

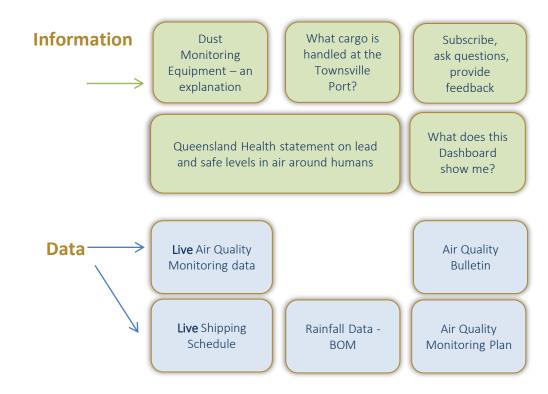
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Air Quality Dashboard | SEPTEMBER | 2020

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 September 2020

Date In/Out	Vessel Name	Cargo	Berth
31 Aug - 01 Sep	ITHACA PATIENCE	Zinc Concentrates (Export), Nil Cargo (Import)	T03South
31 Aug - 01 Sep	THE BLACKSMITH	Nil Cargo (Export), Bitumen (Import)	T01
01 Sep - 05 Sep	AFRICAN GANNET	Nil Cargo (Export), Sulphur (Import)	Т08
01 Sep - 02 Sep	KOTA HIDAYAH	Containers (Export), Containers (Import)	T03South
01 Sep - 02 Sep	GREYMAN EXPRESS	Fodder, Cattle (Export), Nil Cargo (Import)	T10
01 Sep - 01 Sep	THE BLACKSMITH	TBA (Export), Nil Cargo (Import)	T04
02 Sep - 03 Sep	GOLDEN CHIE	Nil Cargo (Export), Fuels (Import)	T01
02 Sep - 04 Sep	AKUNA	Nil Cargo (Export), Cement (Import)	T04
02 Sep - 04 Sep	KING CORN	Sugar (Export), Nil Cargo (Import)	Т09
04 Sep - 05 Sep	GLORIOUS SAWARA	Sugar (Export), Nil Cargo (Import)	Т09
05 Sep - 07 Sep	THERESA ORION	Molasses (Export), Nil Cargo (Import)	Т09
05 Sep - 07 Sep	OCEAN DROVER	Fodder, Cattle (Export), Nil Cargo (Import)	T04
05 Sep - 08 Sep	BASIC CHALLENGER	Nil Cargo (Export), Urea (Import)	T10
05 Sep - 08 Sep	OCEAN OUTSTANDING	Fertilizer (Export), Nil Cargo (Import)	Т08
06 Sep - 08 Sep	HAFNIA EUROPE	Nil Cargo (Export), Fuels (Import)	T01
06 Sep - 07 Sep	SOFRANA TOURVILLE	Containers (Export), Containers (Import)	T03North
07 Sep - 08 Sep	GLORIOUS SAIKI	Nil Cargo (Export), General Cargo (Import)	T04
08 Sep - 09 Sep	KOHINOOR	Concentrates (Export), Nil Cargo (Import)	Т08
09 Sep - 10 Sep	THERESA MICRONESIA	Molasses (Export), Nil Cargo (Import)	Т09
09 Sep - 10 Sep	OLYMPIAN HIGHWAY	Nil Cargo (Export), Motor Vehicles (Import)	T03North
10 Sep - 11 Sep	HESTIA LEADER	Nil Cargo (Export), Motor Vehicles (Import)	T04
10 Sep - 12 Sep	NOSHIMA	Sugar (Export), Nil Cargo (Import)	LUC
11 Sep - 12 Sep	HANSA REGENSBURG	Containers (Export), Containers (Import)	T03South
11 Sep - 15 Sep	BELLE OCEAN	Concentrates (Export), Nil Cargo (Import)	T11
12 Sep - 19 Sep	BASIC CHALLENGER	Zinc Ferrites (Export), Nil Cargo (Import)	T10
12 Sep - 13 Sep	ASPHALT CARRIER	Nil Cargo (Export), Bitumen (Import)	T04
12 Sep - 14 Sep	PPS TOMO	Sugar (Export), Nil Cargo (Import)	LUC
13 Sep - 15 Sep	BUXHANSA	Containers (Export), Containers (Import)	T04
13 Sep - 14 Sep	GELBRAY EXPRESS	Fodder, Cattle (Export), Nil Cargo (Import)	T03North

