

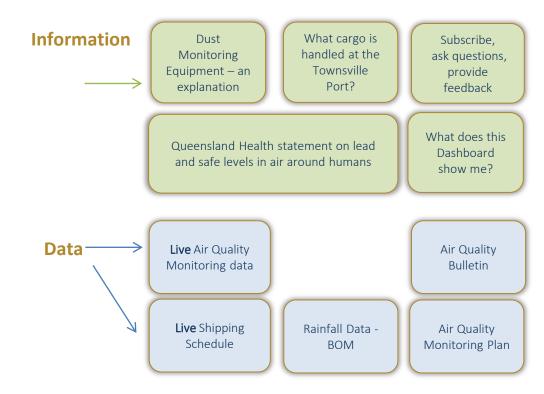
Click here to visit the Port of Townsville's monitoring network

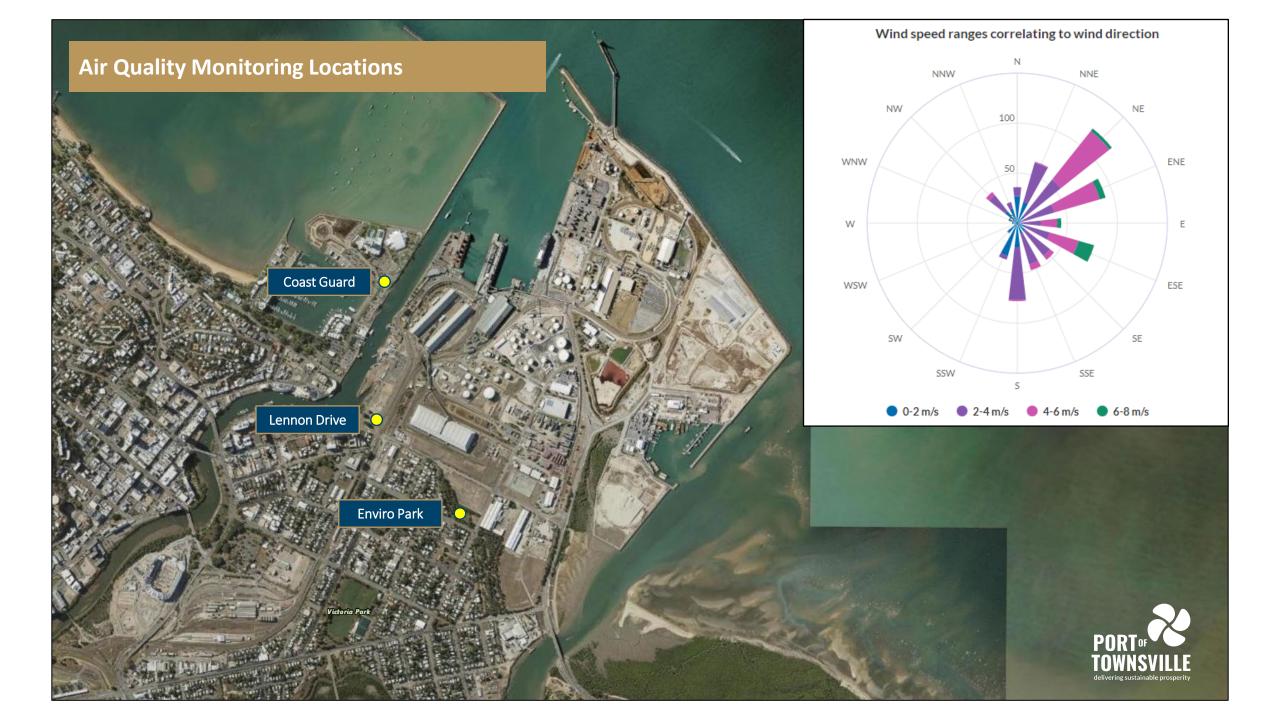
Click here to visit DES monitoring network

