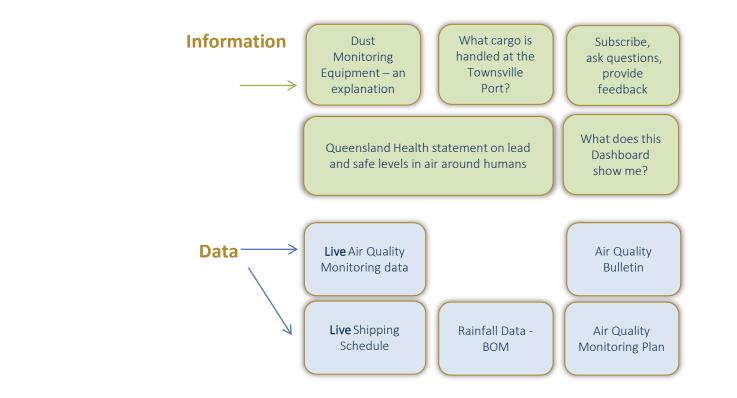


Air Quality Dashboard | October | 2023

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



Shipping Movements in October 2023

Date In/Out	Vessel Name	Cargo	Berth
30 Sep 2023 - 01 Oct 2023	KEN KON	CONCENTRATES (EXPORT)	3 STH
30 Sep 2023 - 04 Oct 2023	TAHO AFRICA	CEMENT (IMPORT)	4
01 Oct 2023 - 03 Oct 2023	ADF		10
01 Oct 2023 - 01 Oct 2023	ARDMORE SEAVENTURE	FUELS (IMPORT)	1
01 Oct 2023 - 03 Oct 2023	GOLIATH LEADER	MOTOR VEHICLES (IMPORT)	9
02 Oct 2023 - 02 Oct 2023	DAREEN	CATTLE (EXPORT)	3 NTH
02 Oct 2023 - 03 Oct 2023	THERESA MICRONESIA	MOLASSES (EXPORT)	8
03 Oct 2023 - 05 Oct 2023	ANL KOKODA	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH
03 Oct 2023 - 05 Oct 2023	JASPER ARROW	MOTOR VEHICLES (IMPORT)	9
04 Oct 2023 - 05 Oct 2023	KEN KON	CONCENTRATES (EXPORT)	4
05 Oct 2023 - 05 Oct 2023	GLOUCESTER EXPRESS	CATTLE (EXPORT)	10
05 Oct 2023 - 06 Oct 2023	TAHO AFRICA	CEMENT (IMPORT)	4
05 Oct 2023 - 06 Oct 2023	ESL WINNER	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH
06 Oct 2023 - 08 Oct 2023	STAMINA SW	CONCENTRATES (EXPORT)	8
06 Oct 2023 - 15 Oct 2023	DREAM SKY	ZINC CONCENTRATES (IMPORT)	10
06 Oct 2023 - 09 Oct 2023	LANNA NAREE	LEAD INGOTS (EXPORT)	3 STH
07 Oct 2023 - 08 Oct 2023	FUNING	SUGAR (EXPORT)	9
08 Oct 2023 - 10 Oct 2023	FEDERAL SPRUCE	SUGAR (EXPORT)	9
10 Oct 2023 - 12 Oct 2023	PAN PRIDE	SUGAR (EXPORT)	9
11 Oct 2023 - 13 Oct 2023	NADI CHIEF	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
11 Oct 2023 - 12 Oct 2023	AFRICAN FINCH	FERTILIZER (IMPORT)	8
12 Oct 2023 - 13 Oct 2023	MAYUREE NAREE	SUGAR (EXPORT)	9
12 Oct 2023 - 17 Oct 2023	VERIGE	MOLASSES (EXPORT)	8
13 Oct 2023 - 14 Oct 2023	POSITIVE LEADER	MOTOR VEHICLES (IMPORT)	4
15 Oct 2023 - 15 Oct 2023	GRAND HERO	MOTOR VEHICLES (IMPORT)	4
16 Oct 2023 - 16 Oct 2023	GUDALI EXPRESS	CATTLE (EXPORT)	4
16 Oct 2023 - 18 Oct 2023	ADF	ARMY EQUIPMENT (IMPORT)	10
16 Oct 2023 - 17 Oct 2023	FLORA DELMAS	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH
17 Oct 2023 - 18 Oct 2023	STOLT YURI	TALLOW (EXPORT)	4
17 Oct 2023 - 18 Oct 2023	ELECTRA.GR	ZINC CONCENTRATES (EXPORT)	11
17 Oct 2023 - 19 Oct 2023	ADF	ARMY EQUIPMENT (IMPORT)	9
PORT TOWNSVILLE			

