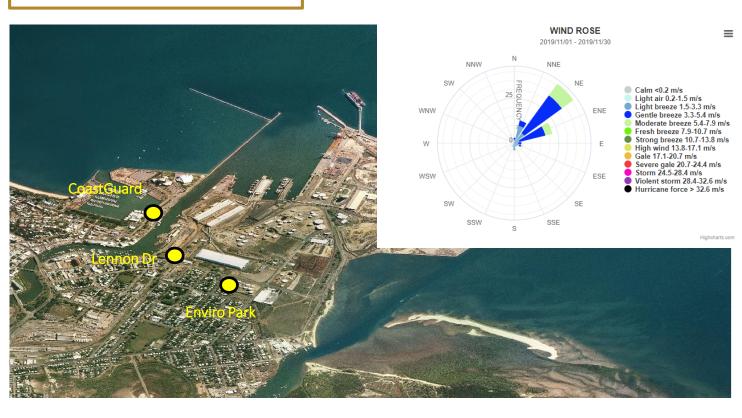
AIR QUALITY MONITORING IN TOWNSVILLE

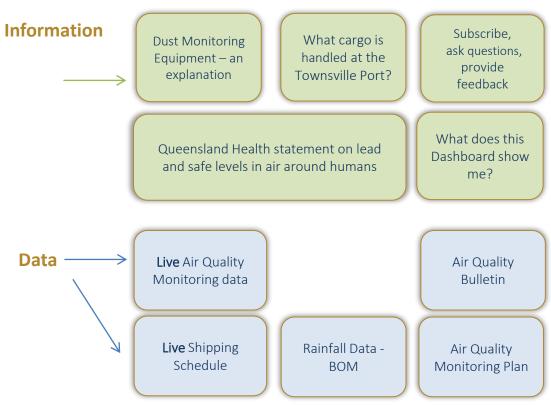
Air Quality Monitoring in Townsville is conducted separately by both the Department of Environment and Science (DES), and Port of Townsville Limited.

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 November 2019

Date In/Out	Vessel Name	Berths	Cargo	Date In/Out	Vessel Name	Berths	Cargo
01-03	VENUS LEADER	4	Motor Vehicles	14-17	NACC NAPOLI	4	Cement
01-02	ATLANTIC TRAMP	9	Sugar	15-17	CHALLENGE PEGASUS	1	Fuels
01-04	GULLWING	8	Fertilizer	169-22	UNION MARK	3 NTH	Lead Ingots
02-03	BOMAR SPRING	3 STH	Containers	17-19	GOLIATH LEADER	9	Motor Vehicles, machinery
03-07	DAIWAN HERO	8	Lead Concentrates	17-18	GANADO EXPRESS	10	Fodder, cattle
04-05	GALISSAS	1	Fuels	17-19	CORONADO BAY	4	Containers
05-07	OCEAN HIGHWAY	3 STH	Motor Vehicles	18-20	OCEAN SWAGMAN	10	Fodder, cattle
06-06	GREYMAN EXPRESS	4	Fodder, cattle	19-11	GOLDEN ASPIRANT	1	Fuels
07-07	GIROLANDO EXPRESS	4	Fodder, cattle	19-19	HYPERION HIGHWAY	4	Nil Cargo
07-09	POYANG	8	Fertilizer	20-20	FINOLA	4	Fodder, cattle
07-08	K&A SP	L1	Sugar	21-21	GALLOWAY EXPRESS	4	Fodder, cattle
08-09	GOLDEN UNITY	1	Fuels	21-22	THERESA MICRONESIA	9	Molasses
08-10	KOTA NIPAH	3 STH	Containers	22-01	VOGE EMMA	3 STH	Lead concentrates
09-10	ORIENT INNOVATION	1	Fuels	23-25	KOTA NEBULA	3 NTH	Containers
09-11	WARNOW MARS	8	Copper Concentrates	23-24	BRIGHT OCEAN	4	Lead Concentrates
10-10	STOLT AZAMI	4	Caustic Soda	23-26	CH BELLA	9	Scrap metal
10-12	KYOWA ROSE	3 NTH	Tyres, copper refined	23-25	OCEAN DROVER	10	Fodder, cattle
11-17	ECKERT OLDENDORFF	3 STH	Copper, Zinc Concentrates	23-24	SAN DU AO	1	Bitumen
11-13	EIKE OLDENDORFF	8	Zinc Concentrates	25-27	LEANNE AUERBACH	10	Copper Concentrates
12-12	GLOUCESTER EXPRESS	4	Fodder, cattle	26-27	FALCON MAJESTIC	1	Fuels
12-16	PACIFIC PIONEER	10	Zinc Ferrites	27-28	LAFAYETTE BAY	1	Fuels
12-13	ASPHALT CARRIER	4	Bitumen	28-28	MAASDAM	10	Cruise
13-15	THERESA GRACE	9	Sugar	28-29	HANSA REGENSBURG	3 NTH	Containers
13-14	SOFRANA TOURVILLE	4	Containers	30-01	STAMINA SW	9	Sugar

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.



