

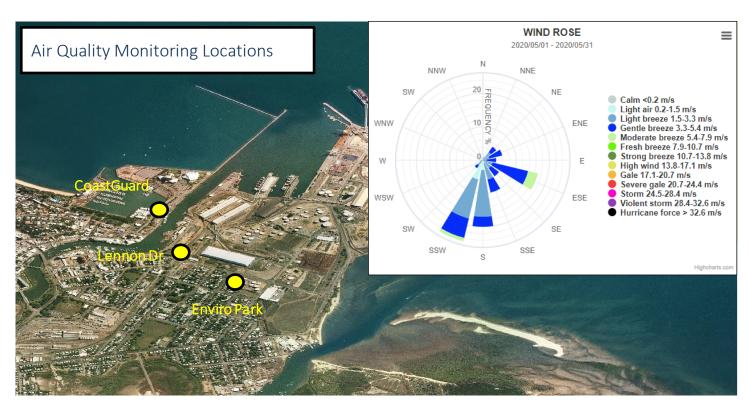
#### AIR QUALITY MONITORING IN TOWNSVILLE

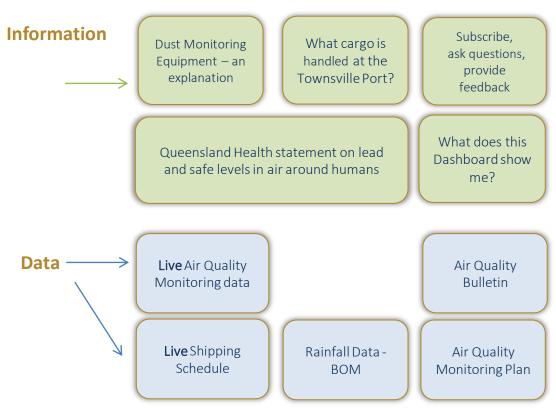
Air Quality Monitoring in Townsville is conducted separately by both the Department of Environment and Science (DES), and Port of Townsville Limited.

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

Click here to visit DES monitoring network

#### Air Quality Dashboard | MAY | 2020





#### **Shipping Movements in May 2020**

Date In/Out	Vessel Name	Cargo	Berth
29 Apr - 01 May	FERONIA	Sugar	09
29 Apr - 01 May	GOLDEN YOSA	Sugar	04
30 Apr - 01 May	ALPINE MIA	Fuel	01
01 May - 02 May	FLORA DELMAS	Containers	03-South
29 Apr - 02 May	SOUTHGATE	Zinc Concentrate	08
01 May - 02 May	HESTIA LEADER	Vehicles	09
01 May - 03 May	GLOBAL AQUARIUS	Sugar	LUCINDA
02 May - 03 May	ZAMBESI	Copper Concentrate	11
02 May - 05 May	CAMILA	Fertiliser	08
30 Apr - 05 May	EOS VICTORY	Fertiliser / Sulphur	09
23 Apr - 05 May	HMAS ADELAIDE	Defence	10
04 May - 05 May	STILEBLON	Fuel	01
05 May - 07 May	ASIA EMERALD I	Sugar	09
06 May - 07 May	BUXHANSA	Containers	04
06 May - 07 May	OCEAN SWAGMAN	Fodder, Cattle	03-South
07 May - 08 May	BAUSTELLA	Bitumen	04
07 May - 09 May	GOLDEN LEADER	Fuel	01
08 May - 10 May	KOTA NIPAH	Containers	03-South
08 May - 10 May	INTERLINK PROBITY	Sugar	09
05 May - 10 May	WESTERN CALLAO	Coking Coal	08
09 May - 10 May	NORDMERKUR	Fuel	01
10 May - 11 May	PACIFIC CONDOR	Containers	03-North
10 May - 11 May	GLORIOUS STARLIGHT	Fertiliser	08
10 May - 11 May	LEO LEADER	Vehicles	04
12 May - 13 May	ERNST OLDENDORFF	Zinc Concentrate	11
13 May - 13 May	SOFRANA TOURVILLE	Containers	04
11 May - 13 May	IVS SENTOSA	Zinc Concentrate	03-South
15 May - 17 May	MARSHAL GELOVANI	Defence	09

