

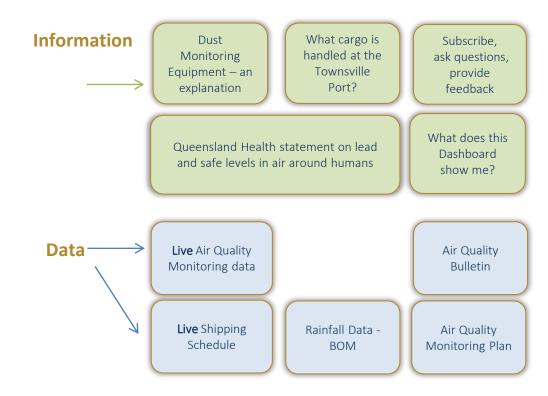
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#### Air Quality Dashboard | May | 2021

#### 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 May 2021**

Date In/Out	Vessel Name	Cargo	Berth
27 Apr - 01 May Bi	ELLE OCEAN	Zinc Ferrites (Export), Nil Cargo (Import)	T10
29 Apr - 01 May Po	OLARIS 3	Cattle (Export), Nil Cargo (Import)	T09
29 Apr - 01 May LU	UGA	Nil Cargo (Export), Cement (Import)	T04
30 Apr - 02 May V	ANTAGE DREAM	Concentrates (Export), Nil Cargo (Import)	T03S
01 May - 02 May P0	OLA AUGUSTA	Zinc Concentrates (Export), Nil Cargo (Import)	T08
01 May - 03 May P0	OLARIS 3	Nil Cargo (Export), Nil Cargo (Import)	T10
02 May - 04 May V	ANTAGE DREAM	Concentrates (Export), Nil Cargo (Import)	T08
03 May - 03 May G	SELBRAY EXPRESS	Cattle (Export), Nil Cargo (Import)	T04
03 May - 06 May Al	KTEA R	Zinc Concentrates (Export), Nil Cargo (Import)	T11
03 May - 06 May PA	ACIFIC CONDOR	General/Break Bulk (Export), Containers (Import)	T03N
04 May - 05 May M	MERCURY LEADER	Nil Cargo (Export), RCW - General Cargo (Import)	T04
04 May - 06 May CA	ASTOR LEADER	Nil Cargo (Export), Motor Vehicles (Import)	T09
04 May - 07 May Al	FRICAN STARLING	Nil Cargo (Export), Sulphur (Import)	T10
05 May - 06 May N	IOUMEA CHIEF	Containers (Export), Containers (Import)	T04
06 May - 08 May KE	EN SEA	Fertilizer (Export), Nil Cargo (Import)	T08
06 May - 06 May G	GLOBAL HIGHWAY	Nil Cargo (Export), Motor Vehicles (Import)	T03N
06 May - 08 May Fl	UNING	Lead Ingots (Export), Nil Cargo (Import)	T03S
07 May - 08 May VI	'UKOVAR	Nil Cargo (Export), Fuels (Import)	T01
07 May - 08 May M	MAYSORA	Cattle (Export), Nil Cargo (Import)	T04
07 May - 12 May IN	NTERLINK VERITY	Zinc Concentrates (Export), Copper Concentrates (Import)	T10
08 May - 08 May Fl	UNING	Nil Cargo (Export), Nil Cargo (Import)	T03S
08 May - 09 May Fl	UNING	Nil Cargo (Export), Nil Cargo (Import)	T03S
08 May - 11 May FL	LORA DELMAS	Containers (Export), Containers (Import)	T03N
09 May - 10 May G	SANADO EXPRESS	Cattle (Export), Nil Cargo (Import)	T04
11 May - 12 May G	OLDEN RESOLUTION	Sulphuric Acid (Export), Nil Cargo (Import)	T01
11 May - 11 May G	GREYMAN EXPRESS	Cattle (Export), Nil Cargo (Import)	T04
11 May - 13 May KY	YOWA ROSE	General Cargo (Export), Containers (Import)	T03N