#### Air Quality Dashboard | February | 2022

#### 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 February 2022**

Date In/Out	Vessel Name	Cargo	Berth
24 Jan 2022 - 01 Feb 2022	GREAT FAITH	Copper Concentrates, Lead Concentrates, Zinc Concentrates (EXPORT)	11
02 Feb 2022 - 03 Feb 2022	LAUTOKA CHIEF	CONTAINERS	4
03 Feb 2022 - 04 Feb 2022	THERESA MICRONESIA	Molasses (EXPORT)	9
03 Feb 2022 - 05 Feb 2022	BF CALOOSA	Concentrates (EXPORT)	3 NTH
06 Feb 2022 - 06 Feb 2022	GRAND COSMO	Motor Vehicles (IMPORT)	4
06 Feb 2022 - 08 Feb 2022	FLORA DELMAS	CONTAINERS	3 STH
07 Feb 2022 - 09 Feb 2022	BELAJA	Fertilizer (EXPORT)	8
07 Feb 2022 - 25 Feb 2022	HALL 1	General/Break Bulk (IMPORT)	9
07 Feb 2022 - 07 Feb 2022	SILVER ELLIE	Fuels (IMPORT)	1
07 Feb 2022 - 26 Feb 2022	HALL 2	General/Break Bulk (IMPORT)	9
07 Feb 2022 - 10 Feb 2022	AFRICAN MARGAUX	Sulphur (IMPORT)	10
07 Feb 2022 - 08 Feb 2022	HAMBURG HIGHWAY	Motor Vehicles (IMPORT)	4
08 Feb 2022 - 09 Feb 2022	IVS IBIS	Zinc Concentrates (EXPORT)	3 NTH
09 Feb 2022 - 11 Feb 2022	BELAJA	BREAK BULK	3 STH
09 Feb 2022 - 13 Feb 2022	OCEAN CLIO	Concentrates (EXPORT)	4
10 Feb 2022 - 12 Feb 2022	BERGE HAKODATE	Fertilizer (EXPORT)	8
12 Feb 2022 - 13 Feb 2022	GENIUS HIGHWAY	Motor Vehicles (IMPORT)	3 NTH
16 Feb 2022 - 17 Feb 2022	SUVA CHIEF	CONTAINERS	4
17 Feb 2022 - 18 Feb 2022	GOLDEN WAVE	Fuels (IMPORT)	1
17 Feb 2022 - 20 Feb 2022	PACIFIC CONDOR	BREAK BULK	3 NTH
18 Feb 2022 - 20 Feb 2022	SINGAN	Fertilizer (EXPORT)	8
18 Feb 2022 - 19 Feb 2022	BLUE GRASS MARINER	Fuels (IMPORT)	1
18 Feb 2022 - 21 Feb 2022	IVS KINGBIRD	Lead Concentrates, Zinc Concentrates (EXPORT)	11
20 Feb 2022 - 21 Feb 2022	IVS IBIS	Zinc Concentrates (EXPORT)	3 NTH
21 Feb 2022 - 23 Feb 2022	ATHINA	Fuels (IMPORT)	1
21 Feb 2022 - 24 Feb 2022	KONDILI	Cement (IMPORT)	4
21 Feb 2022 - 22 Feb 2022	PISCES LEADER	Motor Vehicles (IMPORT)	10

Date In/Out	Vessel Name	Cargo	Berth
21 Feb 2022 - 23 Feb 2022	BASIC BRAVE	Zinc Concentrates (EXPORT)	8
25 Feb 2022 - 26 Feb 2022	HANSA FREYBURG	CONTAINERS	3 STH
26 Feb 2022 - 27 Feb 2022	GOLDEN ACE	Sulphuric Acid (EXPORT)	1
27 Feb 2022 - 27 Feb 2022	SOFRANA TOURVILLE	CONTAINERS	3 STH





# Port of Townsville Overview

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.

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:

#### Import

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

Visit the Port of Townsville Facebook page and click on "Sign up" at the top of the page.

OR

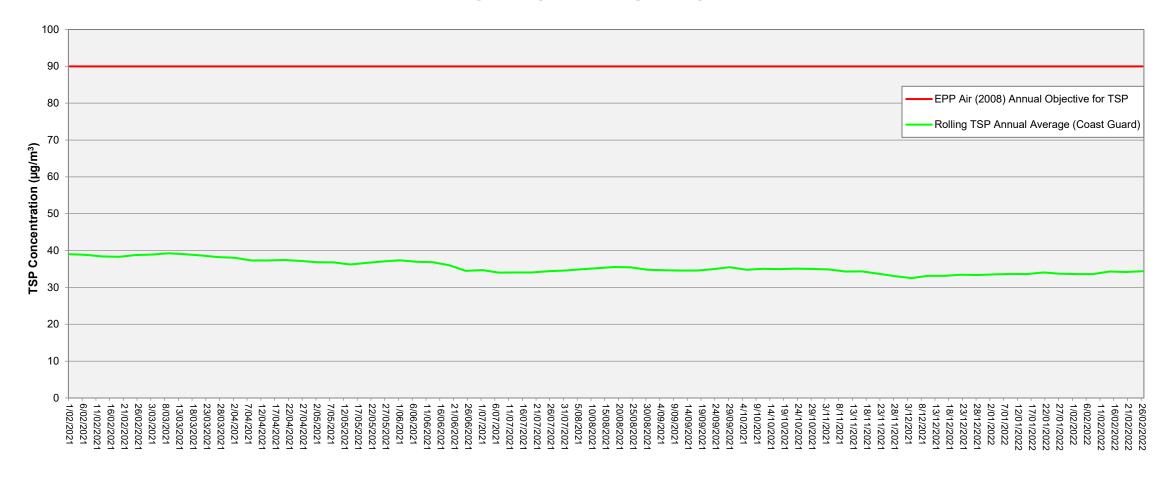
Phone 07 4781 1500 and asked to be added to the list.

