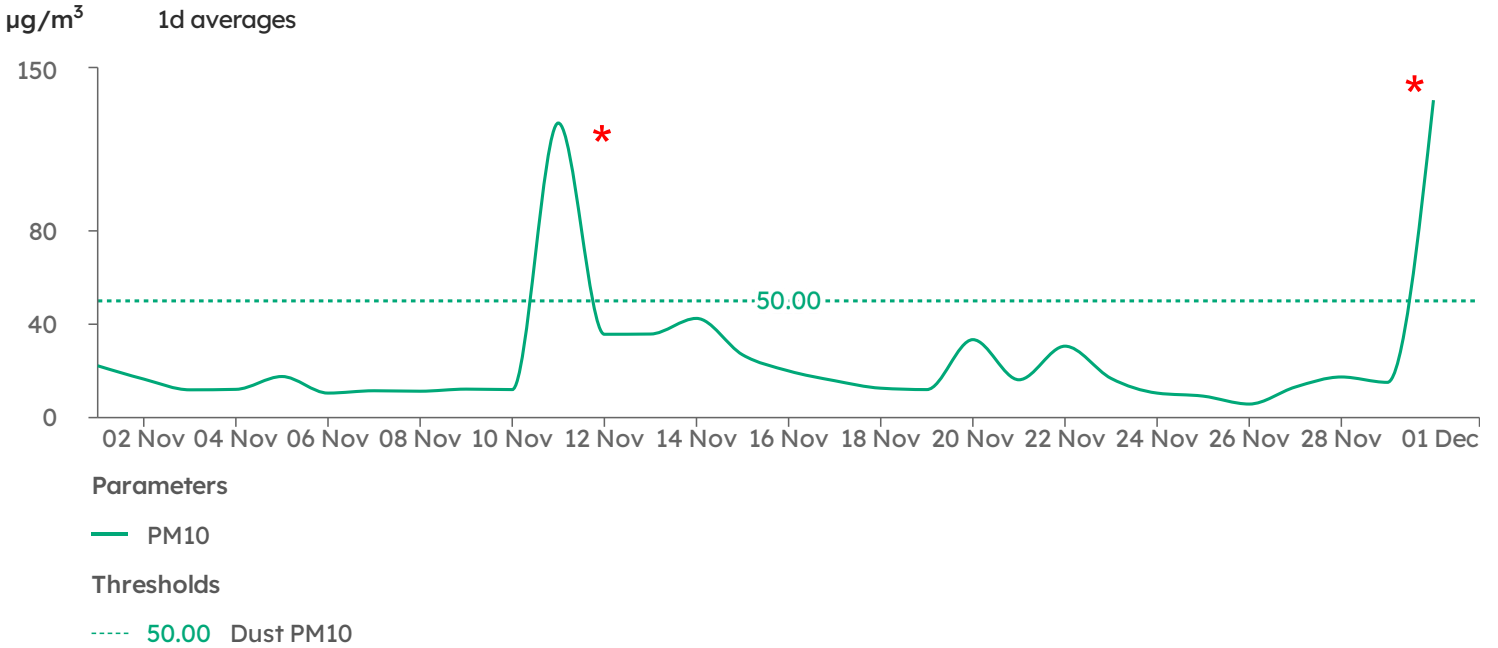


#### Dust Monitoring Graphs

Site Compound

01 Nov 2023 - 30 Nov 2023



#### Device Details

Device Serial	Monitoring Points	Model	Calibration Date	Calibration Due
HEX-000390	Site Compound	SiteHive Hexanode	29 Aug 2023	29 Aug 2025

\* Dust spike occurred out of hours, impacting daily reporting averages and was not caused by construction activities. On review with Site Hive tech support it appears the exceedances were caused by moisture in the air.

#### Dust spike explanation -

Optical particle counters, such as the sensor used in the SiteHive Hexanode Multi, along with a range of other industry standard devices, have a range of benefits over traditional approaches including being more compact, lower cost, and able to measure in real-time.

However, they also have some limitations, including producing measurements based on some assumptions (specifically particle density [weight] and refractive index [shape]), which can result in some conditions causing significant spikes in data that are not actual measurements of construction dust.

The Victorian EPA has published a useful guide explaining more about this: <https://www.epa.vic.gov.au/about-epa/publications/1745>

These are commonly seen in a few consistent scenarios:

- Moisture in the air is measured as dust e.g. high relative humidity, low dew point
- Hyperlocal dust/smoke e.g. near a bbq/smoko/air conditioner unit
- Ambient conditions e.g. bushfires