

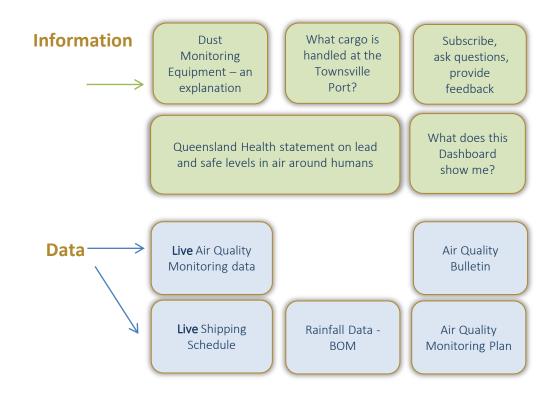
Click here to visit the Port of Townsville's monitoring network

Click here to visit DES monitoring network

#### Air Quality Dashboard | July | 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 July 2022**

Date In/Out	Vessel Name	Cargo	Berth
28 Jun 2022 - 03 Jul 2022	CORESKY OL	SCRAP (EXPORT)	9
28 Jun 2022 - 01 Jul 2022	KONDILI	CEMENT (IMPORT)	4
30 Jun 2022 - 02 Jul 2022	SEA TIGER	FUELS (IMPORT)	1
01 Jul 2022 - 02 Jul 2022	EASTGATE	CONCENTRATES (EXPORT)	8
03 Jul 2022 - 04 Jul 2022	OCEAN SWAGMAN	FODDER (EXPORT)	4
04 Jul 2022 - 05 Jul 2022	THERESA ORION	MOLASSES (EXPORT)	9
04 Jul 2022 - 07 Jul 2022	KMARIN JASMINE	ZINC CONCENTRATES (EXPORT)	10
04 Jul 2022 - 05 Jul 2022	OCEAN UTE	CATTLE (EXPORT)	4
06 Jul 2022 - 07 Jul 2022	NADI CHIEF	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
06 Jul 2022 - 08 Jul 2022	ERRADALE	LEAD INGOTS (EXPORT)	3 STH
07 Jul 2022 - 08 Jul 2022	GALLOWAY EXPRESS	CATTLE (EXPORT)	4
07 Jul 2022 - 09 Jul 2022	WOODGATE	SUGAR (EXPORT)	9
08 Jul 2022 - 10 Jul 2022	PACIFIC CONDOR	GENERAL CARGO + CONTAINERS (IMPORT) COPPER REFINED (EXPORT)	3 NTH
11 Jul 2022 - 11 Jul 2022	DIONYSOS LEADER	MOTOR VEHICLES (IMPORT)	4
11 Jul 2022 - 13 Jul 2022	KM JAKARTA	SUGAR (EXPORT)	9
12 Jul 2022 - 13 Jul 2022	SUNNY BAY	FUELS (IMPORT)	1
12 Jul 2022 - 14 Jul 2022	KEN JYO	TYRES (IMPORT)	3 NTH
13 Jul 2022 - 14 Jul 2022	GRAND MARK	MOTOR VEHICLES (IMPORT)	4
14 Jul 2022 - 18 Jul 2022	AFRICAN QUAIL	FERTILIZER,SULPHUR (IMPORT)	10
14 Jul 2022 - 15 Jul 2022	GREEN BAY	MOTOR VEHICLES (IMPORT)	9
14 Jul 2022 - 16 Jul 2022	HANSA FREYBURG	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
16 Jul 2022 - 17 Jul 2022	ELANDRA SPRUCE	FUELS (IMPORT)	1
16 Jul 2022 - 17 Jul 2022	BOSPORUS HIGHWAY	MOTOR VEHICLES (IMPORT)	4

