

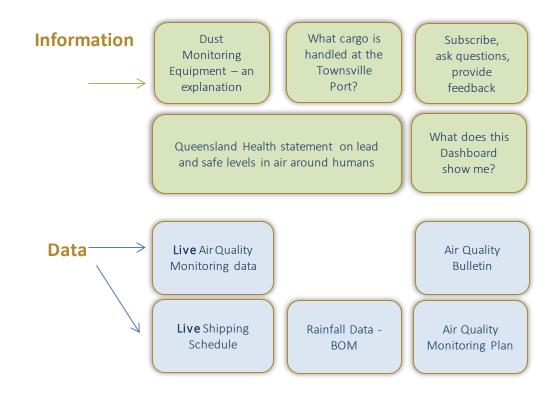
Click here to visit the Port of Townsville's monitoring network

Click here to visit DES monitoring network

#### Air Quality Dashboard | June | 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 June 2021**

Date In/Out	Vessel Name	Cargo	Berth	Date In/Out	Vessel Name	Cargo	Berth
28 May - 02 Jun	ADF		10	14 Jun - 14 Jun	ADF		9
31 May - 02 Jun	ADF		9	14 Jun - 14 Jun	GLOBALHIGHWAY	Motor Vehicles (IMPORT)	10
01 Jun - 02 Jun	OCEAN UTE	Cattle (EXPORT)	4	15 Jun - 15 Jun	ADF		10
01 Jun - 04 Jun	ECO	Fertilizer (EXPORT)	8	15 Jun - 17 Jun	CORETALENT OL	Sugar (EXPORT)	9
01 Jun - 02 Jun	STI TOPAZ	Fuels (IMPORT)	1	15 Jun - 16 Jun	TAIHAI 1	Bitumen (IMPORT)	4
01 Jun - 01 Jun	DONINGTON	Motor Vehicles (IMPORT)	3 NTH	15 Jun - 16 Jun	ASPHALT SPIRIT	Bitumen (IMPORT)	1
02 Jun - 03 Jun	SUVA CHIEF	NIL	4	16 Jun - 16 Jun	PACIFIC CONDOR	ТВА	3 NTH
02 Jun - 04 Jun	VOGE EMMA	Zinc Concentrates, Copper Concentrates (EXPORT)	3 NTH	16 Jun - 18 Jun	NOUMEA CHIEF	NIL	4
03 Jun - 04 Jun	SOFRANA TOURVILLE	NIL	4	16 Jun - 16 Jun	GELBRAY EXPRESS	Cattle (EXPORT)	3 NTH
04 Jun - 06 Jun	VOGE EMMA	ТВА	11	17 Jun - 19 Jun	AQUAGEMINI	Sugar (EXPORT)	9
04 Jun - 09 Jun	CLIPPER BELLE	Zinc Ferrites (EXPORT)	10	17 Jun - 19 Jun	ARCADIA	Lead Concentrates, Zinc Concentrates (EXPORT)	3 NTH
05 Jun - 06 Jun	STI MIRACLE	Fuels (IMPORT)	1	19 Jun - 23 Jun	DAYANG CONFIDENCE	Fertilizer (EXPORT)	8
05 Jun - 06 Jun	HANSA FREYBURG	NIL	3 STH	19 Jun - 20 Jun	ADF		10
05 Jun - 07 Jun	DLLAVENDER	Fertilizer (IMPORT)	4	19 Jun - 20 Jun	GLADIATOR	Sugar (EXPORT)	9
06 Jun - 08 Jun	VOGE EMMA	ТВА	8	20 Jun - 24 Jun	NEW GENERAL	Lead Concentrates,Zinc Concentrates (EXPORT)	11
07 Jun - 08 Jun	LOCH LOMOND	Lead Ingots (EXPORT)	3 STH	20 Jun - 22 Jun	MARLIN MAJESTIC	Fuels (IMPORT)	1
09 Jun - 10 Jun	ORCA ACE	Motor Vehicles (IMPORT)	4	20 Jun - 21 Jun	THERESA MICRONESIA	Molasses (EXPORT)	9
09 Jun - 12 Jun	FLORA DELMAS	NIL	3 STH	21 Jun - 21 Jun	GREYMAN EXPRESS	Cattle (EXPORT)	4
10 Jun - 13 Jun	PAN GLORIS	Scrap (EXPORT)	8	23 Jun - 24 Jun	OCEAN DROVER	Cattle (EXPORT)	4
10 Jun - 11 Jun	VUKOVAR	Fuels (IMPORT)	1	23 Jun - 27 Jun	SOLE	Zinc Concentrates (EXPORT)	8
12 Jun - 12 Jun	DAEDALUS LEADER	Motor Vehicles (IMPORT)	10	24 Jun - 25 Jun	EENDRACHT	General Cargo, Containers (EXPORT)	3 NTH
12 Jun - 13 Jun	FOREVER GLORY	Fuels (IMPORT)	1	25 Jun - 27 Jun	HANSA REGENSBURG	NIL	3 STH
12 Jun - 12 Jun	GOLDEN SKY	Fuels (IMPORT)	1	27 Jun - 28 Jun	NORD TAIPEI	Concentrates (EXPORT)	8
13 Jun - 15 Jun	KONDILI	Cement (IMPORT)	4	27 Jun - 28 Jun	OCEAN UTE	Cattle (EXPORT)	4
13 Jun - 16 Jun	PACIFIC CONDOR	NIL	3 NTH	27 Jun - 28 Jun	SOLE	Zinc Concentrates (EXPORT)	3 NTH
14 Jun - 15 Jun	JAWAN	Cattle (EXPORT)	3 STH	28 Jun - 28 Jun	APHRODITE LEADER	Motor Vehicles (IMPORT)	10