#### **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 FEBRUARY 2021 – FEBRUARY 2022

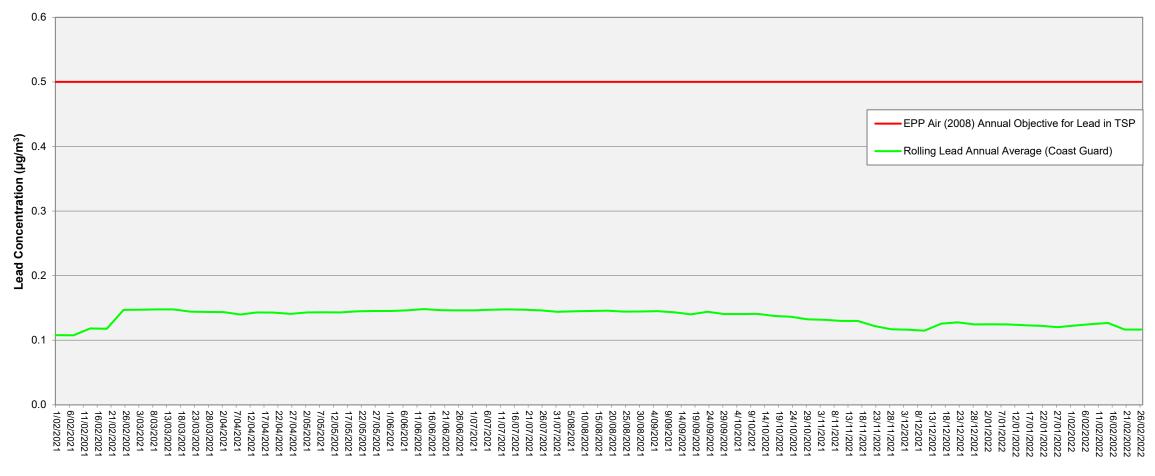




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



#### Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site FEBRUARY 2021 – FEBRUARY 2022