Date In/Out	Vessel Name	Cargo	Berth
12 May - 17 May	INTERLINK VERITY	Nil Cargo (Export), Nil Cargo (Import)	T03S
12 May - 13 May	THERESA MICRONESIA	Molasses (Export), Nil Cargo (Import)	Т09
12 May - 14 May	KOTA HARUM	Nil Cargo (Export), Nil Cargo (Import)	T04
14 May - 17 May	BBC CONGO	Scrap (Export), Nil Cargo (Import)	T08
14 May - 16 May	AKUNA	Nil Cargo (Export), Cement (Import)	T04
15 May - 17 May	XING HE HAI	Sugar (Export), Nil Cargo (Import)	Т09
15 May - 16 May	SAGITTARIUS LEADER	Nil Cargo (Export), Motor Vehicles (Import)	T10
16 May - 17 May	ATLANTIC INFINITY	Nil Cargo (Export), Fuels (Import)	T01
17 May - 18 May	MYKONOS	Sugar (Export), Nil Cargo (Import)	Т09
17 May - 18 May	ESTEEM ENERGY	Nil Cargo (Export), Fuels (Import)	T01
18 May - 19 May	GOLDEN ASPIRANT	Molasses (Export), Nil Cargo (Import)	T09
19 May - 19 May	GOLDEN AUSTRALIS	Nil Cargo (Export), Fuels (Import)	T01
19 May - 20 May	LAE CHIEF	Containers (Export), Containers (Import)	T04
19 May - 22 May	MANTA HATICE	Nil Cargo (Export), Urea (Import)	T10
21 May - 21 May	TOKYO TRADER	Containers (Export), Containers (Import)	T04
21 May - 22 May	INTERLINK VERITY	Nil Cargo (Export), Nil Cargo (Import)	T03S
22 May - 22 May	ORIENTAL SPIRIT	Fertilizer (Export), Nil Cargo (Import)	T08
22 May - 25 May	AFRICAN HERON	Nil Cargo (Export), Sulphur (Import)	T10
24 May - 31 May	NEW LEGACY	Lead Concentrates (Export), Nil Cargo (Import)	T11
25 May - 26 May	HANSA REGENSBURG	Containers (Export), Containers (Import)	T03S
26 May - 27 May	POLARIS 3	Cattle (Export), Nil Cargo (Import)	T04
27 May - 28 May	SEA FALCON	Zinc Concentrates (Export), Nil Cargo (Import)	T08
29 May - 30 May	THERESA MICRONESIA	Molasses (Export), Nil Cargo (Import)	T09
29 May - 31 May	WYUNA	Nil Cargo (Export), Cement (Import)	T04
29 May - 30 May	ARDMORE ENCOUNTER	Nil Cargo (Export), Fuels (Import)	T01
30 May - 31 May	NORD MIYAKO	Nil Cargo (Export), Fuels (Import)	T01





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 2019-20, the Port of Townsville delivered strong financial results and continued to roll-out major infrastructure investments despite the impacts of the global pandemic, COVID-19. In a year where supply chains across the world have been tested, a total of 8.2 million tonnes of freight passed over our wharves, which was a 6.5 per cent increase on last year. With a focus on cost management, the Port also reported a \$13.87 million net profit for 2019/20, 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 (up 17%), fertiliser (up 25%) and livestock (up 32%), making it Australia's largest live cattle export port. Townsville is the number one port in Australia for copper, zinc, lead and sugar exports and services 70% 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).





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OR

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

OR

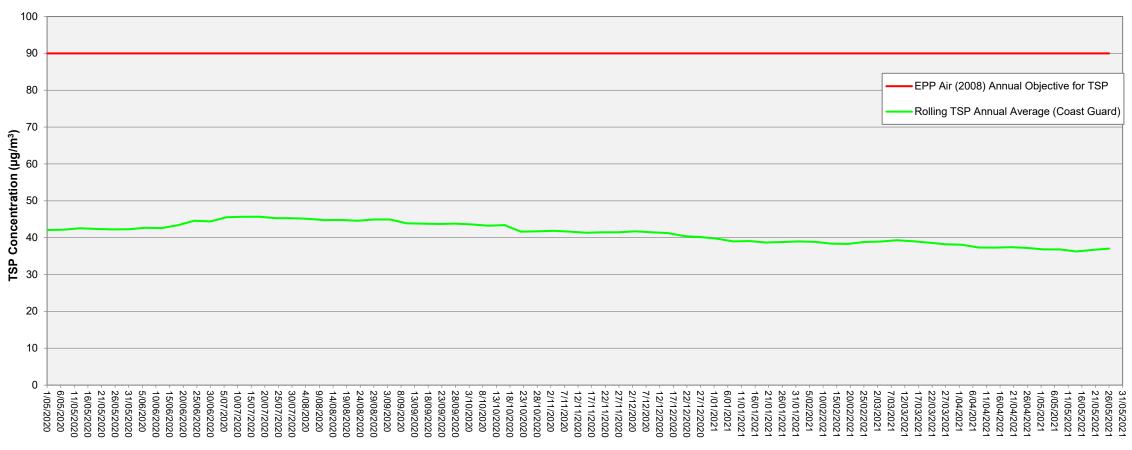
Phone 07 4781 1500 and asked to be added to the list.

