



Atlassian Building Central

Construction Air Quality Monitoring - Report 01

BUILT PTY LTD

2022-05-01 to 2022-12-31







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1. Introduction

The report detailed below presents real-time dust readings for the associated construction activities within the Atlassian project. A dust monitor was installed at the boundary between Central station Platform 1 and the Atlassian site.

The corresponding dust monitor generates data for both PM2.5 & PM10, in line with the CNVMP "Construction noise, vibration and dust management plan".





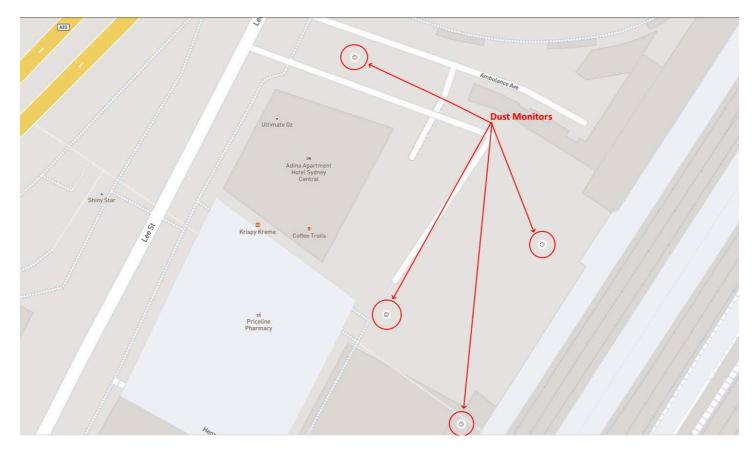
<u>2. Site Plan</u>







i) Sensors Installed







3. Nominated Trigger Levels as per the CNVMP

Following is the extract from the CNVMP, section 8.1:

8.1 RESPIRABLE DUST

The NSW EPA air pollutants Impact assessment criterion applicable to the project site with regards to health concerns is shown in Table 10 below.

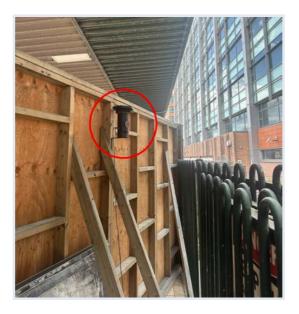
Table 10 - Dust Impact Criterion

Pollutant	Averaging Period	Concentration
PM _{2.5}	24 hours	25 μg/m³
PM ₁₀		50 μg/m³



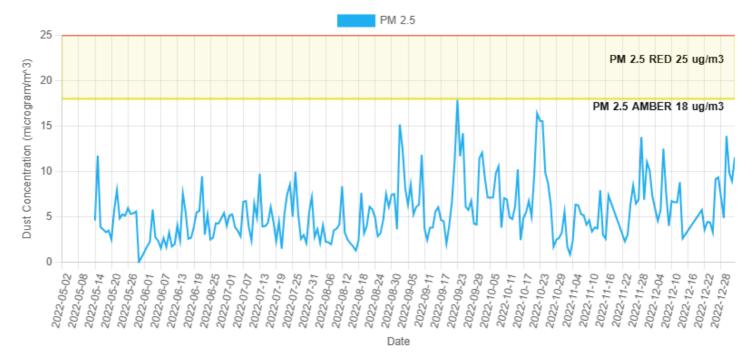


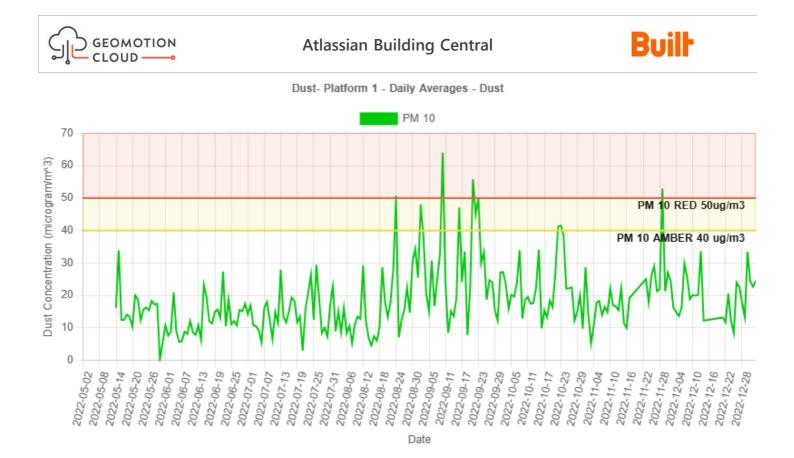
4. Result Summary



i) Dust Monitor (Daily Averages)

Dust- Platform 1 - Daily Averages





The data provided above was taken post Atlassian works commencing and represents the condition for above mentioned timeframes.

Data represents rolling daily averages of the PM 2.5 and PM 10 monitored by the dust monitor, which are largely within specified limits. Any exceedances have been addressed on-site utilising the mitigation measures outlined below.





5. Dust Mitigation Techniques (Refer CNVMP - Section 15.2)

15.2 DUST SUPRESSION AND PREVENTION

To regulate dust emanating from the demolition and excavation processes, the demolition and excavation contractors can implement the following measures where appropriate:

• Water sprays and dust suppression surfactants:

- o Directly hosing the hydraulic hammer or rock saws.
- o Site perimeter water mist spray system.
- o Truck wash bay.
- o Sprinklers on spoil mounds.

• Barriers:

- o Solid perimeter hoarding, solid site entry doors.
- o Wind breaks (temporary cyclone fence with fine shade cloth).
- o Tarps over spoil mounds.
- o Tarps over dump truck trays and trailers.

• Other measures:

- o Carry out concrete crushing/recycling off site.
- o Carry out sorting, sifting of spoil off site.
- o Use of gravel, asphalt paving or road base to seal dusty and trafficable area.s
- o Daily review of wind forecast and proposed works at morning tool box meetings to program works or implement measures if unfavourable wind conditions are forecast to reduce impact on stakeholders.
- o Assess and relocate activities to suit the environmental conditions where appropriate.

• Fine Particle Emissions:

- o Machinery should be checked on arrival to site that its in good working order.
- o Proper maintenance and tuning of engines.
- o Catalytic converters and exhaust filters (if available).
- o Correct fuel specificatiun.
- o Limiting idling time.
- o Avoiding overloading.
- o Appropriate height of exhaust discharge above ground level.

• Warning System:

o An electronic messaging alert system is required if a dust monitoring system is implemented. It is suggested that warning levels are set at 85% of the lower bound of the POOR air quality category.





o Given that water mist dust suppression techniques are implemented on most sites it is recommended that the dust monitor have a heated inlet otherwise spurious results may arise.