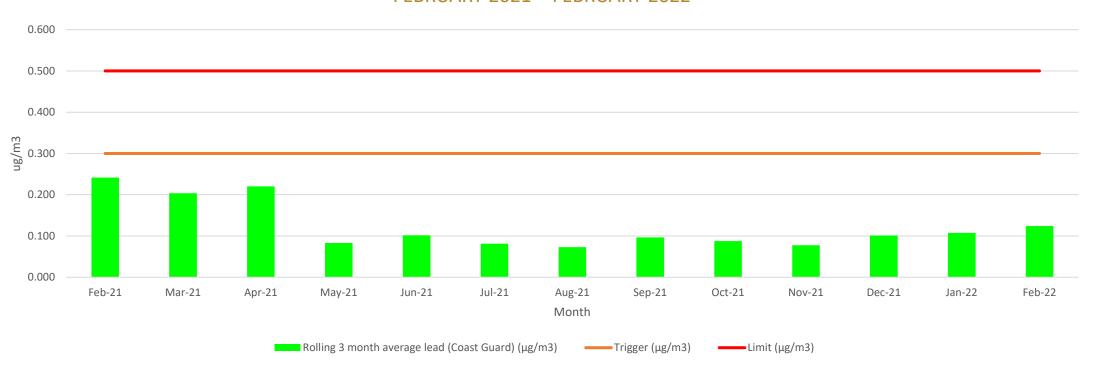




Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



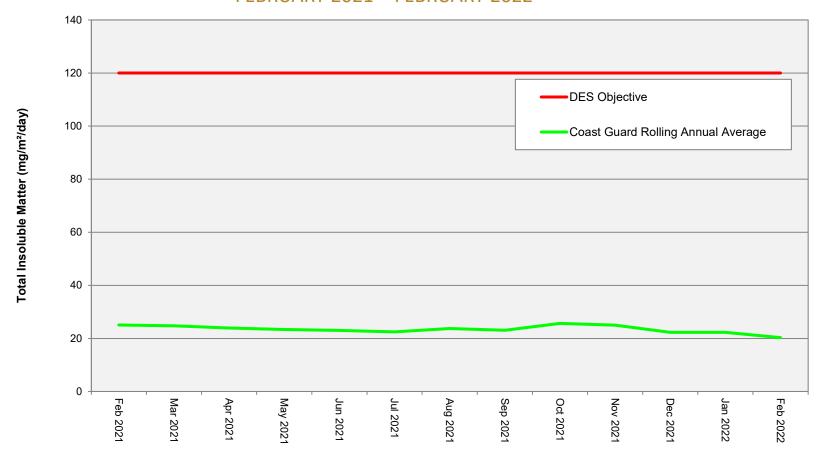
Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site FEBRUARY 2021 – FEBRUARY 2022



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 FEBRUARY 2021 – FEBRUARY 2022

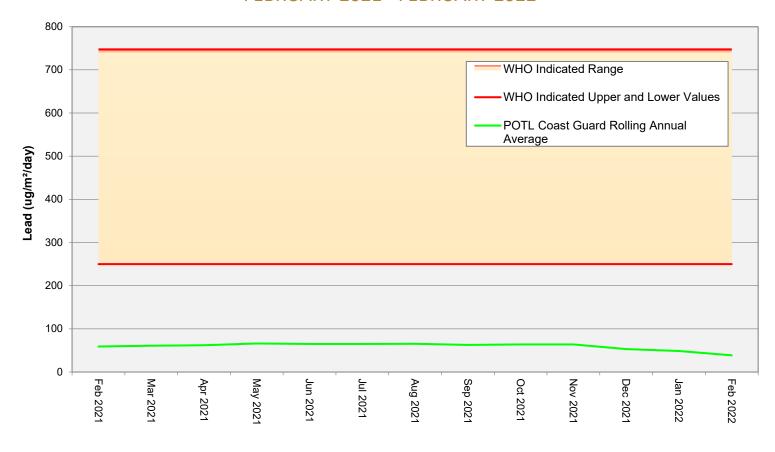


Note:

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



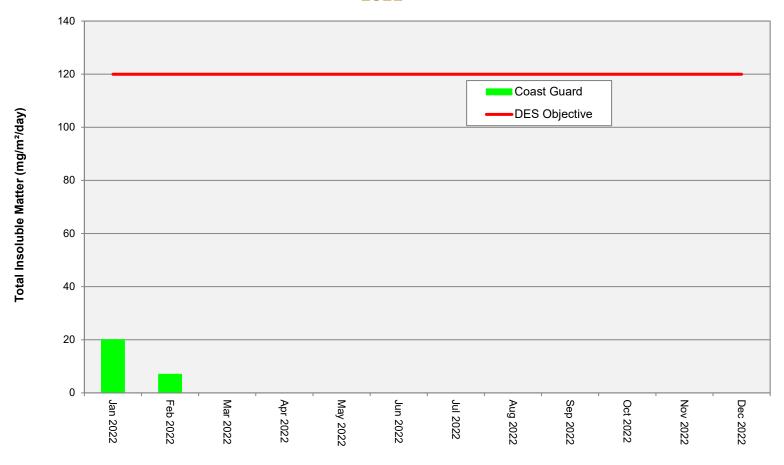
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Note: Lead Concentration units = micrograms per square metre per day
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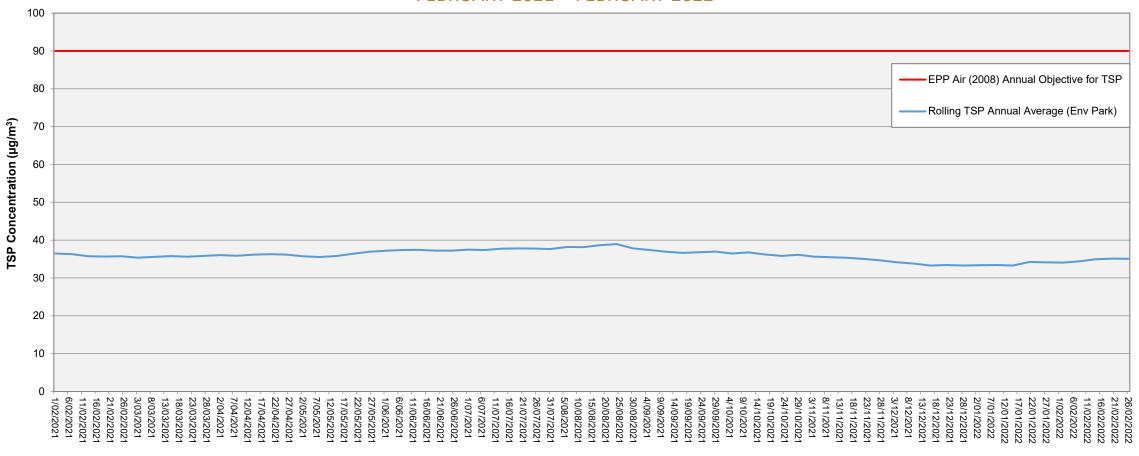
# Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2022



