



# Air Quality Construction Monitoring Report August 2025 to July 2026

SMWSASSM-PLD-SWD-SW000-AH-RPT-000003

Parklife Metro D&C

# Approval Record

| Revision  | Author                              | Date       | Comments | Reviewed by                         | Approved by                                                 |
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## Glossary/Abbreviations

| Abbreviation                  | Expanded Text                                                                                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BOM</b>                    | The Australian Bureau of Meteorology                                                                                                                                                                          |
| <b>BRD</b>                    | Bradfield Station                                                                                                                                                                                             |
| <b>CEMF</b>                   | Construction Environmental Management Framework                                                                                                                                                               |
| <b>CEMP</b>                   | Construction Environmental Management Plan                                                                                                                                                                    |
| <b>CSSI</b>                   | Critical State Significant Infrastructure                                                                                                                                                                     |
| <b>Condition</b>              | Planning Minister's Condition of Approval                                                                                                                                                                     |
| <b>DPHI</b>                   | NSW Department of Planning, Housing and Infrastructure (formerly DPE)                                                                                                                                         |
| <b>EIS</b>                    | Environmental Impact Assessment                                                                                                                                                                               |
| <b>EMS</b>                    | Environmental Management System                                                                                                                                                                               |
| <b>EPA</b>                    | NSW Environmental Protection Authority – The Appropriate Regulatory Authority for project activities on NSW land (off-airport land), as defined in Section 6(2)(c) of the POEO Act 1997                       |
| <b>EPL</b>                    | Environmental Protection Licence                                                                                                                                                                              |
| <b>ER</b>                     | Environmental Representative nominated by the Proponent and approved by the Planning Secretary in accordance with Condition A27                                                                               |
| <b>FRP</b>                    | Form Reo Pour                                                                                                                                                                                                 |
| <b>ISO</b>                    | International Organisation for Standardisation                                                                                                                                                                |
| <b>Minister, the</b>          | NSW Minister for Planning and Public Spaces (or delegate)                                                                                                                                                     |
| <b>NATA</b>                   | National Association of testing authorities                                                                                                                                                                   |
| <b>Non-compliance</b>         | An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Infrastructure Approval or other licence, permit or legal requirements, but is not an incident. |
| <b>Non-conformance</b>        | Observations or actions that are not in strict accordance with the CEMP and the aspect specific Sub-Plan                                                                                                      |
| <b>OHE</b>                    | Orchard Hills Station                                                                                                                                                                                         |
| <b>POEO Act</b>               | <i>Protection of the Environment Operations Act 1997.</i>                                                                                                                                                     |
| <b>Parklife Metro (PLM)</b>   | Consortium comprising entities of Plenary, Siemens, RATP Dev and Webuild as the Applicant for the Sydney Metro Western Sydney Airport SSTOM Package.                                                          |
| <b>Parklife Metro D&amp;C</b> | Parklife Metro Design and Construct. Consists of Webuild S.P.A, Siemens Mobility Pty Ltd and Richard Crookes Constructions Pty Ltd. Responsible for the construction of SSTOM Works                           |
| <b>PM</b>                     | Particulate Matter                                                                                                                                                                                            |
| <b>REMMs</b>                  | SSD 7308 Revised Environmental Management Measures                                                                                                                                                            |
| <b>SBT</b>                    | Station Boxes and Tunnelling (SBT) Works for Sydney Metro – Western Sydney Airport                                                                                                                            |
| <b>SCAW</b>                   | Surface, Civil and Alignment Works (SCAW) Works for Sydney Metro – Western Sydney Airport                                                                                                                     |
| <b>SMWSA</b>                  | Sydney Metro Western Sydney Airport                                                                                                                                                                           |
| <b>SSTOM</b>                  | Stations, Systems, Trains, Operations and Maintenance                                                                                                                                                         |

# 1 Introduction

## 1.1 Background

Sydney Metro is Australia's biggest public transport program comprising four main packages of work including Metro North-West Line, Sydney Metro City and Southwest, Sydney Metro West, and Sydney Metro Western Sydney Airport (SMWSA, the Project). The SMWSA will become the transport spine for Greater Western Sydney, connecting communities and travellers with the new Western Sydney International (Nancy-Bird Walton) Airport and the growing region.

