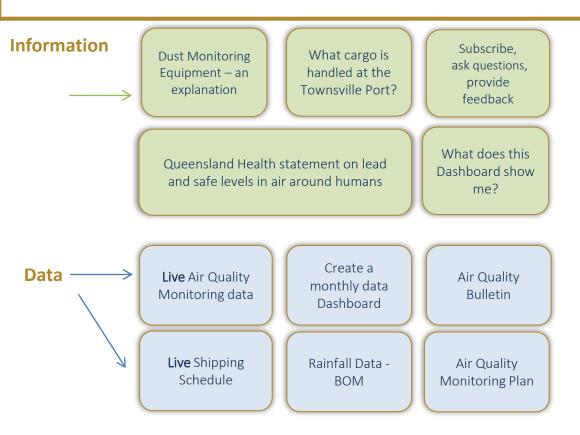
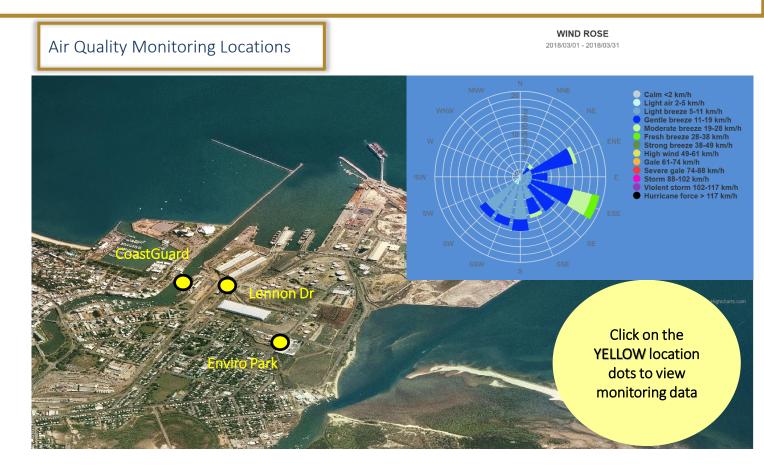
Townsville Port | Air Quality Dashboard | MARCH 2018





SHIPPING MOVEMENT

Date In/Out	Vessel Name	Berths	Cargo
1-7	YANGTZE ETERNAL	10	Zinc Concentrates
1-4	VITA N	3	Containers
3-4	LILY_OLDENDORFF	8	Fertilizer
5-7	KOTA NASRAT	3	Containers
6-7	VIKING CORAL	9	Motor Vehicles
6-10	MERWEDEGRACHT	8	Copper Concentrates
7-9	MIA SCHULTE	3	Containers
8-9	LUGA	4	Cement
9-9	KOGARAH	10	Containers
10-10	GOLDEN TAKA	4	Caustic Soda
10-11	ECO DESTINY	3	Zinc Concentrates
11-14	NEW IZUMO	4	Scrap
12-12	AZAMARA JOURNEY	10	NIL
12-14	ALPINE MARIA	1	Fuels
12-12	PRESTIGE ACE	9	Motor Vehicles
13-14	EDWARD OLDENDORFF	3	Concentrates
14-15	OSLO BULK 1	8	Fertilizer
14-14	DELPHINUS LEADER	9	Motor Vehicles
14-15	GRAND DAHLIA	4	Motor Vehicles
15-15	SEVEN SEAS VOYAGER	10	Passenger Vessel
16-16	AAL HONG KONG	3	General/Break Bulk
16-16	STRAIT SHOOTER	10Barge	Machinery

Date In/Out	Vessel Name	Berths	Cargo
16-16	ADF	9	Army Equipment
17-18	GULF CRYSTAL	1	Fuels
17-18	ATHENA TRIUMPH	3	Tyres
18-19	AAL NEWCASTLE	3	General/Break Bulk
19-21	VIYADA NAREE	8	Fertilizer
19-20	BOW SINGAPORE	1	Fuels
20-21	GALLOWAY EXPRESS	3	Cattle/Fodder
20-25	TAO BRAVE	10	Zinc Concentrates
20-21	BRITISH NAVIGATOR	1	Fuels
21-22	OCEAN UTE	4	Cattle/Fodder
21-24	FLORA DELMAS	3	Containers
22-22	GUARDIAN LEADER	9	Motor Vehicles
22-25	OSLO BULK 5	8	Fertilizer
23-25	KYOWA HIBISCUS	3	Containers, Copper Refined
24-24	GANADO EXPRESS	4	Cattle/Fodder
24-25	SOFRANA TOURVILLE (NEW)	3	Containers
25-30	VIENNA WOOD N	8-3	Lead Ingots, zinc concentrates
26-28	EDWARD OLDENDORFF	3	Zinc Concentrates
27-27	BRASILIA HIGHWAY	9	Motor Vehicles
27-29	SEA ANGEL	11	Lead Concentrates

Date In/Out	Vessel Name	Berths	Cargo
28-30	NAUMA	10	Copper Concentrates
30-31	BOW SINGAPORE	1	Sulphuric Acid
30-1	TETON	9	Sugar
30-31	GREYMAN EXPRESS	10	Cattle/Fodder
31-1	THERESA MICRONESIA	8	Molasses



AIR QUALITY MONITORING IN TOWNSVILLE

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

Click here to visit DEHP's monitoring network

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

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 – expecting 19 vessel visits in 2018.