Date In/Out	Vessel Name	Cargo	Berth
17 Jul 2022 - 19 Jul 2022	SANIA	SUGAR (EXPORT)	9
17 Jul 2022 - 19 Jul 2022	ANL KOKODA	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH
18 Jul 2022 - 19 Jul 2022	DL LAVENDER	ZINC CONCENTRATES (EXPORT)	8
18 Jul 2022 - 18 Jul 2022	GOLDEN UNITY	FUELS (IMPORT)	1
18 Jul 2022 - 20 Jul 2022	LUGA	CEMENT (IMPORT)	4
18 Jul 2022 - 20 Jul 2022	REGINA ISLAND	UREA (IMPORT)	10
20 Jul 2022 - 21 Jul 2022	LAUTOKA CHIEF	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
20 Jul 2022 - 22 Jul 2022	SEA BREEZE	CONCENTRATES (EXPORT)	11
21 Jul 2022 - 24 Jul 2022	WESTERN PARIS	CONCENTRATES (EXPORT)	3 NTH
21 Jul 2022 - 22 Jul 2022	NORD OCEANIA	FUELS (IMPORT)	1
23 Jul 2022 - 24 Jul 2022	DAIWAN CHAMPION	SUGAR (EXPORT)	9
24 Jul 2022 - 25 Jul 2022	SAN DU AO	BITUMEN,BITUMEN (IMPORT)	4
25 Jul 2022 - 25 Jul 2022	GRAVITY HIGHWAY	MOTOR VEHICLES (IMPORT)	3 NTH
27 Jul 2022 - 28 Jul 2022	AFRICAN JAY	ZINC CONCENTRATES (EXPORT)	8
27 Jul 2022 - 28 Jul 2022	TACOMA TRADER	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH
27 Jul 2022 - 29 Jul 2022	PACIFIC ACE	SUGAR (EXPORT)	9
28 Jul 2022 - 29 Jul 2022	GELBRAY EXPRESS	CATTLE (EXPORT)	3 NTH
28 Jul 2022 - 29 Jul 2022	BASIC BRAVE	ZINC CONCENTRATES (EXPORT)	8
28 Jul 2022 - 30 Jul 2022	THERESA MICRONESIA	MOLASSES (EXPORT)	4
30 Jul 2022 - 31 Jul 2022	WESTERN PARIS	CONCENTRATES (EXPORT)	3 STH
30 Jul 2022 - 31 Jul 2022	VENUS HALO	FERTILIZER (IMPORT)	10





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:

#### 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).



#### **Subscribe to Dashboard Updates**

Visit our website and subscribe here <a href="https://www.townsville-port.com.au/community/">www.townsville-port.com.au/community/</a>

OR

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

OR

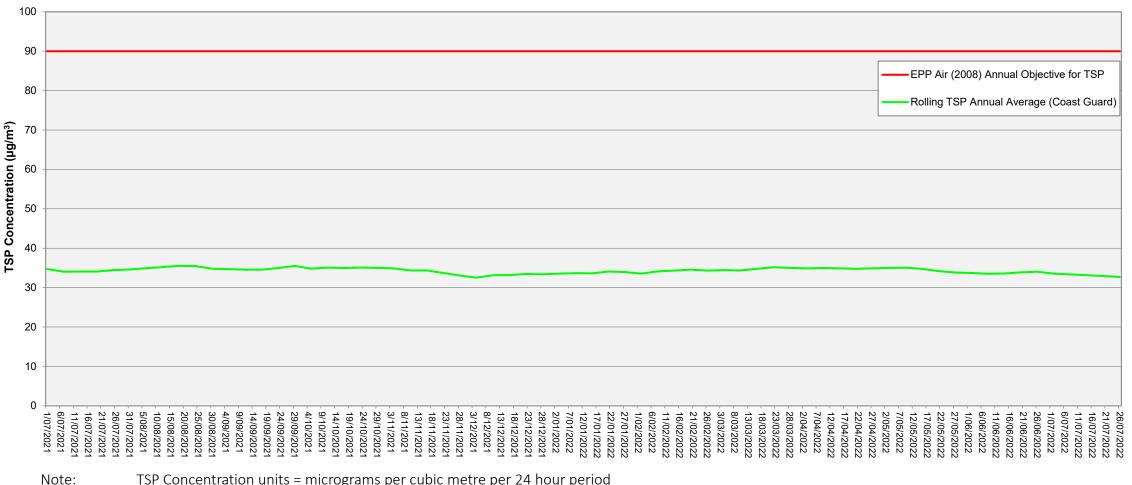
Phone 07 4781 1500 and asked to be added to the list.