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

# 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 a cross 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:

#### **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).



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OR

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

OR

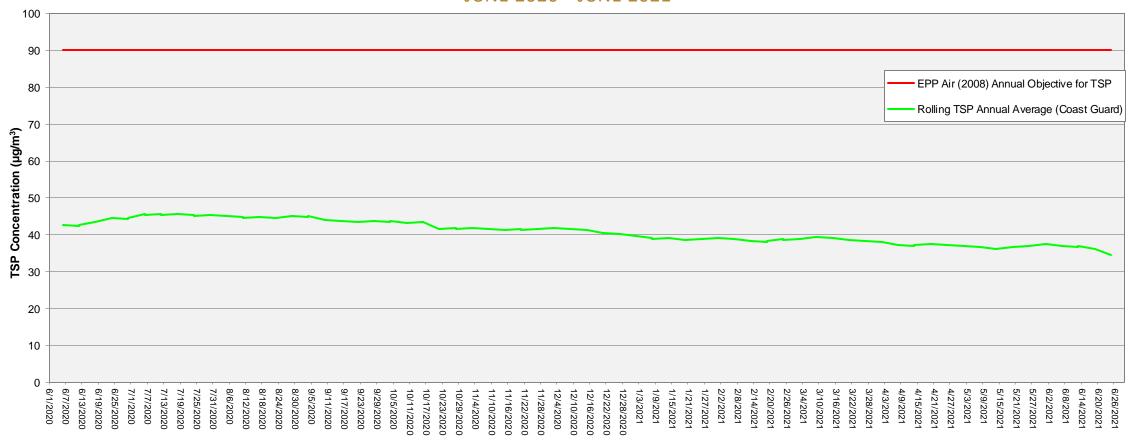
Phone 07 4781 1500 and asked to be added to the list.

#### Ask a Question / Provide Feedback

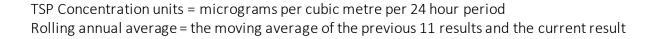
Send your enquiry or feedback to <a href="mailto:community@townsvilleport.com.au">community@townsvilleport.com.au</a>