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Date In/Out	Vessel Name	Cargo	Berth
13 Sep - 14 Sep	ELANDRA STAR	Nil Cargo (Export), Fuels (Import)	T01
15 Sep - 16 Sep	KOTA NIPAH	Containers (Export), Containers (Import)	T03South
15 Sep - 15 Sep	HEROIC ACE	Nil Cargo (Export), Motor Vehicles (Import)	T04
18 Sep - 21 Sep	STI LA BOCA	Nil Cargo (Export), Fuels (Import)	T01
19 Sep - 29 Sep	FEDERAL TAMBO	Nil Cargo (Export), Zinc Concentrates (Import)	T10
19 Sep - 20 Sep	EMMA OLDENDORFF	Zinc Concentrates (Export), Nil Cargo (Import)	T03South
20 Sep - 23 Sep	CLIPPER AEGINA	Zinc Concentrates (Export), Nil Cargo (Import)	T08
21 Sep - 23 Sep	GOLDEN ACE	Sulphuric Acid (Export), Nil Cargo (Import)	T01
21 Sep - 22 Sep	GANADO EXPRESS	Fodder, Cattle (Export), Nil Cargo (Import)	T04
21 Sep - 22 Sep	FURNESS PORTLAND	Nil Cargo (Export), General Cargo (Import)	Т09
21 Sep - 23 Sep	KYOWA ROSE	Copper Concentrates (Export), Containers (Import)	T03North
22 Sep - 24 Sep	FLORA DELMAS	Containers (Export), Containers (Import)	T03South
22 Sep - 24 Sep	BRIGHTEN TRADER	Lead Concentrates (Export), Nil Cargo (Import)	T11
22 Sep - 25 Sep	AKUNA	Nil Cargo (Export), Cement (Import)	T04
23 Sep - 24 Sep	FOREVER MELODY	Nil Cargo (Export), Fuels (Import)	T01
23 Sep - 26 Sep	TRIDENT STAR	Fertilizer (Export), Nil Cargo (Import)	Т08
24 Sep - 24 Sep	HARVEST LEADER	Nil Cargo (Export), Motor Vehicles (Import)	Т09
24 Sep - 25 Sep	ORIENT INNOVATION	Nil Cargo (Export), Fuels (Import)	T01
24 Sep - 26 Sep	FEDERAL IMABARI	Nil Cargo (Export), Nil Cargo (Import)	T03South
25 Sep - 28 Sep	ROYAL INNOVATION	Scrap (Export), Nil Cargo (Import)	T04
25 Sep - 27 Sep	KMARIN OSLO	Sugar (Export), Nil Cargo (Import)	Т09
26 Sep - 26 Sep	FEDERAL IMABARI	Nil Cargo (Export), Nil Cargo (Import)	T03S
26 Sep - 26 Sep	GREAT OCEAN	Copper Concentrates (Export), Nil Cargo (Import)	T03North
26 Sep - 28 Sep	GREAT OCEAN	Nil Cargo (Export), Nil Cargo (Import)	T03North
27 Sep - 28 Sep	FOOLS GOLD	Sugar (Export), Nil Cargo (Import)	Т09
28 Sep - 29 Sep	KOTA HARUM	Containers (Export), Containers (Import)	T03South
28 Sep - 30 Sep	GREAT OCEAN	Nil Cargo (Export), Nil Cargo (Import)	T11
28 Sep - 29 Sep	GREYMAN EXPRESS	Fodder, Cattle (Export), Nil Cargo (Import)	T04
28 Sep - 29 Sep	GLORIOUS STARLIGHT	Sugar (Export), Nil Cargo (Import)	Т09
29 Sep - 30 Sep	GREYMAN EXPRESS	Fodder, Cattle (Export), Nil Cargo (Import)	T03North



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Port of Townsville Overview

PORT OF TOWNSVILLE

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 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).



