AIR QUALITY MONITORING IN TOWNSVILLE

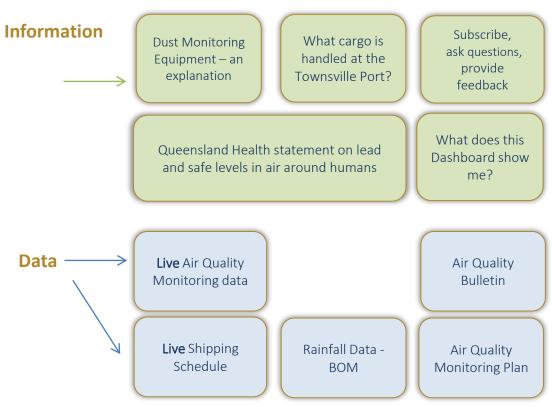
Air Quality Monitoring in Townsville is conducted separately by both the Department of Environment and Science (DES), and Port of Townsville Limited.

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

Click here to visit DES monitoring network

Air Quality Monitoring Locations







Shipping Movements in May 2019

Date In/Out	Vessel Name	Berths	Cargo	Date In/Out	Vessel Name	Berths	Cargo
01-02	INTERLINK ABILITY	3 NTH	Lead Ingots	16-19	TS FLOWER	8	Zinc Concentrates
01-01	CORONADO BAY	4	Containers	16-17	GALLOWAY EXPRESS	4	Fodder, Cattle
01-03	MAYUREE NAREE	8	Lead Concentrates	17-18	FLORIDA HIGHWAY	4	Motor Vehicles
02-04	AKUNA	4	Cement	18-19	GOLDEN CHIE	1	Fuels
02-07	AFRICAN RAVEN	3 NTH	Zinc Concentrates	18-19	GREYMAN EXPRESS	4	Fodder, Cattle
03-04	LAKE DANY	9	Sugar	18-19	KOTA NIPAH	3 STH	Containers
03-05	ZAMBESI	8	Zinc Concentrates	20-20	BOMAR SPRING	3 STH	Containers
04-05	LINDANGER	1	Fuels	21-21	SOFRANA TOURVILLE	3 STH	Containers
04-05	GIROLANDO EXPRESS	4	Fodder, Cattle	21-23	KYOWA ROSE	3 STH	General/Break Bulk
04-05	OCEAN UTE	10	Fodder, Cattle	21-22	BARDU	4	Containers
05-06	ROYAL INNOVATION	9	Sugar	22-24	ANNA MARRA	10	Fodder, Cattle
05-06	BOW SINGAPORE	1	Sulphuric Acid	22-23	WYUNA	4	Cement
06-07	GWEN	8	Tallow	23-25	DL OLIVE	9	Scrap metal
06-08	GSL KETA	4	Containers	23-23	HAWAIIAN HIGHWAY	3 STH	Nil Cargo
07-07	FREMANTLE HIGHWAY	10	Motor Vehicles	24-25	TS FLOWER	3 NTH	Zinc Concentrates
07-07	CENTAURUS LEADER	9	Motor Vehicles	25-27	KAITI HILL	8	Fertilizer
07-09	KYOWA ORCHID	3 NTH	Containers	26-27	THERESA ORION	9	Nil Cargo
07-08	GOLDEN ACE	1	Fuels	27-28	FOOLS GOLD	11	Lead Concentrates
08-10	KOTA NAGA	4	Containers	27-28	PACIFIC NOBLE	9	Sugar
11-13	ORIENTAL DIAMOND	1	Fuels	28-28	STI DAMA	1	Fuels
12-13	MS EAGLE	3 STH	Containers	28-29	GRAND ACE8	1	Fuels
14-16	EMERALD SHINER	1	Fuels	29-30	WYUNA	4	Cement
15-22	PATAGONIA	10	Zinc Ferrites	30-30	BRISBANE	10	Fuels
16-18	GOLDEN ACE	A/1	Sulphuric Acid	30-31	OCEAN UTE	3 STH	Fodder, Cattle

Port of Townsville - Overview

First established in 1864, the Port of Townsville is operates eight berths handled more than \$8 billion in trade during the 2016/2017 financial year; servicing more than 136 ports around the globe. 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.