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

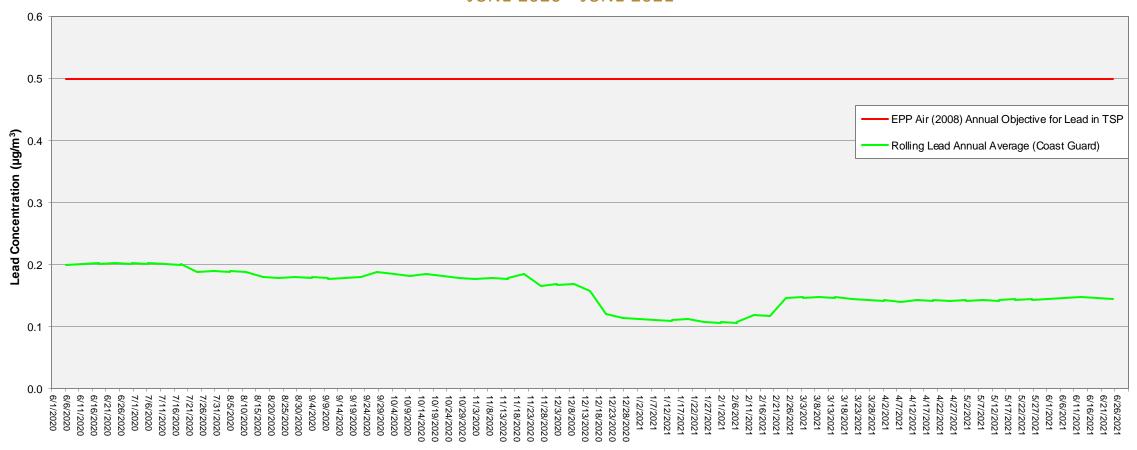








#### Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site JUNE 2020 – JUNE 2021

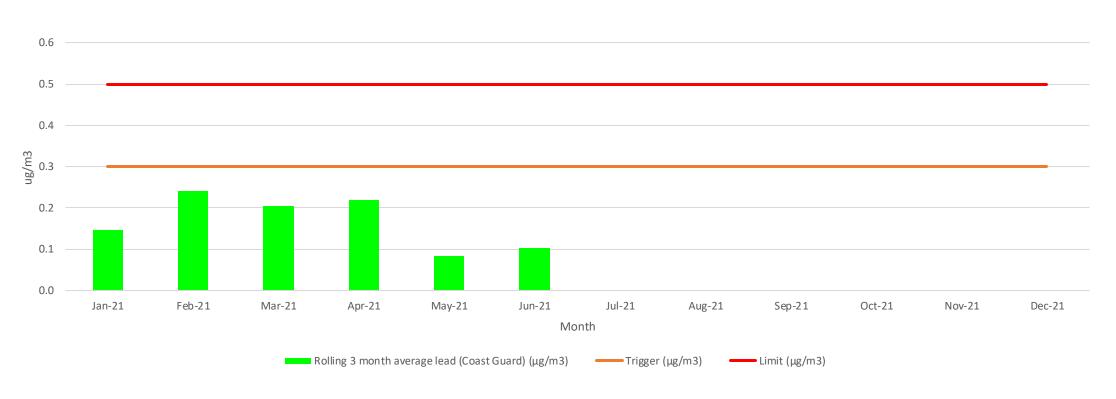




Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



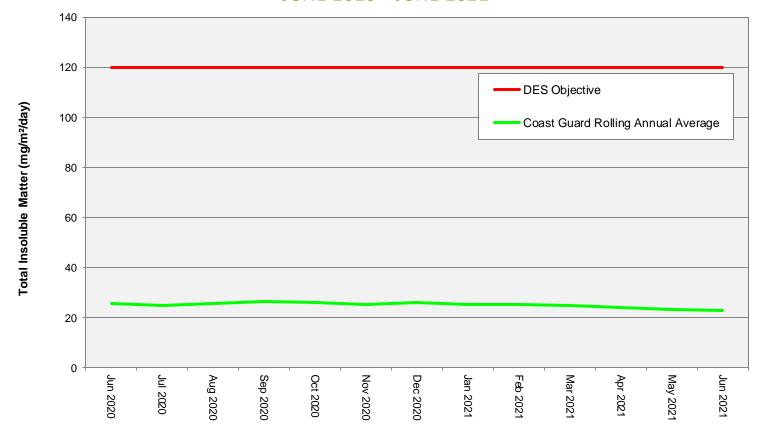
Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2021