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

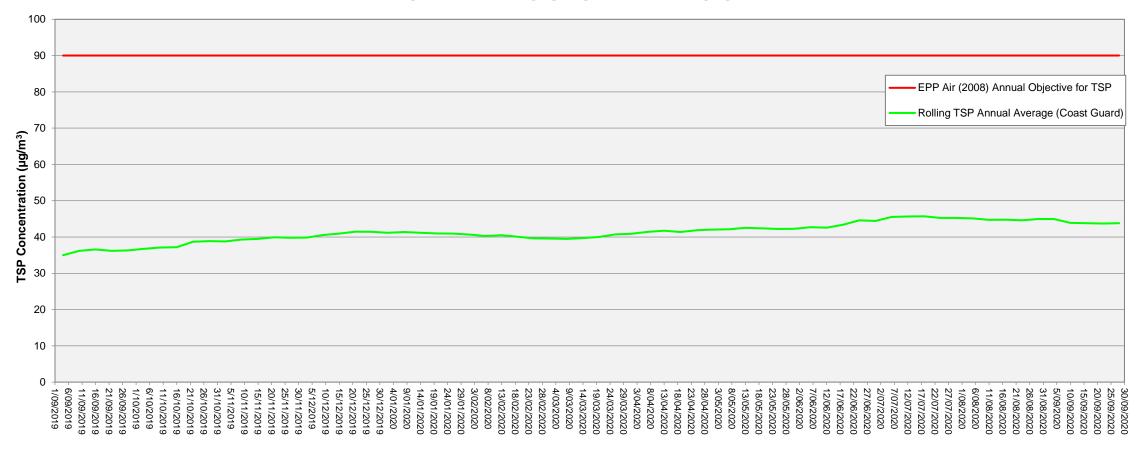
Phone 07 4781 1500 and asked to be added to the list.

Ask a Question / Provide Feedback

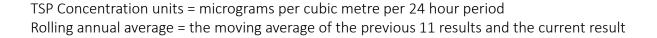
Send your enquiry or feedback to community@townsvilleport.com.au



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

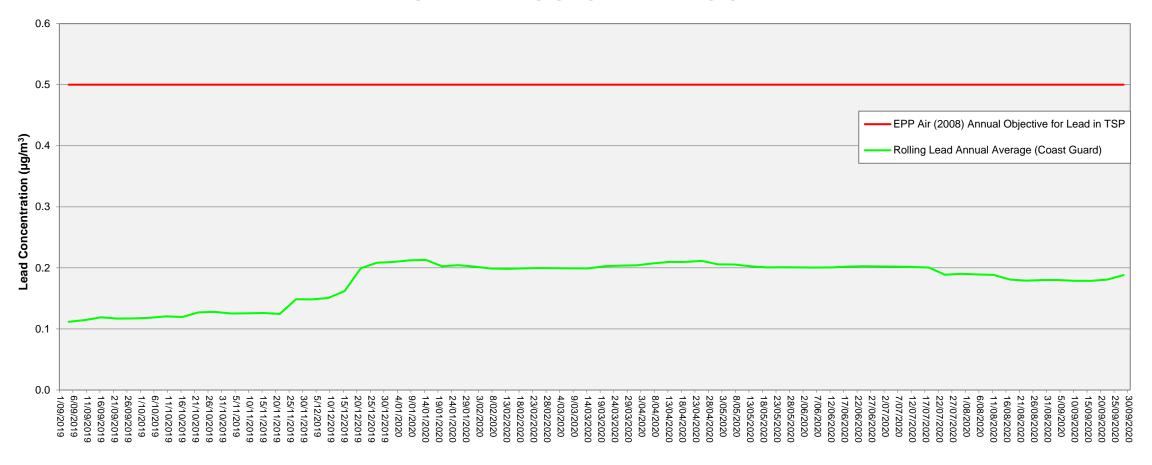








Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site SEPTEMBER 2019 – SEPTEMBER 2020