The Project involves the construction and operation of a new metro railway line around 23km in length that extends from the existing Sydney Trains suburban T1 Western Line at St Marys Station (STM) towards Orchard Hills Station (OHE) and the new Bradfield Station (BRD - formerly Aerotropolis [AER]) in the south at Bringelly. The alignment includes a combination of tunnel, surface, bridges and viaduct sections, and comprises of six new metro stations between St Marys and the Aerotropolis Core precinct, as well as a stabling and maintenance facility and operational control centre to support the operation of the new metro railway line (see Figure 1).

Parklife Metro D&C (PLM) has been engaged to deliver the Stations, Systems, Trains, Operations and Maintenance (SSTOM) works. The scope of the SSTOM package comprises:

- construction of six new stations
- installation of tracks, signalling, mechanical and electrical systems
- supplying new driverless trains
- construction of stabling and maintenance facility at Orchard Hills
- operation and maintenance of the line and its assets, and
- handback of operations and maintenance at the end of term.

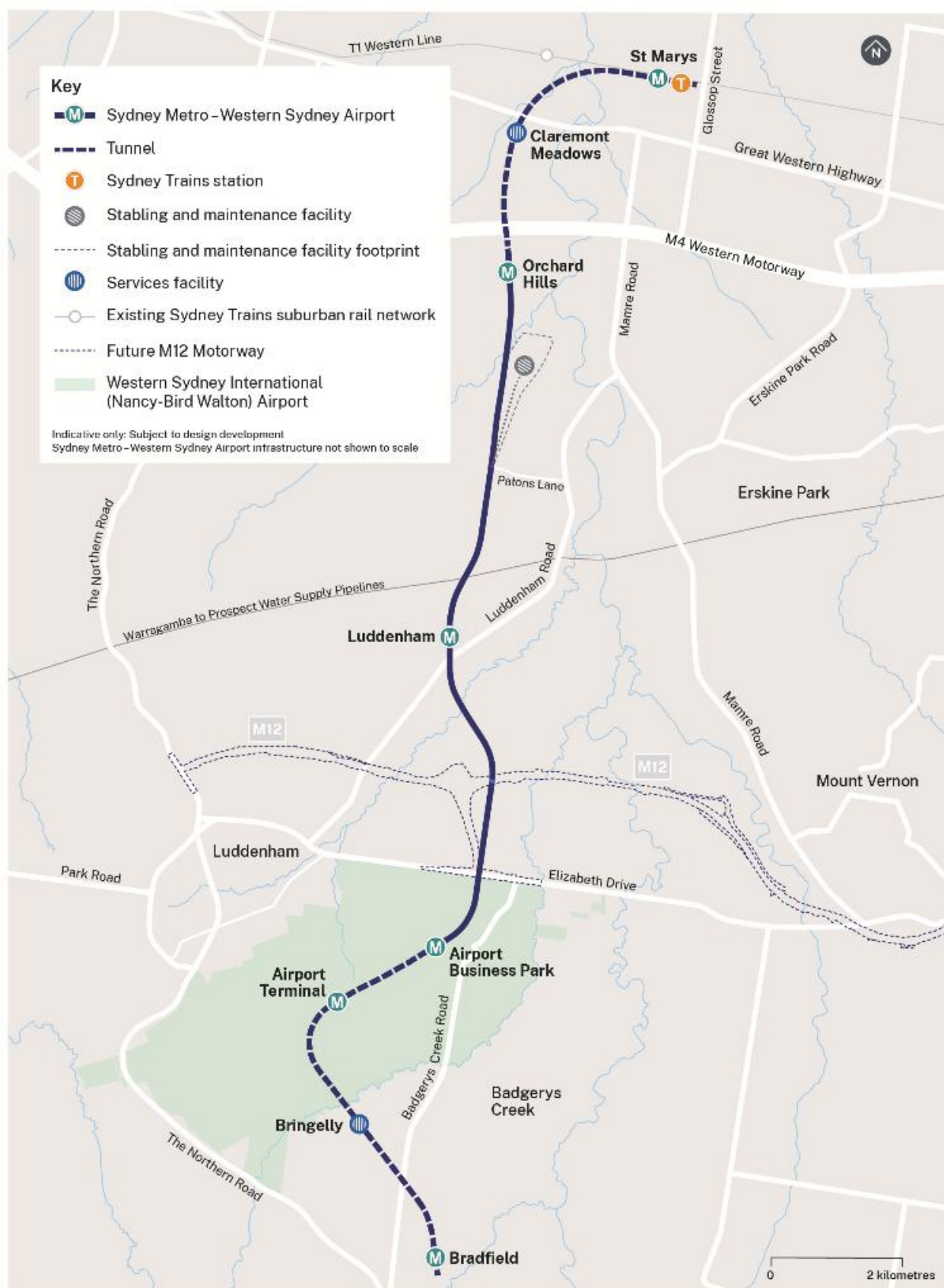


FIGURE 1 OVERVIEW OF SMWSA PROJECT

### 1.1.1 Scope of report

This Air Quality Construction Monitoring Report (AQMR) has been prepared for works approved under the Infrastructure Approval SSI-10051 associated with the delivery of the off-airport portion of the SMWSA SSTOM Works. This report provides the results of air quality monitoring undertaken as part of the Air Quality Monitoring Program (AQMoP) during the reporting period from the start August 2025 to the end of July 2026.

TABLE 1 REQUIREMENTS RELEVANT TO AIR QUALITY MONITORING REPORT

| Condition  | Requirement                                                                                                                                                                                                                                                                        |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C22        | The results of the Construction Monitoring Programs must be submitted to the Planning Secretary, ER and relevant regulatory agencies, for information in the form of a Construction Monitoring Report at the frequency identified in the relevant Construction Monitoring Program. |