#### **Ask a Question / Provide Feedback**

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



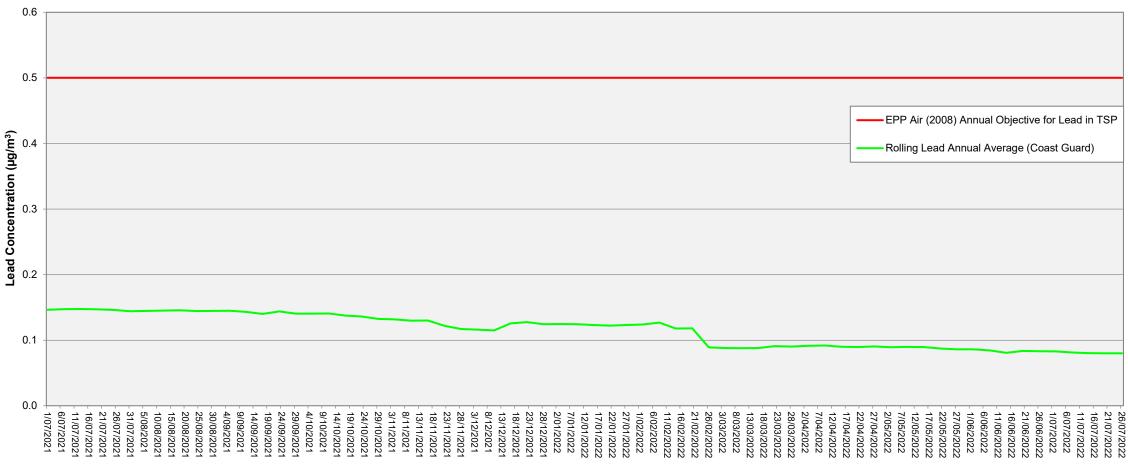
# Hi-Volume Sampler – General total dust levels (one in six days) at Coast Guard Site July 2021 – July 2022





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 July 2021 – July 2022

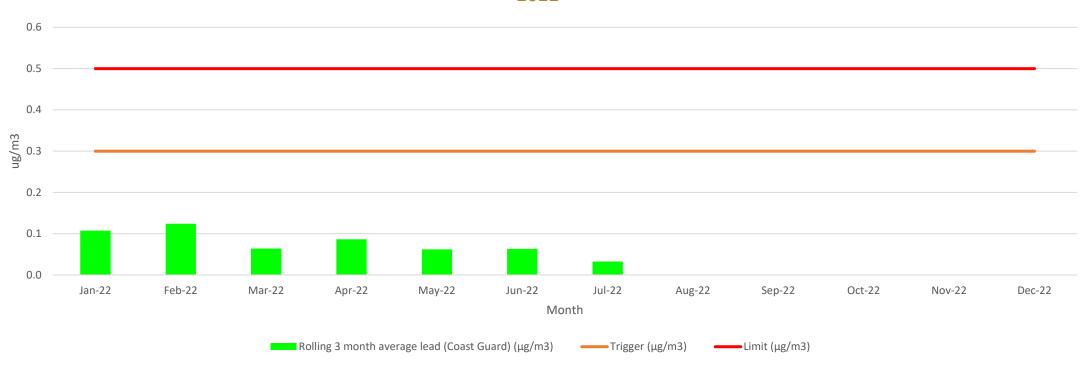


Note:

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



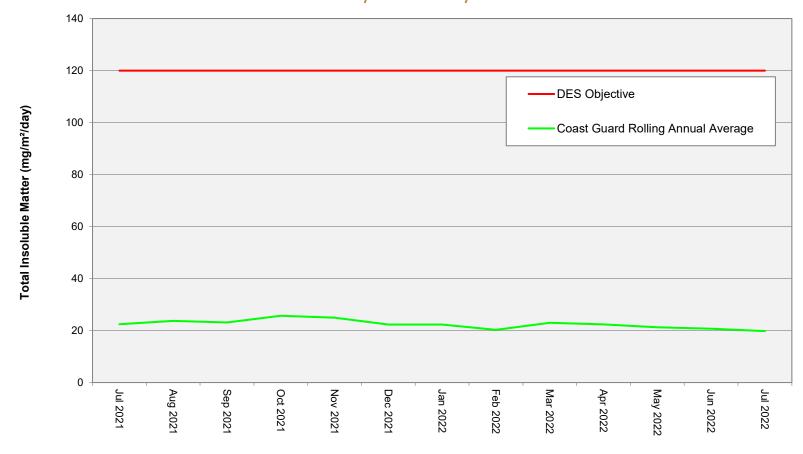
Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2022



