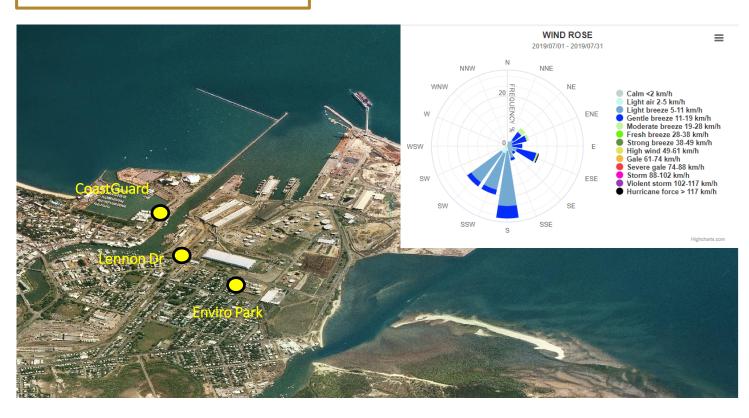
AIR QUALITY MONITORING IN TOWNSVILLE

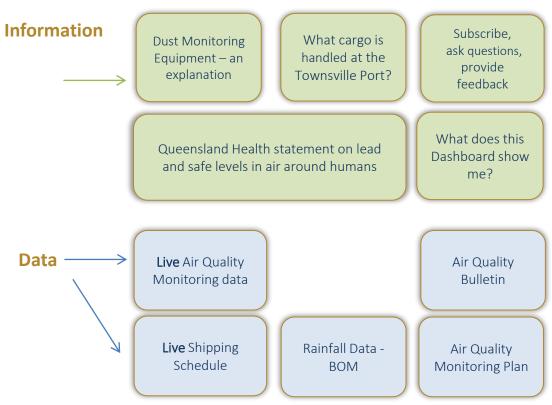
Air Quality Monitoring in Townsville is conducted separately by both the Department of Environment and Science (DES), and Port of Townsville Limited.

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 July 2019

Date In/Out	Vessel Name	Berths	Cargo	Date In/Out	Vessel Name	Berths	Cargo
01-02	BELLE OCEAN	9	Sugar	17-18	WARNOW MARS	8	Zinc Concentrates
01-04	BALTIC PANTHER	L1	Sugar	17-18	GREYMAN EXPRESS	4	Cattle
01-03	NORDNEPTUN	1	Fuels	17-19	STOLT SATSUKI	1	Sulphuric Acid
02-02	OREGON HIGHWAY	10	Motor Vehicles	18-18	USNS MATTHEW PERRY	Α	Defence
02-04	OCEAN DROVER	3 STH	Fodder, cattle	18-24	BUNUN WISDOM	10	Zinc Ferrites
03-16	USNS MATTHEW PERRY	А	Defence	18-18	VIRGO LEADER	4	Motor Vehicles
03-03	HMAS ADELAIDE	10	Defence	20-22	CORONADO BAY	4	Containers
03-05	THERESA ORION	8	Molasses	21-21	GRAND ACE 11	1	Fuels
03-05	KOTA NIPAH	4	Containers	22-22	GOLDEN SKY 1	1	Fuels
04-09	USS McCAMPBELL	10	Army Equipment	22-23	TAURUS_1	8	Fertilizer
04-05	KYOWA ROSE	3 NTH	General/Break Bulk	22-26	USNS RICHARD E BYRD	А	Defence
05-06	UNI WEALTH	9	Sugar	22-25	IVS SPARROWHAWK	3 NTH	Lead Concentrates
06-06	CENTAURUS LEADER	4	Motor Vehicles	22-22	GANADO EXPRESS	4	Cattle
06-15	INCHEON BAY	10	General/Break Bulk	22-23	PALANCA SINGAPORE	1	Bitumen
06-10	GREAT BEAUTY	9	Urea	23-23	PMG PRIDE	3 STH	Containers
07-11	PACIFIC BULKER_1	3 STH	Zinc Concentrates	24-26	USNS MATTHEW PERRY	Α	Defence
07-08	OCEAN ANGEL	4	Bitumen	24-27	HMAS CANBERRA	10	Defence
08-09	TRINITAS	4	Containers	25-27	DALLY	8	Concentrates
09-12	WAVE FRIEND	11	Zinc Concentrates	26-27	GALLOWAY EXPRESS	4	Fodder, cattle
09-10	GWEN	4	Caustic Soda	26-30	USS ASHLAND	9	Defence
10-11	MONACO	4	Containers	26-28	ECO DYNAMIC	3 STH	Urea
10-11	ST.PAULI	1	Fuels	27-01	CHAMPION CONCEPT	9	Molasses
11-16	SANTA VIRGINIA	3 NTH	Lead Ingots	27-28	KOTA NAGA	4	Containers
11-12	GLOUCESTER EXPRESS	3 STH	Fodder, cattle	28-29	CHANG HANG XING YUN	1	Fuels
11-14	GLORY SKY	4	Cement	28-29	USNS RICHARD E BYRD	Α	Defence
11-13	SANIA	9	Sugar	28-30	KYOWA ORCHID	3 NTH	Containers, copper
13-15	KOTA NEBULA	3 STH	Containers	28-29	LOWLANDS SCHELDT	11	Lead Concentrates
13-14	BLUE RIDGE HIGHWAY	3 NTH	Motor Vehicles	29-30	ST.PAULI	1	Fuels
14-22	AFRICAN QUAIL	9	Fertilizer	30-01	BOMAR SPRING	4	Containers
14-16	PANTANAL	4	Steel Pipes	30-31	TAURUS_1	8	Fertilizer
14-17	FRIEDRICH SCHULTE	8	Fertilizer	30-01	IRIS VICTORIA	1	Fuels
15-17	LEANNE AUERBACH	10	Copper Concentrates	30-01	OCEAN DROVER	3 NTH	Fodder, cattle
16-18	BLUE ALEXANDRA	9	Sugar				