Date In/Out	Vessel Name	Cargo	Berth
17 Oct 2023 - 18 Oct 2023	MANCHAC SUN	FUELS (IMPORT)	1
17 Oct 2023 - 19 Oct 2023	ADF		8
18 Oct 2023 - 18 Oct 2023	IGUAZU HIGHWAY	MOTOR VEHICLES (IMPORT)	3 NTH
18 Oct 2023 - 19 Oct 2023	DREAM SKY	ZINC CONCENTRATES (IMPORT)	10
18 Oct 2023 - 20 Oct 2023	ELECTRA.GR	ZINC CONCENTRATES (EXPORT)	4
18 Oct 2023 - 19 Oct 2023	GOLDEN YOSA	FUELS (IMPORT)	1
19 Oct 2023 - 21 Oct 2023	EASTGATE	FERTILIZER (EXPORT)	8
19 Oct 2023 - 20 Oct 2023	KEN KON	CONCENTRATES (EXPORT)	3 STH
19 Oct 2023 - 21 Oct 2023	GOLDEN CHIE	MOLASSES (EXPORT)	9
20 Oct 2023 - 21 Oct 2023	GREYMAN EXPRESS	CATTLE (EXPORT)	4
20 Oct 2023 - 22 Oct 2023	STI MANHATTAN	FUELS (IMPORT)	1
21 Oct 2023 - 22 Oct 2023	ELECTRA.GR	ZINC CONCENTRATES (EXPORT)	8
21 Oct 2023 - 21 Oct 2023	OCEAN UTE	FODDER (EXPORT)	4
21 Oct 2023 - 23 Oct 2023	AAL MERKUR	COPPER CONCENTRATES (IMPORT)	3 STH
22 Oct 2023 - 23 Oct 2023	GELBRAY EXPRESS	CATTLE (EXPORT)	4
22 Oct 2023 - 24 Oct 2023	EIDSVAAG OMEGA	GENERAL CARGO (IMPORT)	10
22 Oct 2023 - 24 Oct 2023	DAMGRACHT	ZINC CONCENTRATES (EXPORT)	8
23 Oct 2023 - 26 Oct 2023	EMMA OLDENDORFF	CONCENTRATES (EXPORT)	3 STH
24 Oct 2023 - 29 Oct 2023	EVA SUNRISE	UREA (IMPORT)	10
24 Oct 2023 - 25 Oct 2023	HANSA FREYBURG	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
24 Oct 2023 - 25 Oct 2023	SEAWAYS FRONTIER	FUELS (IMPORT)	1
24 Oct 2023 - 26 Oct 2023	THERESA MICRONESIA	MOLASSES (EXPORT)	9
25 Oct 2023 - 27 Oct 2023	LAUTOKA CHIEF	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	4
25 Oct 2023 - 27 Oct 2023	THE SHERIFF	BITUMEN (IMPORT)	1
26 Oct 2023 - 28 Oct 2023	EMMA OLDENDORFF	CONCENTRATES (EXPORT)	8
27 Oct 2023 - 29 Oct 2023	JERVIS BAY	FERTILIZER (IMPORT)	4
27 Oct 2023 - 29 Oct 2023	BUNUN DYNASTY	SUGAR (EXPORT)	9
28 Oct 2023 - 29 Oct 2023	ATLANTIC INFINITY	FUELS (IMPORT)	1
29 Oct 2023 - 30 Oct 2023	ANL DHAMBI	CONTAINERS (IMPORT) CONTAINERS (EXPORT)	3 STH
30 Oct 2023 - 30 Oct 2023	GLOUCESTER EXPRESS	CATTLE (EXPORT)	4
31 Oct 2023 - 31 Oct 2023	FRANBO LOGIC	GENERAL/BREAK BULK (IMPORT)	4

delivering sustainable prosperity



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.