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 July 2021 – July 2022

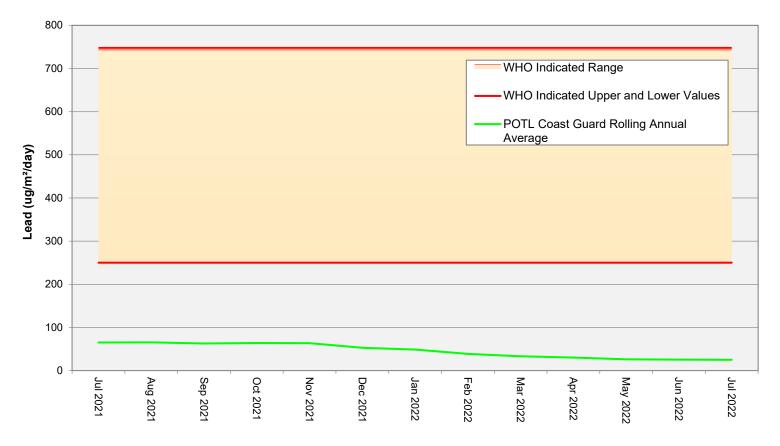


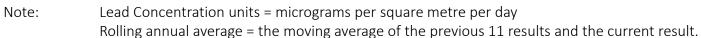


Total Insoluble Matter Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



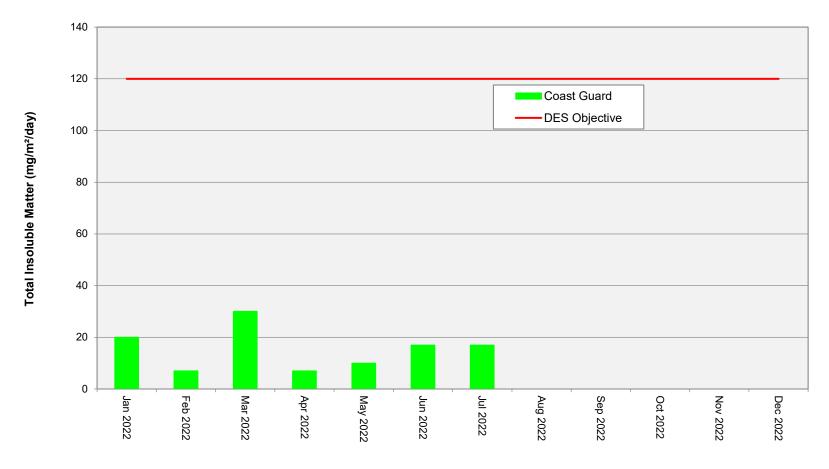
#### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site JULY 2021 – JULY 2022







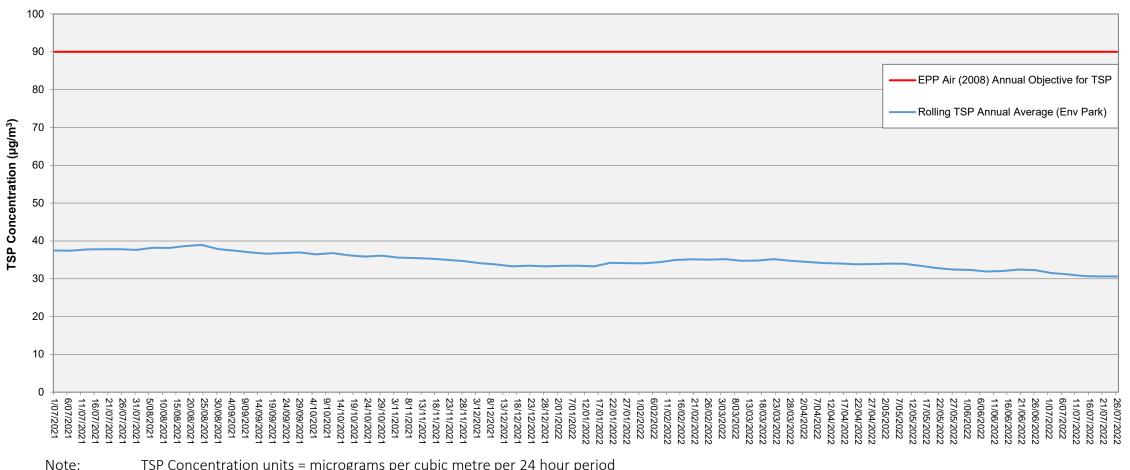
### Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2022