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 4781 1551 and asked to be added to the list.

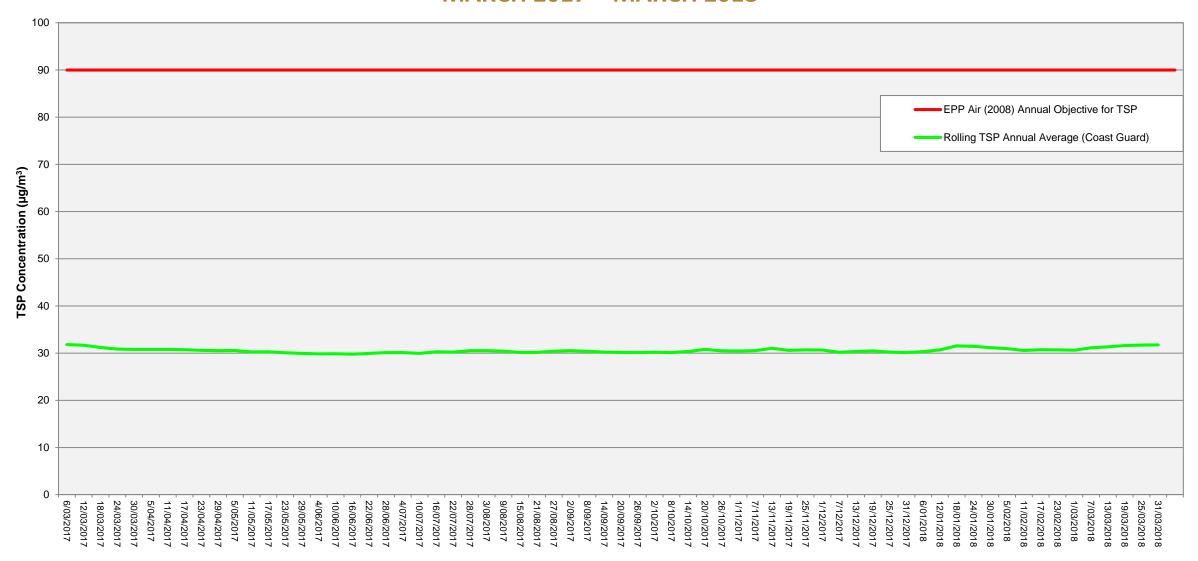
Ask a Question / Provide Feedback

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 MARCH 2017 – MARCH 2018

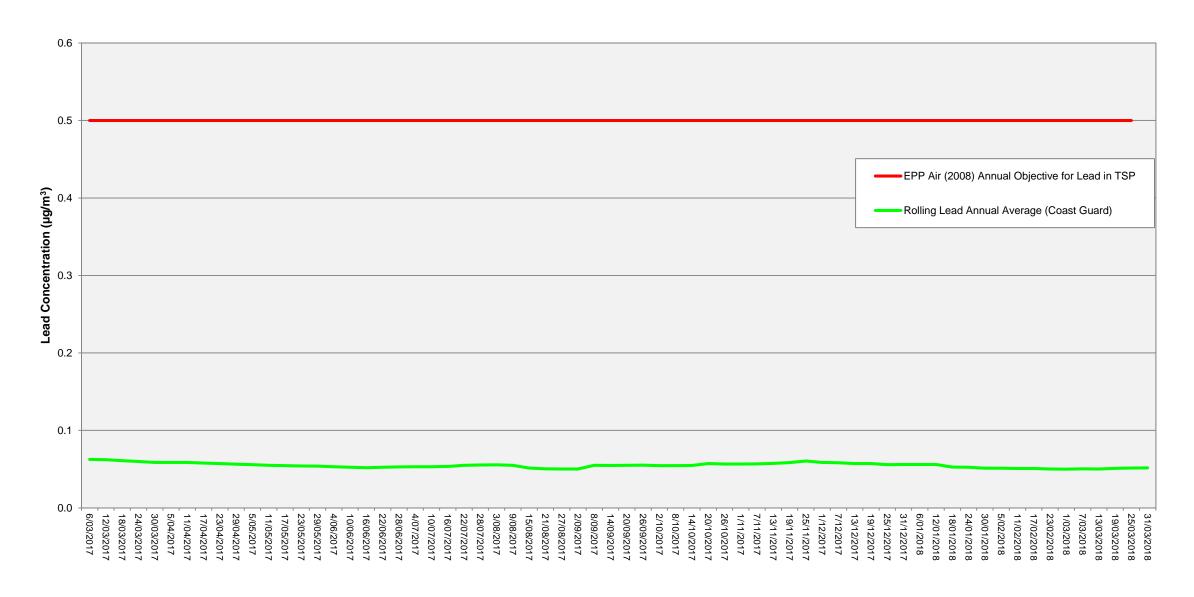


Note:

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 MARCH 2017 - MARCH 2018



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



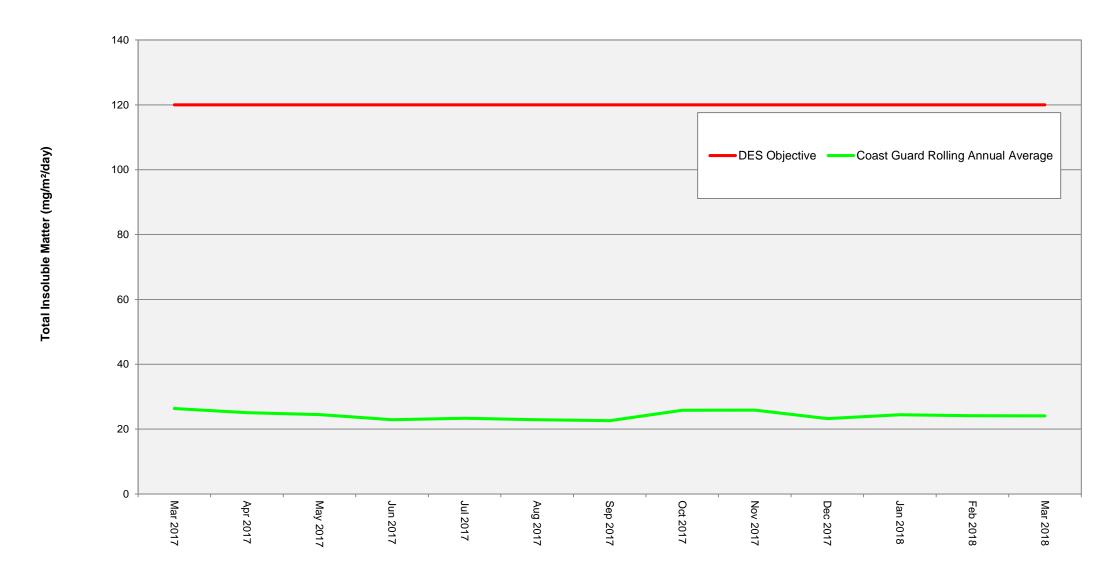
Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site JANUARY 2018 – MARCH 2018



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 MARCH 2017 - MARCH 2018

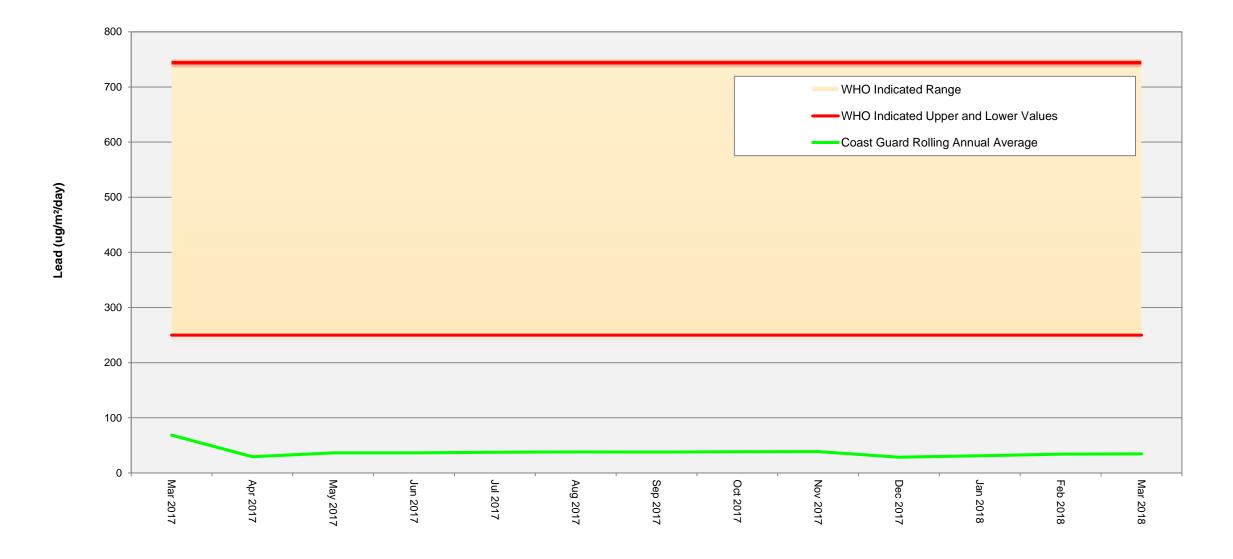


Note:

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 **MARCH 2017 - MARCH 2018**