Port of Townsville Overview In 2020-21, the Port of Townsville delivered strong financial results and continued to roll-out major infrastructure investments despite the impacts of the ongoing global pandemic, COVID-19. In a year where supply chains across the world have been tested, a total of 7.7 million tonnes of freight passed over our wharves, which was a 6.3 per cent decrease on last year. With a focus on cost management, the Port also reported a \$14.33 million net profit for 2020/21, 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 (down 8.14%), fertiliser (up 9.7%) and livestock (down 6%). Townsville is the number one port in Australia for copper, zinc, lead and sugar exports and services 75% 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 Containers and general cargo, motor vehicles, tyres, bulk products - cement, sulphuric acid, fertiliser, sulphur, zinc concentrate and petroleum (fuel) products.

PORT®TOWNSVILLE

Exports

General cargo, containers, timber, cattle, tallow, refined metal products, bulk products - sugar, molasses, fertiliser and mineral concentrates (zinc, copper, lead).

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OR

Visit the <u>Port of Townsville Facebook page</u> and click on "Sign up" at the top of the page.

OR

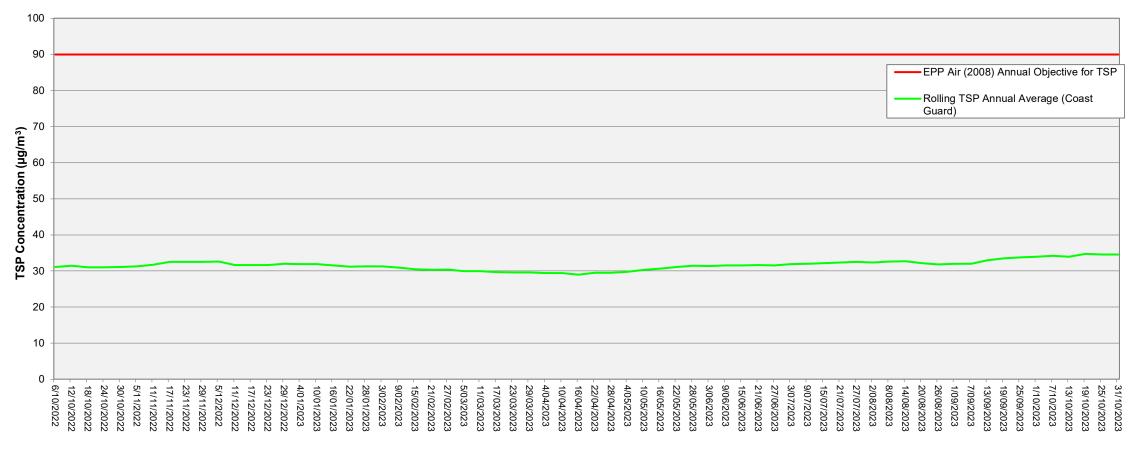
Phone 07 4781 1500 and asked to be added to the list.

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 October 2022 – October 2023



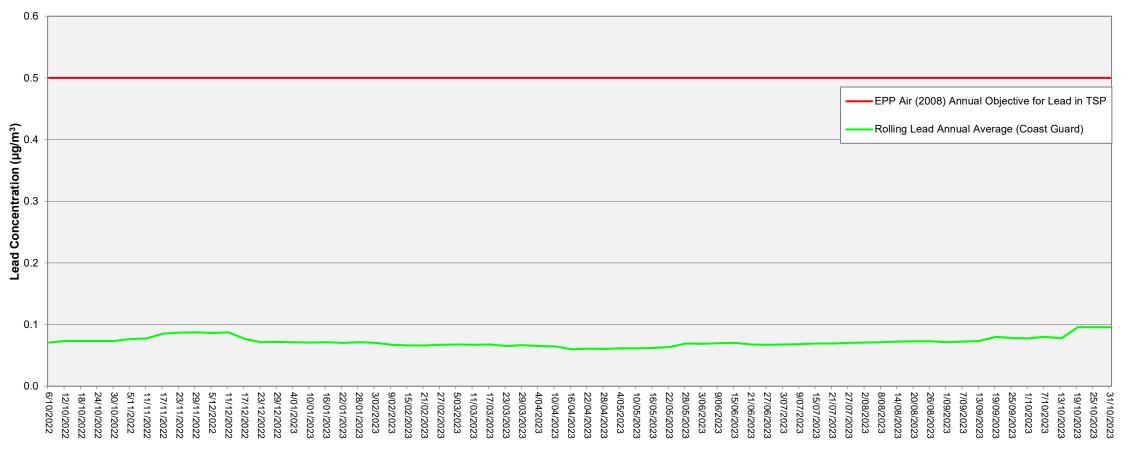
Note:

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 October 2022 – October 2023



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



0.6 0.5 0.4 0.3 0.0 0.2 0.1 0.0 Jan-23 Feb-23 May-23 Jun-23 Mar-23 Apr-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Month Rolling 3 month average lead (Coast Guard) (µg/m3) **—**Trigger (μg/m3) Limit (µg/m3)

Hi-Volume Sampler - Lead in dust levels (one in six days) at Coast Guard Site 2023

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



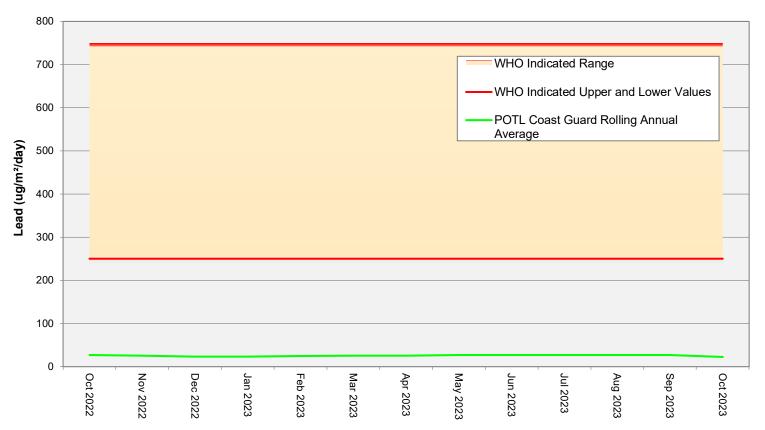


Dust Deposition Gauge – General dust deposition levels (monthly) at Coast Guard Site

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



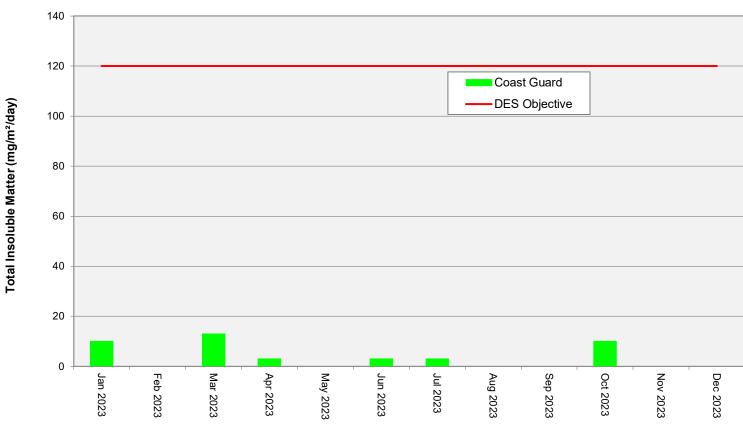
Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Coast Guard Site October 2022– October 2023



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



2023

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

No result for February 2023 due to Laboratory error.

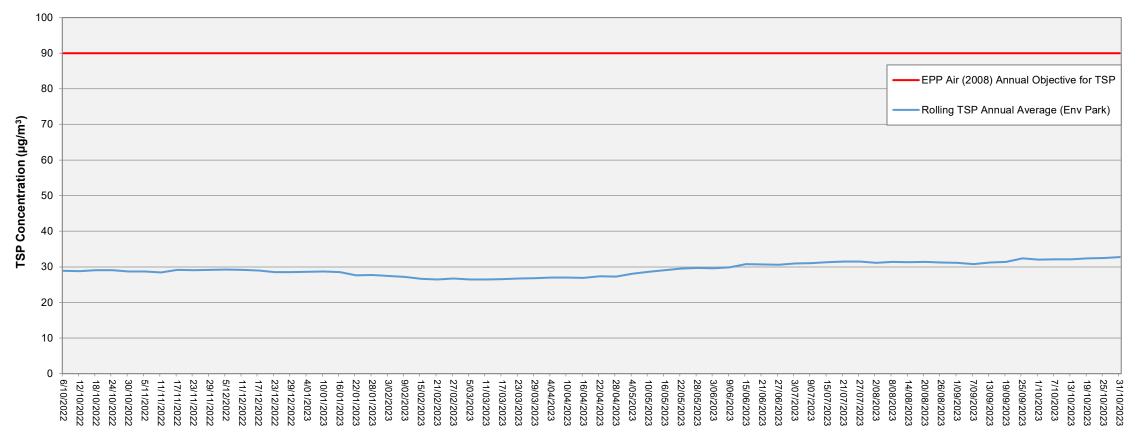
No result for May 2023 due to Laboratory error.

