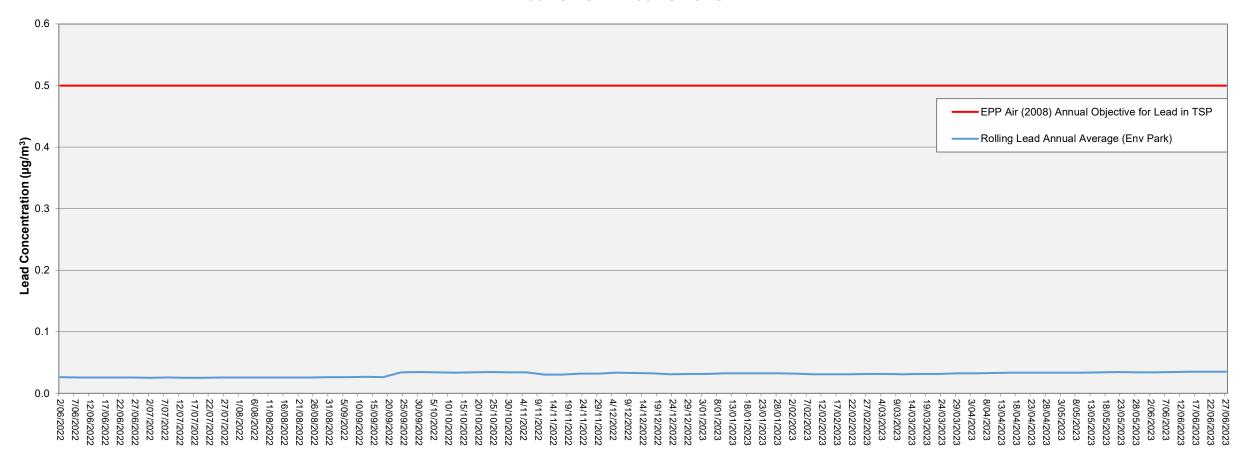
Note: Total Insoluble Matter Concentration units = milligrams per square metre per day. No result for February 2023 due to Laboratory error. No result for May 2023 due to Laboratory error.

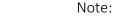
# Hi-Volume Sampler - General total dust levels (one in six days) at Environment Park site June 2022 – June 2023





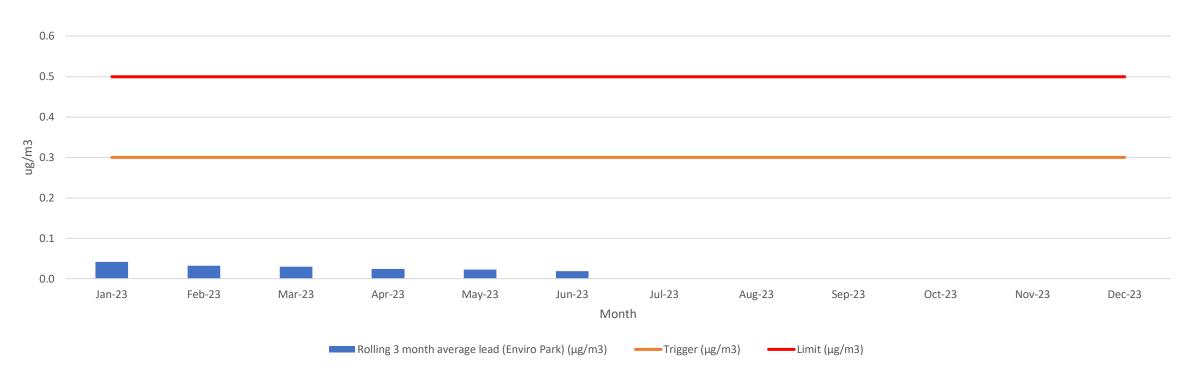
## Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site June 2022 – June 2023





**PORT** of **TOWNSVILLE** 

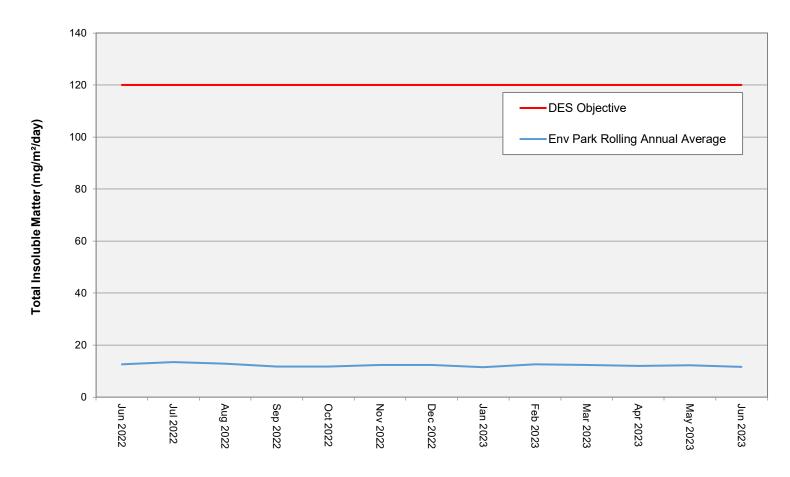
## Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2023



Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result



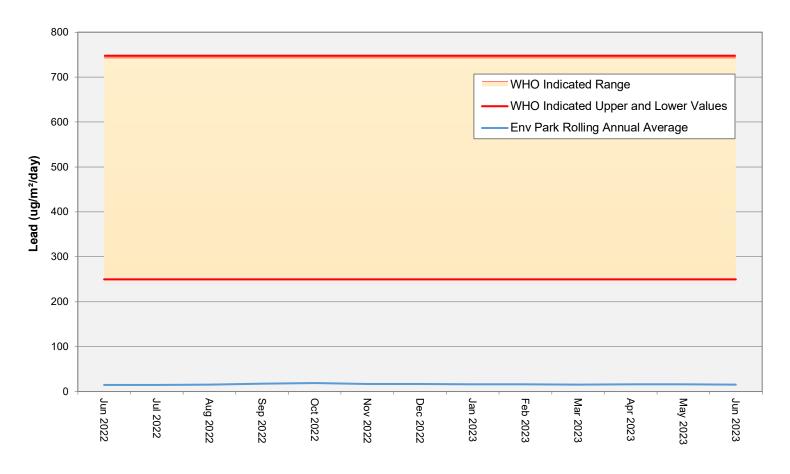
#### Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site June 2022 – June 2023



Note: Total Insoluble Matter Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



# Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Environment Park site JUNE 2022 – JUNE 2023

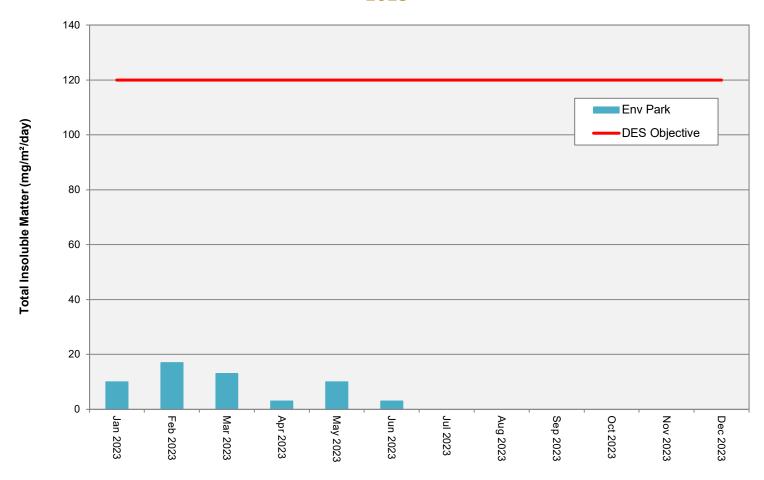




Lead Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



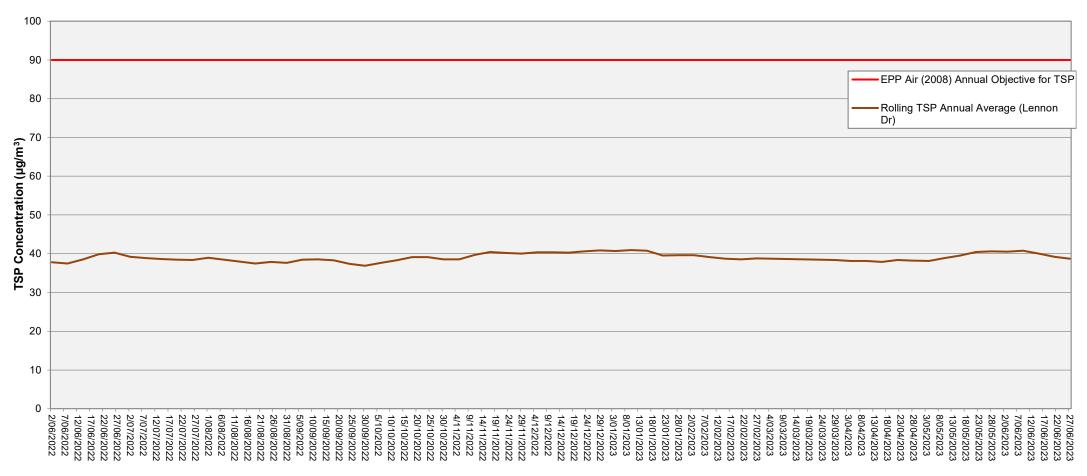
## Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2023