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

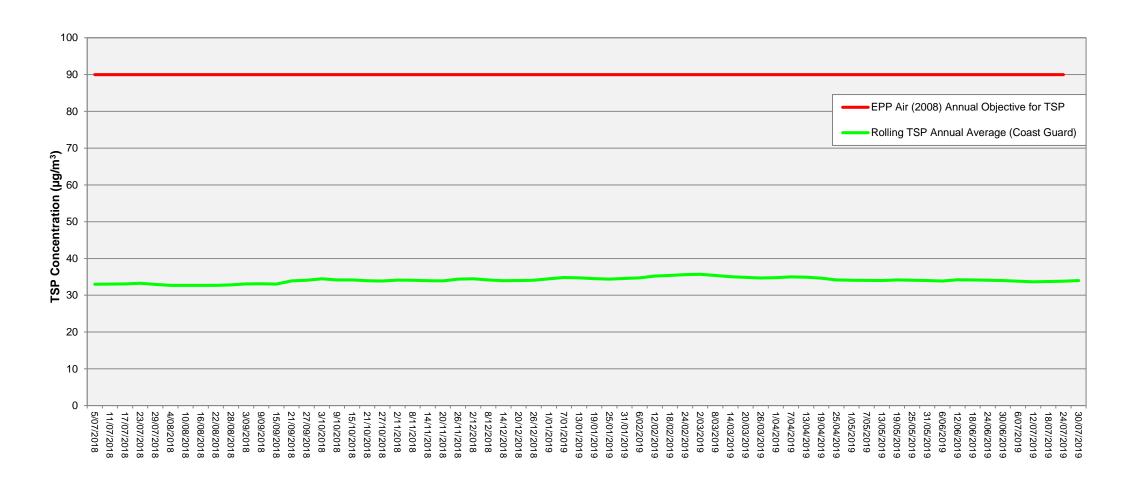
Phone 07 47 811 500 and asked to be added to the list.

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 JULY 2018 – JULY 2019

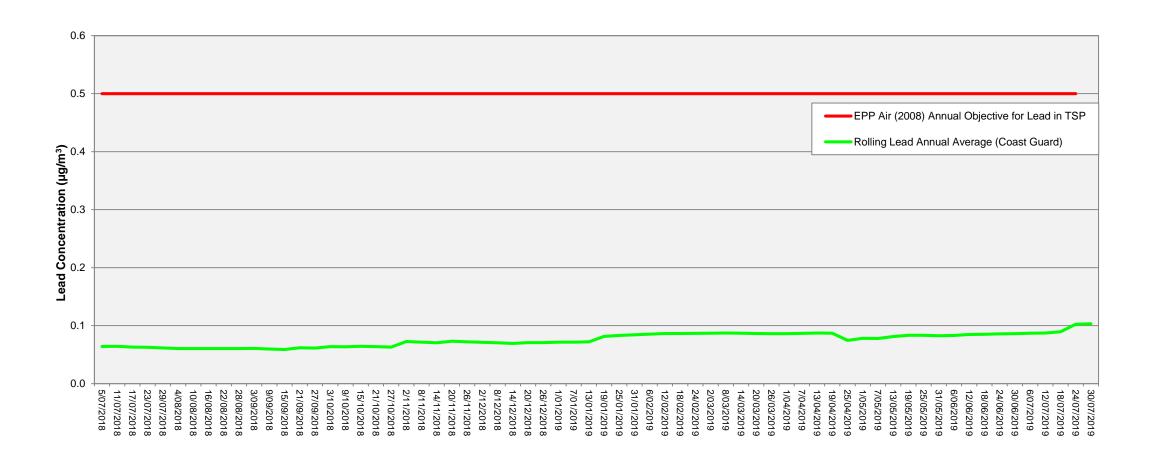


Note:

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



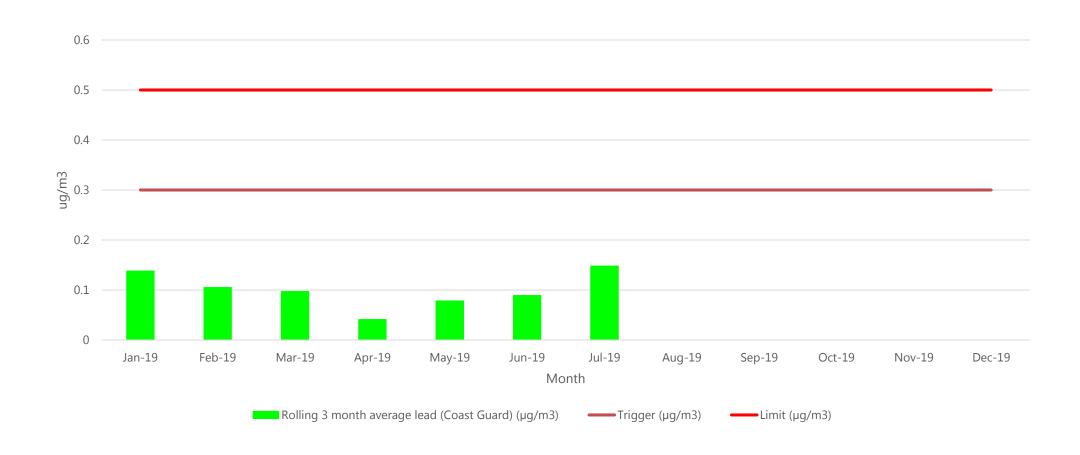
Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site JULY 2018 – JULY 2019



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

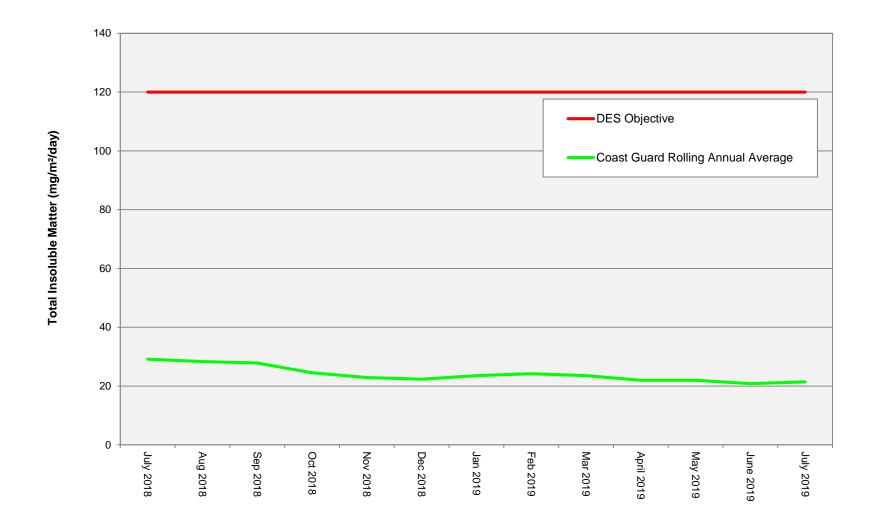
Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2019