| CEMF 3.16a | Issue specific environmental monitoring will be undertaken as required or as additionally required by any approval, permit or license conditions.                                                                                                                                  |

## 2 Description of Works

### 2.1 Project Activities undertaken during the reporting period

Construction activities undertaken during the reporting period are summarised in Table 2.

TABLE 2 CONSTRUCTION ACTIVITIES DURING THIS REPORTING PERIOD

| Site                               | Construction Activities                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| St Marys Station                   | <ul style="list-style-type: none"> <li>General operation of ancillary facility</li> <li>Tower crane pad removal</li> <li>Station Box – FRP</li> <li>Station Box – Water proofing</li> <li>Station Box fitout</li> <li>Precast beams</li> </ul>                                                                                                              |
| Claremont Meadows Service Facility | <ul style="list-style-type: none"> <li>Tunnel fitout</li> <li>Water treatment plant operation</li> <li>Ventilation installation and decommissioning</li> <li>Concrete pouring</li> </ul>                                                                                                                                                                    |
| Orchard Hills Station              | <ul style="list-style-type: none"> <li>General operation of ancillary facility</li> <li>Station Box – FRP and MEP</li> <li>Batch plant operation</li> <li>Precast beam delivery and installation</li> <li>Rail activities</li> <li>Station canopy structure</li> <li>Services building structure and façade</li> <li>Retaining wall construction</li> </ul> |