Date In/Out	Vessel Name	Cargo	Berth
16 May - 17 May	FPMC 31	Fuel	01
16 May - 18 May	DORTHE OLDENDORFF	Fertiliser	08
11 May - 19 May	FENGTIEN	Zinc Ingots	10
16 May - 19 May	WYUNA	Cement	04
, 19 May - 20 May	GANADO EXPRESS	Fodder, Cattle	03-South
19 May - 20 May	KYOWA ROSE	Containers	03-North
, 21 May - 22 May	GRAVITYHIGHWAY	Vehicles	03-North
, 22 May - 22 May	GLOUCESTER EXPRESS	Fodder, Cattle	04
, 21 May - 23 May	THE JUDGE	Fuel	01
, 22 May - 23 May	YANGTZE HARMONY	Fodder, Cattle	04
, 22 May - 24 May	KOTA HARUM	Containers	03-North
23 May - 24 May	GULF LIVESTOCK 1	Fodder, Cattle	04
25 May - 25 May	PMG 123	N/A	10
25 May - 25 May	PMG SWORDFISH	N/A	10
23 May - 26 May	SELINDA	Zinc Concentrate	08
, 25 May - 27 May	KEN ORCHID	Zinc Concentrate	03-South
, 26 May - 28 May	HANSA REGENSBURG	Containers	04
, 21 May - 28 May	MARTIN ISLAND	Zinc Ferrite	10
, 27 May - 28 May	HELLAS REVENGER	Fuel	01
, 26 May - 28 May	PALAWAN	Lead Concentrate	11
28 May - 29 May	GOLDEN YOSA	Fuel	01
28 May - 29 May	STENTOR	Sugar	09
28 May - 30 May	GOLDEN RESOLUTION	Fuel	01
30 May - 31 May	SAN JACK	Fuel	01
30 May - 31 May	THETIS	Sugar	09
30 May - 31 May	CORONADO BAY	Containers	10
31 May - 01 Jun	JULIA	Sugar	09
31 May - 02 Jun	OCEAN SWAGMAN	Fodder, Cattle	04

#### **Port of Townsville - Overview**

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

The 2018-19 year was a significant one for the Port of Townsville, with growth in trade driven by a rebound in the resources sector, a strong net profit of \$15.96 million and the advancement of a number of major infrastructure projects. Total trade throughput of 7.68 million tonnes is a 4.7% increase on the previous financial year. There were increases across a range of export commodities, in particular mineral concentrates, zinc ferrites, refined copper, smelted lead, sugar and cattle. Cruise ship visitation grew with 16 arrivals and a doubling the number of passengers and crew to almost 20,000 people.

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:

#### **Imports**

Motor vehicles, shipping containers (general cargo), cement, sulphuric acid, fertiliser, copper, nickel, zinc, copper anode, petroleum products, sulphur, containers, tyres.

#### **Exports**

Sugar, timber, fertiliser, shipping containers (general cargo) cattle, refrigerated meat, magnetite, copper, lead, zinc, zinc ferrites, zinc oxide, silver, molasses, sand, gravel, coke, project cargo.



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OR

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

OR

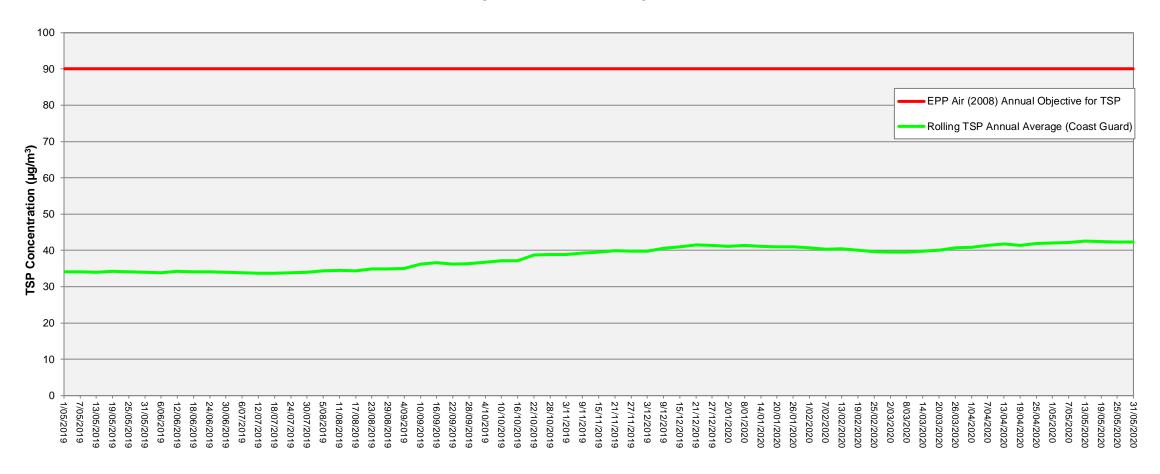
Phone 07 47 811 500 and asked to be added to the list.

