

Air Quality Monitoring Locations

AIR QUALITY MONITORING IN TOWNSVILLE

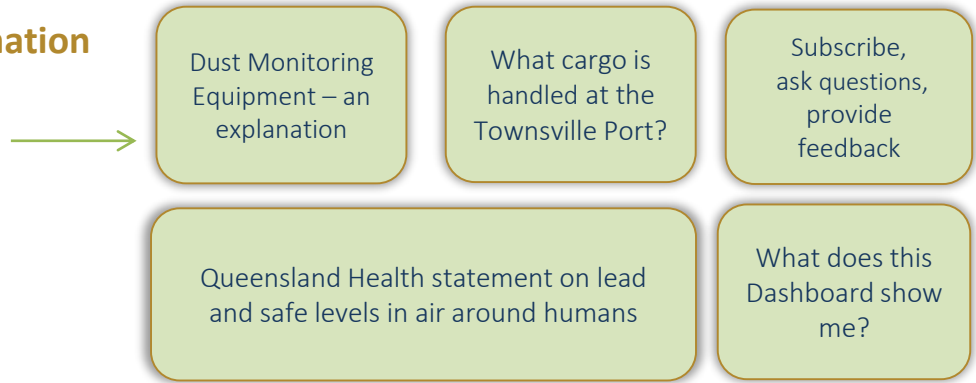
Air Quality Monitoring in Townsville is conducted separately by both the Department of Environment and Science (DES), and Port of Townsville Limited.

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

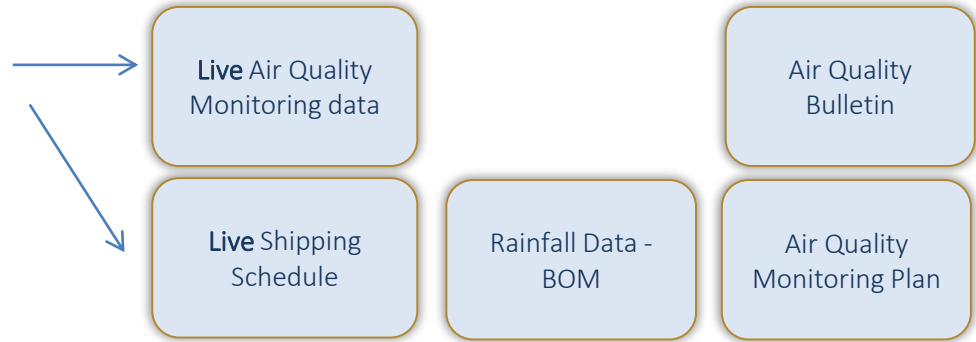
Click here to visit DES monitoring network



Information



Data



Calendar Year Average PM10 dust levels (continuous)
at boundary air stations 2018

PM10	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	16.28 µg/m ³	Continuous	25 µg/m ³
Lennon Drive	18.89 µg/m ³	Continuous	25 µg/m ³

Calendar Year Average Arsenic in PM10 dust levels (one in six days)
at boundary air stations 2018

Arsenic	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	0.0008 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.006 $\mu\text{g}/\text{m}^3$
Lennon Drive	0.0010 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.006 $\mu\text{g}/\text{m}^3$
Enviro Park	0.0008 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.006 $\mu\text{g}/\text{m}^3$

Calendar Year Average Cadmium in PM10 dust levels (one in six days) at boundary air stations 2018

Cadmium	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	0.0003 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.005 $\mu\text{g}/\text{m}^3$
Lennon Drive	0.0004 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.005 $\mu\text{g}/\text{m}^3$
Enviro Park	0.0002 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.005 $\mu\text{g}/\text{m}^3$

Calendar Year Average Nickel in PM10 dust levels (one in six days) at boundary air stations 2018

Nickel	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	0.0042 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.02 $\mu\text{g}/\text{m}^3$
Lennon Drive	0.0042 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.02 $\mu\text{g}/\text{m}^3$
Enviro Park	0.0023 $\mu\text{g}/\text{m}^3$	HVAS PM10	0.02 $\mu\text{g}/\text{m}^3$

Calendar Year Average Arsenic in dust deposition levels (monthly)
at boundary stations 2018

Arsenic	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	2.1 $\mu\text{g}/\text{m}^2/\text{day}$	Dust deposition	4 $\mu\text{g}/\text{m}^2/\text{day}$
Lennon Drive	2.0 $\mu\text{g}/\text{m}^2/\text{day}$	Dust deposition	4 $\mu\text{g}/\text{m}^2/\text{day}$
Enviro Park	2.7 $\mu\text{g}/\text{m}^2/\text{day}$	Dust deposition	4 $\mu\text{g}/\text{m}^2/\text{day}$

Calendar Year Average Cadmium in dust deposition levels (monthly)
at boundary stations 2018

Cadmium	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	0.9 ug/m ² /day	Dust deposition	2 ug/m ² /day
Lennon Drive	1.0 ug/m ² /day	Dust deposition	2 ug/m ² /day
Enviro Park	1.5 ug/m ² /day	Dust deposition	2 ug/m ² /day

Calendar Year Average Lead in dust deposition levels (monthly)
at boundary stations 2018

Lead	Calendar Year Average	Monitoring Method	Air Quality Limit
Coast Guard	19 $\mu\text{g}/\text{m}^2/\text{day}$	Dust deposition	100 $\mu\text{g}/\text{m}^2/\text{day}$
Lennon Drive	25 $\mu\text{g}/\text{m}^2/\text{day}$	Dust deposition	100 $\mu\text{g}/\text{m}^2/\text{day}$
Enviro Park	15 $\mu\text{g}/\text{m}^2/\text{day}$	Dust deposition	100 $\mu\text{g}/\text{m}^2/\text{day}$

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 out. 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.