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stabling and Maintenance Facility | <ul style="list-style-type: none"> <li>• General operation of ancillary facility</li> <li>• Bulk earthworks</li> <li>• Basin excavation</li> <li>• Power supply installation</li> <li>• In-ground utility installation</li> <li>• FRP</li> <li>• Substation water proofing and fit out</li> <li>• Detailed excavation, inground service trenches, FRP and tank installation for maintenance and administration, and operational control centre buildings</li> <li>• Structural building</li> </ul> |
| Luddenham Station                 | <ul style="list-style-type: none"> <li>• General operation of ancillary facility</li> <li>• Bulk Earthworks</li> <li>• In-ground utility installation</li> <li>• Station structures FRP</li> <li>• Precinct works</li> </ul>                                                                                                                                                                                                                                                                       |
| Bradfield Station                 | <ul style="list-style-type: none"> <li>• General operation of ancillary facility</li> <li>• Station Box – Waterproofing</li> <li>• Station Box – FRP</li> <li>• Delivery of Equipment</li> <li>• Precast beam delivery and installation</li> <li>• Permanent car park</li> <li>• Earthworks</li> </ul>                                                                                                                                                                                             |
| Bringelly Service Facility        | <ul style="list-style-type: none"> <li>• Tunnel fitout</li> <li>• Ventilation installation and commissioning</li> </ul>                                                                                                                                                                                                                                                                                                                                                                            |
| Linewide                          | <ul style="list-style-type: none"> <li>• In-ground utility installation</li> <li>• Galvinised steel trough (GST) installation</li> <li>• FRP works</li> <li>• Rail activities</li> <li>• Earthworks</li> <li>• Fencing</li> </ul>                                                                                                                                                                                                                                                                  |

## 3 Monitoring Methodology

### 3.1 Methodology

During the reporting period air quality and dust monitoring was undertaken by:

- Reviewing meteorological conditions (Bureau of Meteorology Badgerys Creek Weather Station) and communicating this to the construction team
- Supervisor's daily inspections of dust generation, utilising site-specific knowledge of where dust can release from active works or high winds, and then actioning accordingly

- Visual monitoring of dust generation through weekly environmental inspections and observations, as required.
- Real-time air quality monitoring targeting PM2.5 and PM10, in response to complaints and as part of investigations, as necessary. Figure 3 shows the fixed real time monitoring station locations, situated close to sensitive receivers.

The assessment of the results obtained during this reporting period is further discussed in below.