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 JUNE 2020 – JUNE 2021

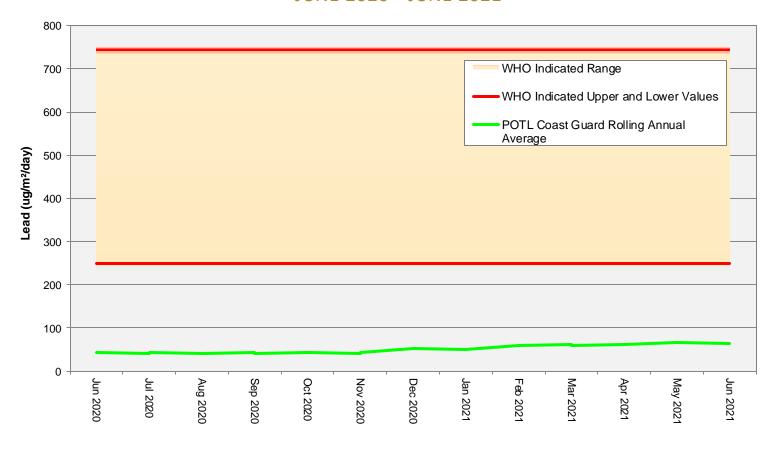




Total Insoluble Matter Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



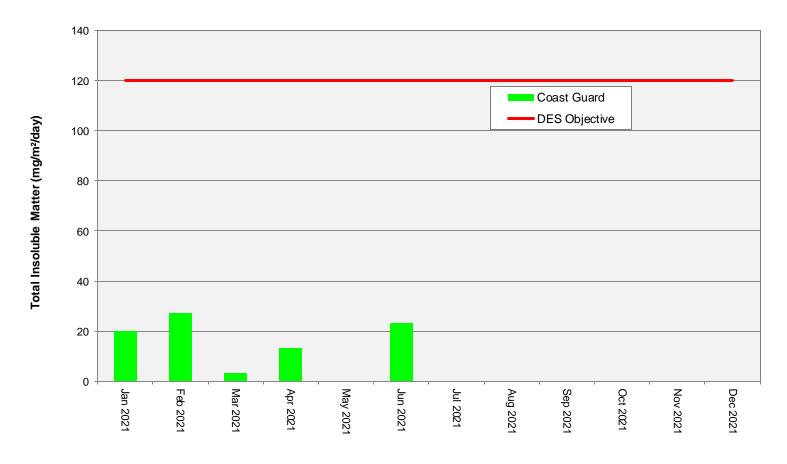
## Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site JUNE 2020 – JUNE 2021



Note: Lead Concentration units = micrograms per square metre per day
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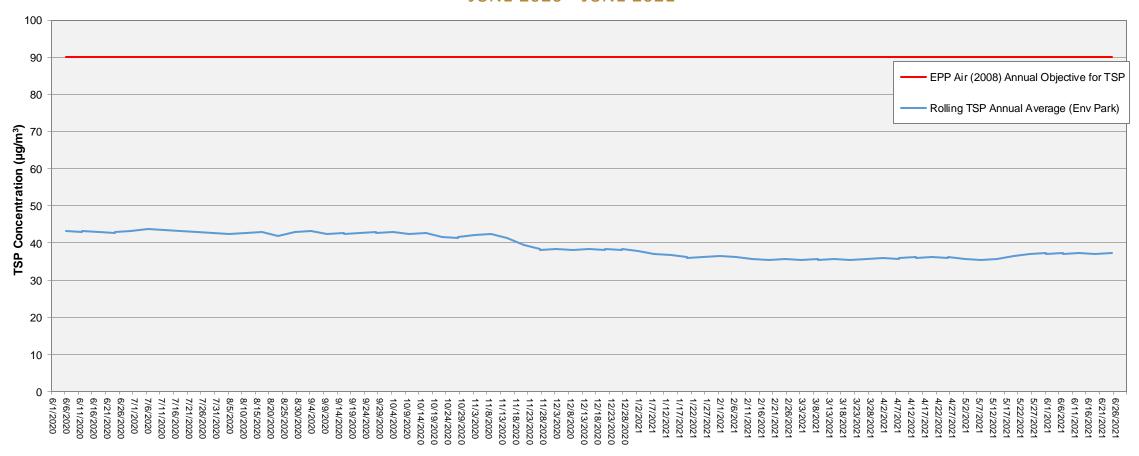
# Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2021





Note: Total Insoluble Matter Concentration units = milligrams per square metre per day ^May 2021 invalid result. Nil data for display.