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 JULY 2018 – JULY 2019



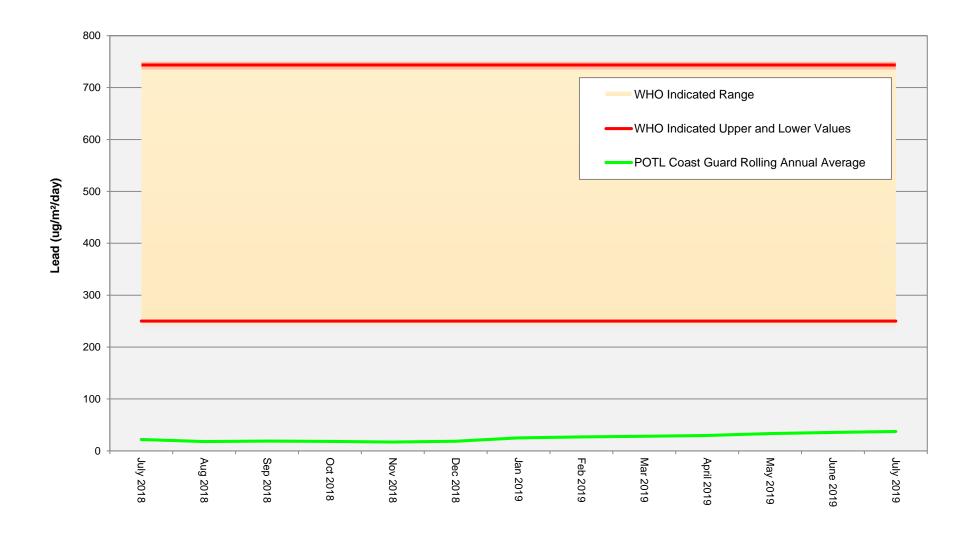
Note:

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 JULY 2018 – JULY 2019



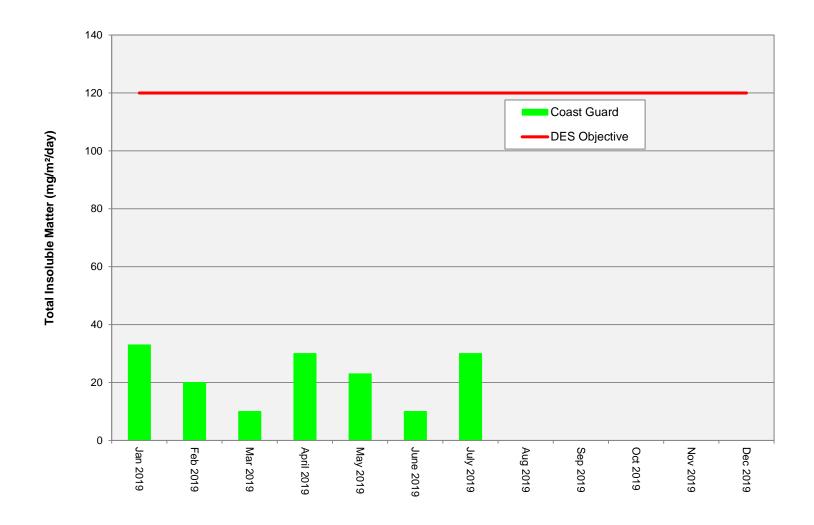
Note:

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



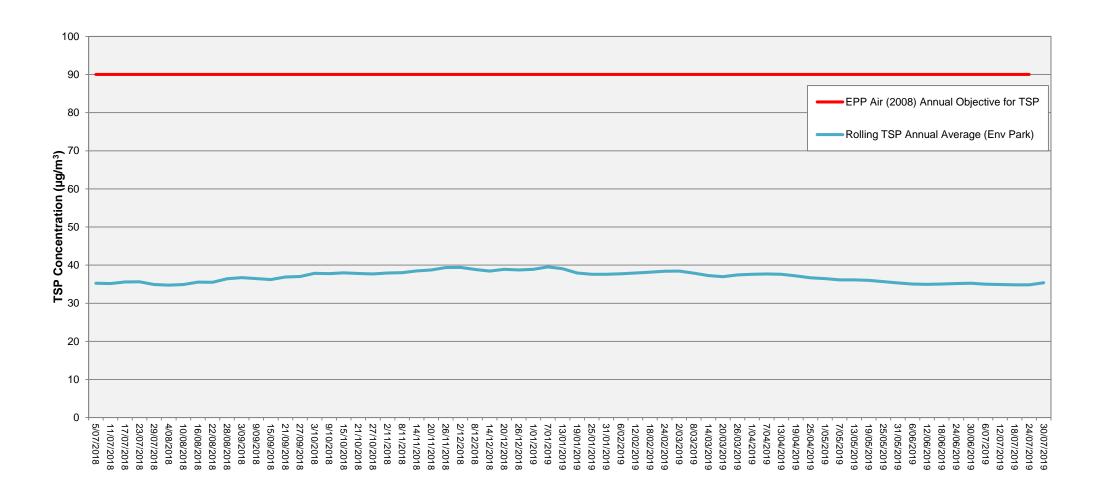


Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2019



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 JULY 2018 – JULY 2019

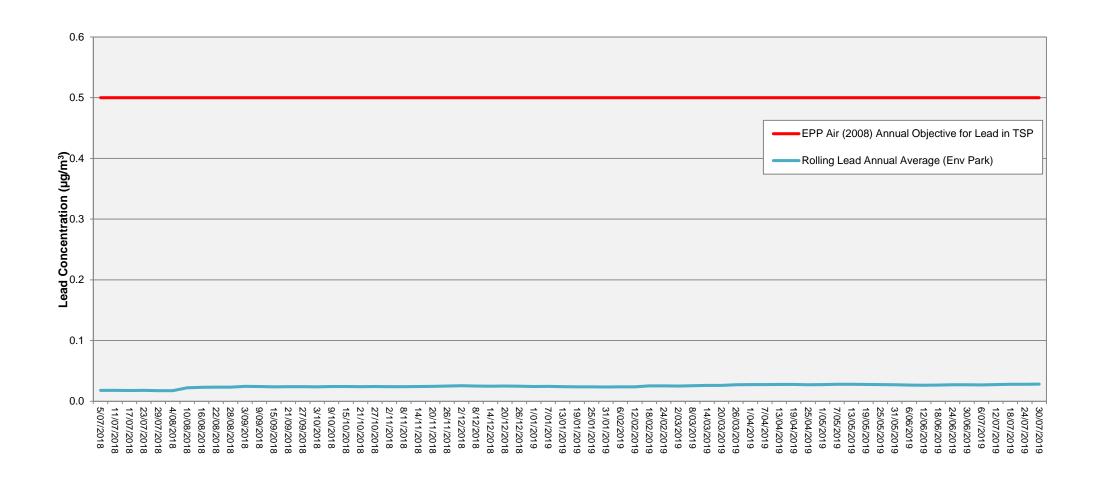


Note:

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



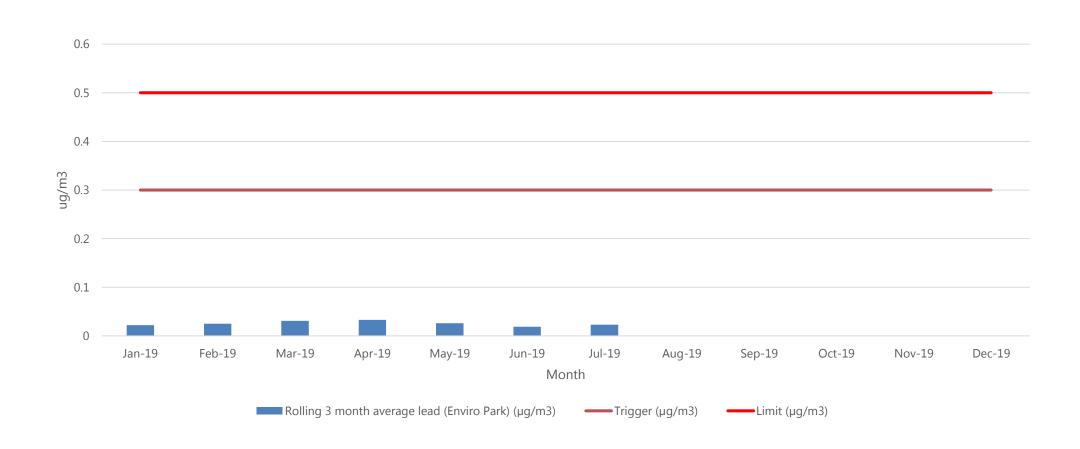
Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site JULY 2018 – JULY 2019



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

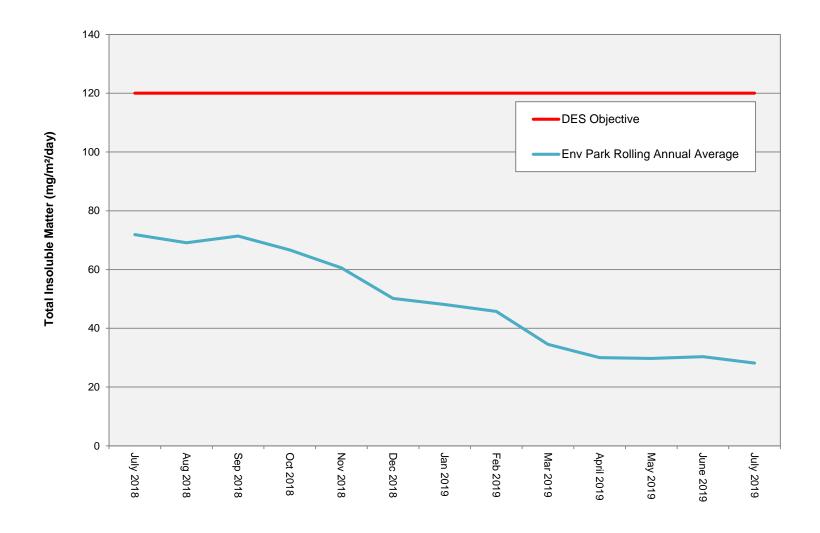
Rolling annual average = the moving average of the previous 11 results and the current result