Subscribe to Dashboard Updates

Visit our website and subscribe here https://www.townsville-port.com.au/environment-community/community/newsletter-sign-up/

OR

Visit the <u>Port of Townsville Facebook page</u> 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

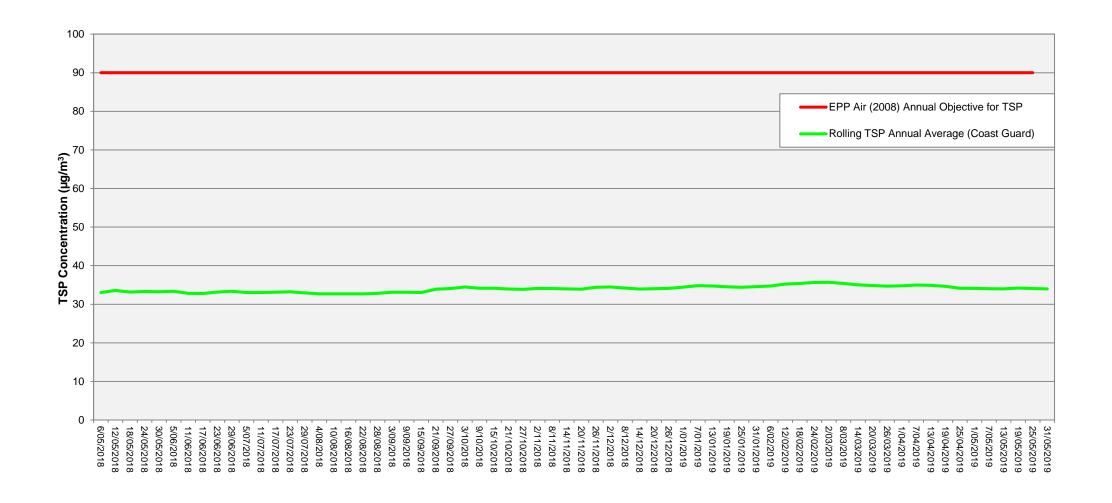
Send your enquiry or feedback to community@townsvilleport.com.au







Hi-Volume Sampler – General total dust levels (one in six days) at Coast Guard Site MAY 2018 – MAY 2019

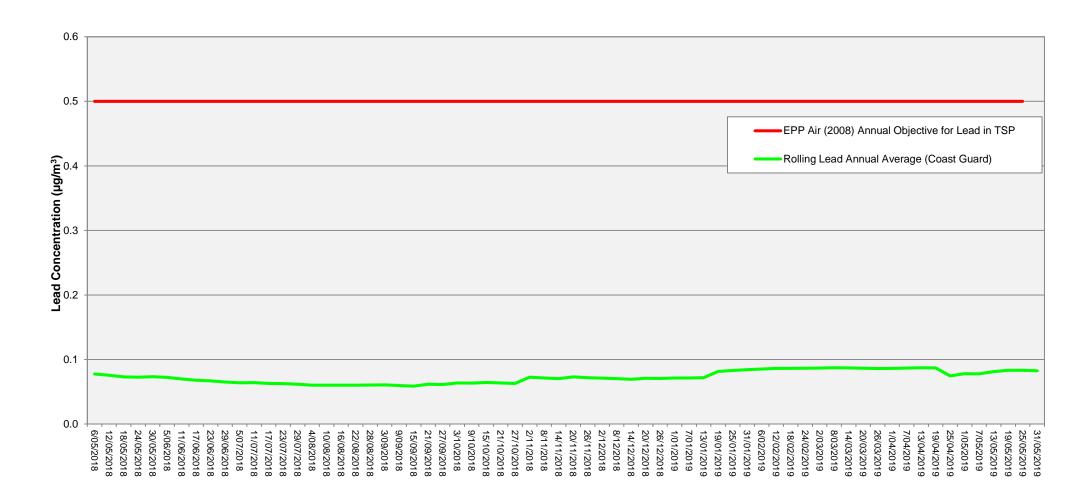


Note:

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



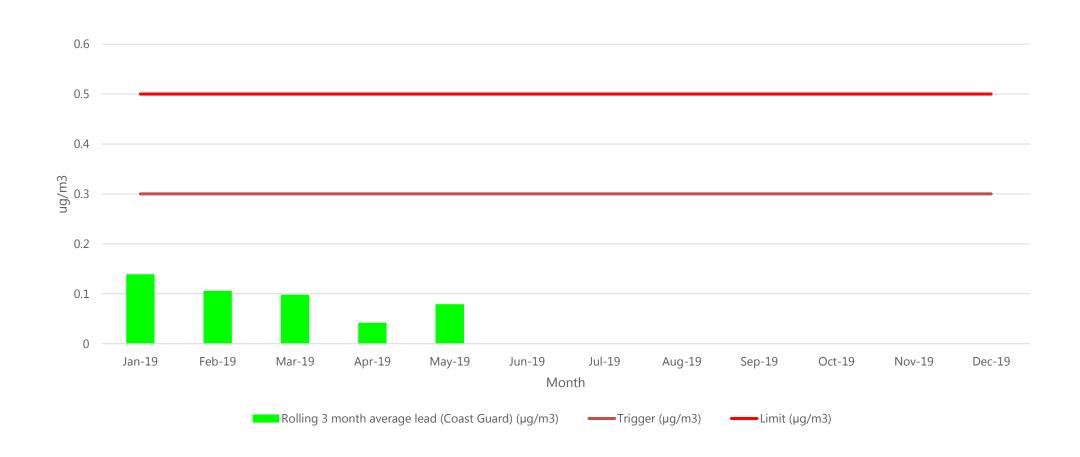
Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site MAY 2018 – MAY 2019



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 2019

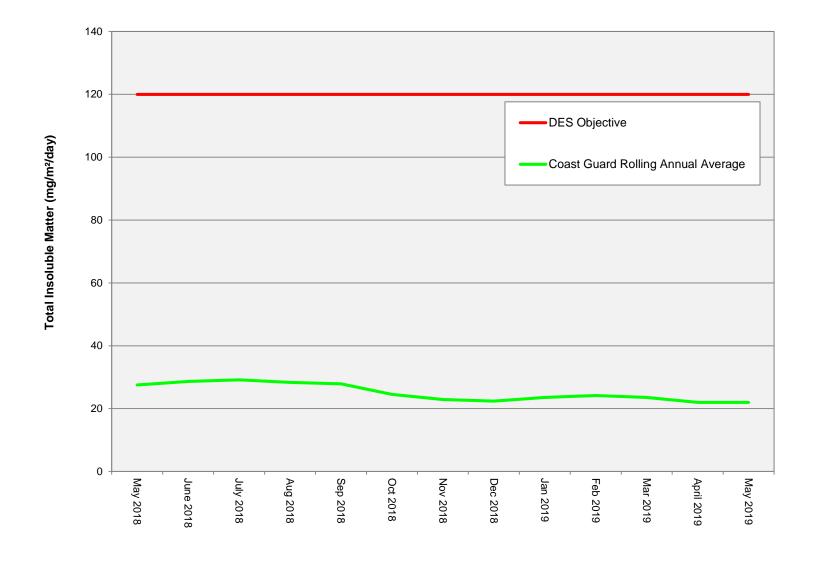


Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result





Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site MAY 2018 – MAY 2019



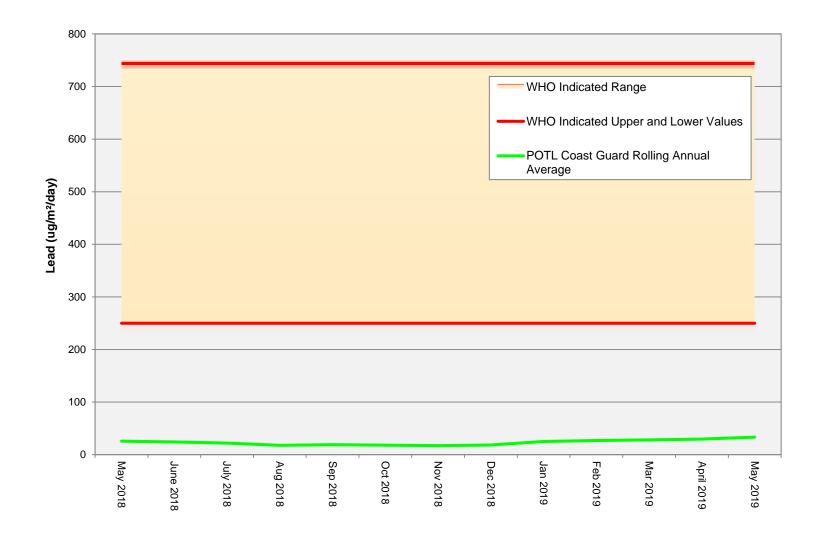
Note:

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 2018 – MAY 2019



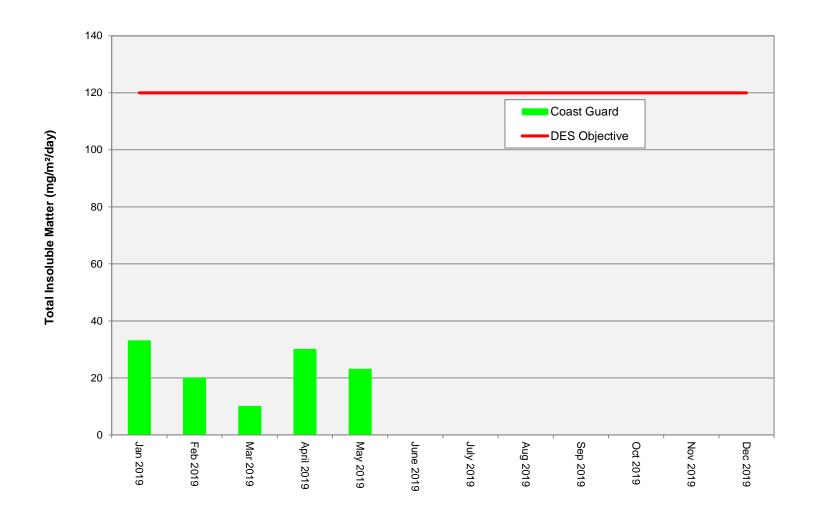
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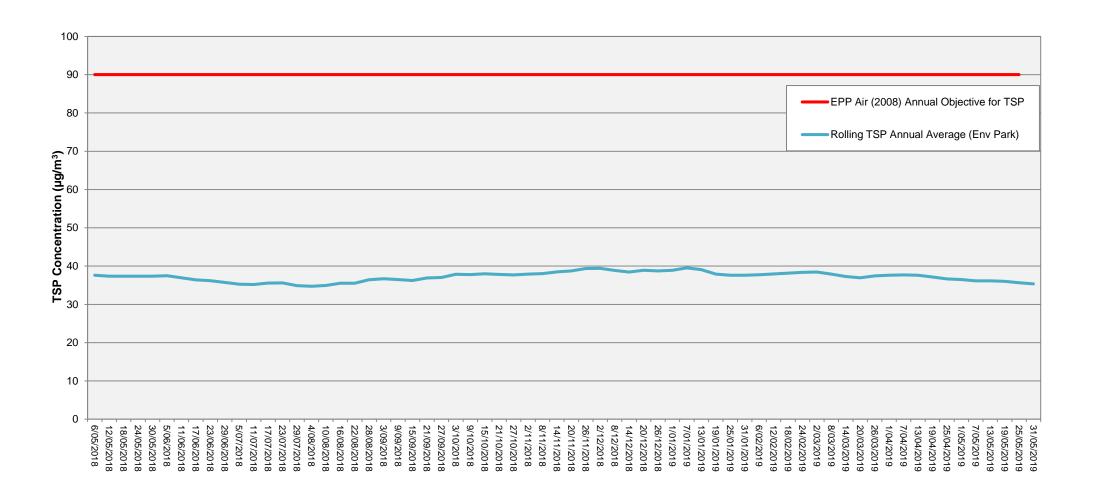
Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2019



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



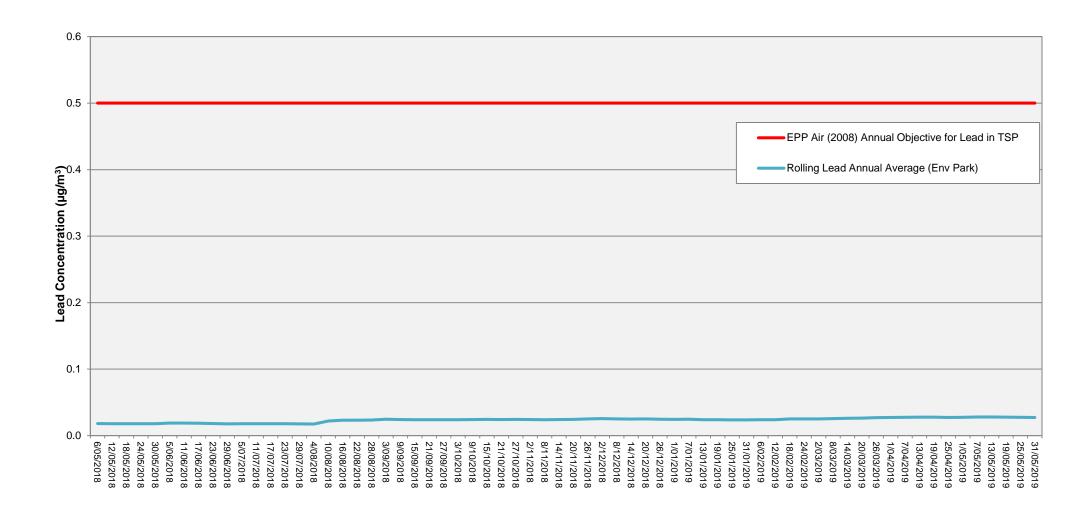
Hi-Volume Sampler - General total dust levels (one in six days) at Environment Park site MAY 2018 – MAY 2019