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

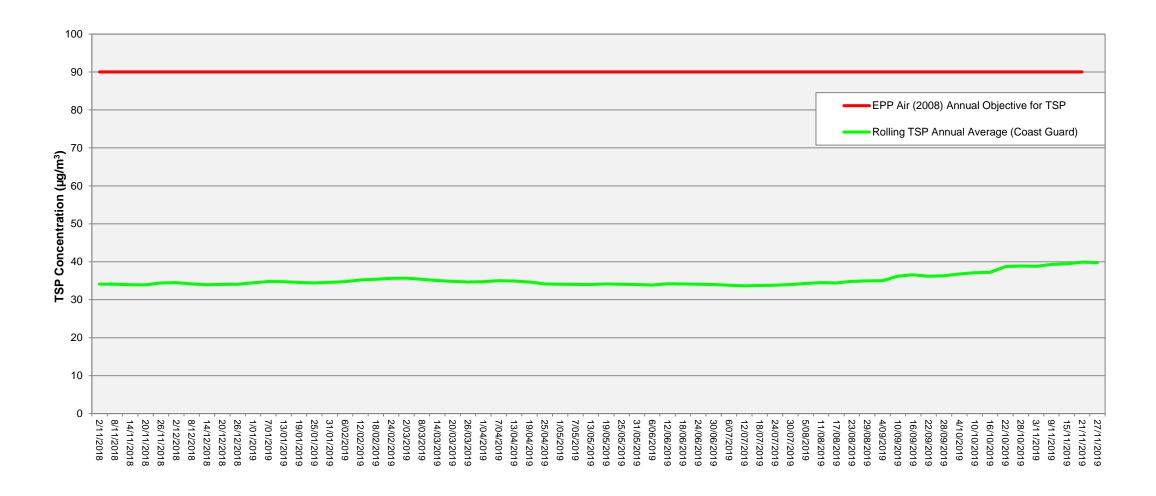
Send your enquiry or feedback to community@townsvilleport.com.au







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

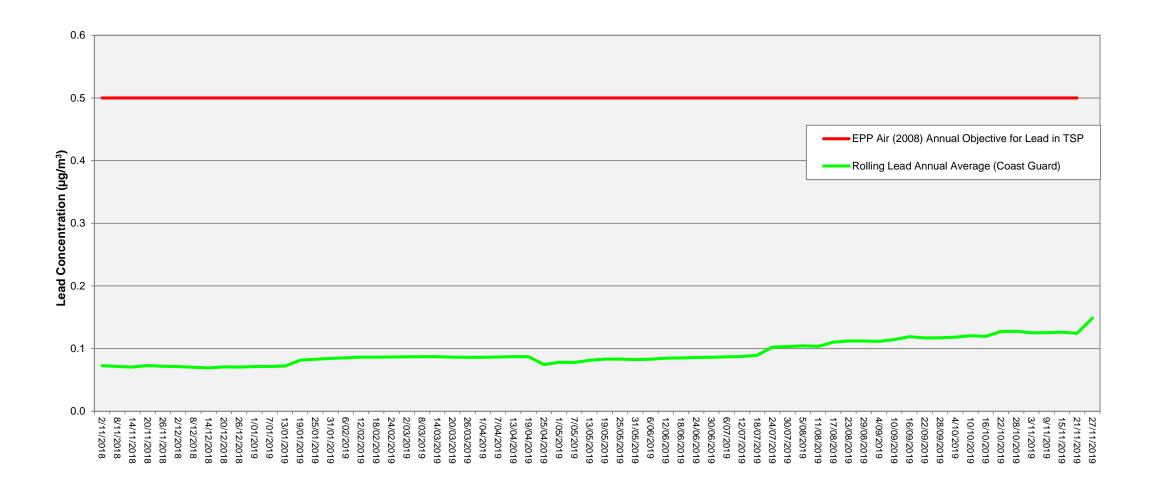


Note:

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



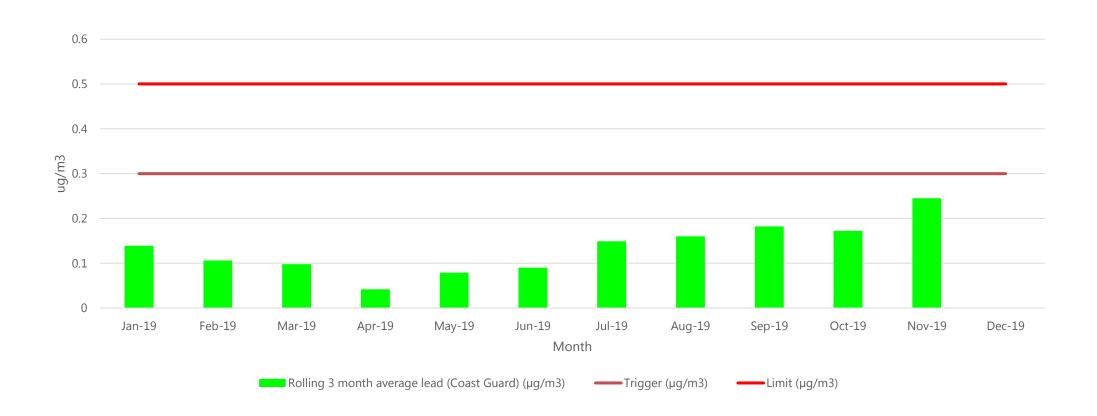
Hi-Volume Sampler – Lead in dust levels (one in six days) at Coast Guard Site NOVEMBER 2018 – NOVEMBER 2019



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

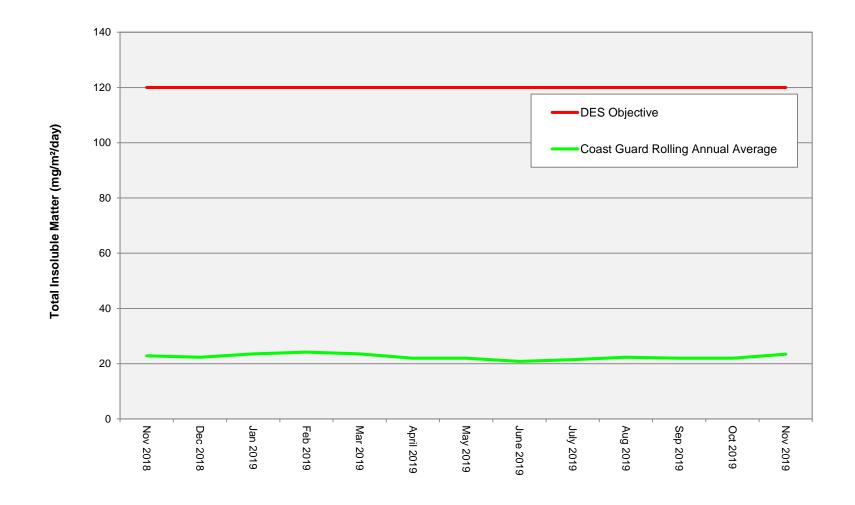


Note: Rolling 3 month average = the moving average of the previous 2 months and the current month result





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

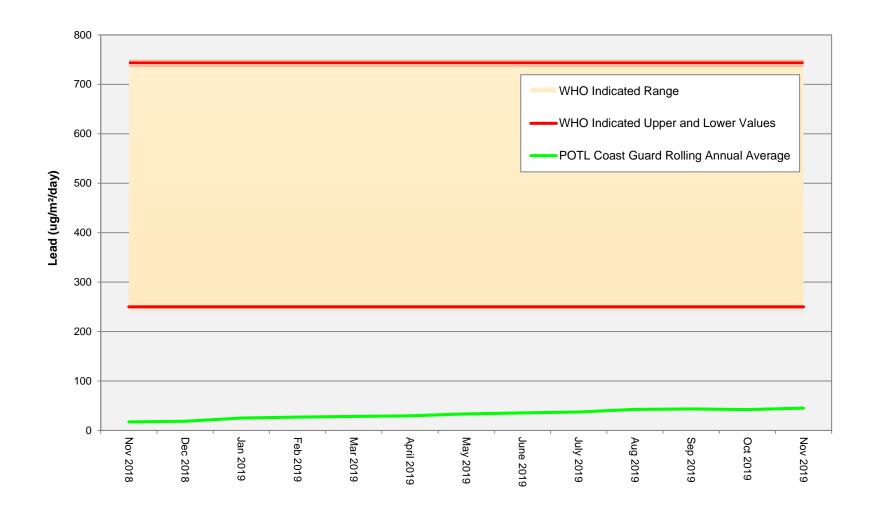


Note:

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



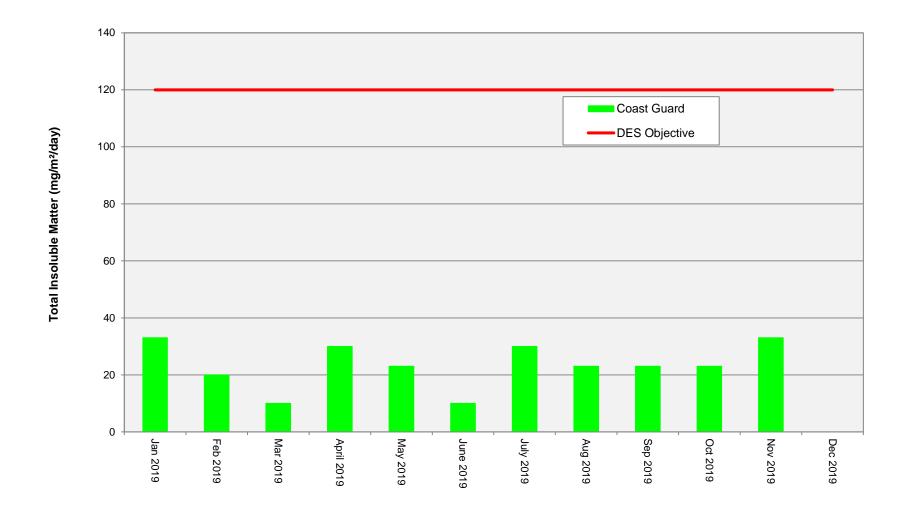
Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site NOVEMBER 2018 – NOVEMBER 2019



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.

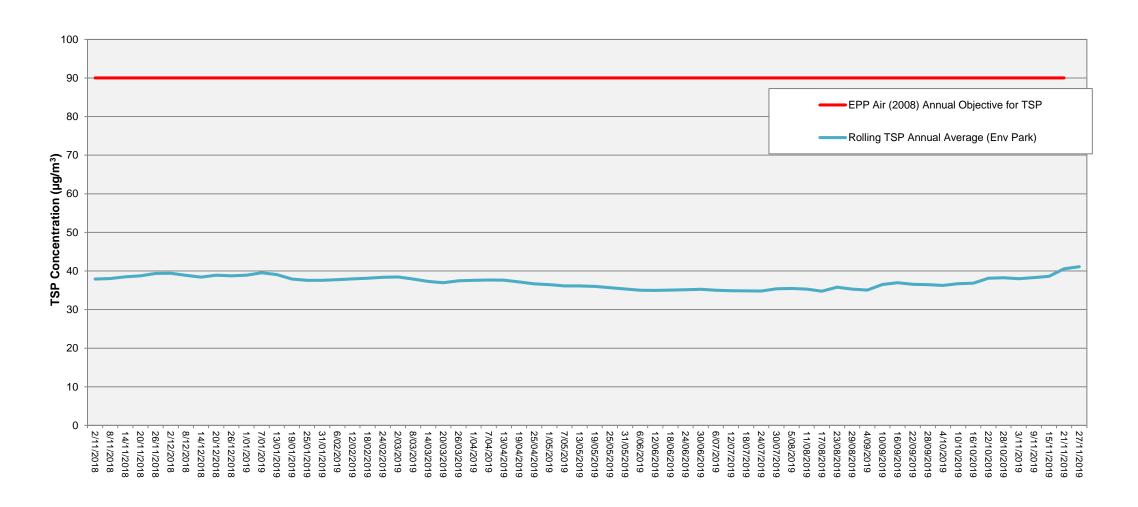
Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2019



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 NOVEMBER 2018 – NOVEMBER 2019