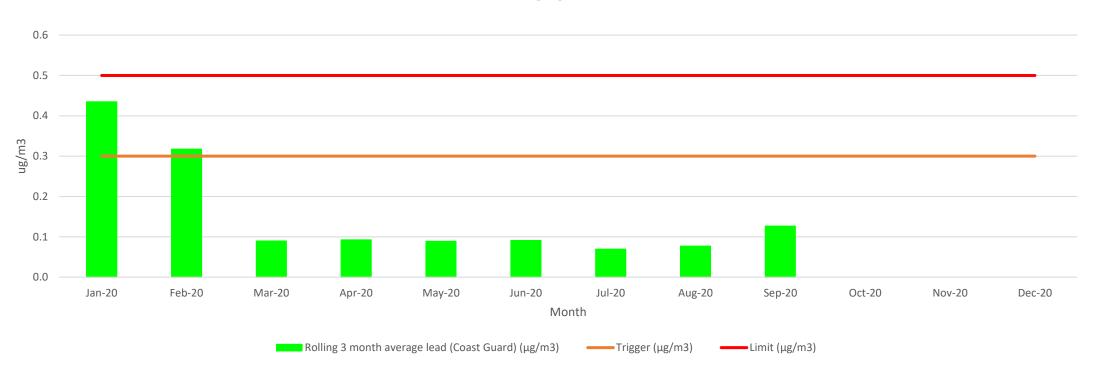




Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



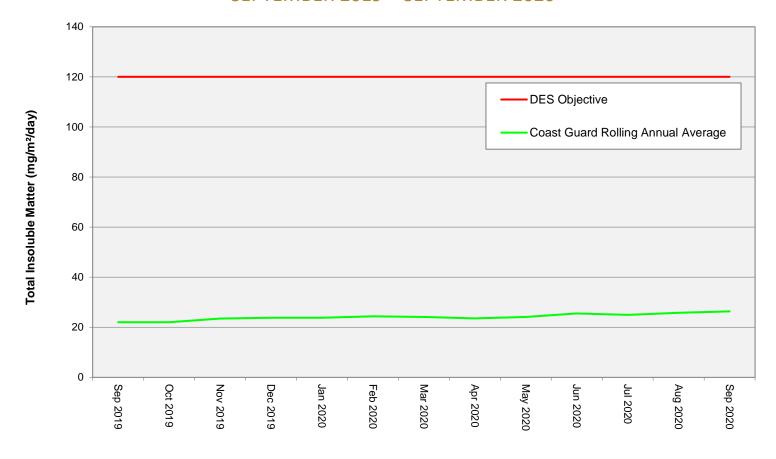
Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2020



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 SEPTEMBER 2019 – SEPTEMBER 2020

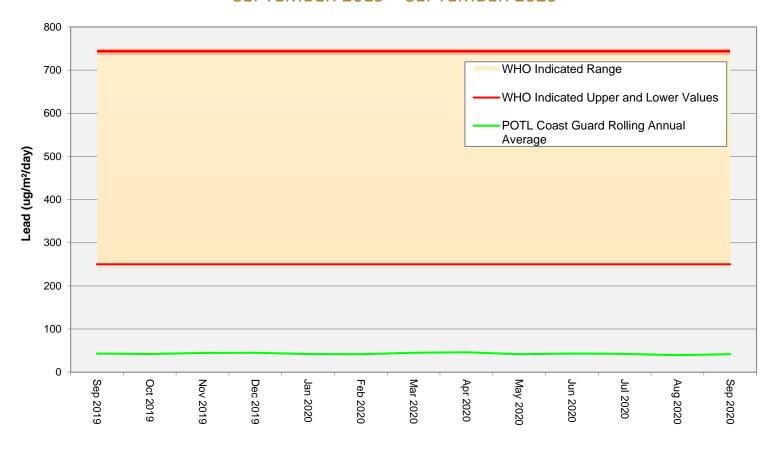




Total Insoluble Matter Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site SEPTEMBER 2019 – SEPTEMBER 2020

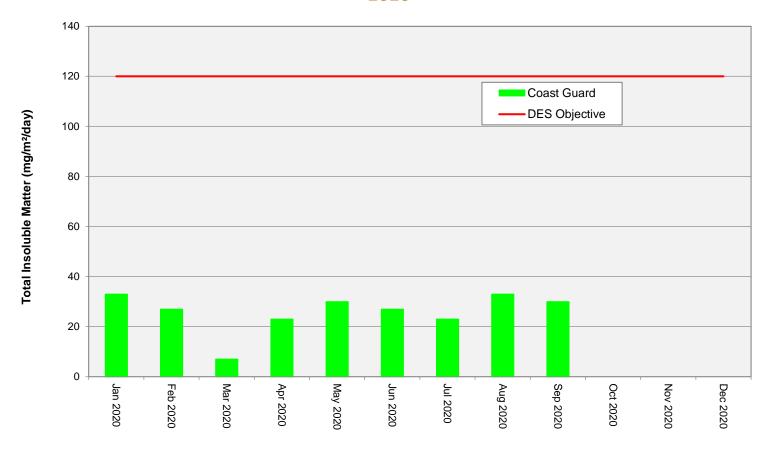


Note:

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



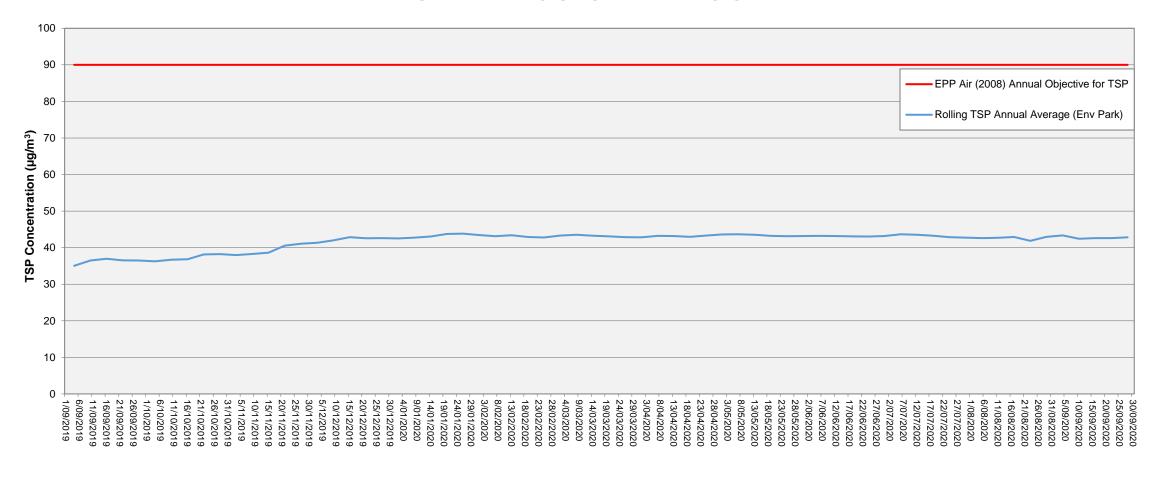
Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2020



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 SEPTEMBER 2019 – SEPTEMBER 2020