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

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



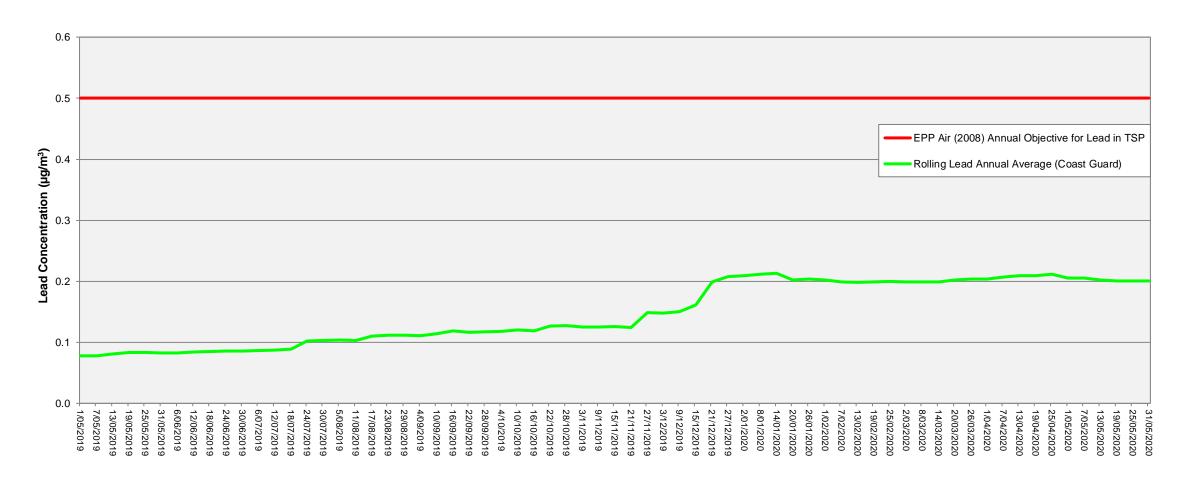
# Hi-Volume Sampler – General total dust levels (one in six days) at Coast Guard Site May 2019 – May 2020





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 Coast Guard Site MAY 2019 – MAY 2020

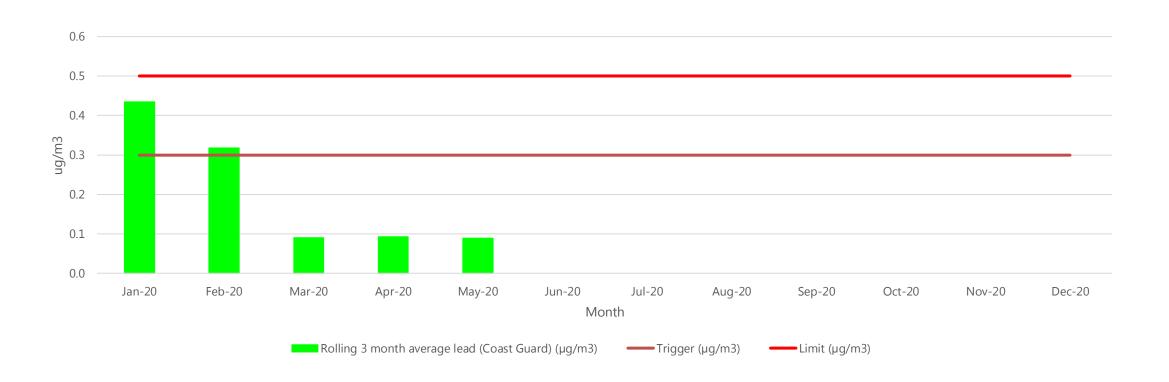


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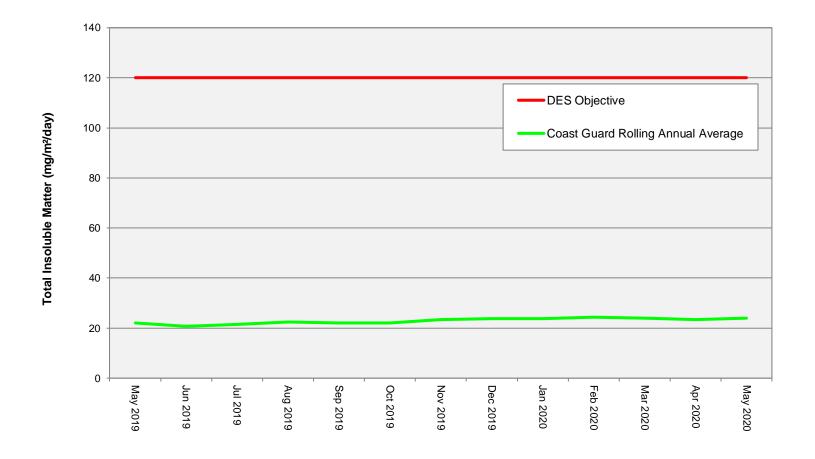
## Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2020