## 3.2 Weather during the Reporting Period

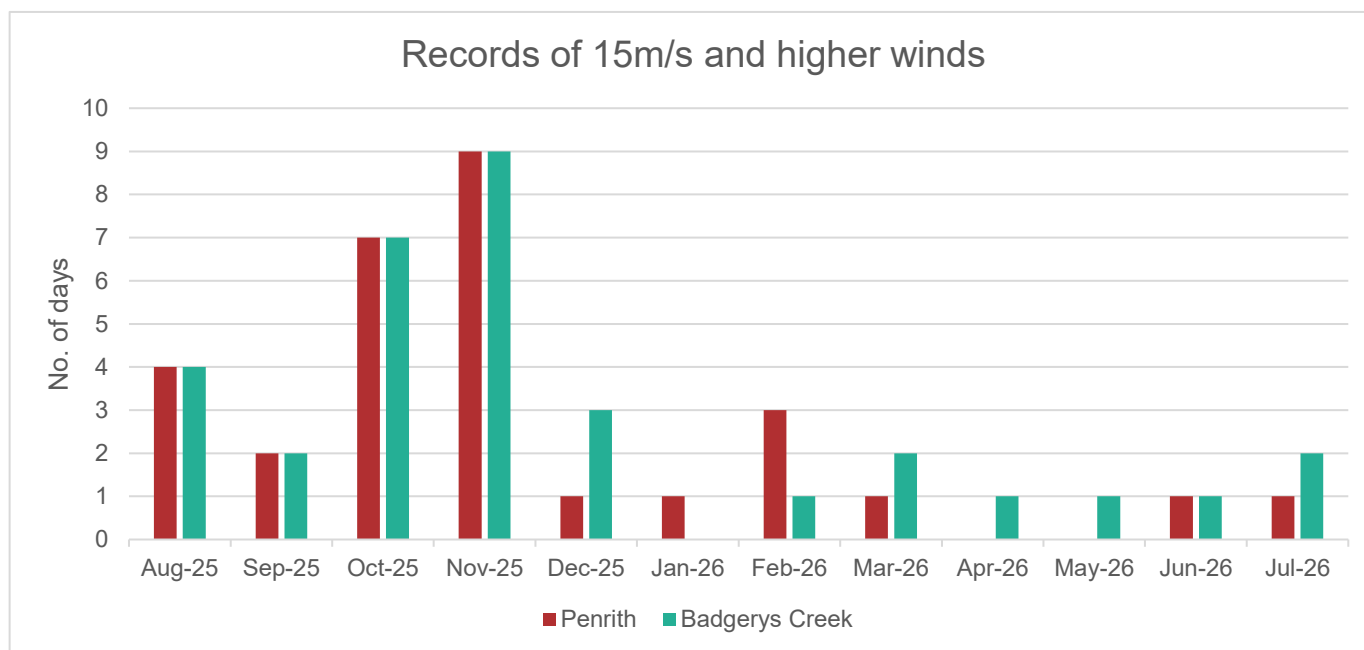


FIGURE 2 HIGH WIND SPEED EVENTS OVER REPORTING PERIOD

Two BOM weather stations were utilised during the reporting period to review wind speeds, Penrith Lakes AWS (station 067113) for the northern sites (St Marys to Warragamba Pipeline) and Badgerys Creek AWS (station 067108) for the southern sites (Warragamba pipeline to Bradfield).

During this reporting period, there were no high wind speed events (>15m/s) recorded in January 2026 (southern sites), April and May 2026 (northern sites). Wind conditions were similar across the project as shown in Figure 2. November 2025 recorded the highest number of high wind speed events at both the northern and southern sites, with nine events recorded at each site.

### 3.2.1 Visual Monitoring Locations and Mitigation Measures

Visual monitoring of air quality controls and potential impacts were undertaken across the active construction sites, as reported in Table 3:

**TABLE 3 SITE LOCATIONS AND SPECIFIC DUST MITIGATION MEASURES**

| Site                               | Proactive and Reactive Dust Mitigation Measures                                                                                                                                                                                                                                                                                                                                                        | Visual Monitoring Methods                                                                                                                                                                                                                             |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| St Marys Station                   | <ul style="list-style-type: none"> <li>• Water cart for dust suppression</li> <li>• Street sweeper</li> <li>• Site is predominantly sealed</li> <li>• Hoses used for dust suppression, as required</li> <li>• Communication of weather conditions</li> </ul>                                                                                                                                           | <ul style="list-style-type: none"> <li>• Daily visual monitoring from site supervisor to determine what level of dust mitigation is required</li> <li>• Weekly environmental inspections and additional observation monitoring as required</li> </ul> |
| Claremont Meadows Service Facility | <ul style="list-style-type: none"> <li>• Water cart for dust suppression</li> <li>• Street sweeper</li> <li>• Rumble grid</li> <li>• Hoses used for dust suppression, as required</li> <li>• Communication of weather conditions</li> </ul>                                                                                                                                                            | <ul style="list-style-type: none"> <li>• Daily visual monitoring from site supervisor to determine what level of dust mitigation is required</li> <li>• Weekly environmental inspections and additional observation monitoring as required</li> </ul> |
| Orchard Hills Station              | <ul style="list-style-type: none"> <li>• Water carts for dust suppression</li> <li>• Site is predominantly sealed</li> <li>• Polymer application to exposed surfaces</li> <li>• Rumble grids and wheel wash</li> <li>• Street sweeper</li> <li>• Hoses used for dust suppression, as required</li> <li>• Communication of weather conditions</li> <li>• Sprinkler used for dust suppression</li> </ul> | <ul style="list-style-type: none"> <li>• Daily visual monitoring from site supervisor to determine what level of dust mitigation is required</li> <li>• Weekly environmental inspections and additional observation monitoring as required</li> </ul> |
| Stabling and Maintenance Facility  | <ul style="list-style-type: none"> <li>• Water carts for dust suppression</li> <li>• Wheel wash</li> <li>• Street sweeper</li> <li>• Hoses used for dust suppression, as required</li> <li>• Polymer application to haul roads</li> <li>• Communication of weather conditions</li> <li>• Speed restrictions on unsealed haul roads</li> <li>• Polymer application to exposed surfaces</li> </ul>       | <ul style="list-style-type: none"> <li>• Daily visual monitoring from site supervisor to determine what level of dust mitigation is required</li> <li>• Weekly environmental inspections and additional observation monitoring as required</li> </ul> |
| Luddenham Station                  | <ul style="list-style-type: none"> <li>• Water cart for dust suppression</li> <li>• Wheel wash</li> <li>• Street sweeper</li> <li>• Hoses used for dust suppression, as required</li> <li>• Communication of weather conditions</li> <li>• Polymer application to exposed surfaces</li> </ul>                                                                                                          | <ul style="list-style-type: none"> <li>• Daily visual monitoring from site supervisor to determine what level of dust mitigation is required</li> <li>• Weekly environmental inspections and additional observation monitoring as required</li> </ul> |