Note:

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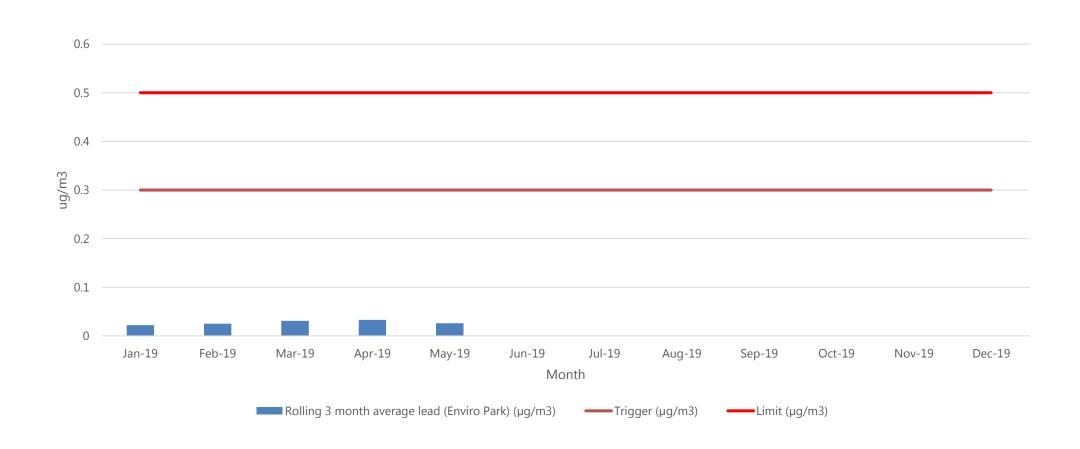
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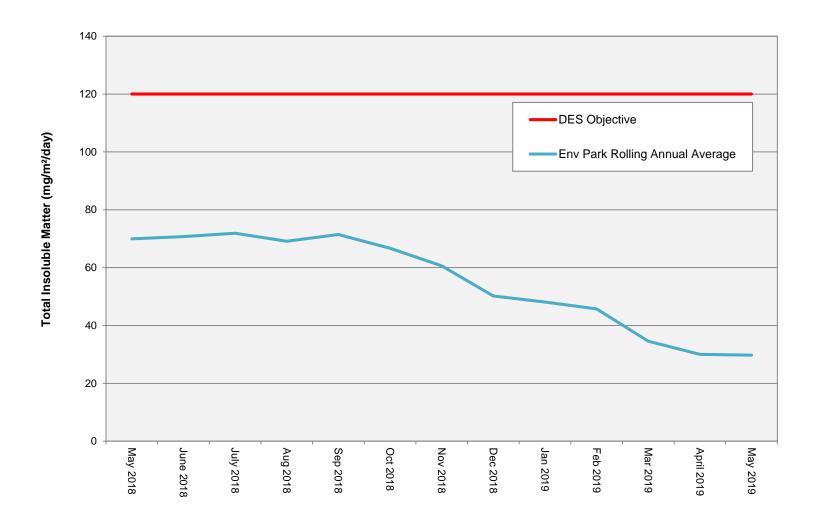
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Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2019