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



#### Hi-Volume Sampler - General total dust levels (one in six days) at Environment Park site FEBRUARY 2021 — FEBRUARY 2022

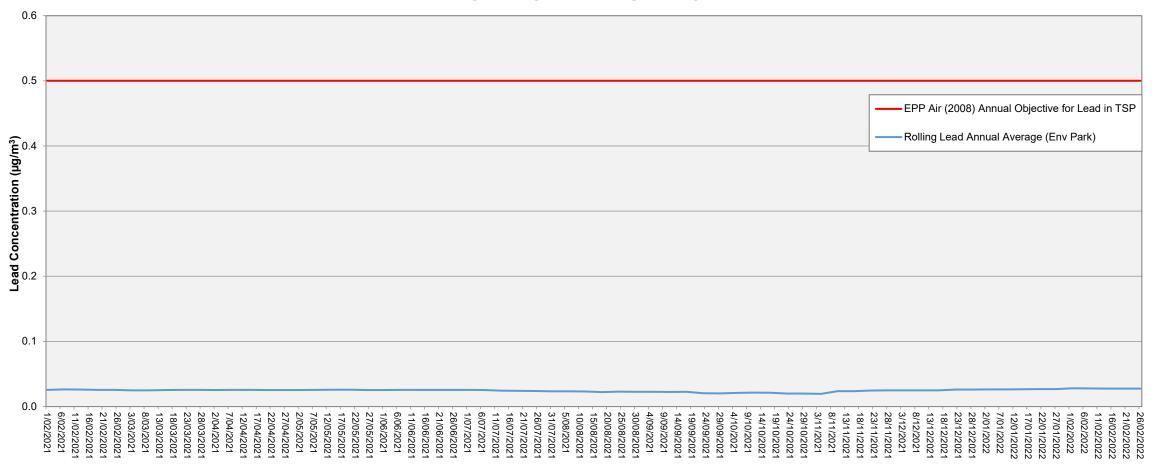


Note:

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



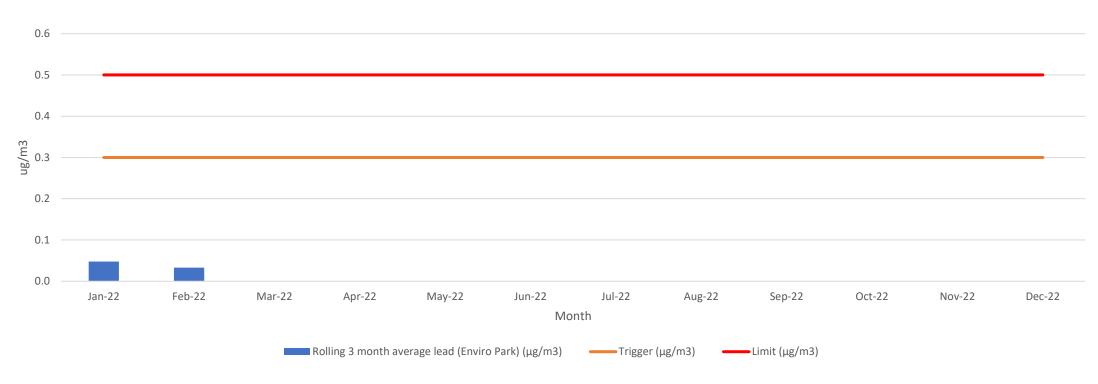
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Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result