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



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

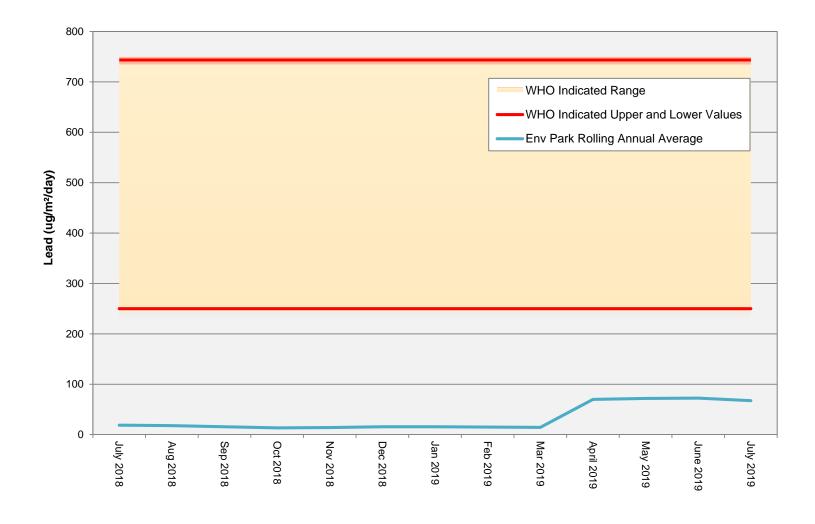
Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site JULY 2018– JULY 2019



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

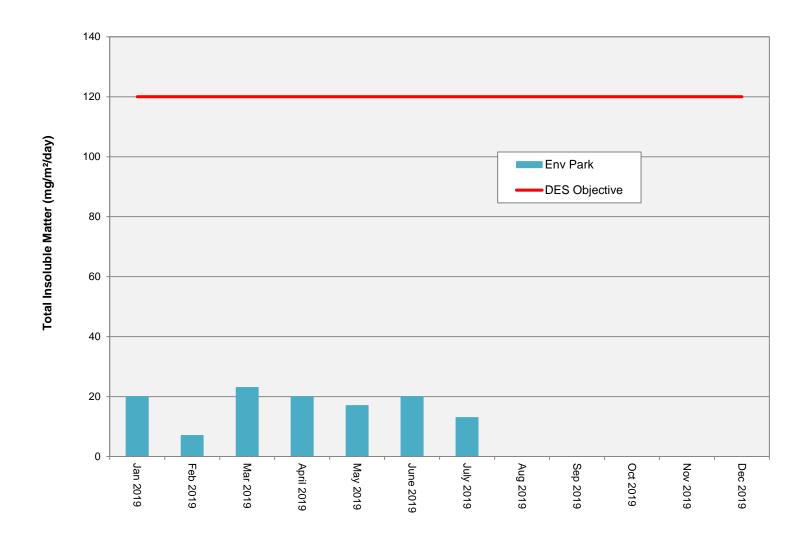
Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Environment Park site JULY 2018– JULY 2019



Note:

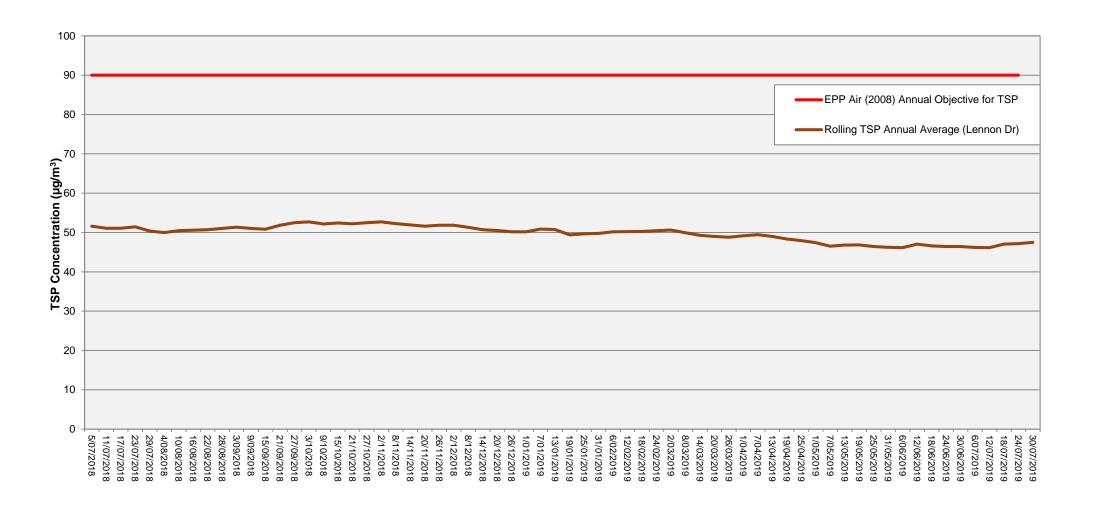
Lead Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result