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



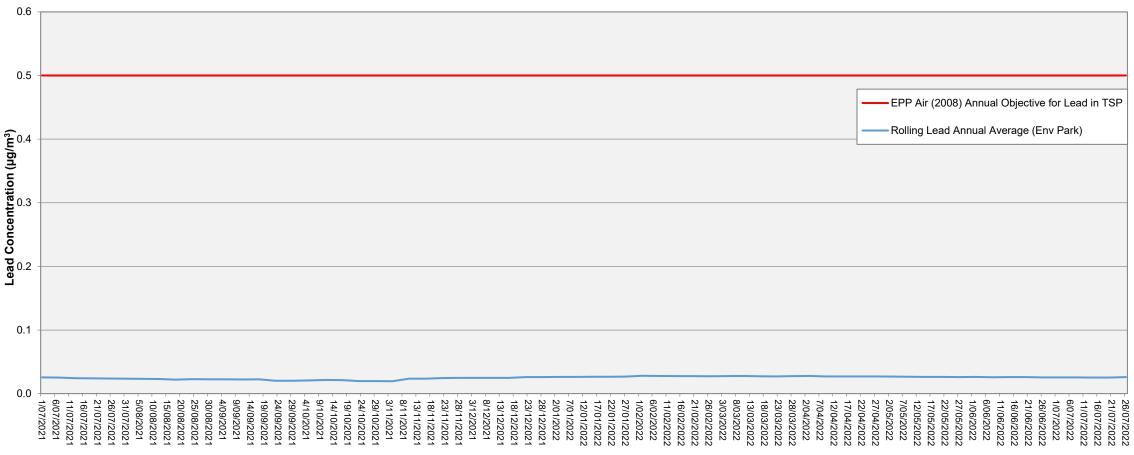
# Hi-Volume Sampler - General total dust levels (one in six days) at Environment Park site July 2021 – July 2022





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 Environment Park site July 2021 – July 2022

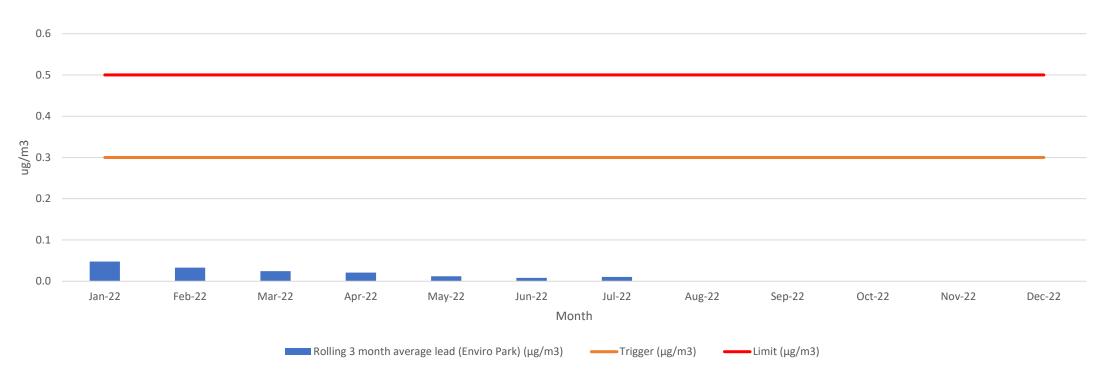




Lead Concentration units = micrograms per cubic metre per 24 hour period
Rolling annual average = the moving average of the previous 11 results and the current result