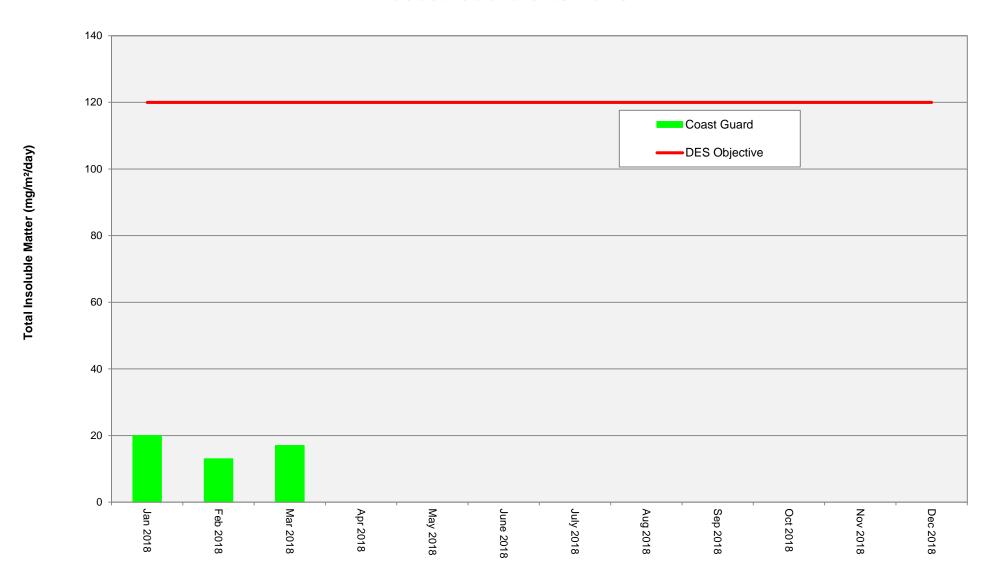


Note:

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



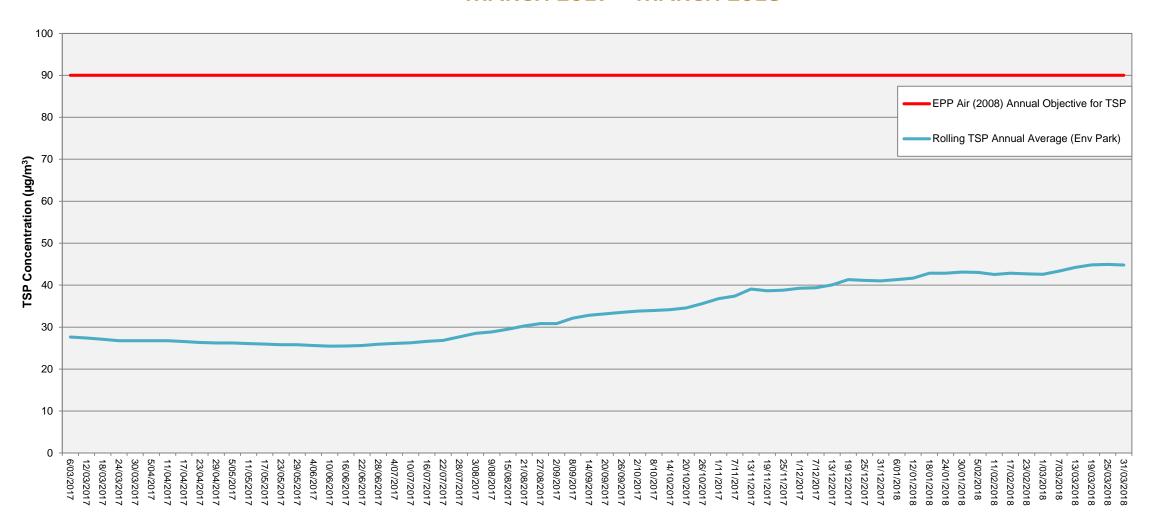
Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site 2018



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 MARCH 2017 – MARCH 2018

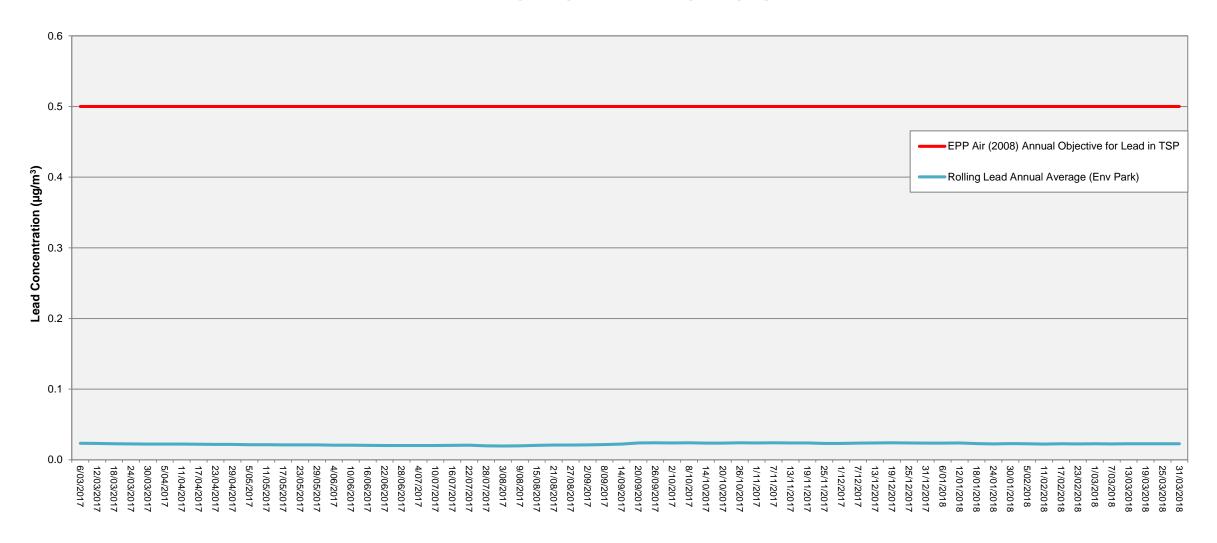


Note:

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 MARCH 2017 – MARCH 2018

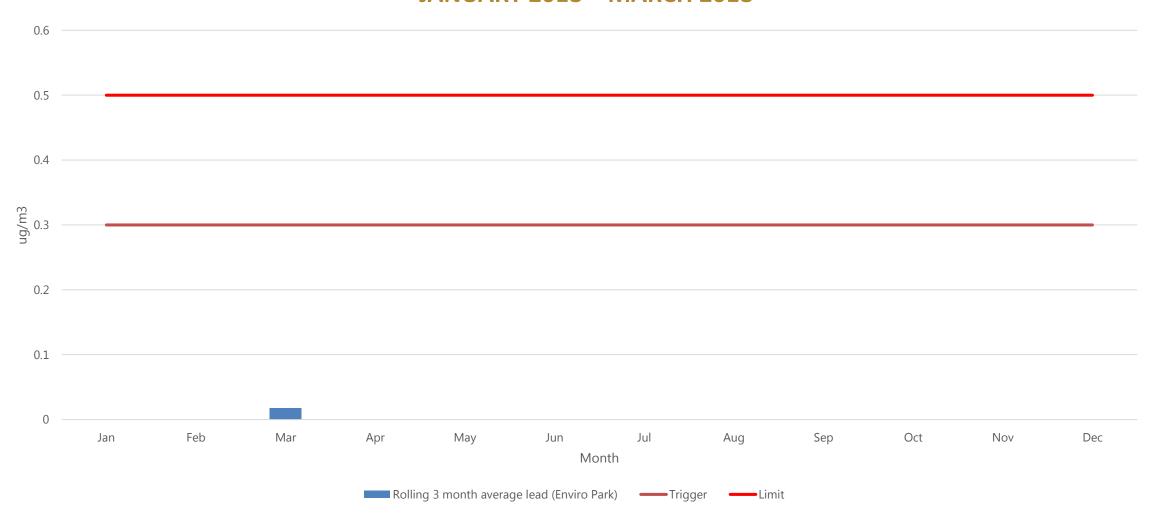


Note:

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



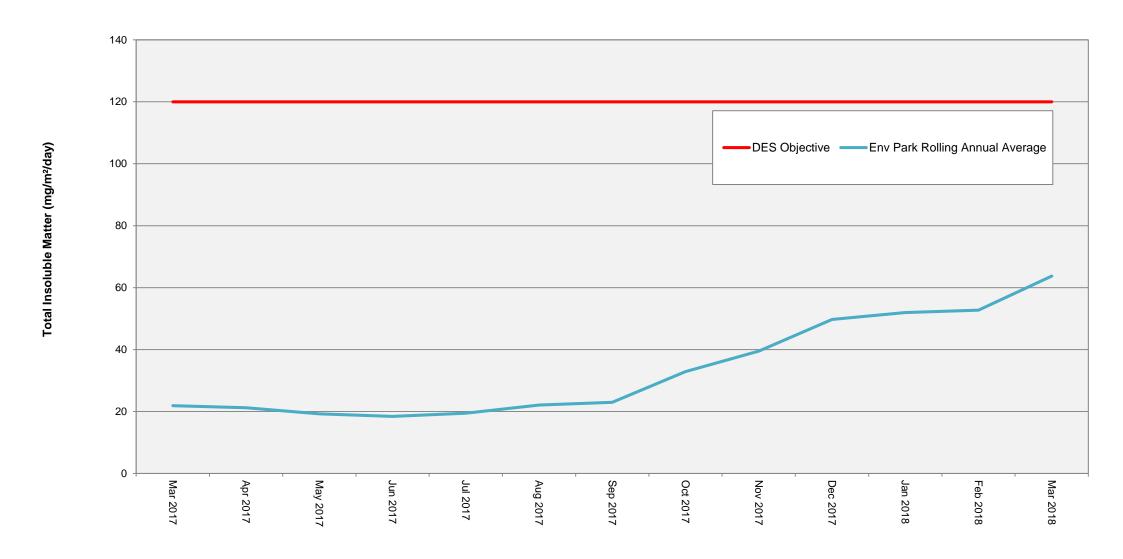
Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site JANUARY 2018 - MARCH 2018