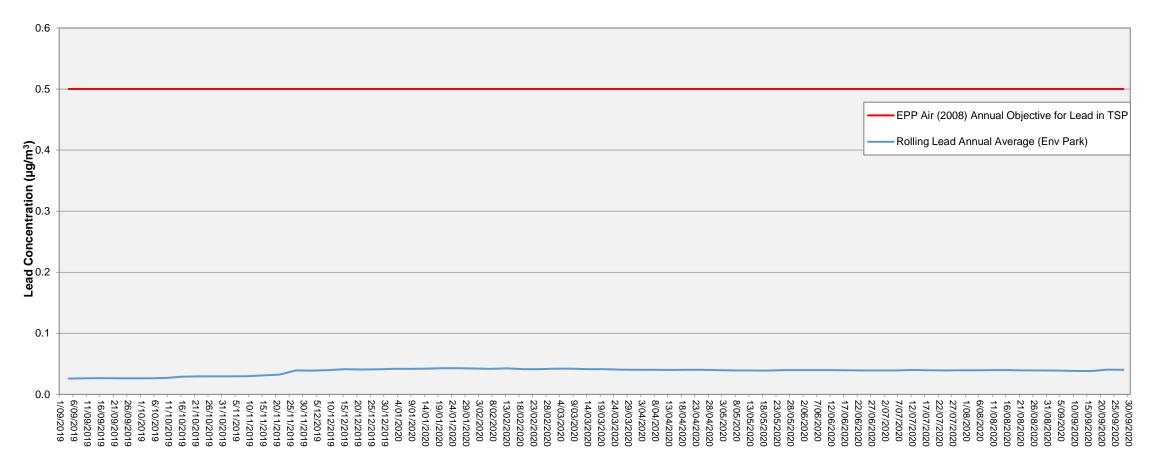




TSP Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



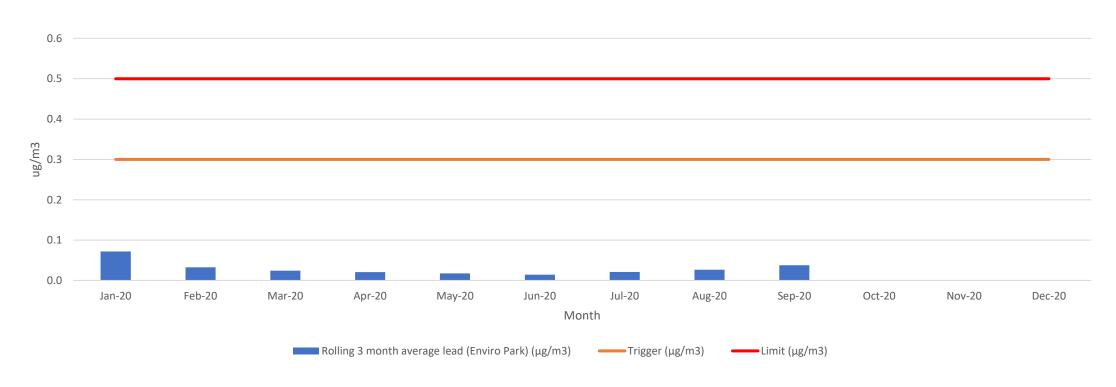
Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site SEPTEMBER 2019 – SEPTEMBER 2020





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

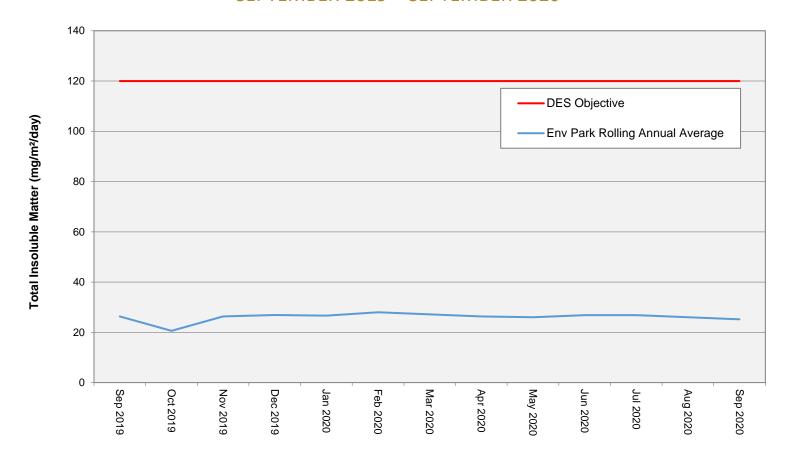
Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2020



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



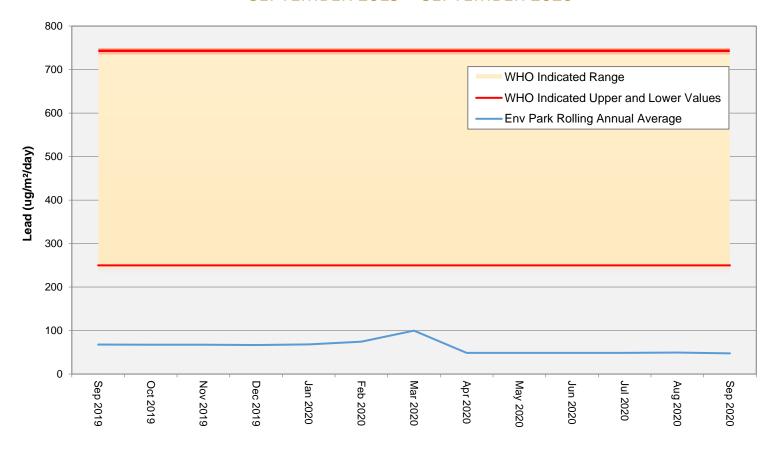
Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site SEPTEMBER 2019 – SEPTEMBER 2020



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 SEPTEMBER 2019 – SEPTEMBER 2020