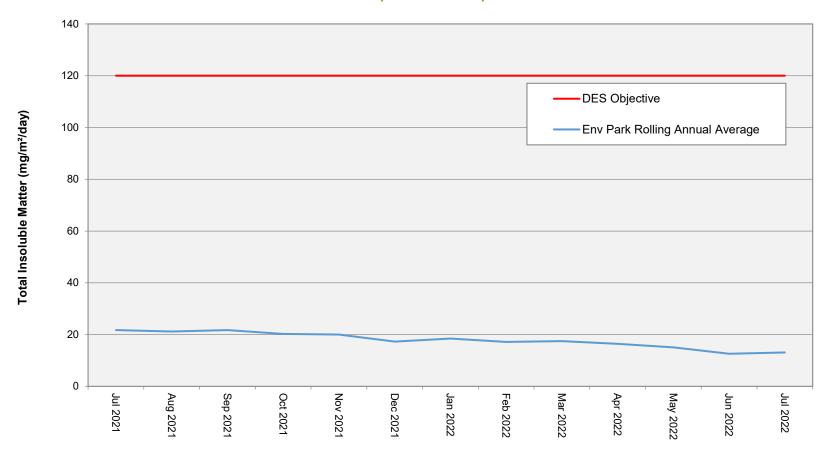
#### Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2022



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



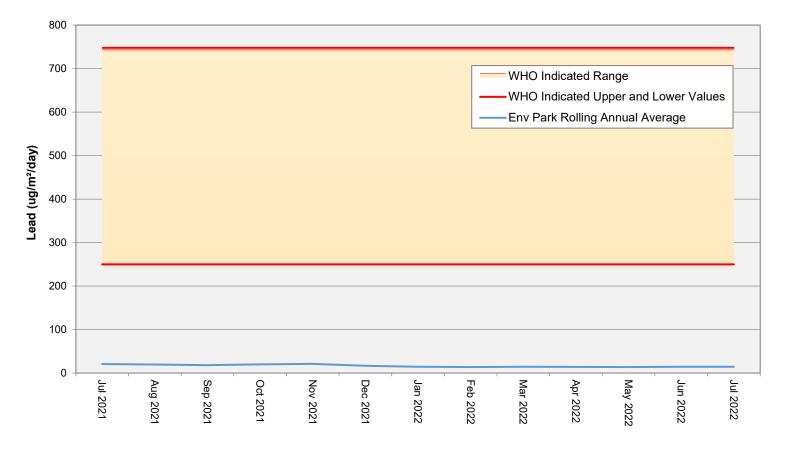
### Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site July 2021 – July 2022



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



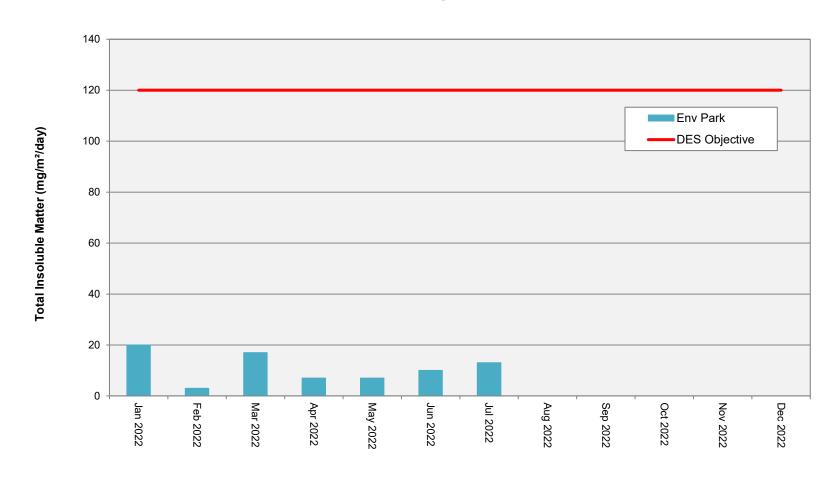
#### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Environment Park site JULY 2021 – JULY 2022