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



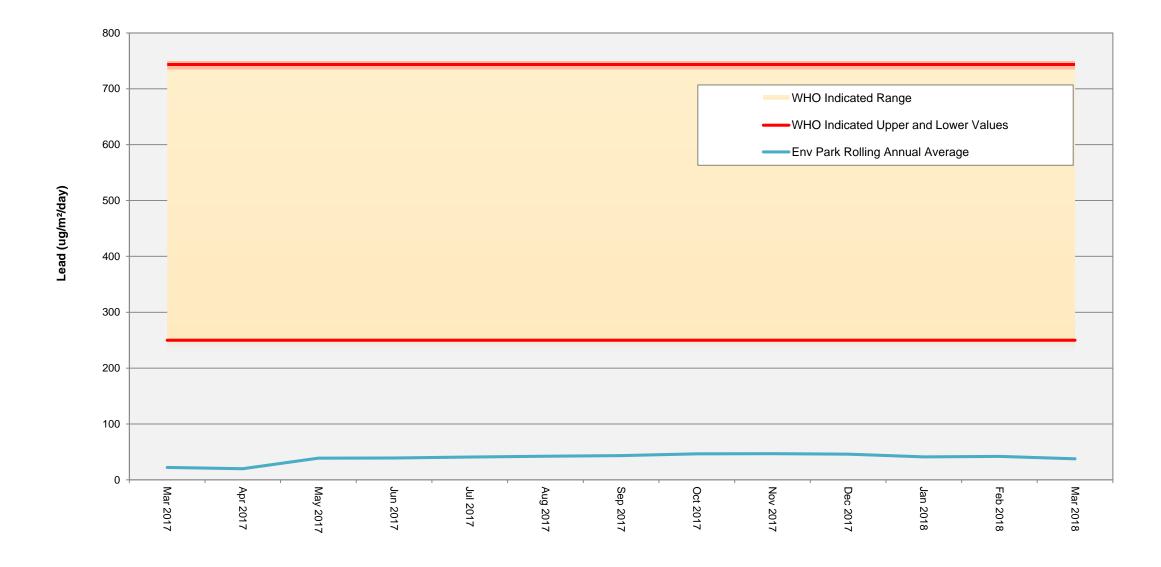
Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site **MARCH 2017 – MARCH 2018**