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

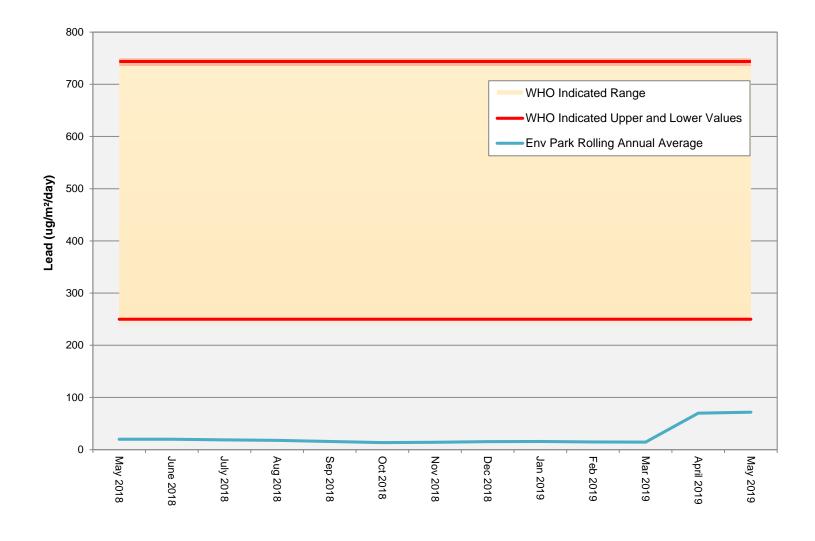
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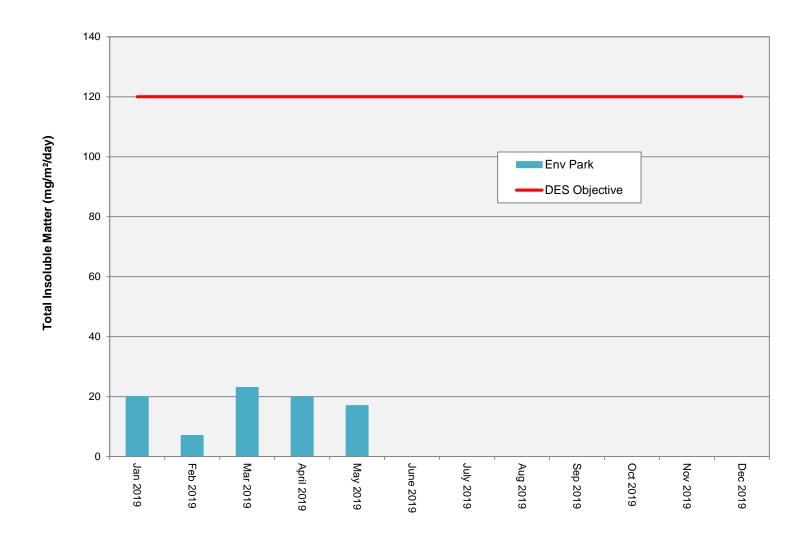
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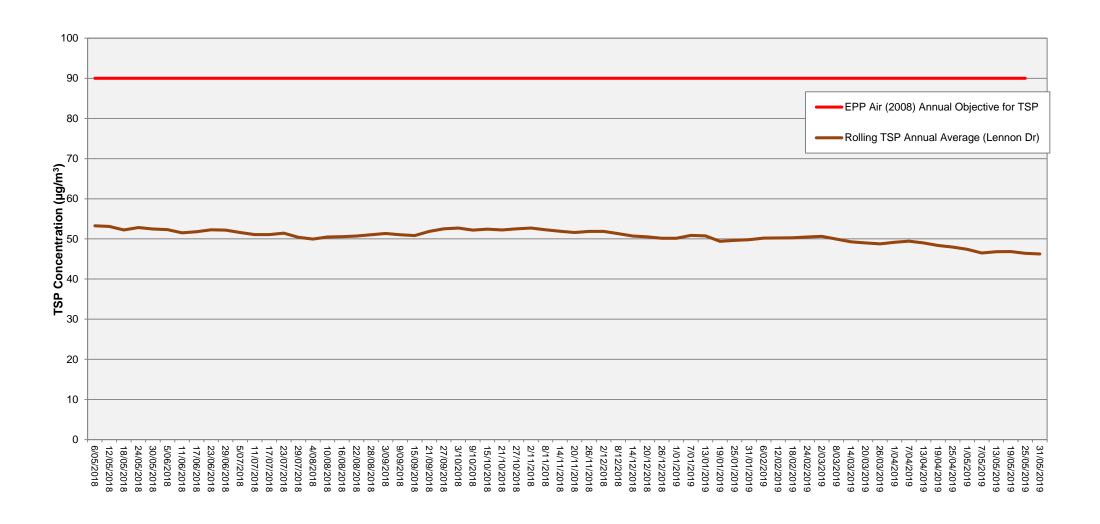
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Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2019