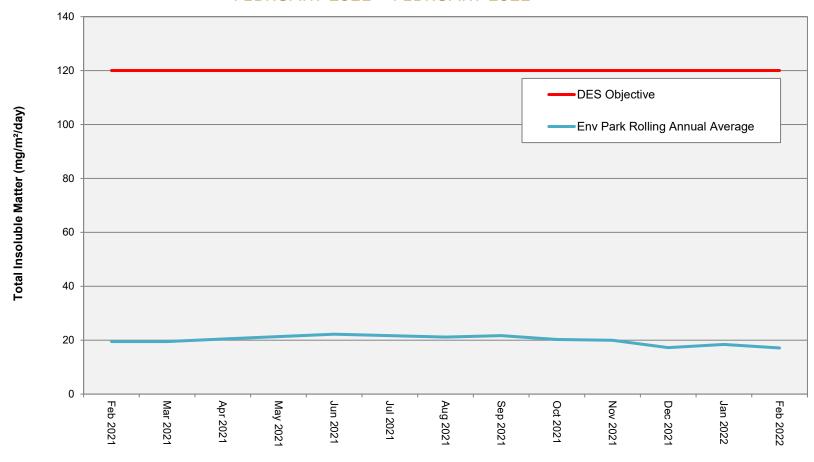
# Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2022



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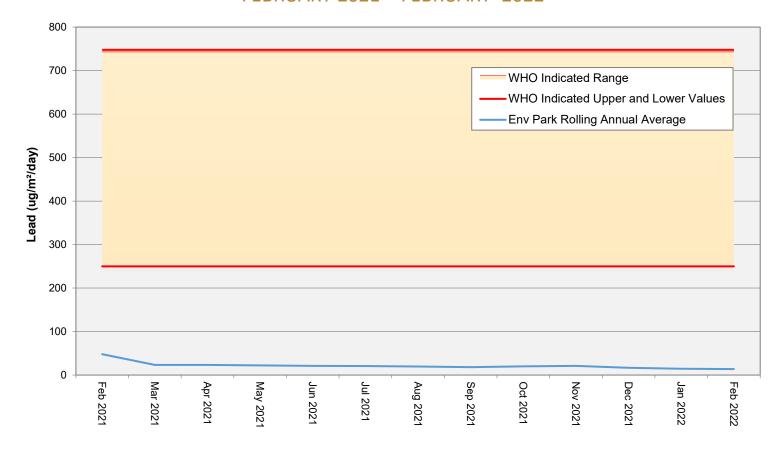
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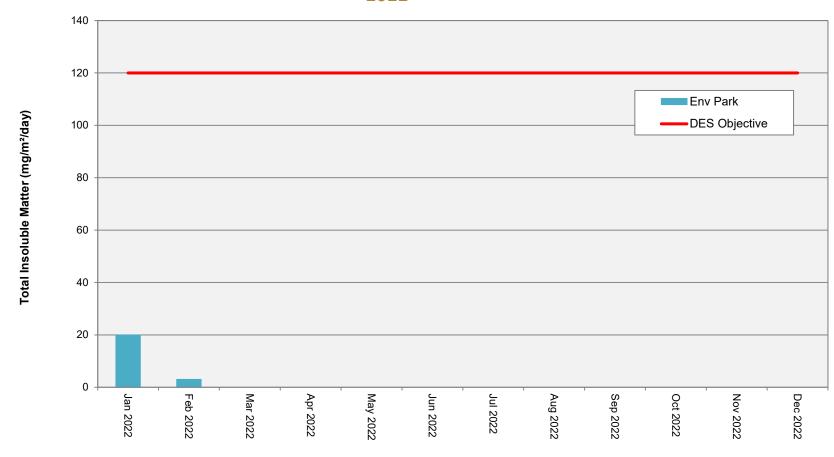
### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Environment Park site FEBRUARY 2021 – FEBRUARY 2022