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 2019 – MAY 2020

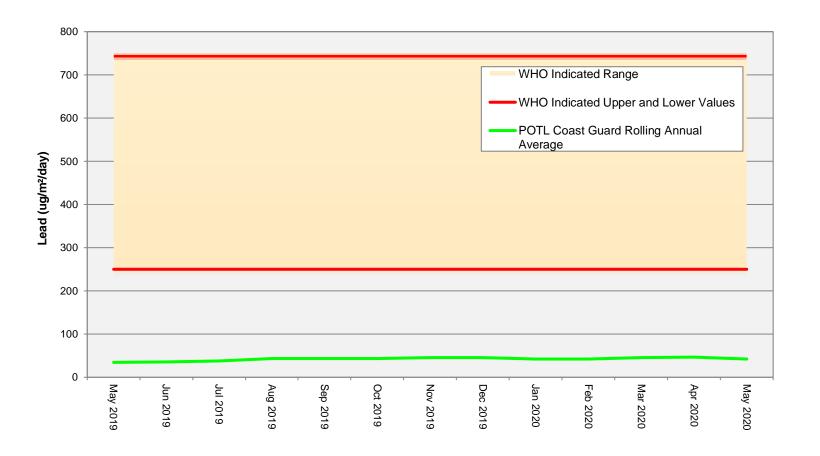


Note:

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 Coast Guard Site MAY 2019 – MAY 2020

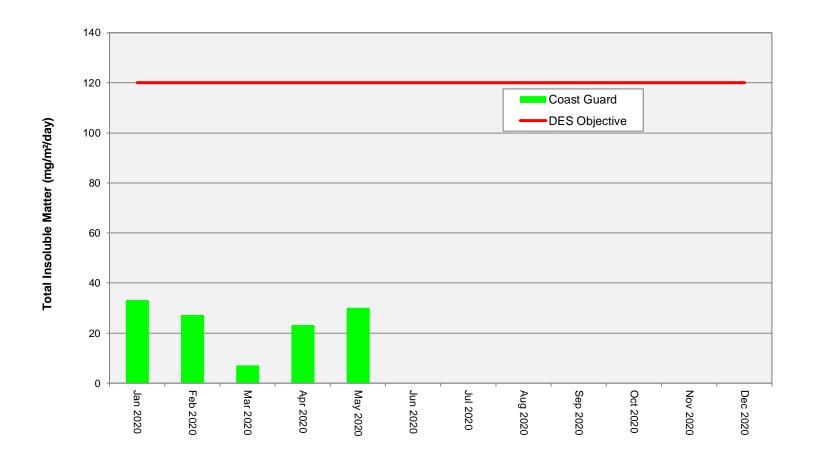


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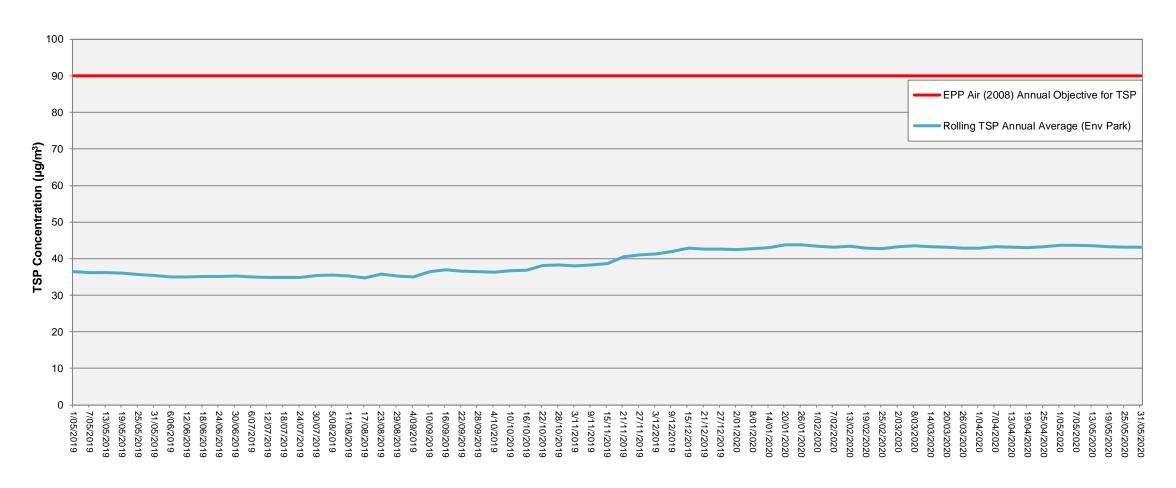
# Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2020