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

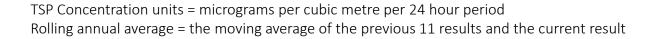
Send your enquiry or feedback to <a href="mailto:community@townsvilleport.com.au">community@townsvilleport.com.au</a>



# Hi-Volume Sampler – General total dust levels (one in six days) at Coast Guard Site MAY 2020 – MAY 2021

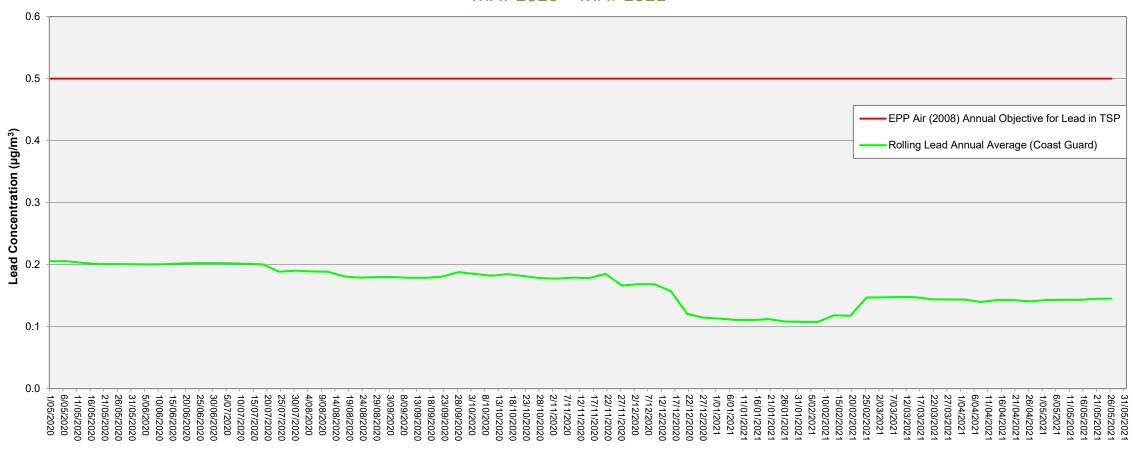








#### Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site MAY 2020 – MAY 2021