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 MARCH 2017 – MARCH 2018

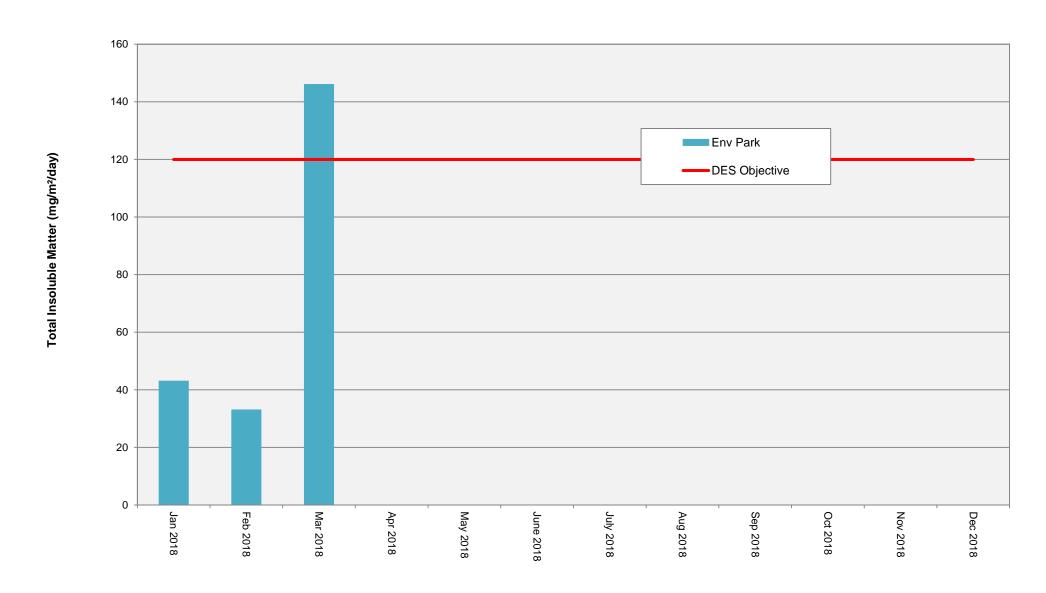


Note: Lead Concentration units = micrograms per square metre per day

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

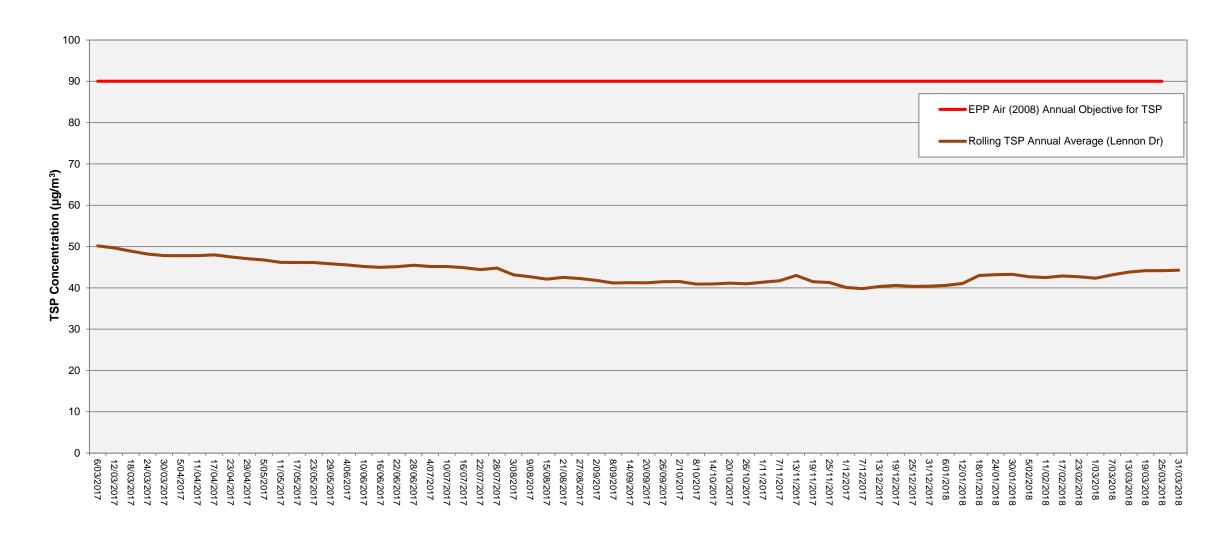


Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2018



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 MARCH 2017 – MARCH 2018

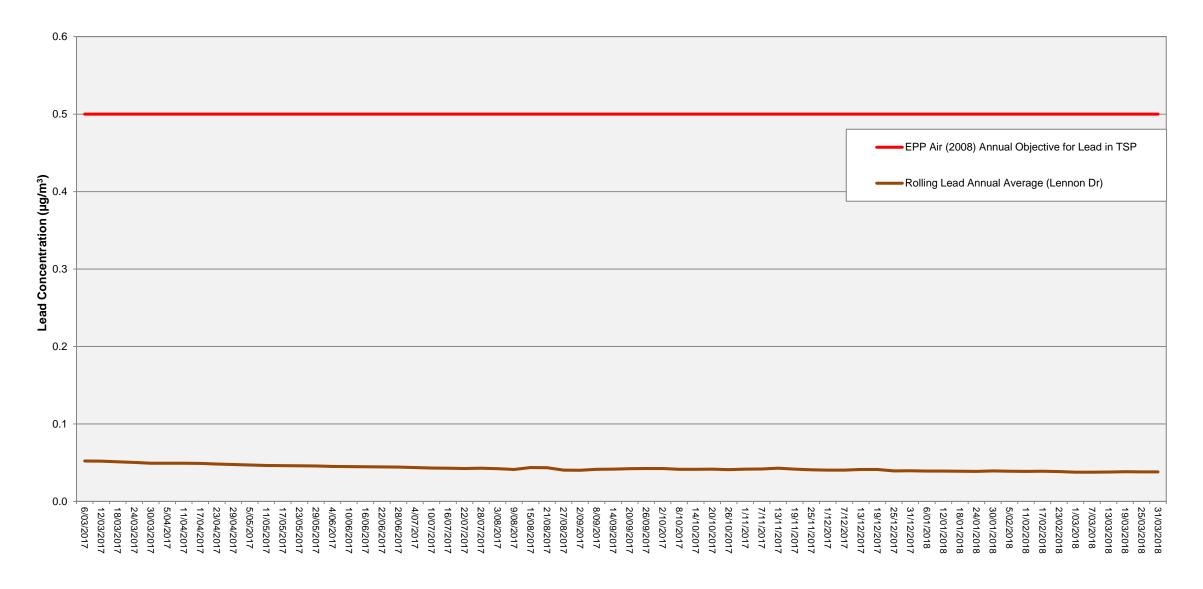


Note: TSP Concentration units = micrograms per cubic metre per 24 hour period

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 MARCH 2017 – MARCH 2018



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



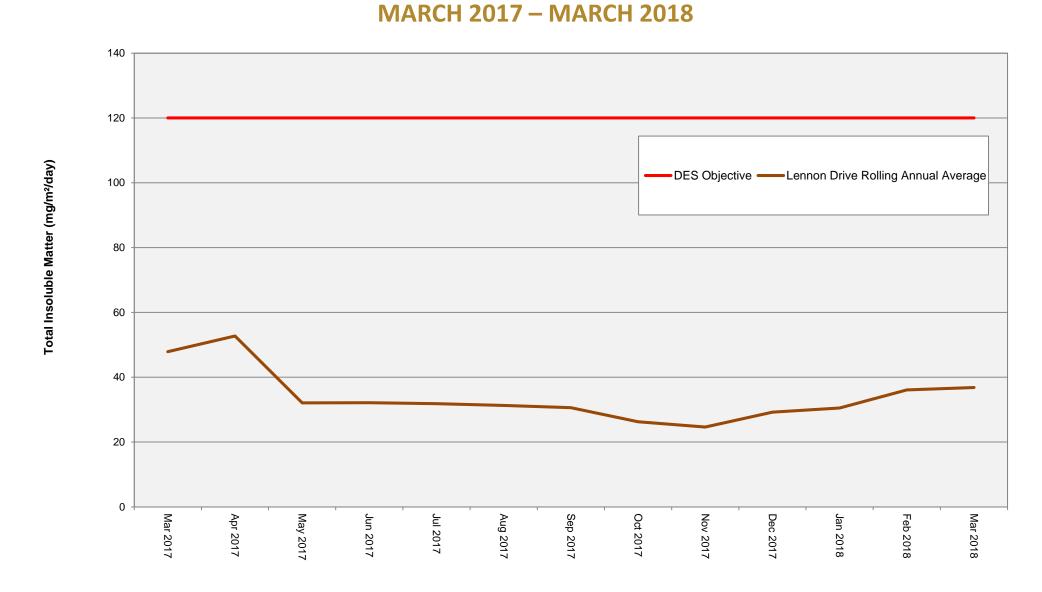
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site JANUARY 2018 – MARCH 2018