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 MAY 2019 – MAY 2020

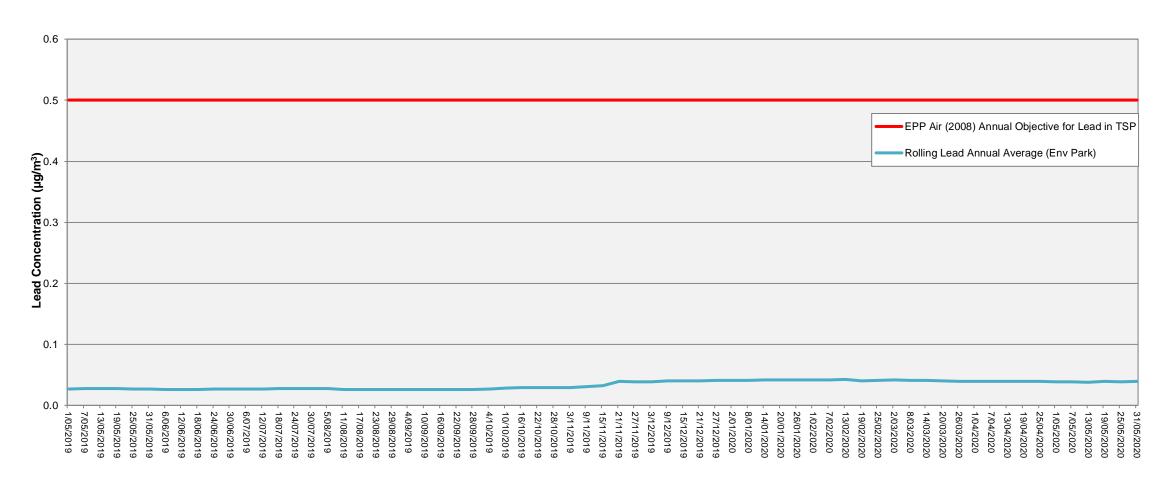


Note: TSP Concentration units = micrograms per cubic metre per 24 hour period

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 Environment Park site MAY 2019– MAY 2020