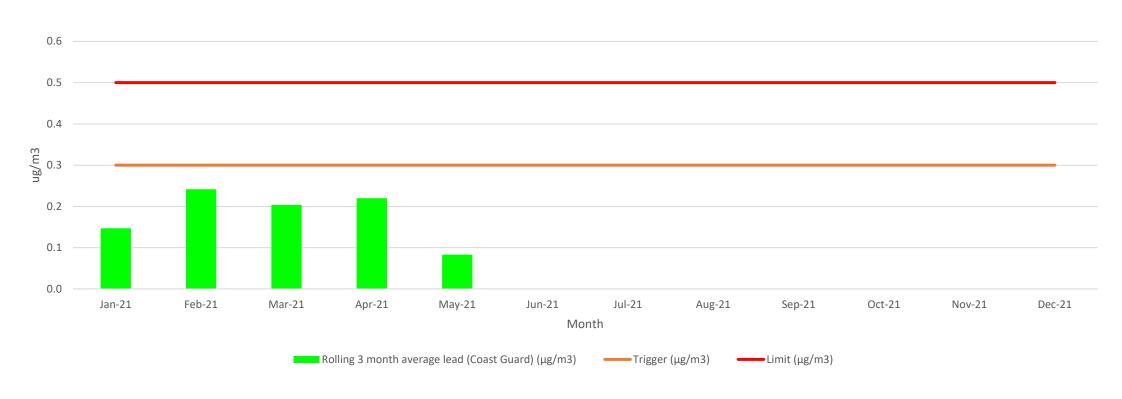




Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



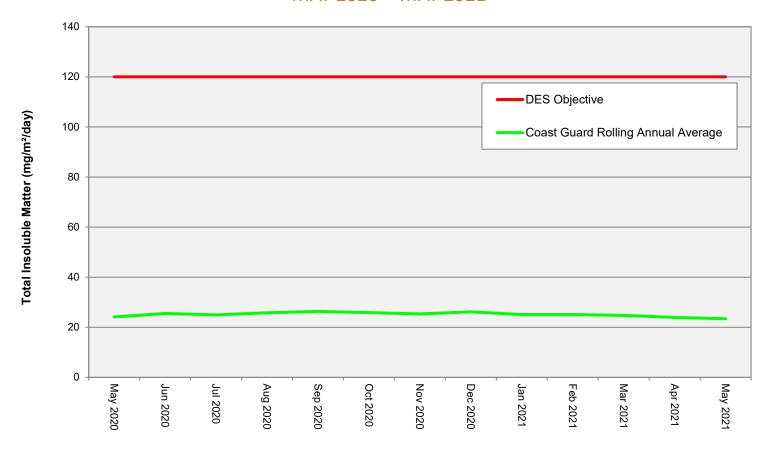
Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2021



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 MAY 2020 – MAY 2021

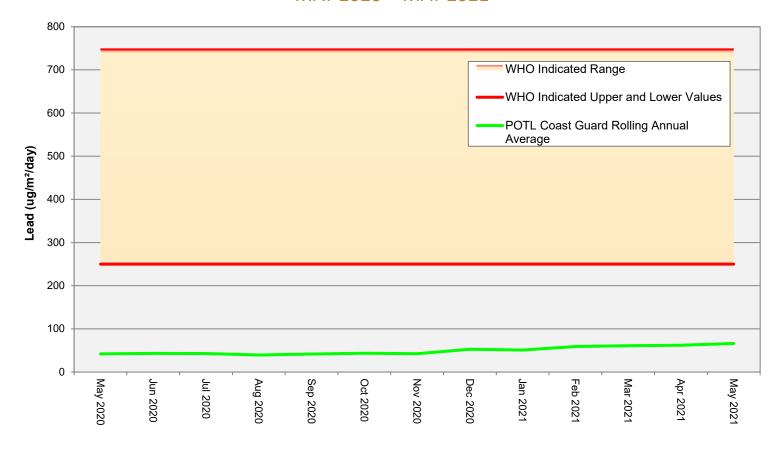




Total Insoluble Matter Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



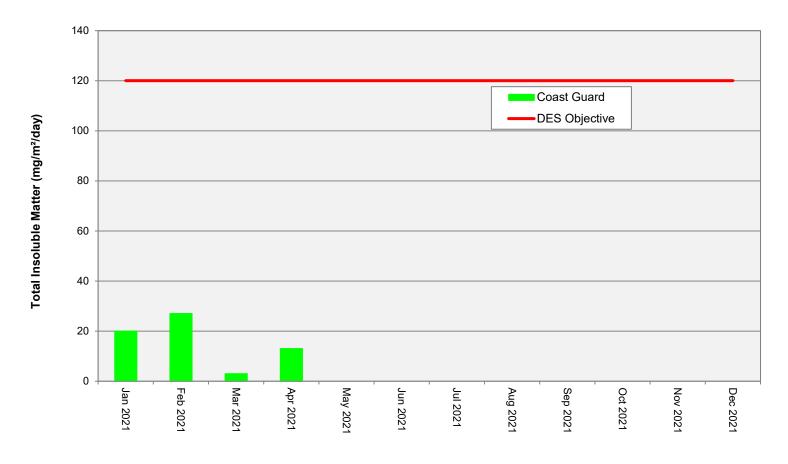
#### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site MAY 2020 – MAY 2021

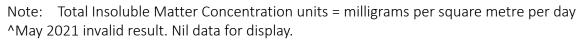


Note: Lead Concentration units = micrograms per square metre per day
Rolling annual average = the moving average of the previous 11 results and the current result.