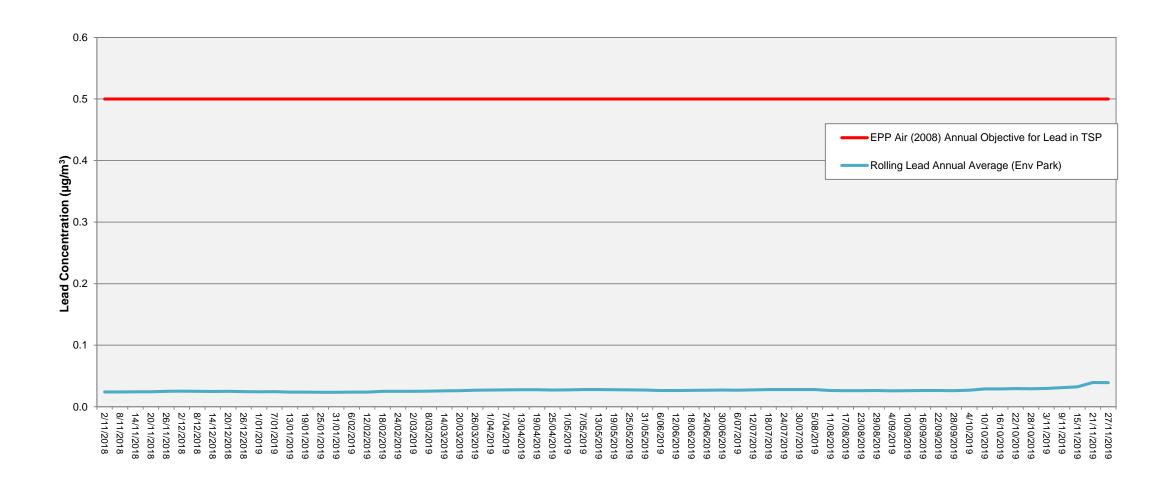


Note:

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



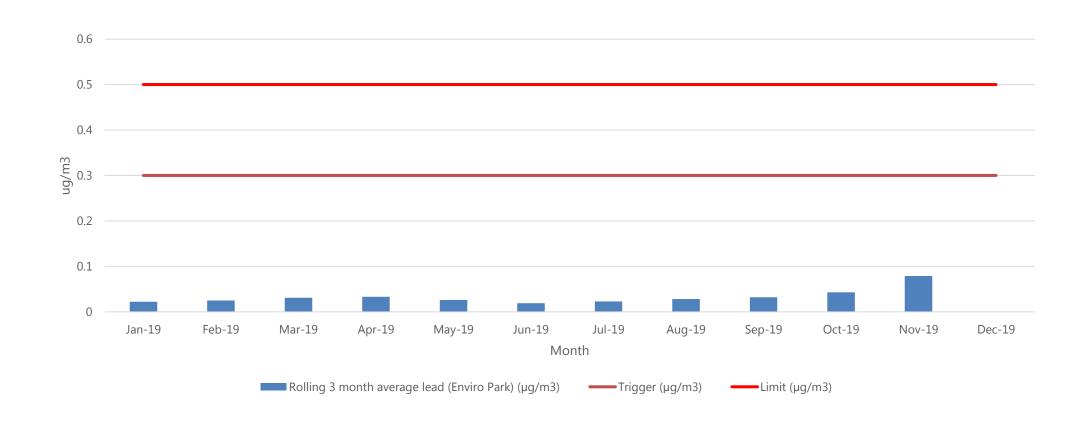
Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site NOVEMBER 2018 – NOVEMBER 2019



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

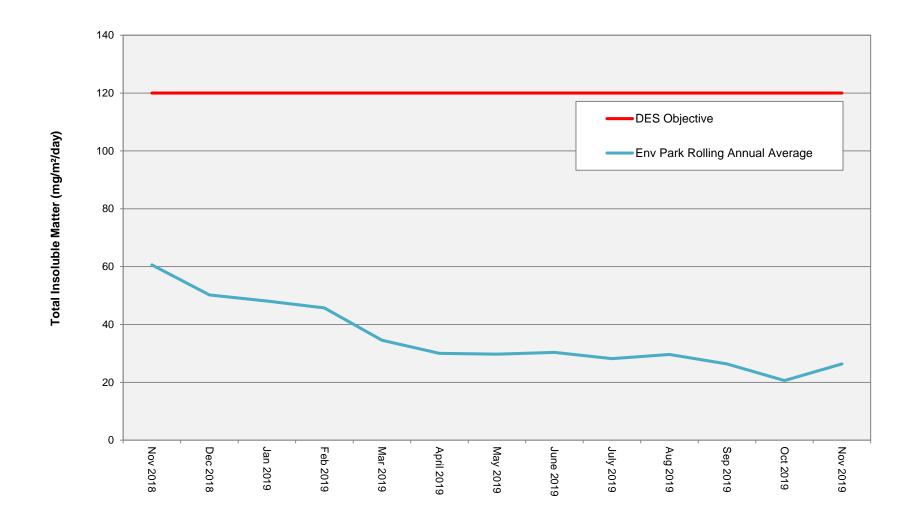
Rolling annual average = the moving average of the previous 11 results and the current result