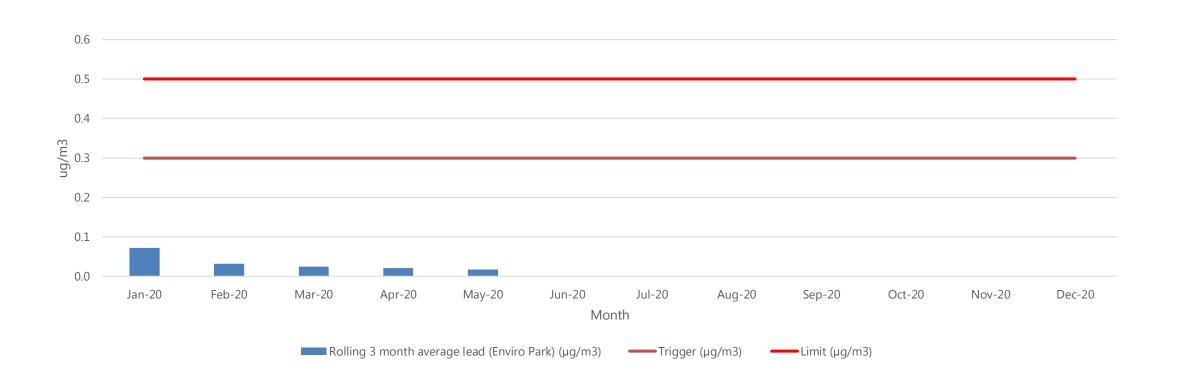


Note: Lead Concentration units = micrograms per cubic metre per 24 hour period

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



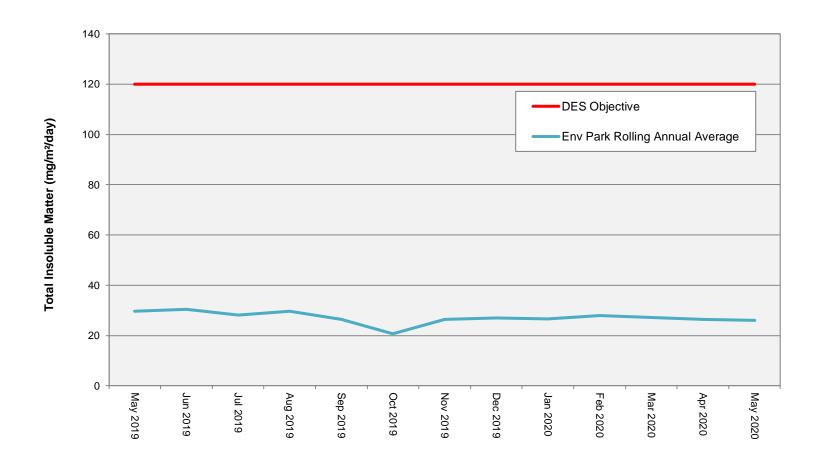
## Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2020



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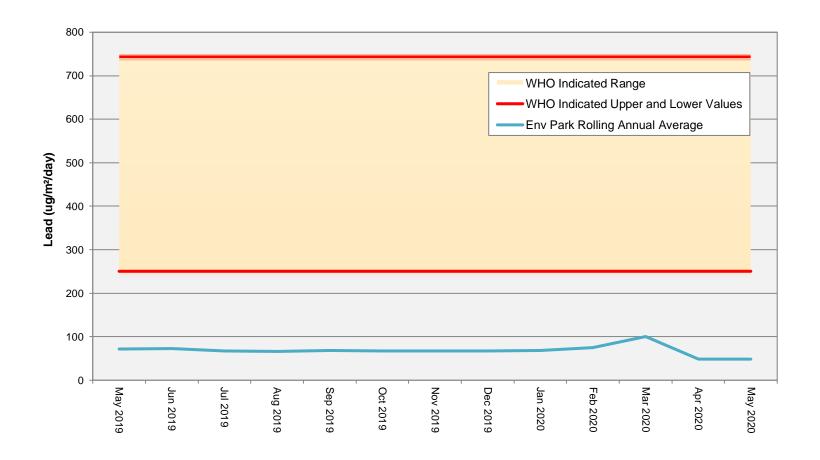
#### Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site MAY 2019 – MAY 2020