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

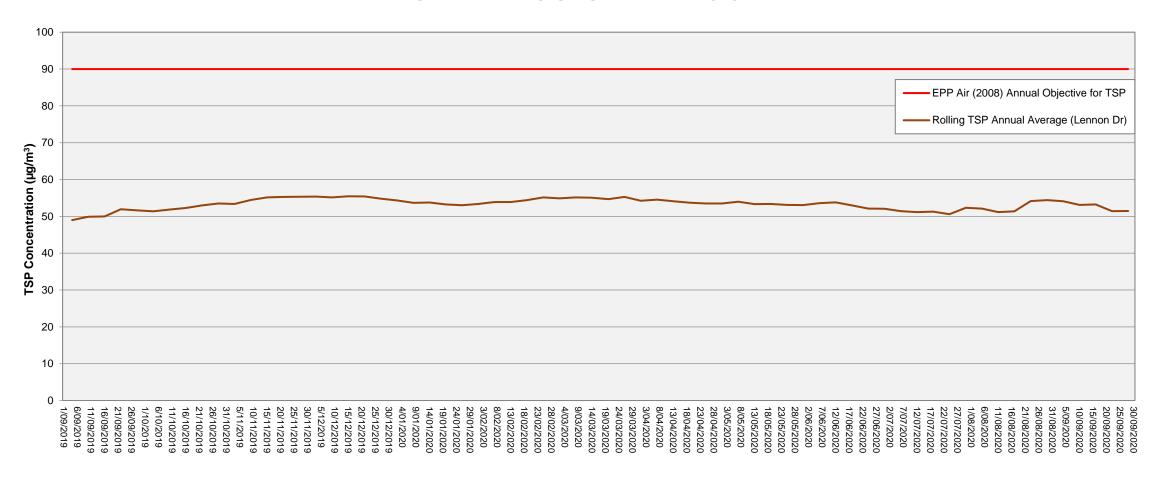
Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2020



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



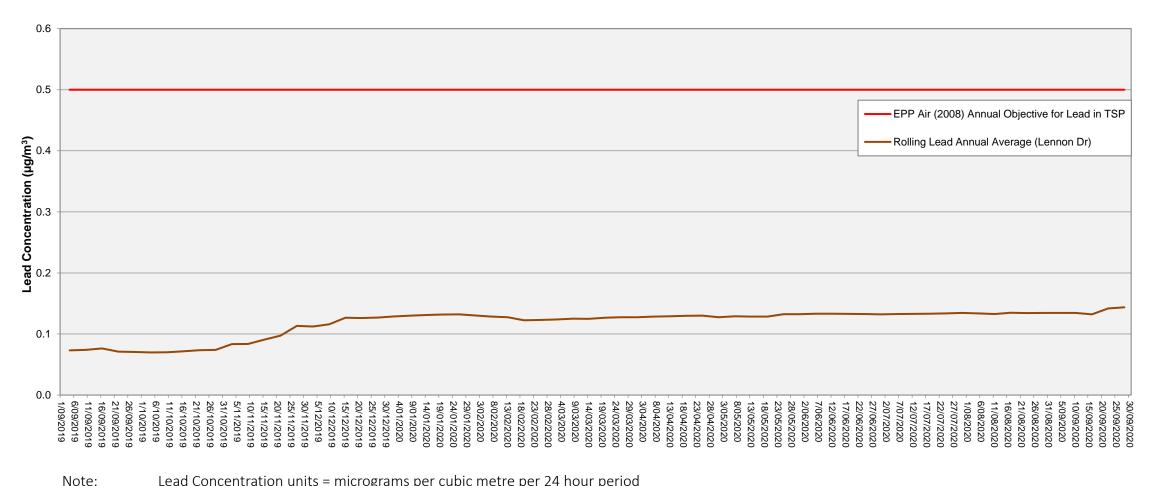
Hi-Volume Sampler - General total dust levels (one in six days) at Lennon Drive site SEPTEMBER 2019 – SEPTEMBER 2020





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

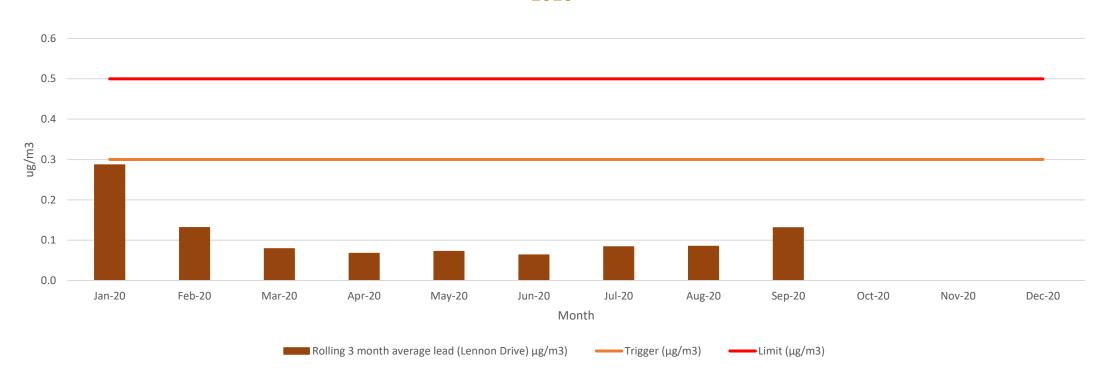
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site SEPTEMBER 2019 – SEPTEMBER 2020