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

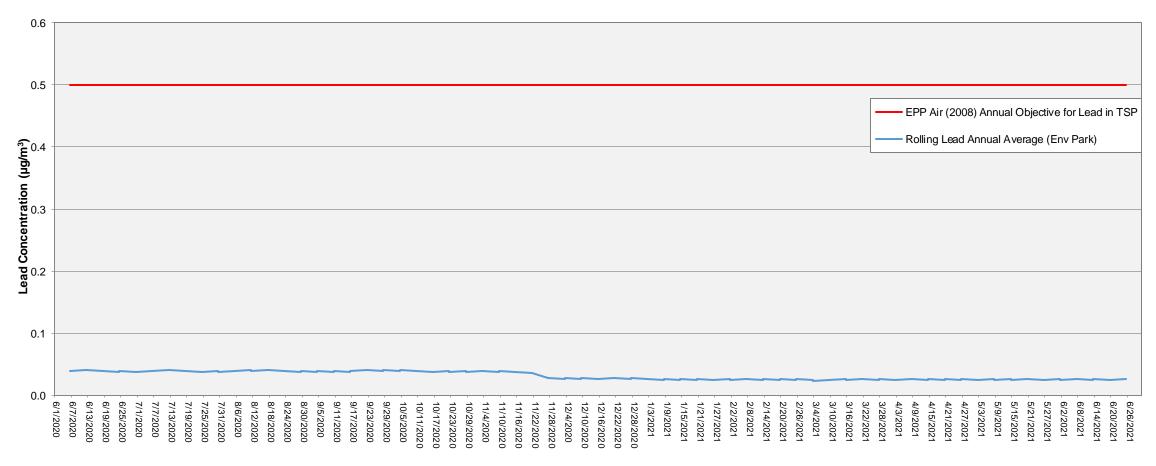




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



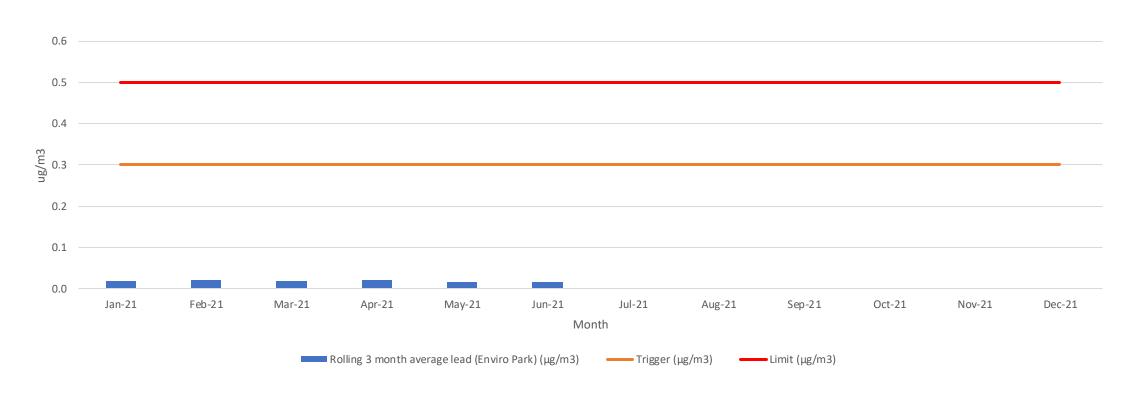
# Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site JUNE 2020 – JUNE 2021