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 2019 – MAY 2020

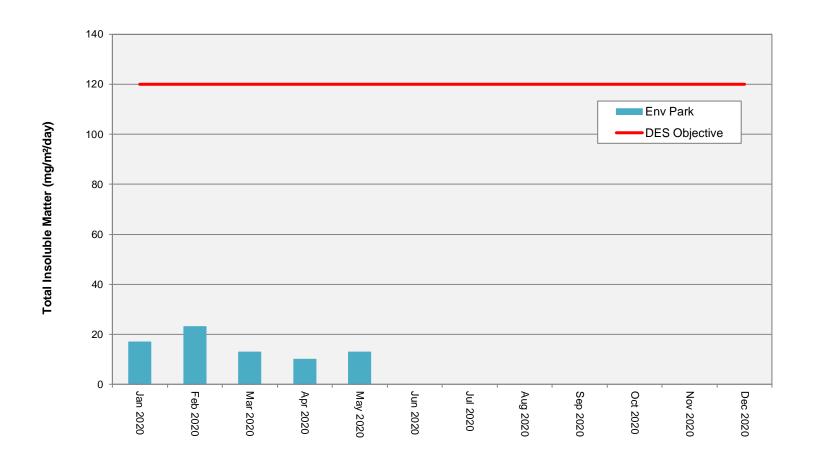


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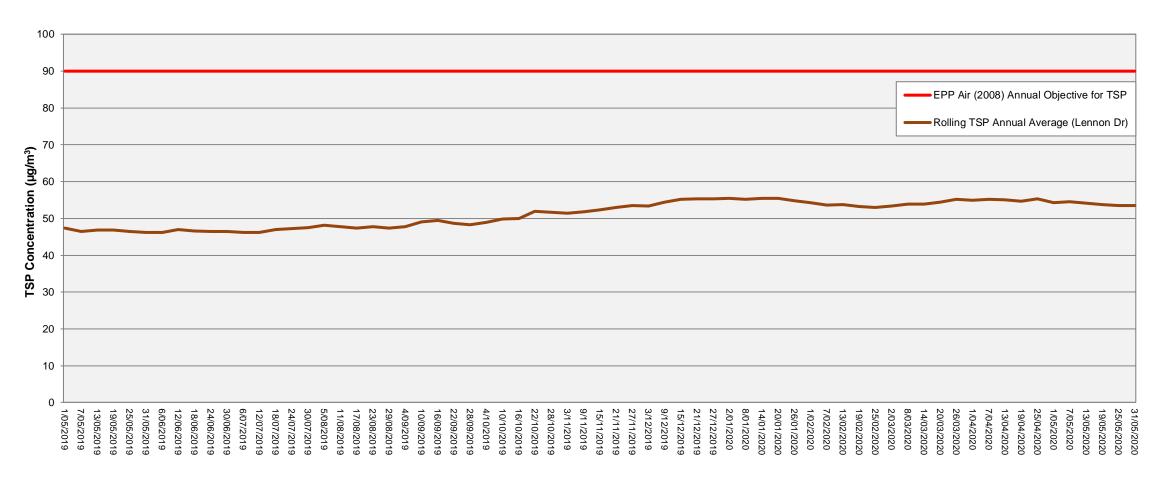
## Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2020



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 MAY 2019 – MAY 2020

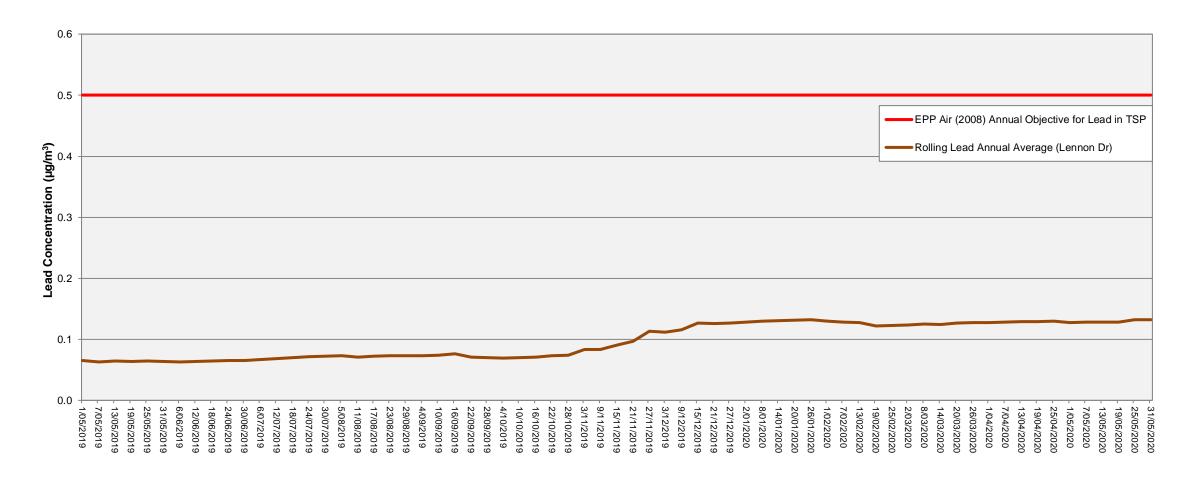


Note: TSP Concentration units = micrograms per cubic metre per 24 hour period

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 MAY 2019 – MAY 2020

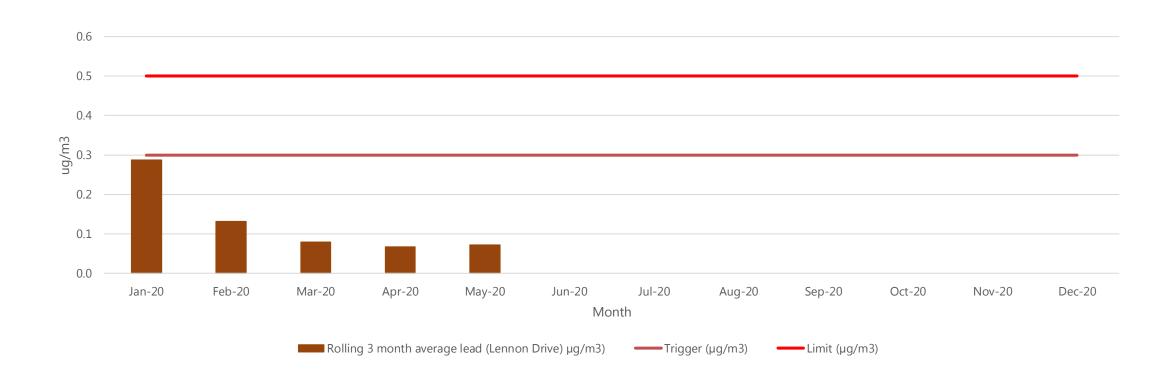


Note:

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



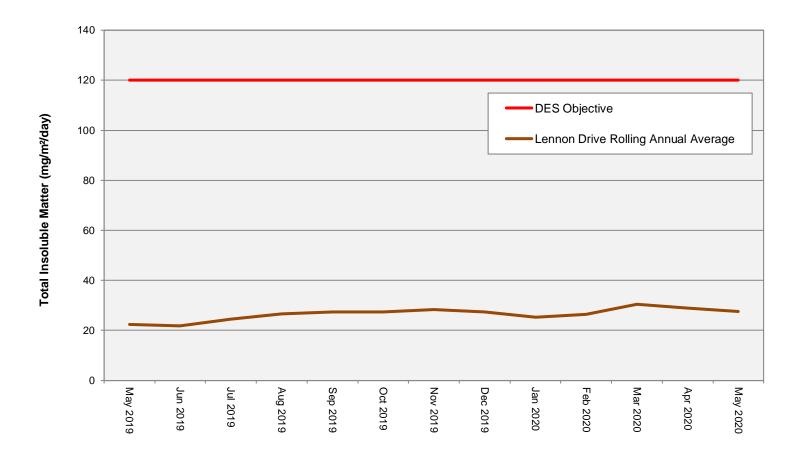
## Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2020



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 2019 – MAY 2020

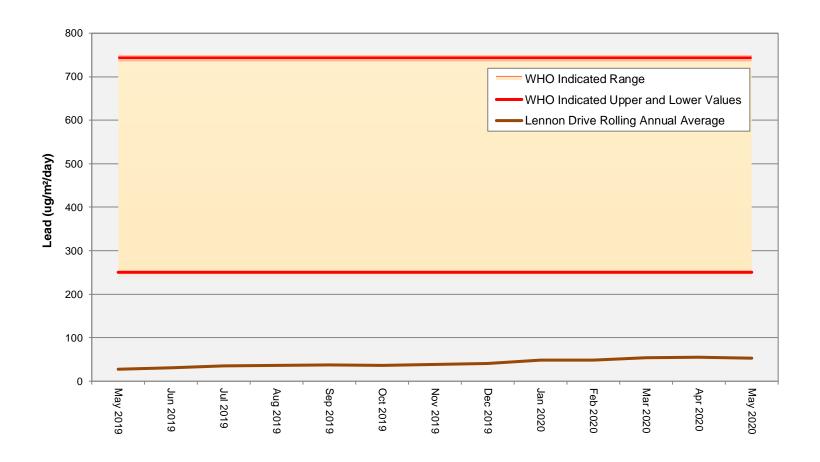


Note:

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#### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Lennon Drive Site MAY 2019 – MAY 2020

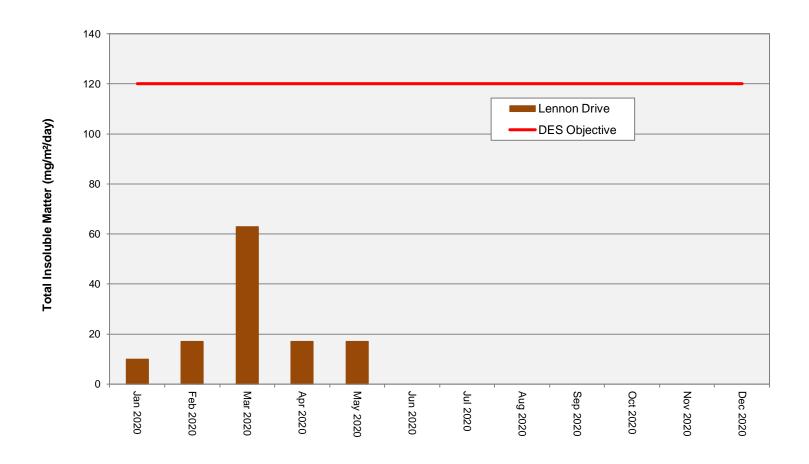


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## Dust Deposition Gauge – General dust deposition levels (monthly) at Lennon Drive Site 2020



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.