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



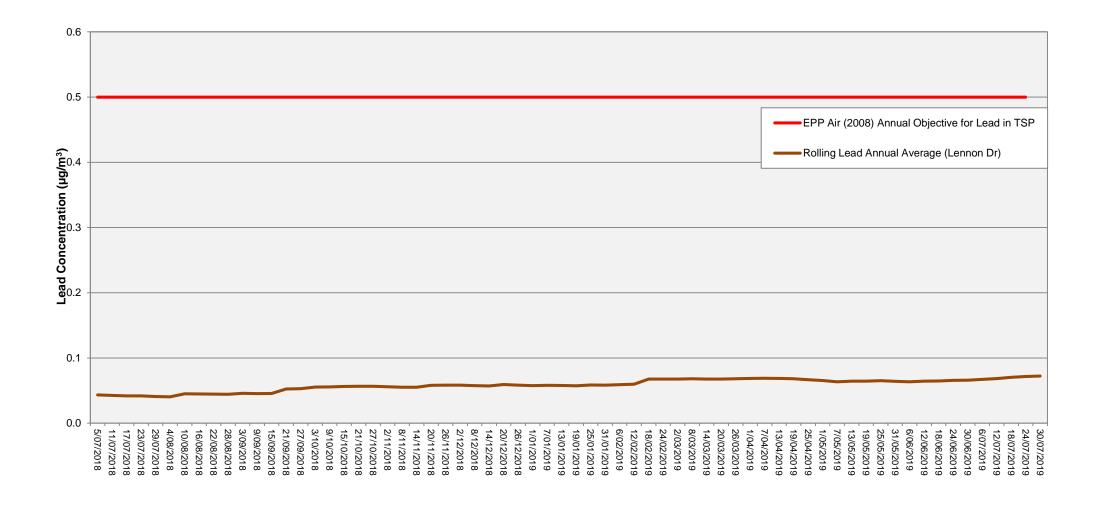
Note: Total Insoluble Matter Concentration units = milligrams per square metre per day

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

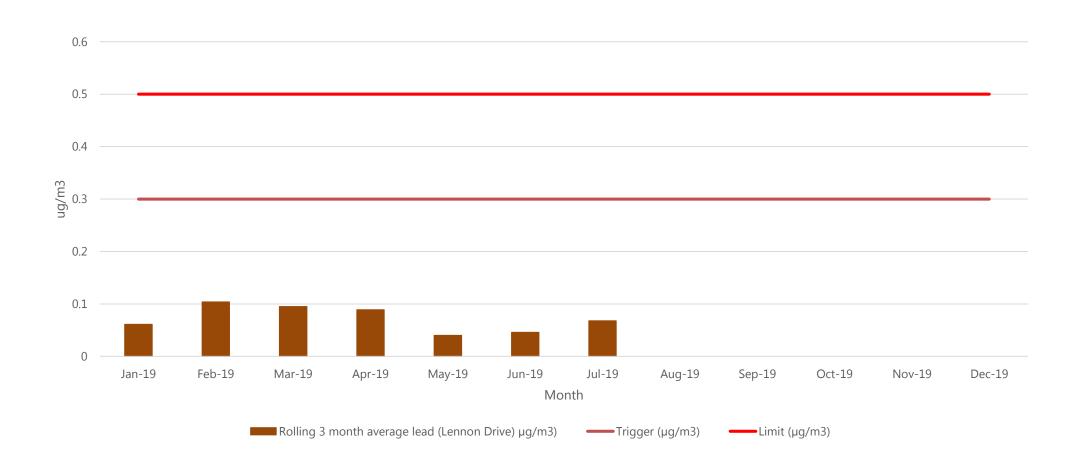
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site JULY 2018– JULY 2019