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

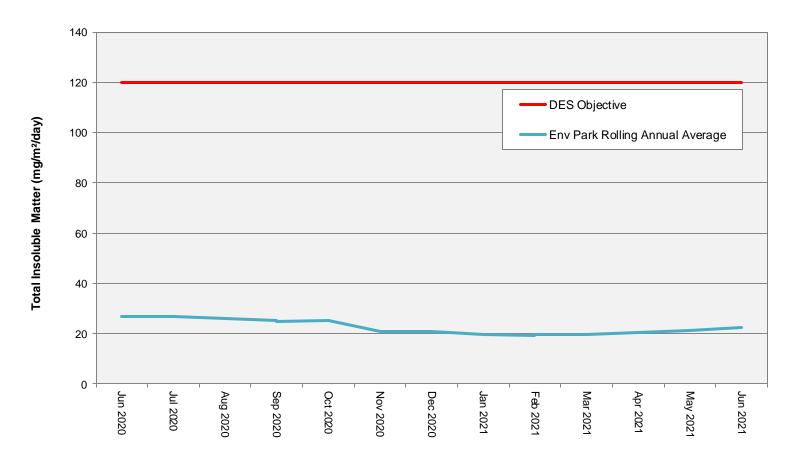
# Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2021



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



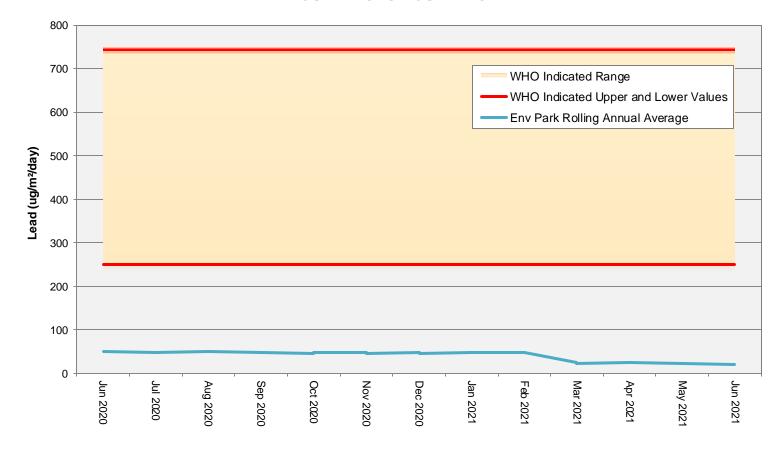
## Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site JUNE 2020 – JUNE 2021



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 JUNE 2020 – JUNE 2021

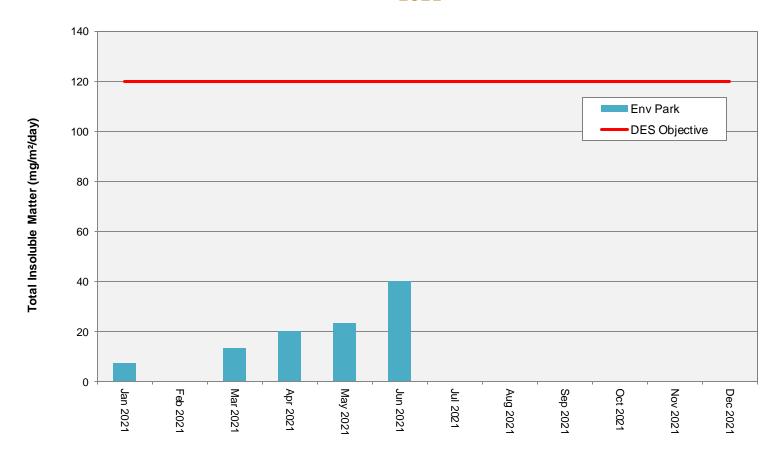




Lead Concentration units = micrograms per square metre per day
Rolling annual average = the moving average of the previous 11 results and the current result



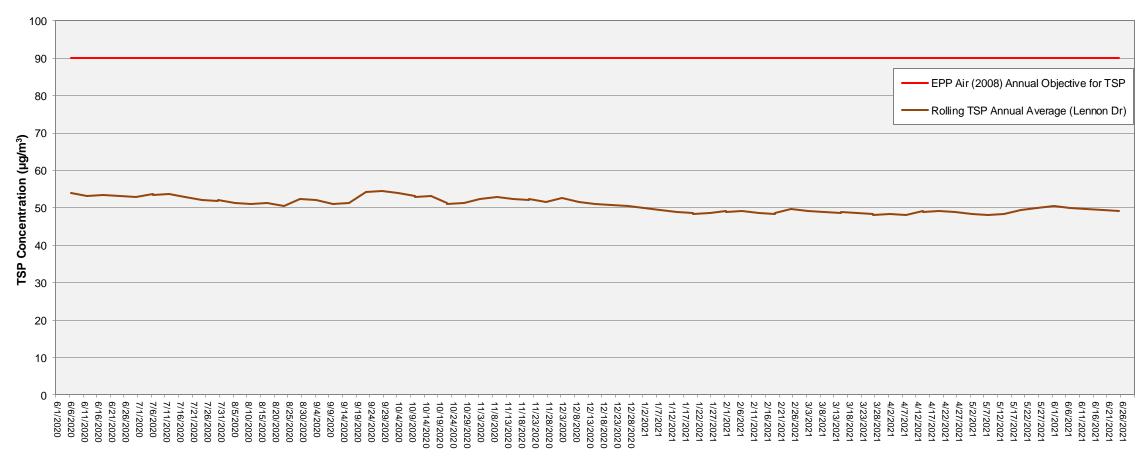
## Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2021