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

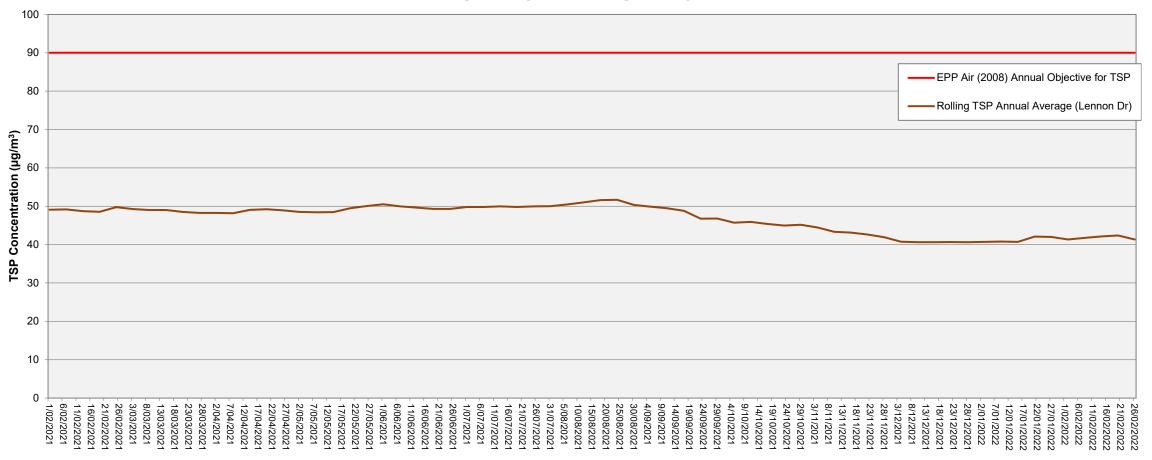
## Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2022



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 FEBRUARY 2021 — FEBRUARY 2022

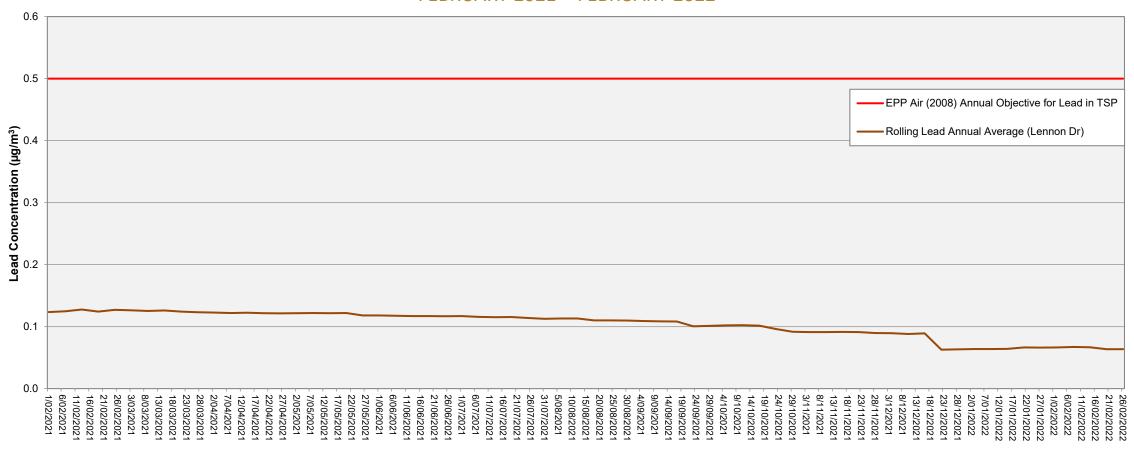




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



### Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site FEBRUARY 2021 – FEBRUARY 2022