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

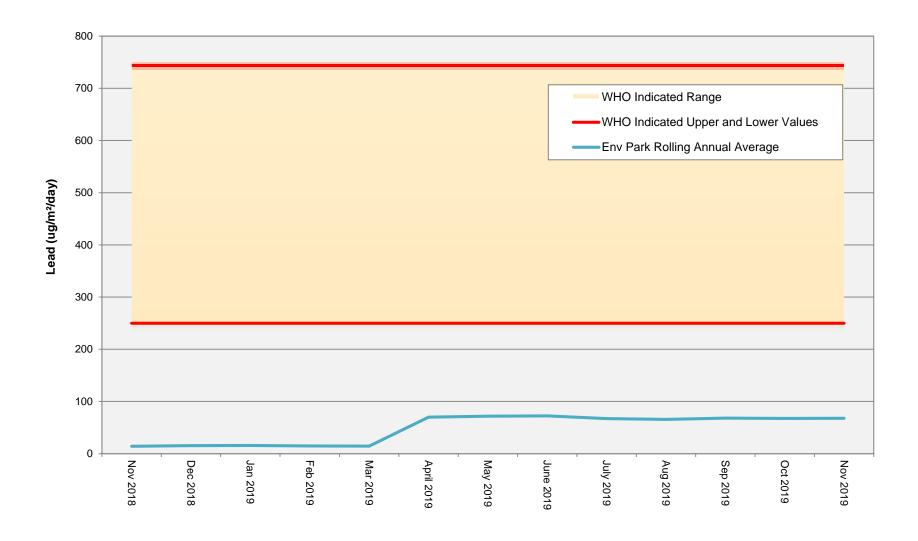
Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site NOVEMBER 2018– NOVEMBER 2019



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

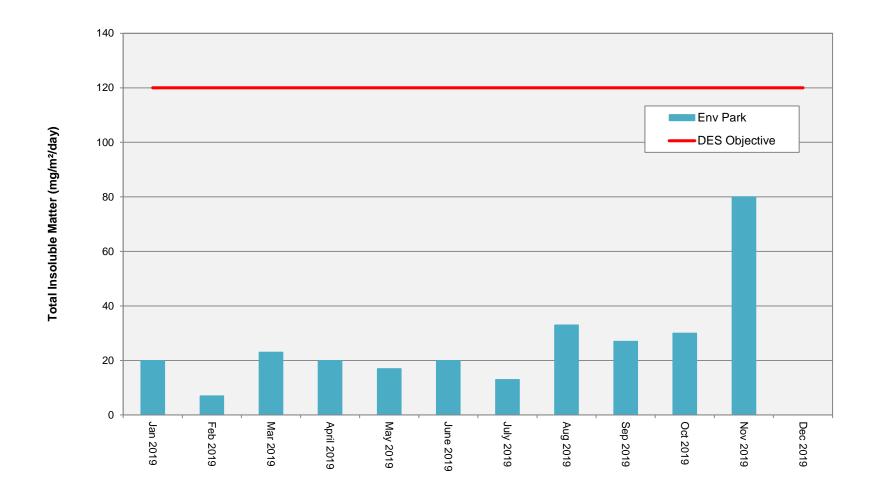
Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Environment Park site NOVEMBER 2018 – NOVEMBER 2019



Note:

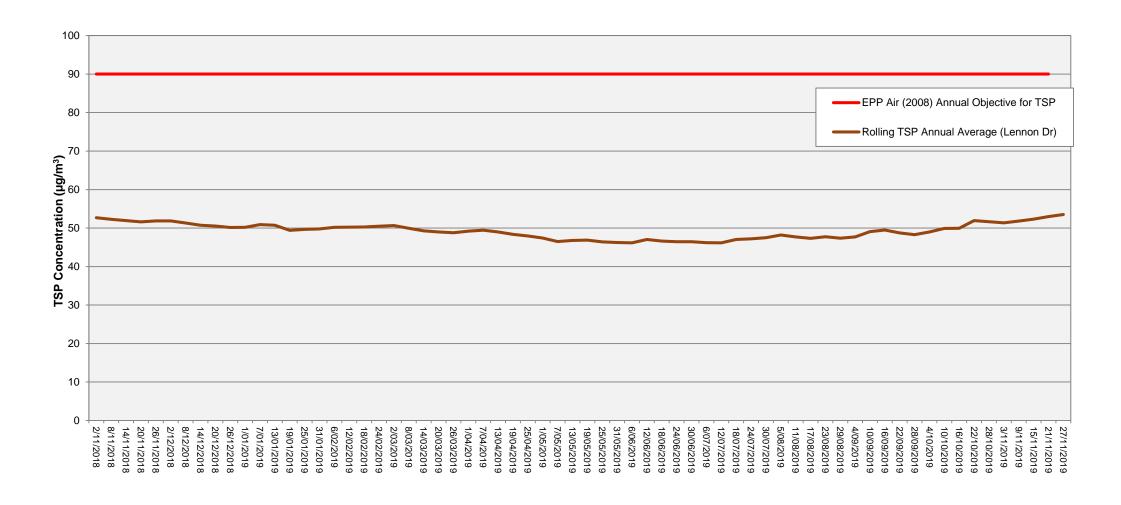
Lead Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result