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 JUNE 2020 – JUNE 2021

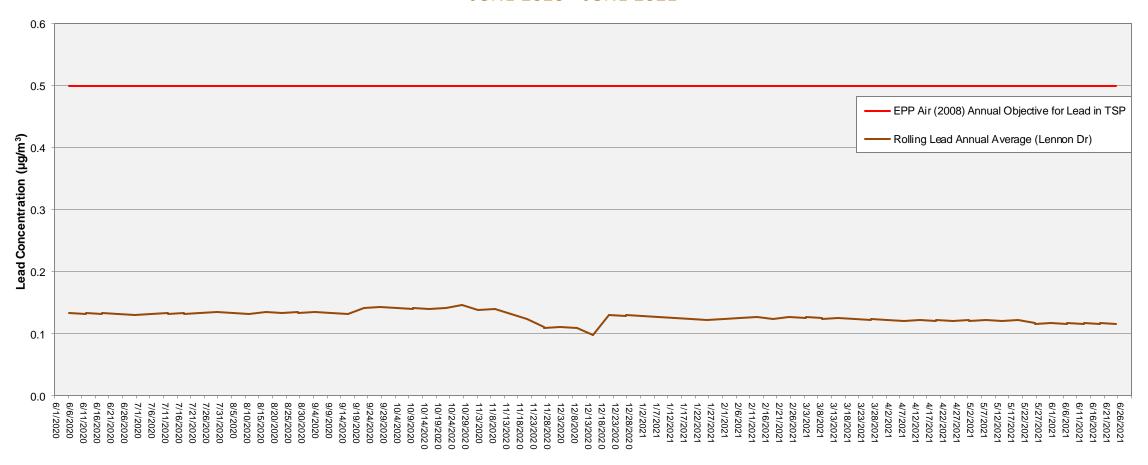




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



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

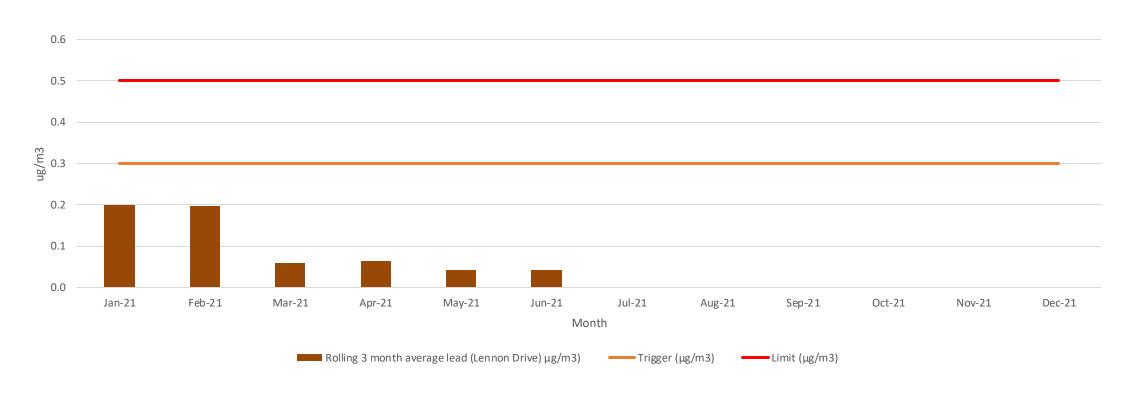




Lead Concentration units = micrograms per cubic metre per 24 hour period
Rolling annual average = the moving average of the previous 11 results and the current result