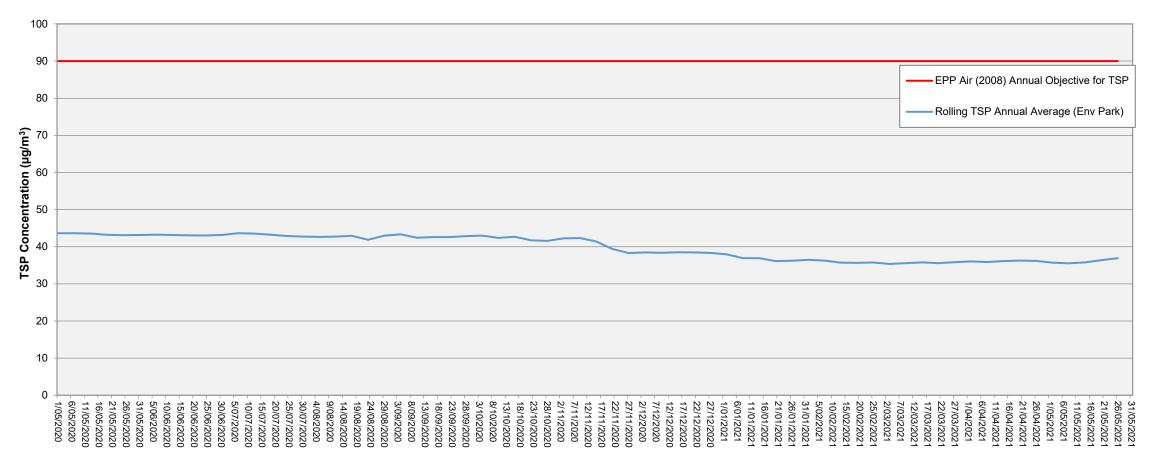
# Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2021







#### Hi-Volume Sampler - General total dust levels (one in six days) at Environment Park site MAY 2020 – MAY 2021

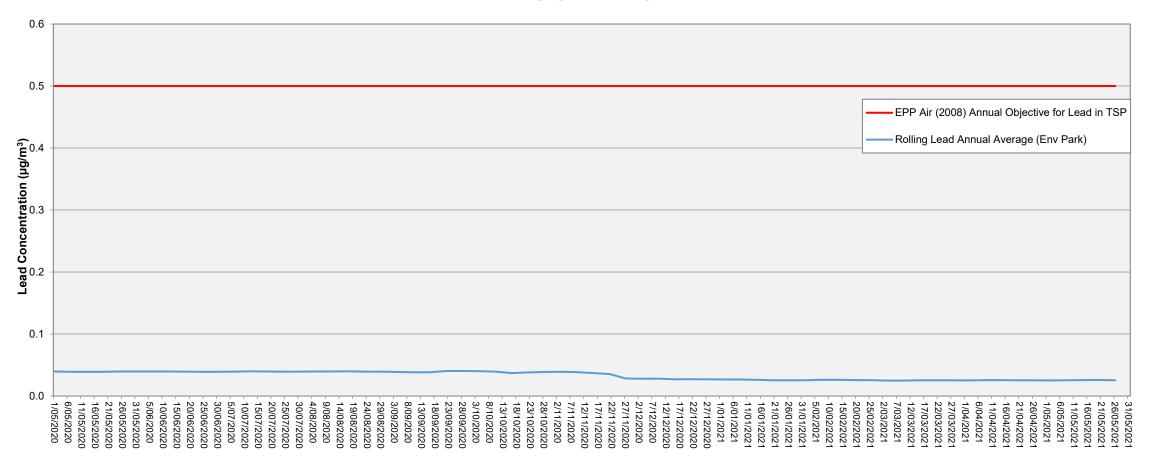




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



## Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site MAY 2020 – MAY 2021

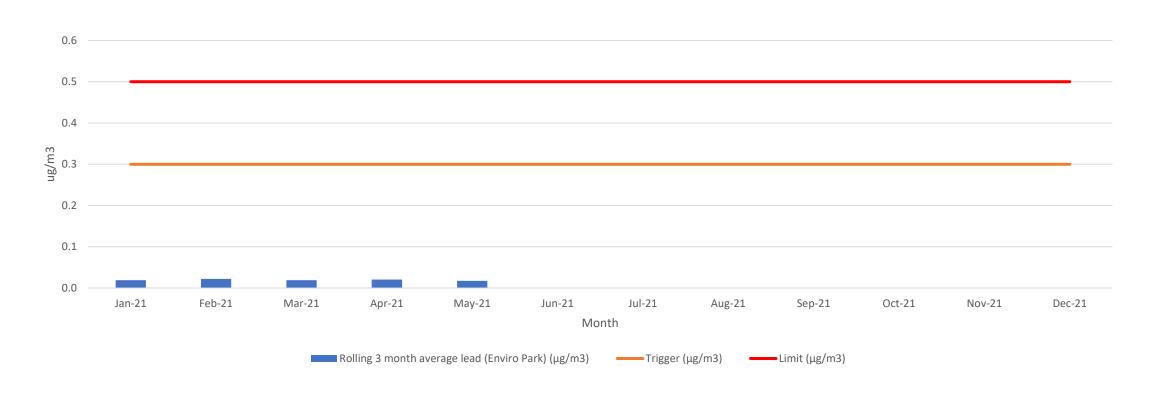




Lead Concentration units = micrograms per cubic metre per 24 hour period
Rolling annual average = the moving average of the previous 11 results and the current result