No result for August 2023 due to Coast Guard Air Station Upgrade.

No result for September 2023 due to Coast Guard Air Station Upgrade.

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Hi-Volume Sampler - General total dust levels (one in six days) at Environment Park site October 2022 – October 2023



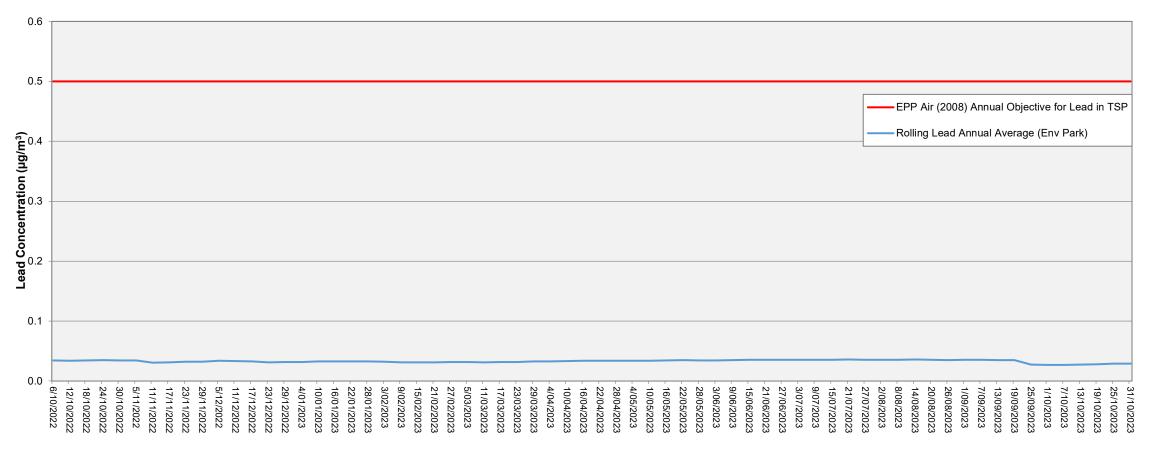
TSP Concentration units = micrograms per cubic metre per 24 hour period

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



Note:

Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site October 2022 – October 2023



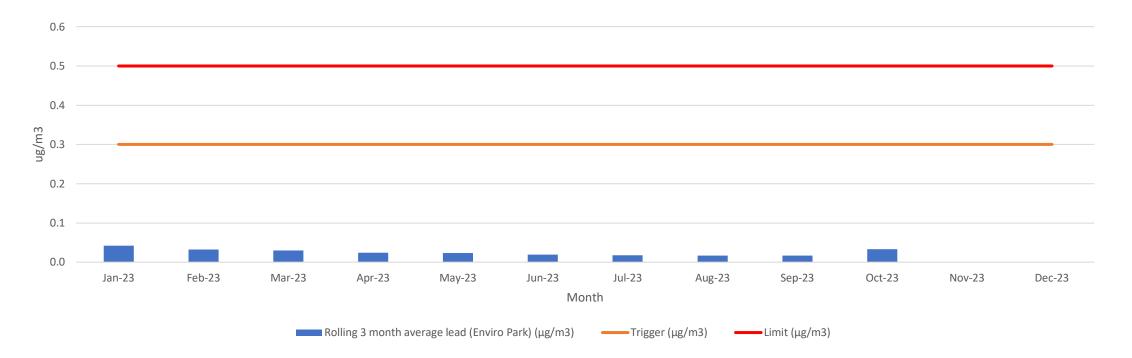
Note:

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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

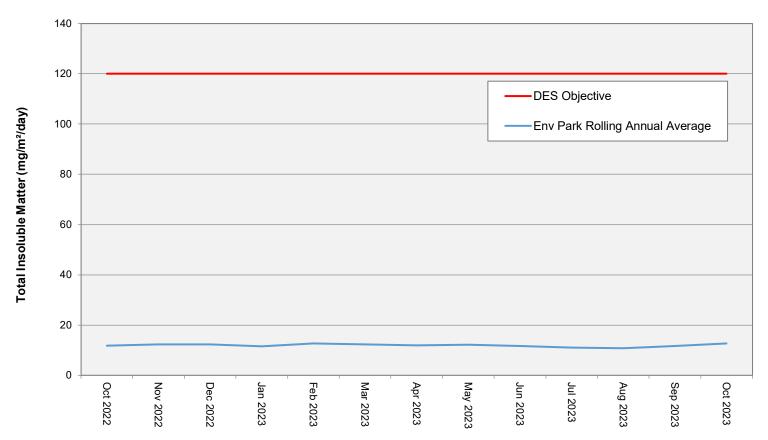
Hi-Volume Sampler - Lead in dust levels (one in six days) at Environment Park site 2023



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



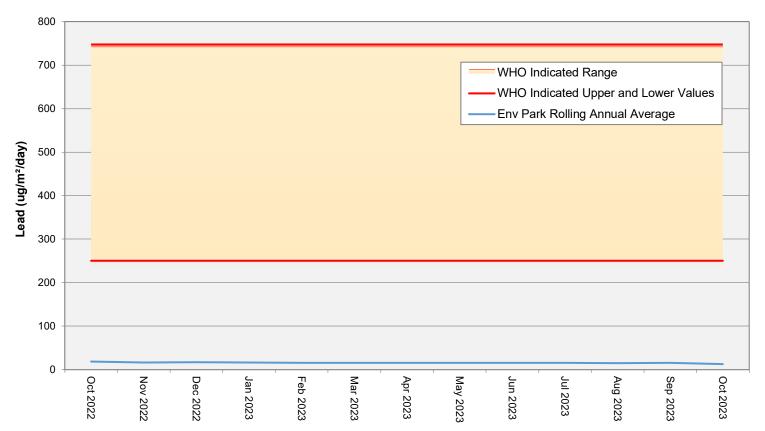
Dust Deposition Gauge - General dust deposition levels (monthly) at Environment Park site October 2022 – October 2023



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 October 2022 – October 2023

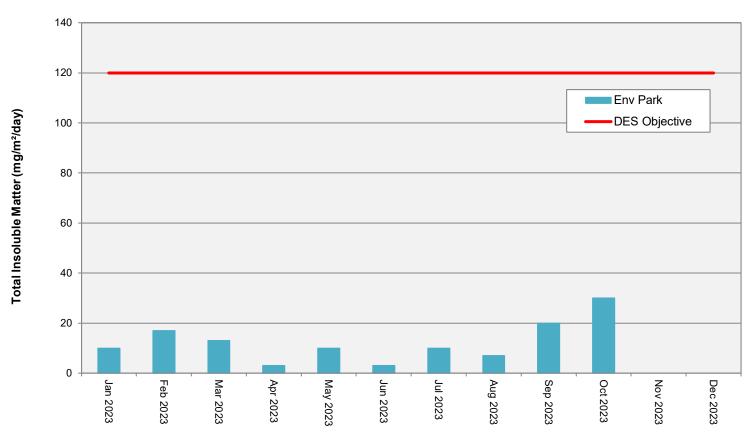


Note:

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



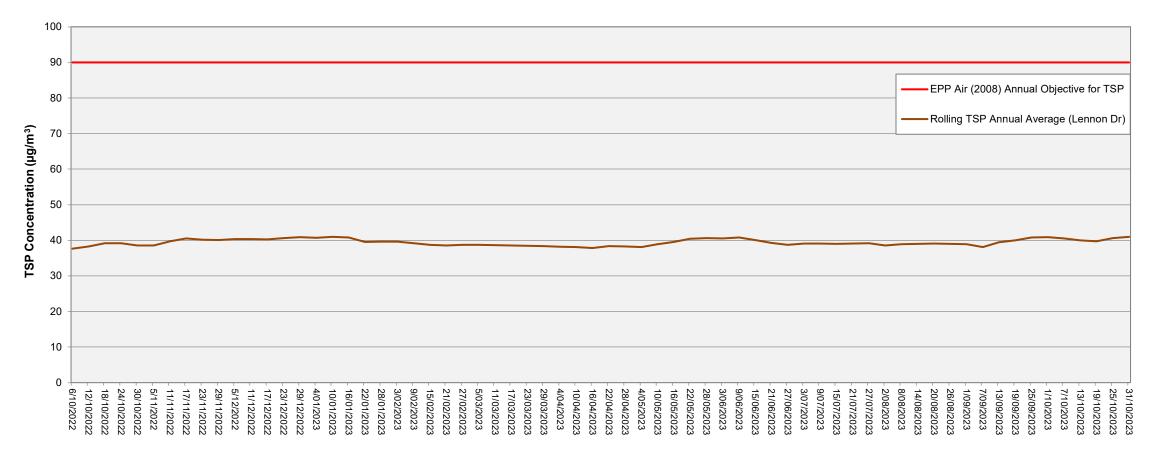
Dust Deposition Gauge – General dust deposition levels (monthly) at Environment Park Site 2023



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 October 2022 – October 2023



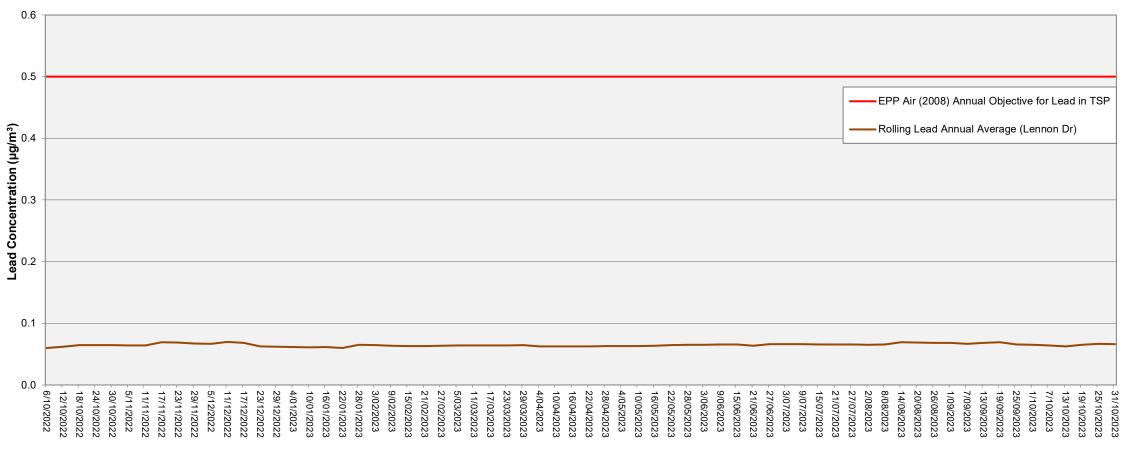
Note:

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 October 2022 – October 2023

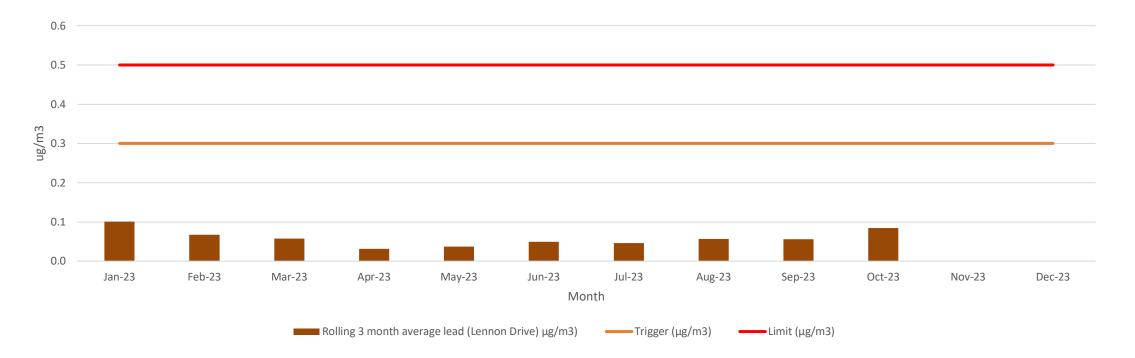


Lead Concentration units = micrograms per cubic metre per 24 hour period Rolling annual average = the moving average of the previous 11 results and the current result