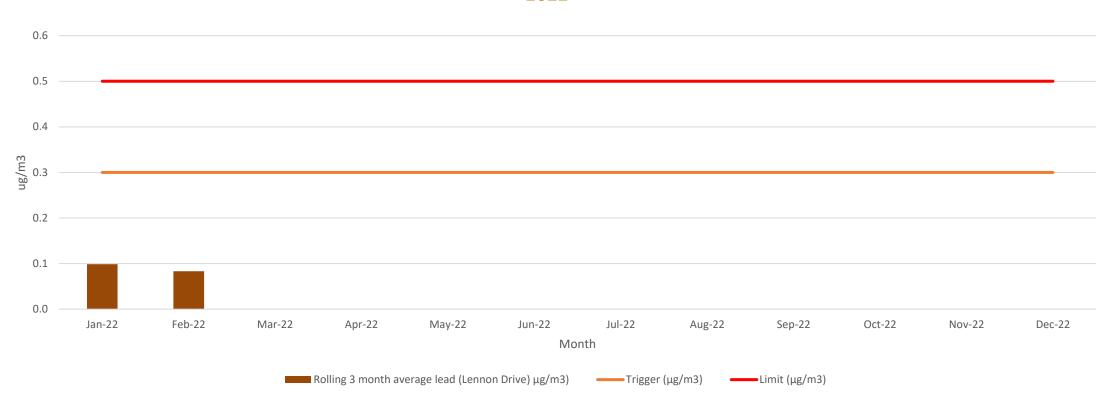




Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



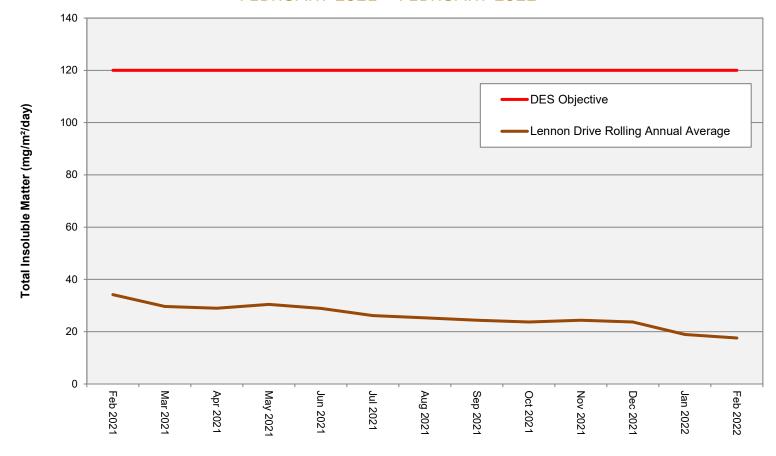
# Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2022



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



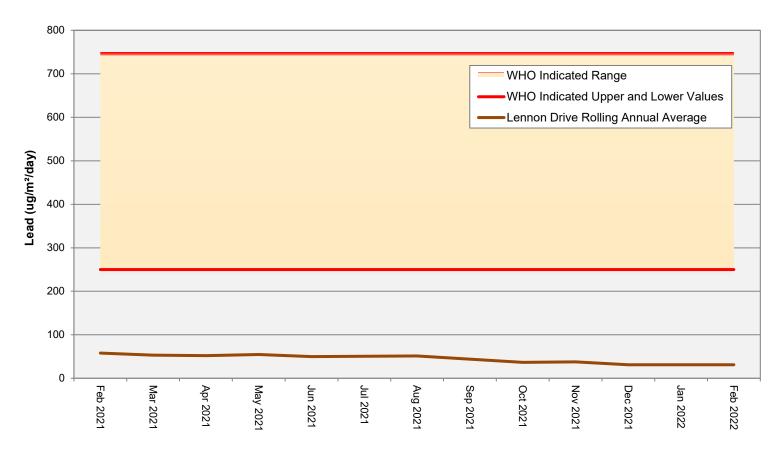
Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site FEBRUARY 2021 – FEBRUARY 2022



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 Lennon Drive Site FEBRUARY 2021 – FEBRUARY 2022

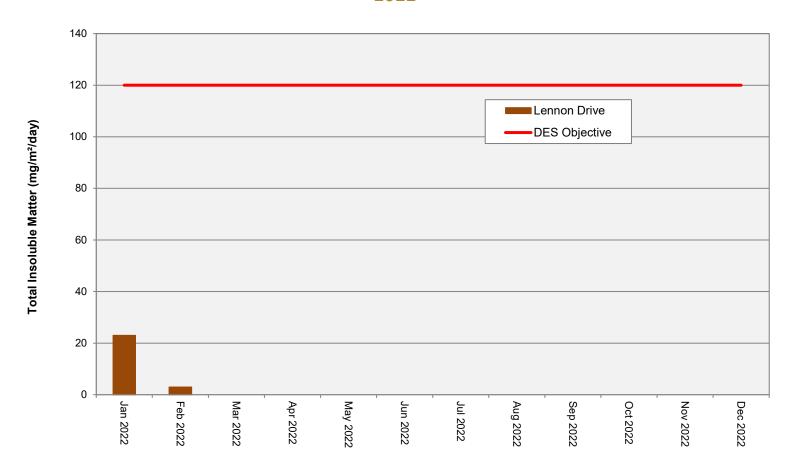


Note: Lead Concentration units = micrograms per square metre per day

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



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  $\mu$ g/dL and 1.9  $\mu$ g/dL, still well under the level which should trigger concern.