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

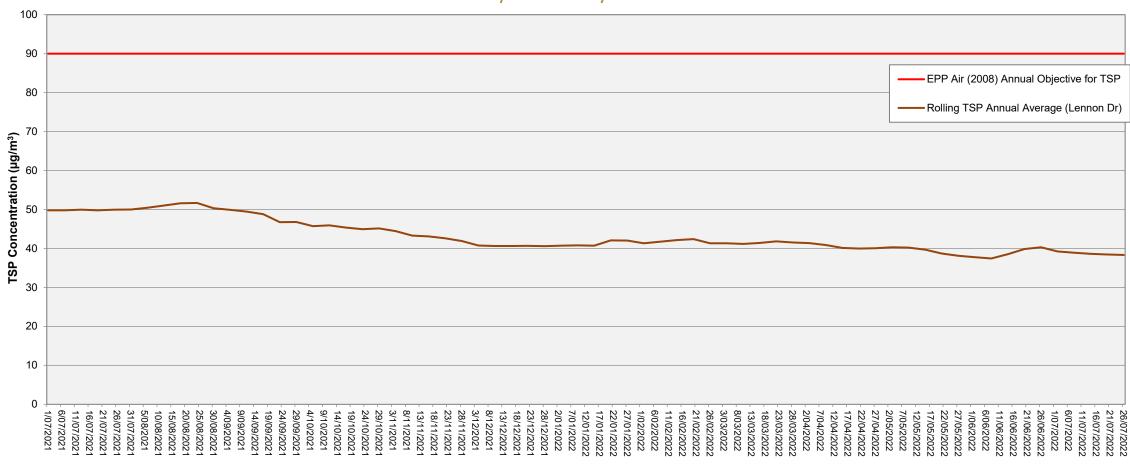
#### Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2022



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 July 2021 – July 2022

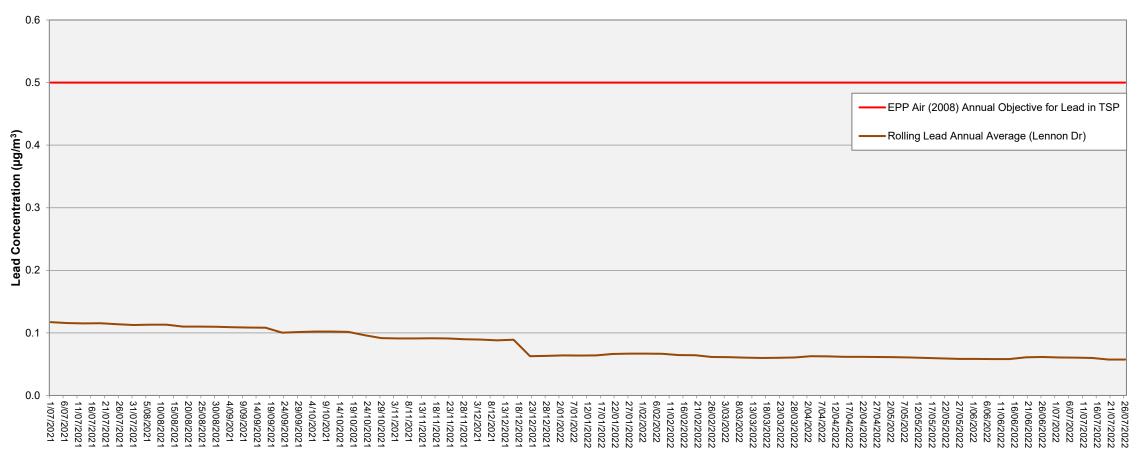


Note:

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



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

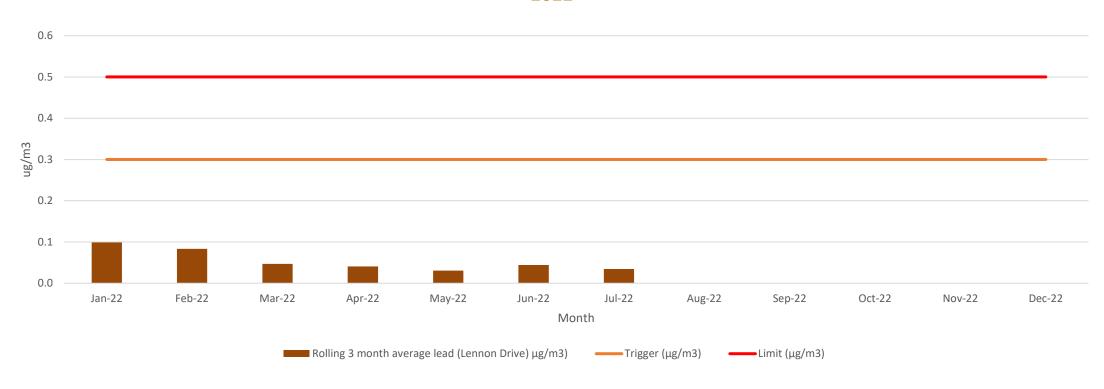


Note:

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



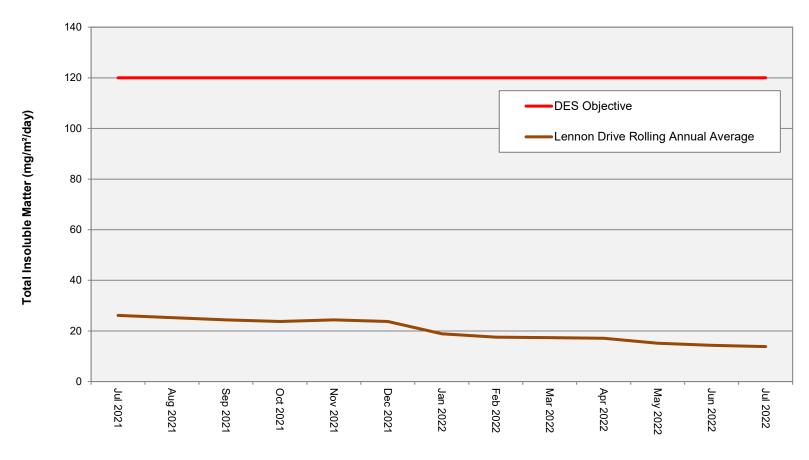
#### Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2022



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



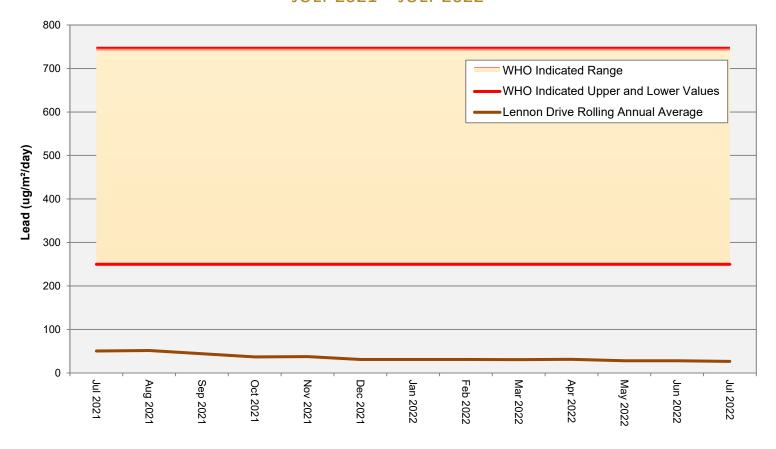
## Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site July 2021 – July 2022



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



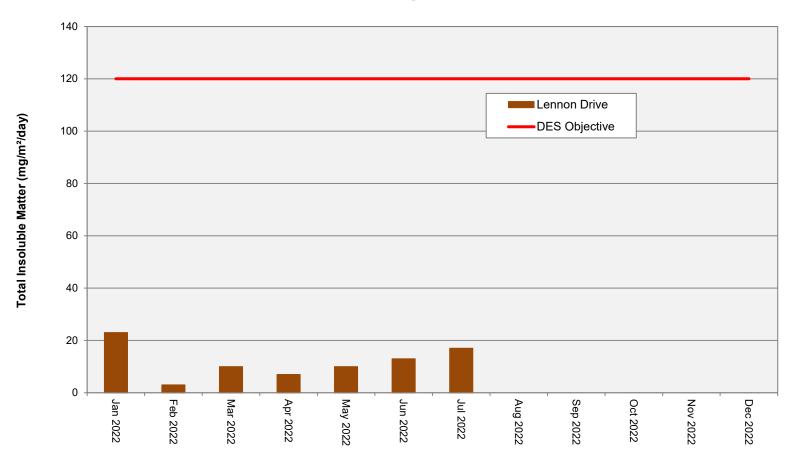
#### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Lennon Drive Site JULY 2021 – JULY 2022



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 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.