Note:

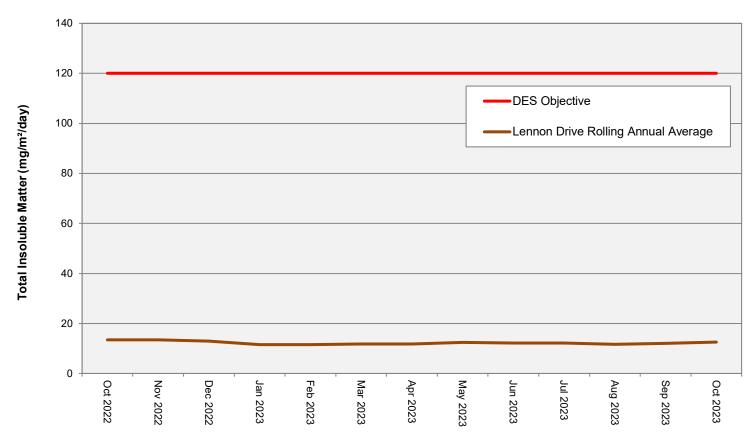
Hi-Volume Sampler - Lead in dust levels (one in six days) at Lennon Drive Site 2023



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 October 2022 – October 2023

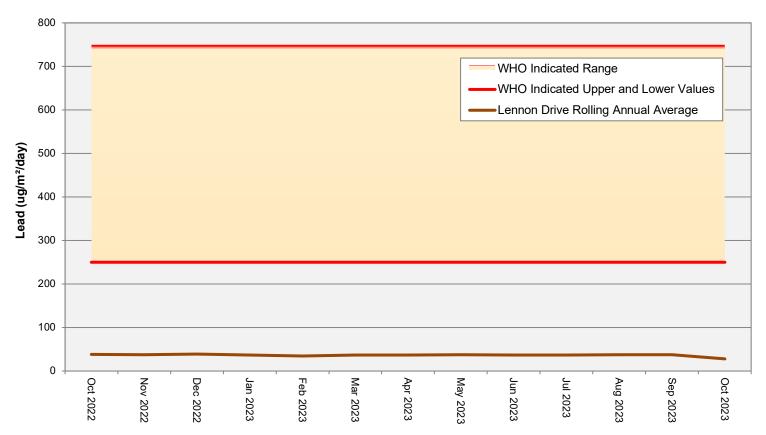


Total Insoluble Matter Concentration units = micrograms per square metre per day Rolling annual average = the moving average of the previous 11 results and the current result



Note:

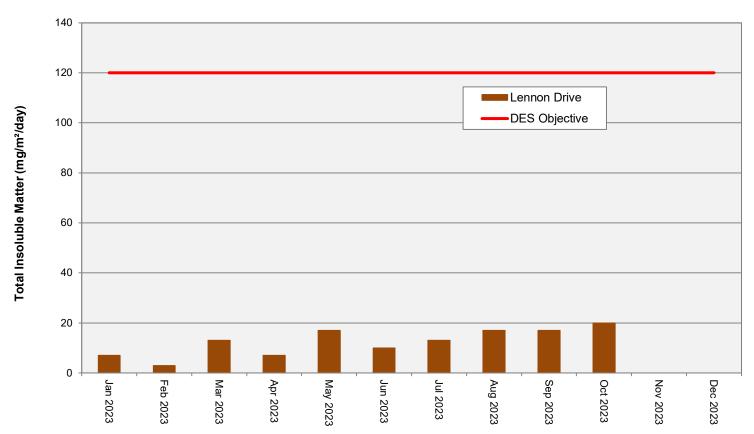
Dust Deposition Gauge – Lead in dust deposition levels (monthly) at Lennon Drive Site October 2022– October 2023



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 2023



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 µg/dL and 0.6 µg/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.