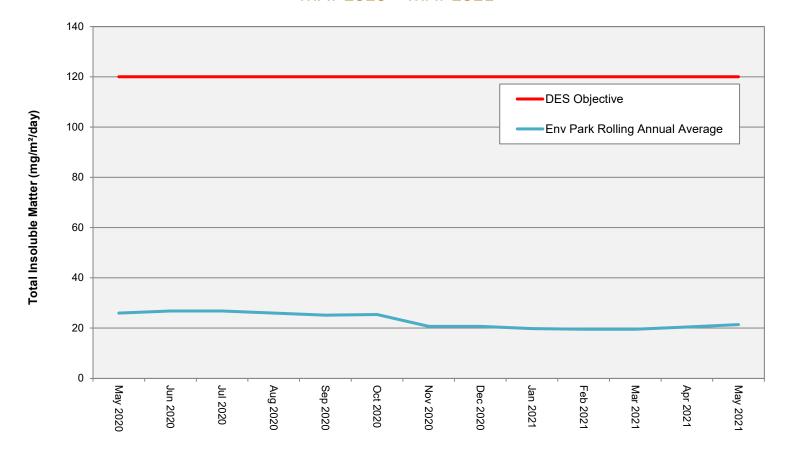
# Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2021



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



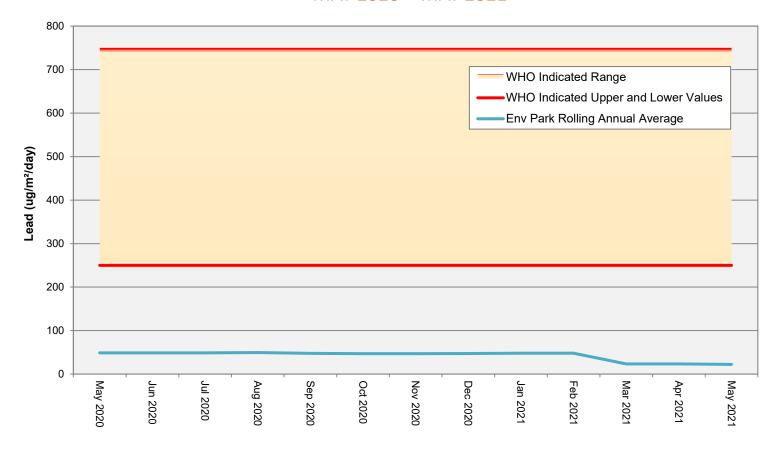
#### Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site MAY 2020 – MAY 2021



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 MAY 2020 – MAY 2021

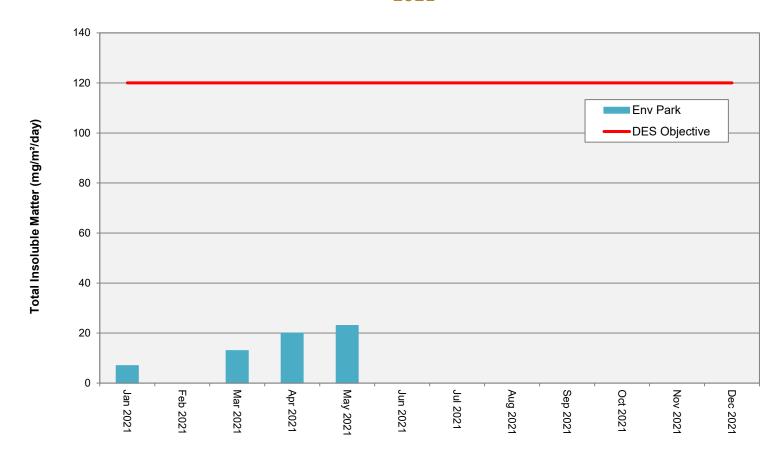




Lead Concentration units = micrograms per square metre per day
Rolling annual average = the moving average of the previous 11 results and the current result