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

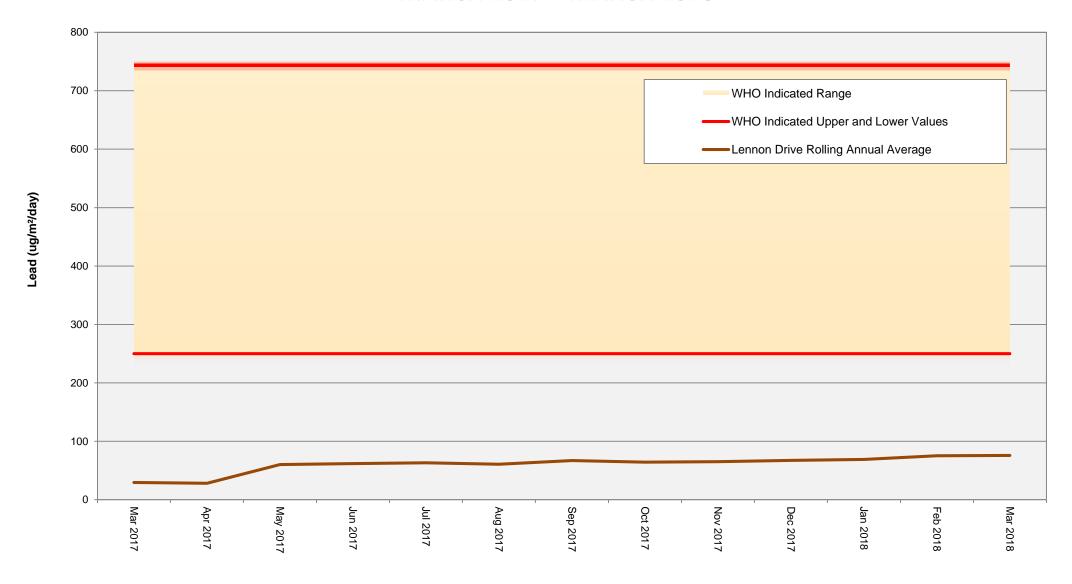


Note:

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 MARCH 2017 – MARCH 2018

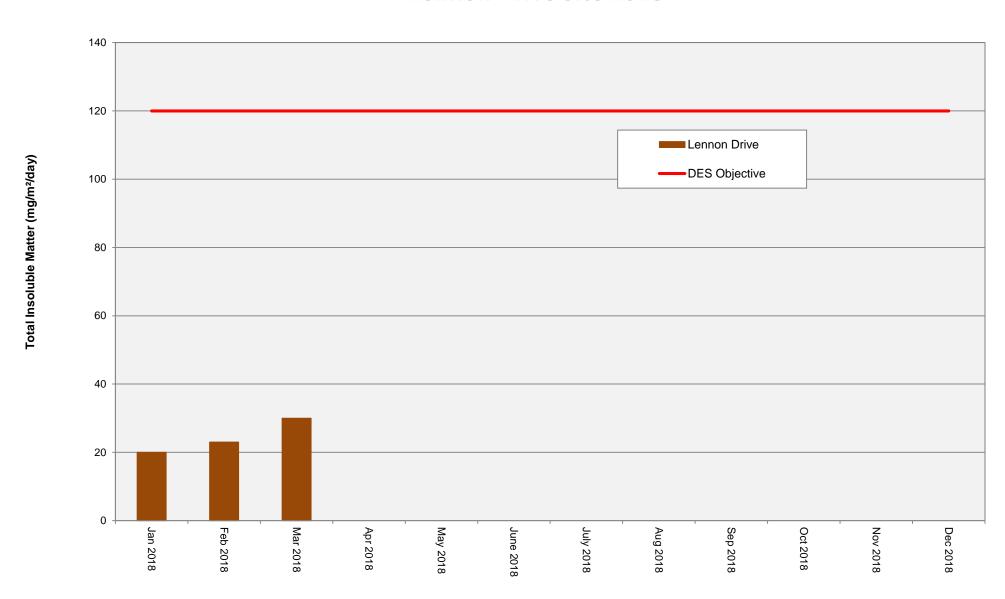


Note: Lead Concentration units = micrograms per square metre per day

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 2018



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.