Note: Total Insoluble Matter Concentration units = milligrams per square metre per day



# Hi-Volume Sampler - General total dust levels (one in six days) at Lennon Drive site June 2022 – June 2023

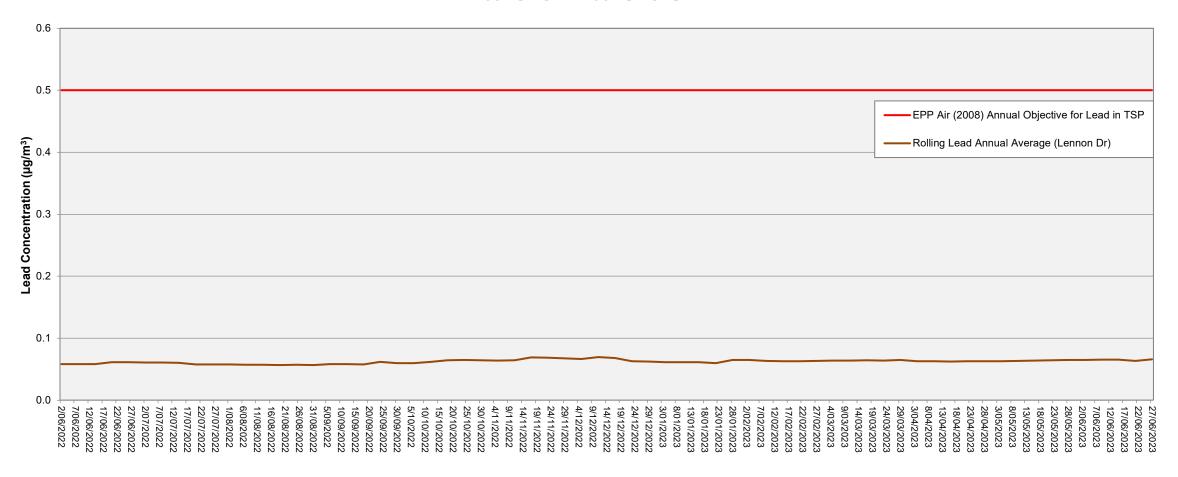




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



#### Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site June 2022 – June 2023

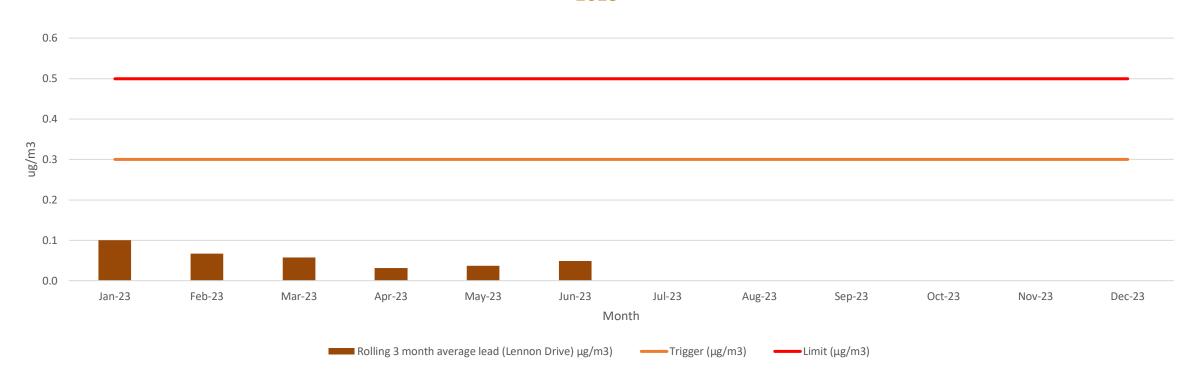




Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



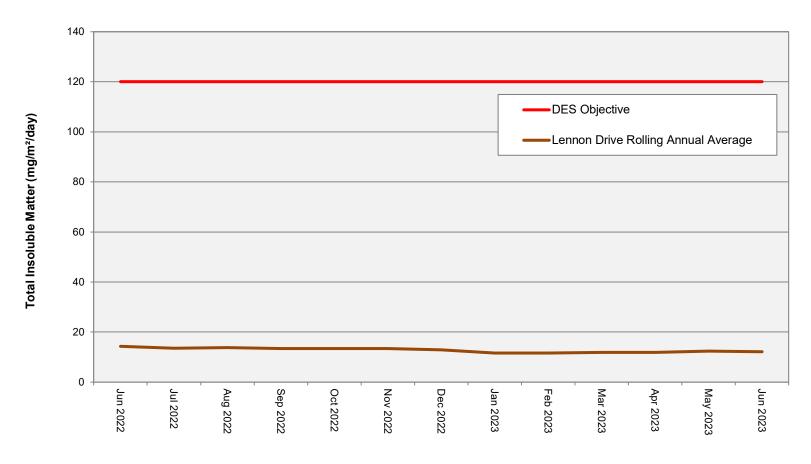
#### Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2023



Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result



#### Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site June 2022 – June 2023

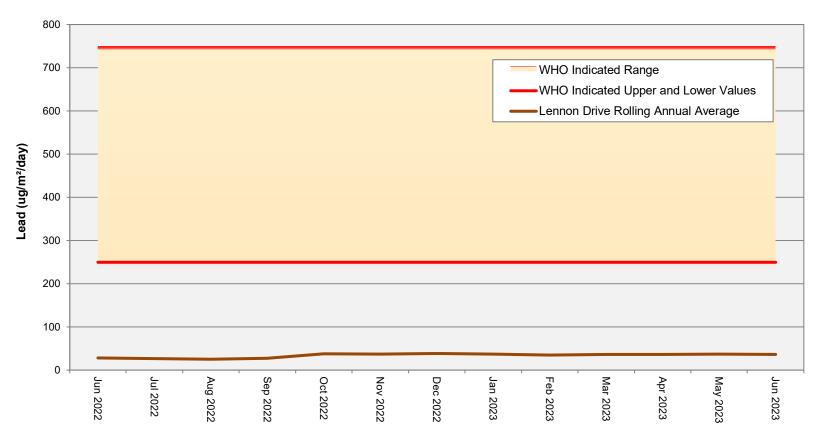




Total Insoluble Matter Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



## Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Lennon Drive Site JUNE 2022– JUNE 2023

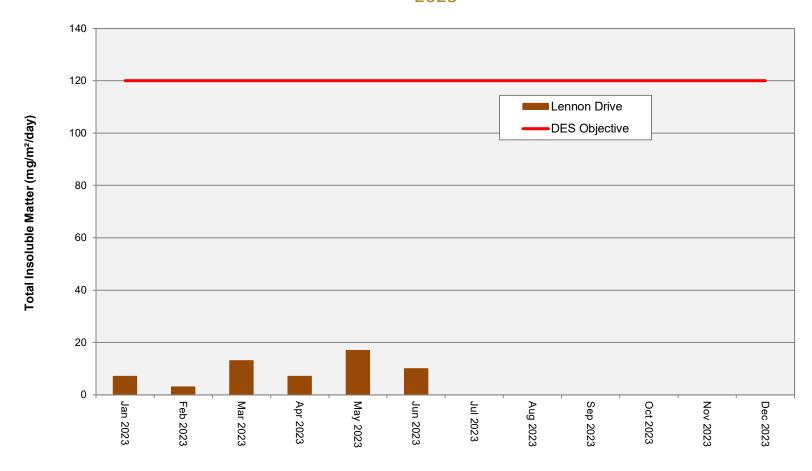


Note: Lead Concentration units = micrograms per square metre per day

Rolling annual average = the moving average of the previous 11 results and the current result



# Dust Deposition Gauge – General dust deposition levels (monthly) at Lennon Drive Site 2023



Note: Total Insoluble Matter Concentration units = milligrams per square metre per day



#### This statement/advice was provided by Queensland Health in relation to blood lead levels in Townsville in April 2016

Environmental limits for lead are set using a number of possible criteria including potential health effects.

Blood lead level within the Australian population have been decreasing over time as the use of lead – particularly in petrol and paint - has been phased put. The most recent NHMRC guidance document suggests that a blood lead level of less than 5  $\mu$ g/dL is what should be expected in the general population.

Elevated blood lead levels are notified to Queensland Health for investigation. Previously this level was 10  $\mu$ g/dL but since the beginning of 2016 has been reduced to 5  $\mu$ g/dL. This is not an indication of a safe blood level, but is a trigger level that requires investigation into what in the individual's environment is contributing to the level.

Based on studies recognised by the World Health Organisation into the relationship between lengthy exposure to ambient air lead levels and increases in blood lead levels, the current 12 month rolling average for measurements (as at March 2016) at the Townsville Coast Guard Site could be expected to add between  $0.36~\mu g/dL$  and  $0.6~\mu g/dL$  to a person's total blood lead level. This increment is only about 10% of the level that would require further investigation. Along with other normal exposure, this would not be expected to exceed that level, is well within the expected community range, and below the level that would trigger further investigation.

The highest rolling annual average in recent years (recorded in May 2014 at the Townsville Coast Guard Site) yields a predicted result of between 1.14 µg/dL and 1.9 µg/dL, still well under the level which should trigger concern.