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

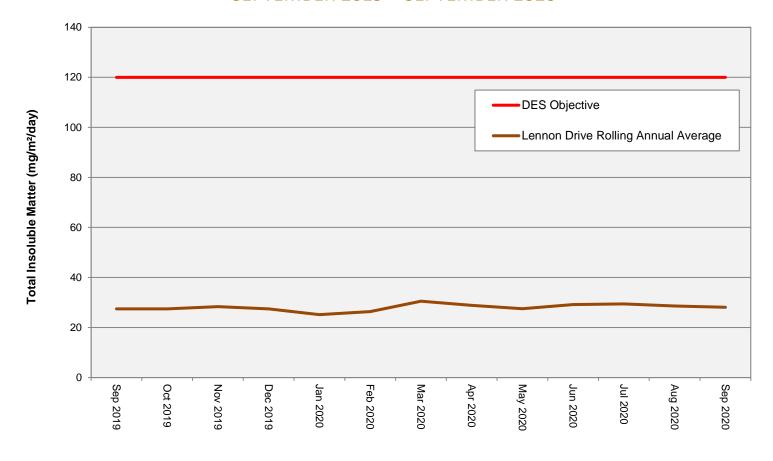
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2020



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 SEPTEMBER 2019 – SEPTEMBER 2020

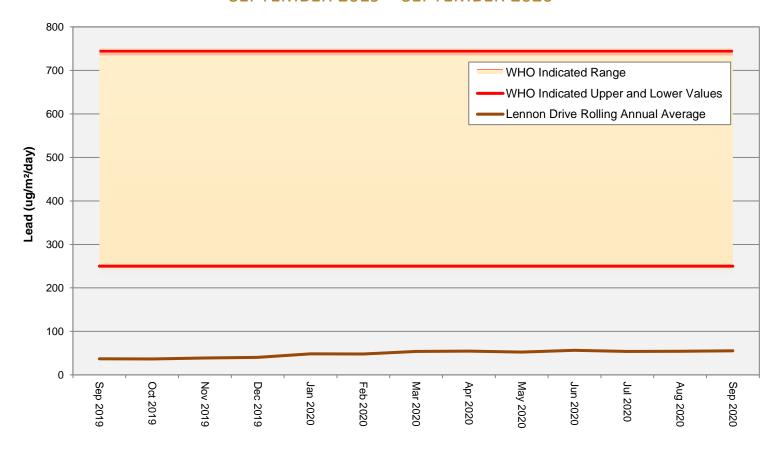


Note: Total Insoluble Matter Concentration units = micrograms per square metre per day

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 Lennon Drive Site SEPTEMBER 2019 – SEPTEMBER 2020

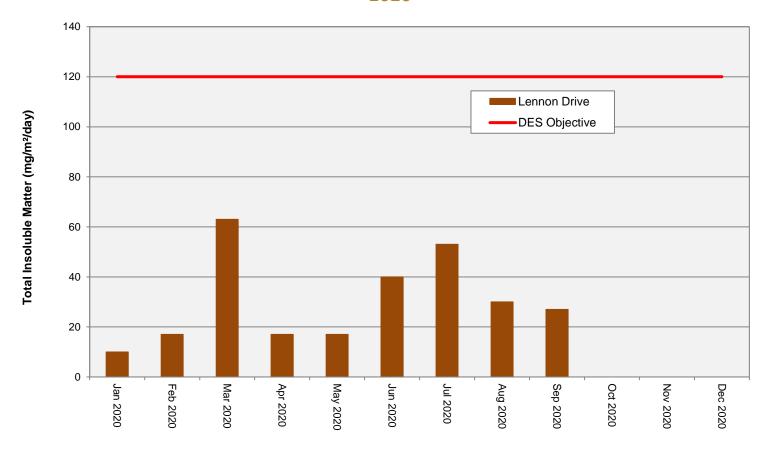


Note: Lead Concentration units = micrograms per square metre per day

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 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 μ 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 μ g/dL but since the beginning of 2016 has been reduced to 5 μ 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 µg/dL and 1.9 µg/dL, still well under the level which should trigger concern.