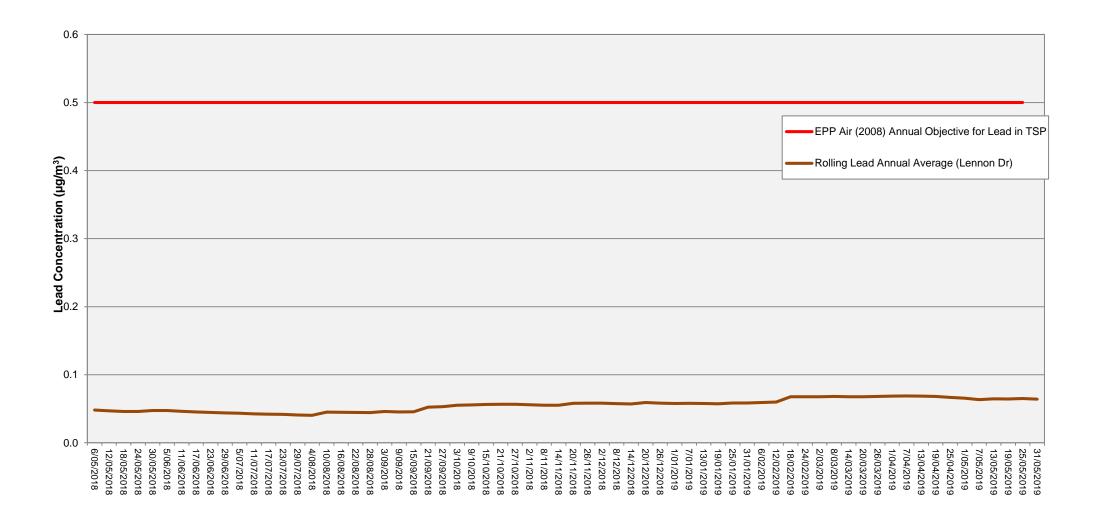
Note: Total Insoluble Matter Concentration units = milligrams per square metre per day

Hi-Volume Sampler - General total dust levels (one in six days) at Lennon Drive site MAY 2018– MAY 2019



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

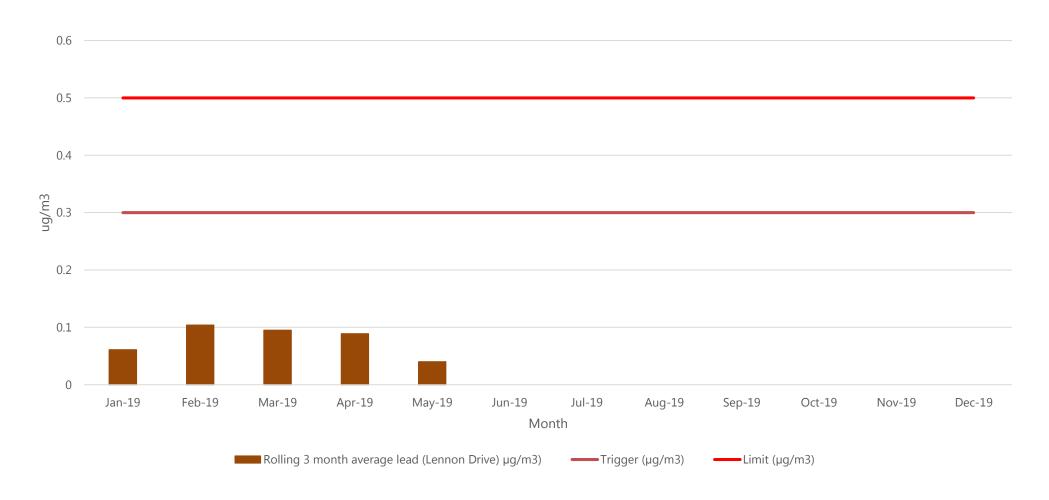
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site MAY 2018– MAY 2019



Note:

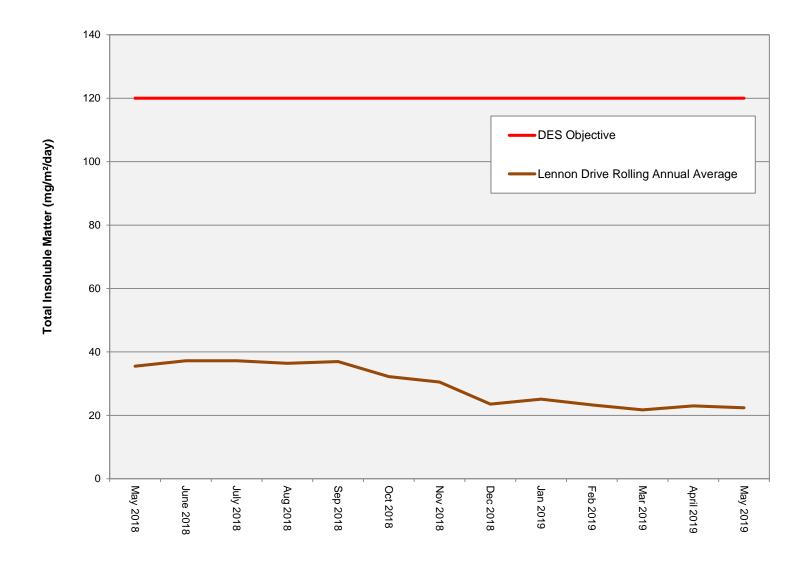
Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result

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



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

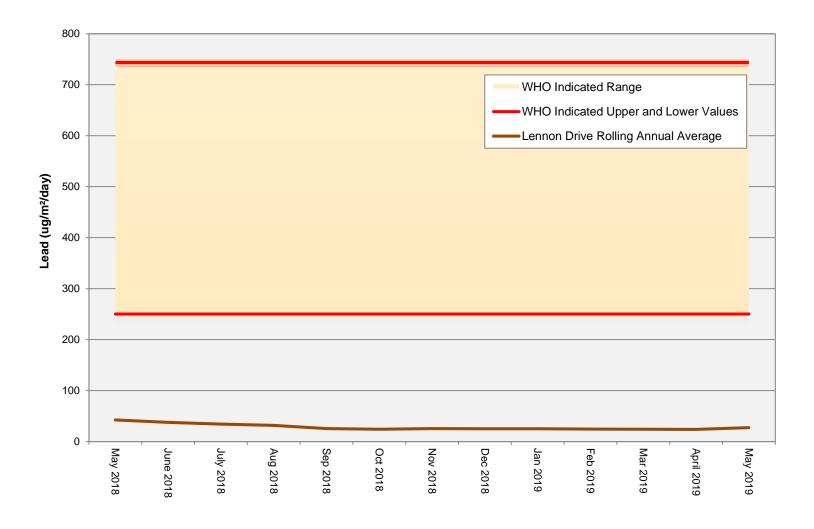
Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site MAY 2018– MAY 2019



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

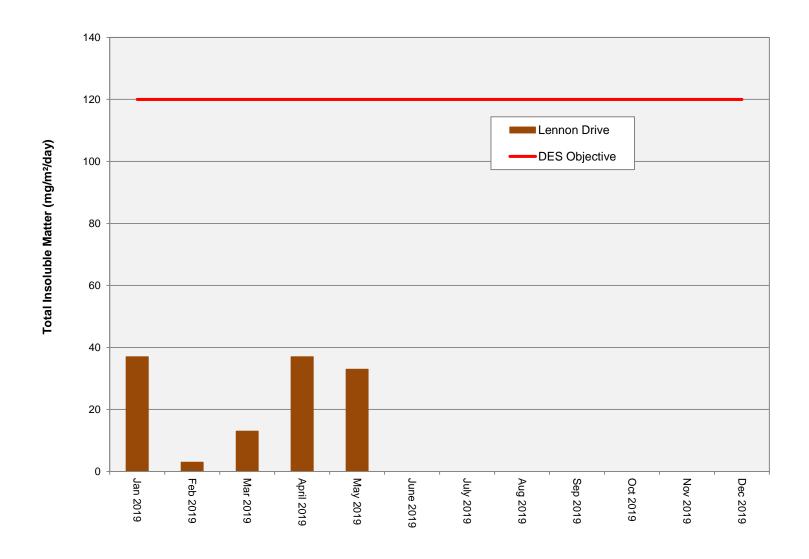
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This statement/advice was provided by Queensland Health in relation to blood lead levels in Townsville in April 2016

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 μ g/dL and 0.6 μ 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 μ g/dL and 1.9 μ g/dL, still well under the level which should trigger concern.