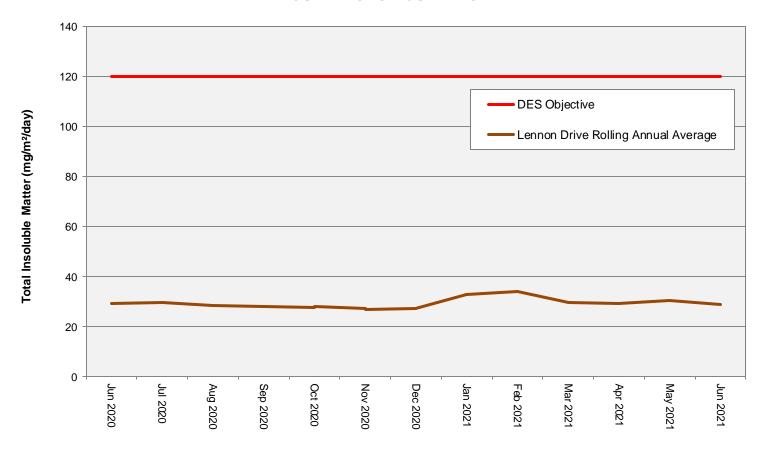
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2021



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 JUNE 2020 – JUNE 2021

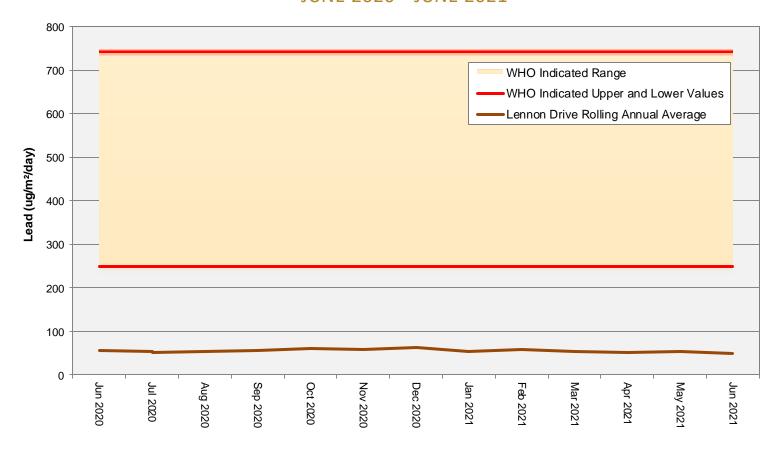


Note: Total Insoluble Matter Concentration units = micrograms per square metre per day

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



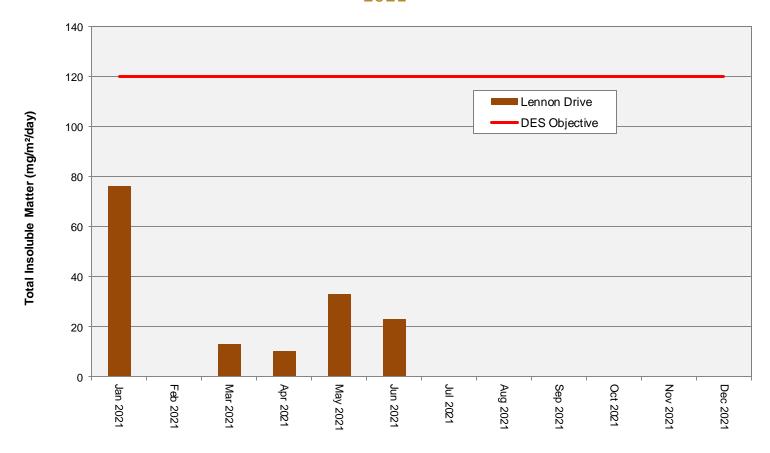
#### Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Lennon Drive Site JUNE 2020 – JUNE 2021



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 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  $0.36 \,\mu\text{g}/\text{dL}$  and  $0.6 \,\mu\text{g}/\text{dL}$  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.