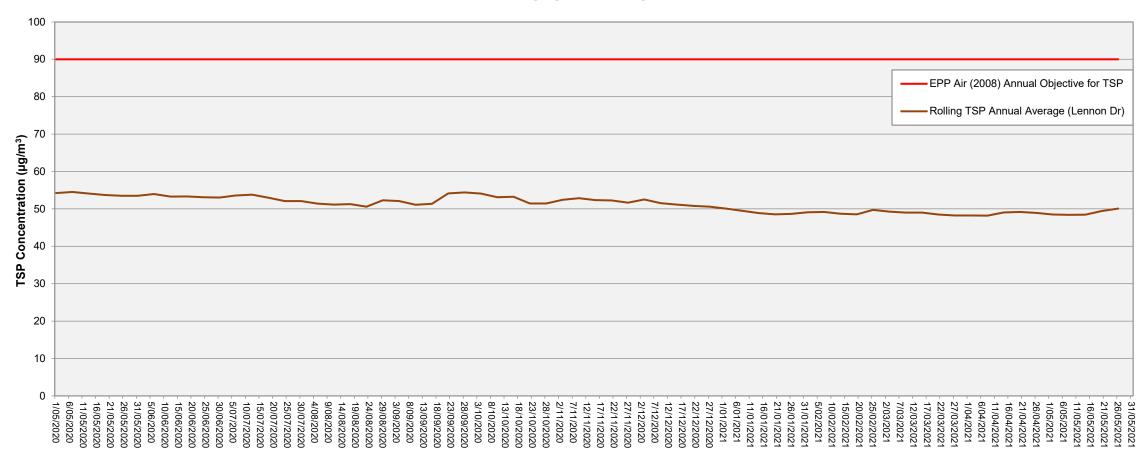
## Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2021



Note: Total Insoluble Matter Concentration units = milligrams per square metre per day ^February 2021 dust bottle damaged in transit. Nil data for display.



#### Hi-Volume Sampler - General total dust levels (one in six days) at Lennon Drive site MAY 2020 – MAY 2021

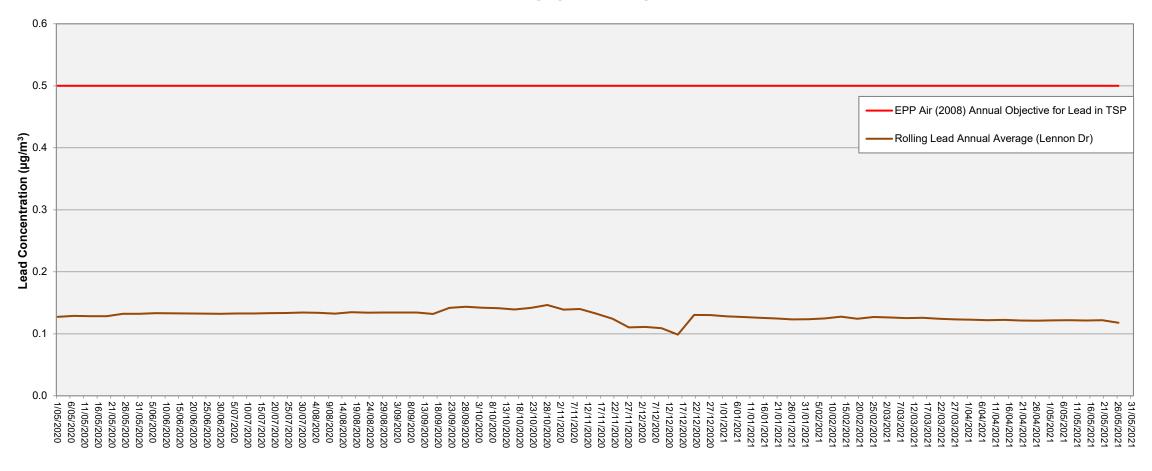




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



#### Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site MAY 2020 – MAY 2021

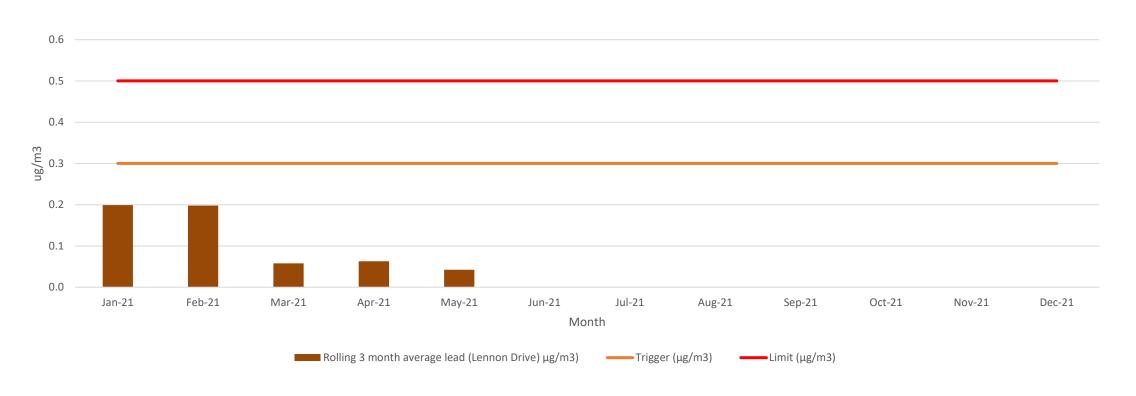


Note:

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



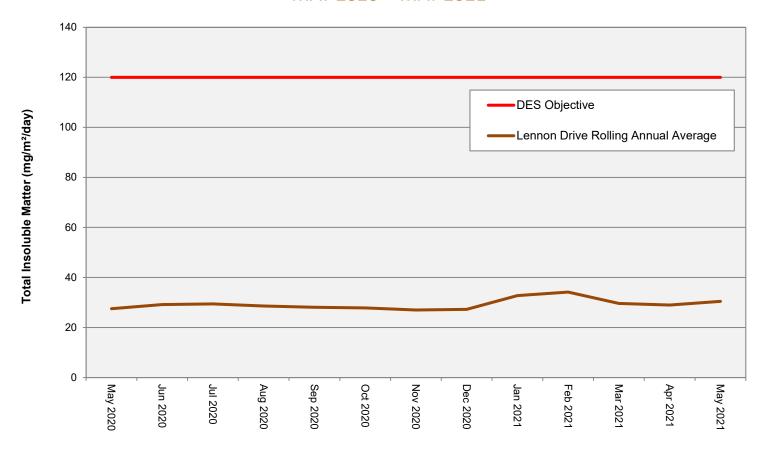
# Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2021



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



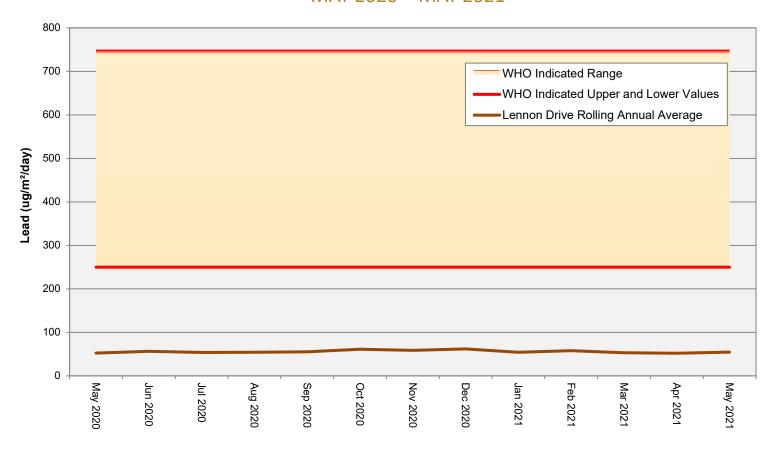
## Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site MAY 2020 – MAY 2021



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 MAY 2020 – MAY 2021

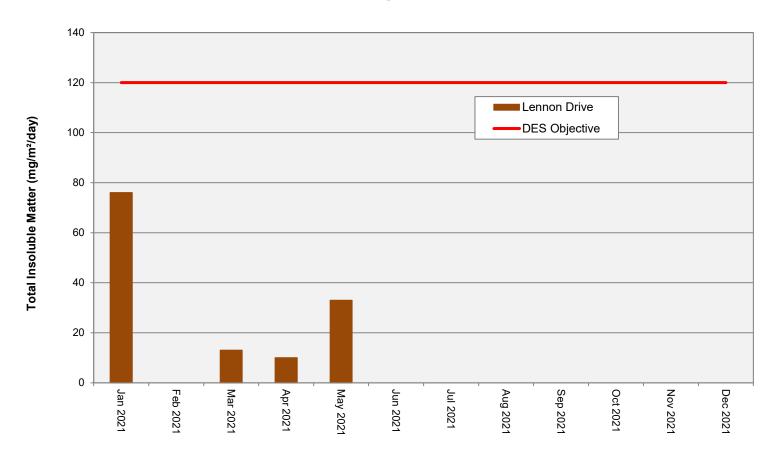


Note: Lead Concentration units = micrograms per square metre per day

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 2021



Note: Total Insoluble Matter Concentration units = milligrams per square metre per day ^February 2021 dust bottle damaged in transit. Nil data for display.



#### 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.