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

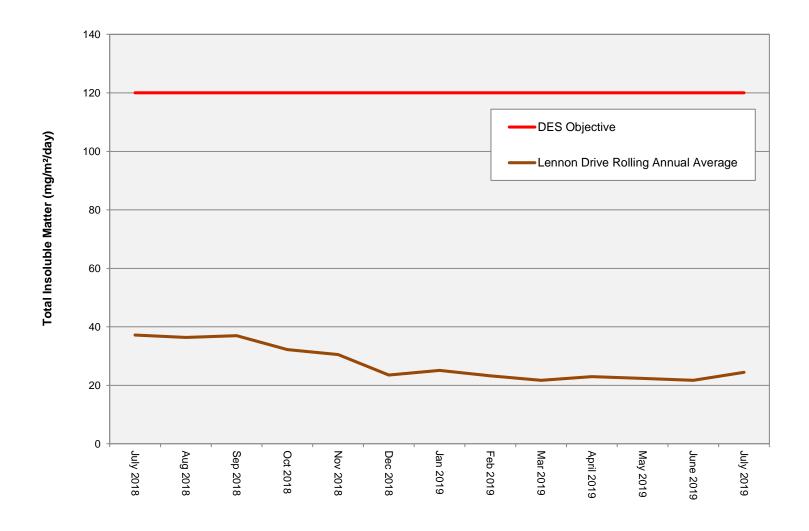
Rolling annual average = the moving average of the previous 11 results and the current result

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

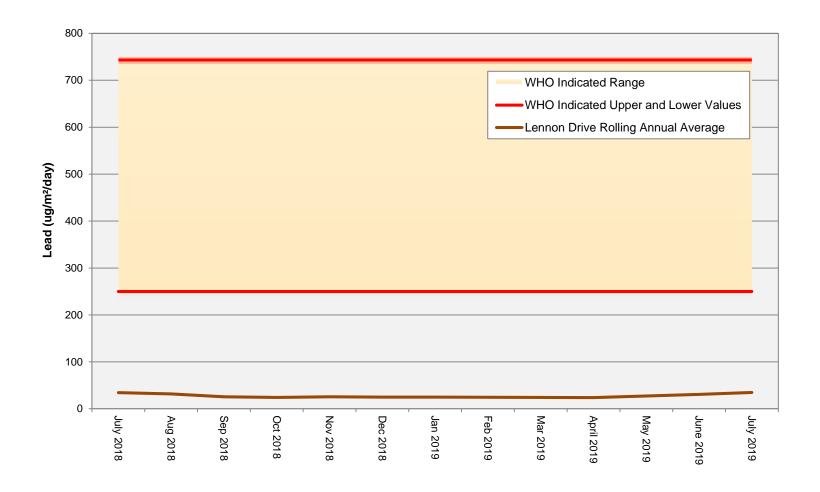
Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site JULY 2018– JULY 2019



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

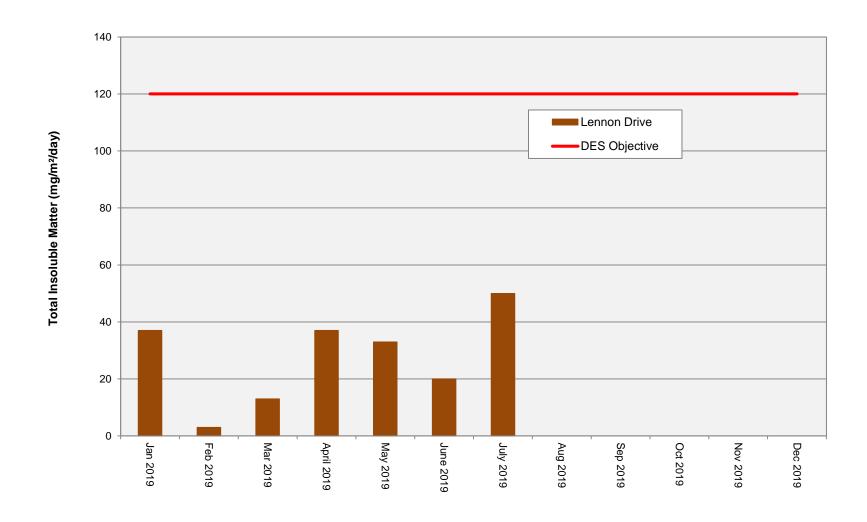
Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Lennon Drive Site JULY 2018– JULY 2019



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 2019



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 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.