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

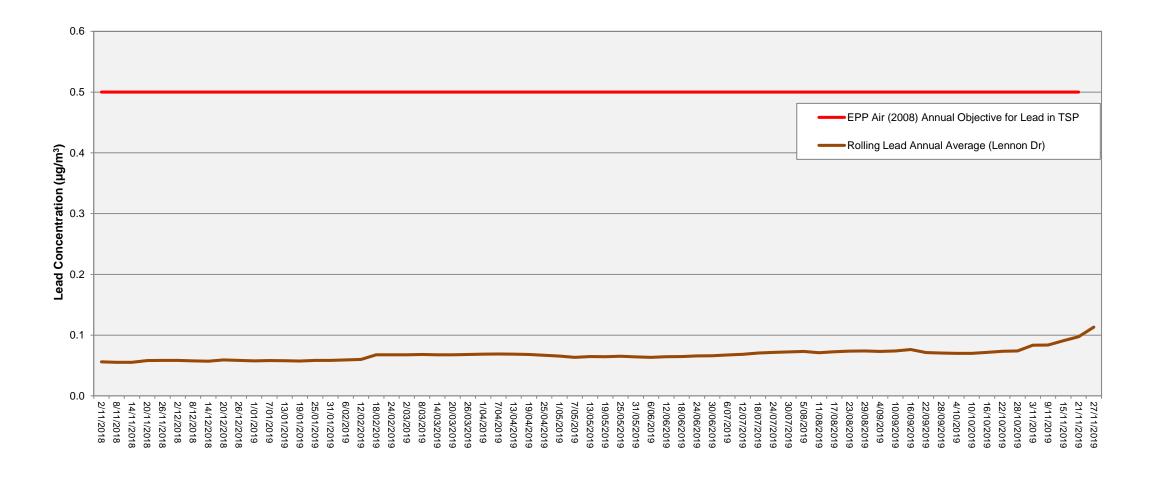
Hi-Volume Sampler - General total dust levels (one in six days) at Lennon Drive site NOVEMBER 2018– NOVEMBER 2019



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

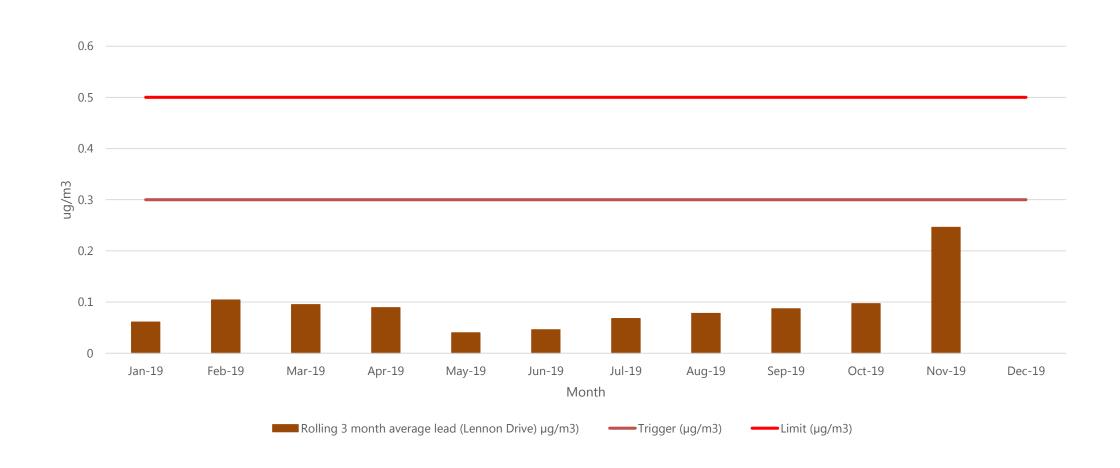
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site NOVEMBER 2018— NOVEMBER 2019



Note:

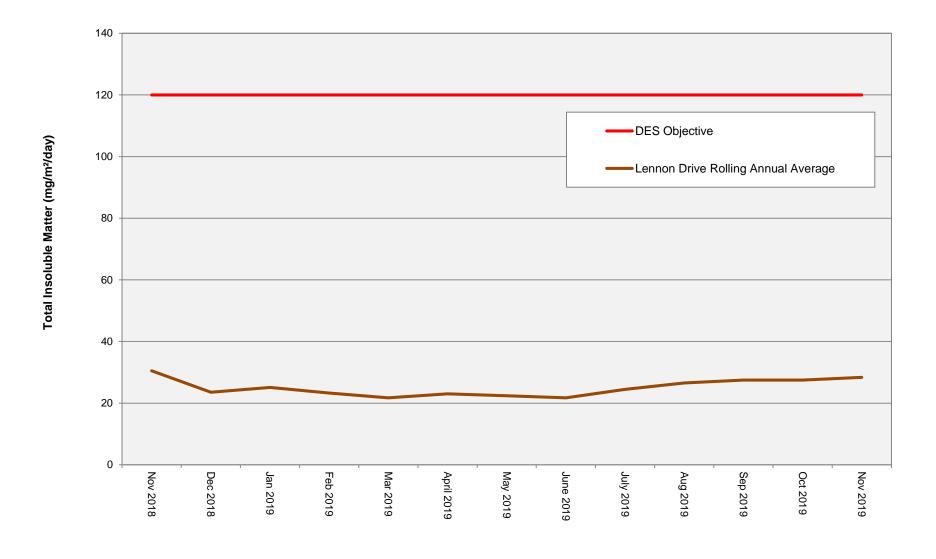
Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result

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

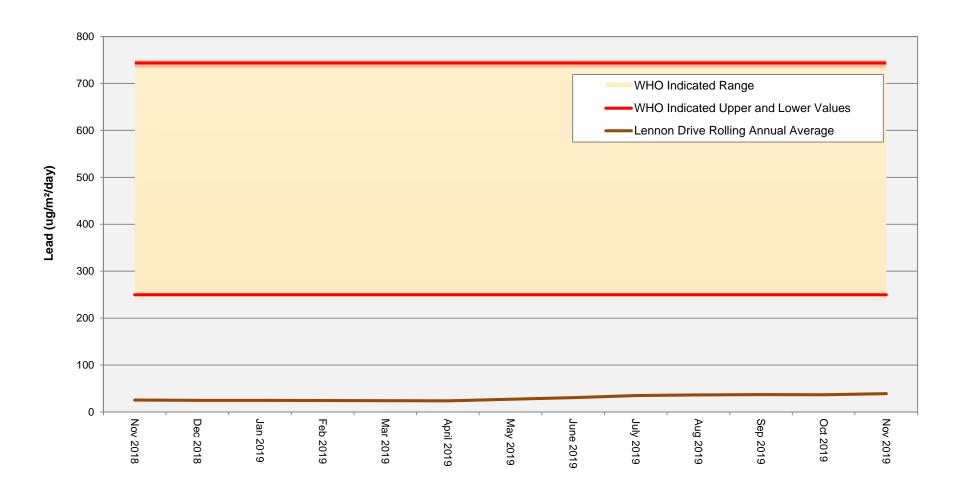
Dust Deposition Gauge - General dust deposition levels (monthly) at Lennon Drive Site NOVEMBER 2018– NOVEMBER 2019



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 NOVEMBER 2018– NOVEMBER 2019

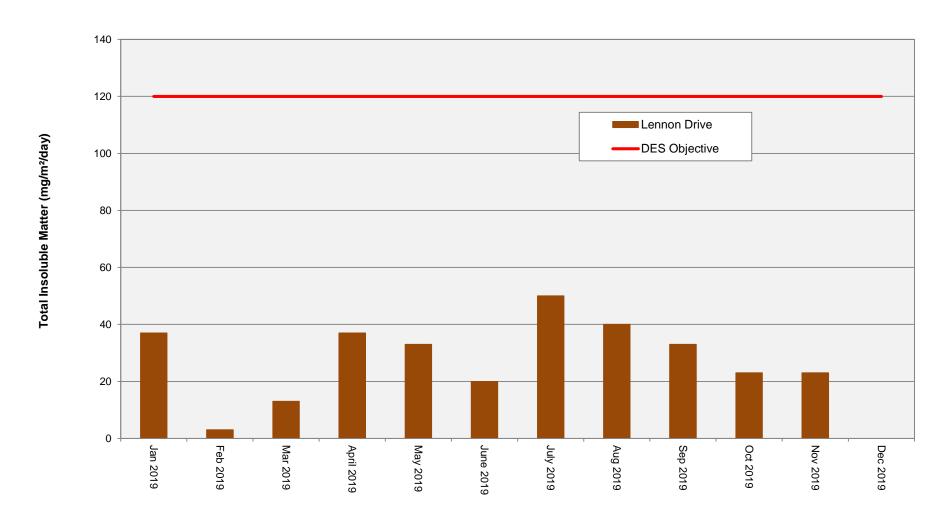


Note: Lead Concentration units = micrograms per square metre per day

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.