

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

Information



Dust
Monitoring
Equipment – an
explanation

What cargo is
handled at the
Townsville
Port?

Subscribe,
ask questions,
provide
feedback

Queensland Health statement on lead
and safe levels in air around humans

What does this
Dashboard
show me?

Data



Live Air Quality
Monitoring data

Air Quality
Bulletin

Live Shipping
Schedule

Rainfall Data -
BOM

Air Quality
Monitoring Plan

Air Quality Monitoring Locations

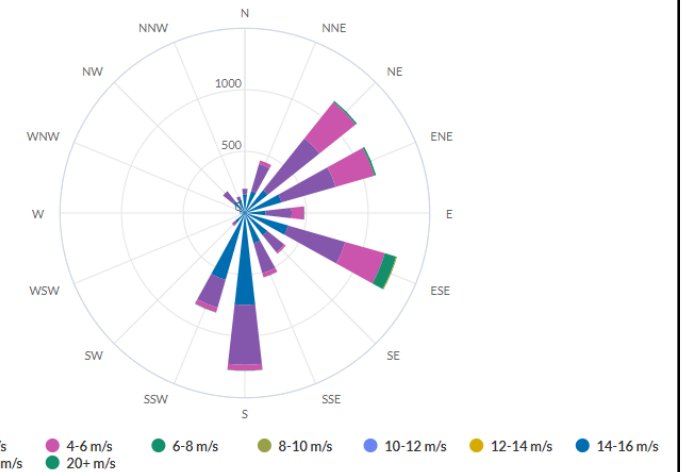
Coast Guard

Lennon Drive

Enviro Park

Victoria Park

Wind speed ranges correlating to wind direction





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.

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.

Exports

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

Port of Townsville Overview

Subscribe to Dashboard Updates

Visit our website and subscribe here <https://www.townsville-port.com.au/community/>

OR

Visit the <https://www.facebook.com/PortofTownsvilleLimited/> 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

Calendar Year Average PM₁₀ dust levels (continuous) at boundary air stations 2021

PM10	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	15.51 µg/m ³	Continuous	25 µg/m ³
Lennon Drive	16.29 µg/m ³	Continuous	25 µg/m ³
Enviro Park	16.61 µg/m ³	Continuous	25 µg/m ³

Calendar Year Average Arsenic in PM₁₀ dust levels (one in six days) at boundary air stations 2021

Arsenic	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	0.0009 µg/m ³	HVAS PM10	0.006 µg/m ³
Lennon Drive	0.0010 µg/m ³	HVAS PM10	0.006 µg/m ³
Enviro Park	0.0011 µg/m ³	HVAS PM10	0.006 µg/m ³

Calendar Year Average Cadmium in PM₁₀ dust levels (one in six days) at boundary air stations 2021

Cadmium	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	0.0003 µg/m ³	HVAS PM10	0.005 µg/m ³
Lennon Drive	0.0003 µg/m ³	HVAS PM10	0.005 µg/m ³
Enviro Park	0.0002 µg/m ³	HVAS PM10	0.005 µg/m ³

Calendar Year Average Nickel in PM₁₀ dust levels (one in six days) at boundary air stations 2021

Nickel	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	0.0023 µg/m ³	HVAS PM10	0.02 µg/m ³
Lennon Drive	0.0016 µg/m ³	HVAS PM10	0.02 µg/m ³
Enviro Park	0.0010 µg/m ³	HVAS PM10	0.02 µg/m ³

Calendar Year Average Arsenic in dust deposition levels (monthly) at boundary stations 2021

Arsenic	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	1 µg/m ² /day	Dust deposition	4 µg/m ² /day
Lennon Drive	1 µg/m ² /day	Dust deposition	4 µg/m ² /day
Enviro Park	1.1 µg/m ² /day	Dust deposition	4 µg/m ² /day

Calendar Year Average Cadmium in dust deposition levels (monthly) at boundary stations 2021

Cadmium	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	0.6 µg/m ² /day	Dust deposition	2 µg/m ² /day
Lennon Drive	0.4 µg/m ² /day	Dust deposition	2 µg/m ² /day
Enviro Park	0.3 µg/m ² /day	Dust deposition	2 µg/m ² /day

Calendar Year Average Lead in dust deposition levels (monthly) at boundary stations 2021

Lead	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	53 µg/m ² /day	Dust deposition	100 µg/m ² /day
Lennon Drive	31.1 µg/m ² /day	Dust deposition	100 µg/m ² /day
Enviro Park	16.9 µg/m ² /day	Dust deposition	100 µg/m ² /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 µg/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 µg/dL but since the beginning of 2016 has been reduced to 5 µg/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 µg/dL and 1.9 µg/dL, still well under the level which should trigger concern.