| Site                       | Proactive and Reactive Dust Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                    | Visual Monitoring Methods                                                                                                                                                                                                                             |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bradfield Station          | <ul style="list-style-type: none"> <li>• Water cart for dust suppression</li> <li>• Rumble grid</li> <li>• Street sweeper</li> <li>• The site is predominantly sealed</li> <li>• Hoses used for dust suppression, as required</li> <li>• Communication of weather conditions</li> <li>• Sprinkler system set up for dust suppression and to promote vegetation cover</li> <li>• Polymer application to exposed surfaces</li> </ul> | <ul style="list-style-type: none"> <li>• Daily visual monitoring from site supervisor to determine what level of dust mitigation is required</li> <li>• Weekly environmental inspections and additional observation monitoring as required</li> </ul> |
| Bringelly Service Facility | <ul style="list-style-type: none"> <li>• Water cart for dust suppression</li> <li>• Rumble grids</li> <li>• Street sweeper</li> <li>• Hoses used for dust suppression, as required</li> <li>• Communication of weather conditions</li> <li>• Polymer application to exposed surfaces</li> </ul>                                                                                                                                    | <ul style="list-style-type: none"> <li>• Daily visual monitoring from site supervisor to determine what level of dust mitigation is required</li> <li>• Weekly environmental inspections and additional observation monitoring as required</li> </ul> |
| Linewide                   | <ul style="list-style-type: none"> <li>• Water cart for dust suppression</li> <li>• Rumble grids</li> <li>• Street sweeper</li> <li>• Hoses used for dust suppression, as required</li> <li>• Communication of weather conditions</li> <li>• Polymer application to exposed surfaces</li> <li>• Speed bumps to limit vehicle speeds</li> </ul>                                                                                     | <ul style="list-style-type: none"> <li>• Daily visual monitoring from site supervisor to determine what level of dust mitigation is required</li> <li>• Weekly environmental inspections and additional observation monitoring as required</li> </ul> |

### 3.2.2 Review of work practices

Visual inspections are conducted by site supervisors, site engineers and environmental coordinators/advisors periodically to ensure that works are not generating excessive amounts of dust with the potential to adversely impact nearby receivers. The following are monitored as key mitigation measures:

- Dust covers on haulage trucks are in place prior to leaving the construction site and whenever the load is in transit
- Stockpiles, spoil movements and cleared areas are being managed in accordance with the Soil and Water Management Sub-plan
- Stabilising disturbed areas as soon as possible
- Inspection of public roads adjacent to construction worksites for tracked dust or mud
- Vehicle speeds on unsealed haul roads

- Communication of weather conditions and air quality mitigation measures at toolboxes and site prestart briefings.

A review of works practices is triggered during high wind conditions (>15m/s). If dust has the potential to leave the site premise, works will be stopped and re-assessed, with the potential for construction activities to be relocated, modified, relocated or have mitigation measures increased to ensure dust emitted is minimised.

### 3.2.3 Real-Time Monitoring Locations

Real-time air quality monitoring targeting PM<sub>2.5</sub> and PM<sub>10</sub>, in response to complaints and as part of investigations, may be carried out as necessary. Monitor locations are selected based on assessment of high-risk work areas, especially in close proximity to residential properties and may be relocated from time to time as works progress or in response to complaints. Figure 3 shows the real time monitoring station locations for higher-risk sites. As per manufacturer specifications, each monitoring station is calibrated on a bi-yearly basis; Appendix D contains the calibration certificate for each device. Calibrated replacement devices are provided to switch out existing devices to limit any downtime in monitoring.

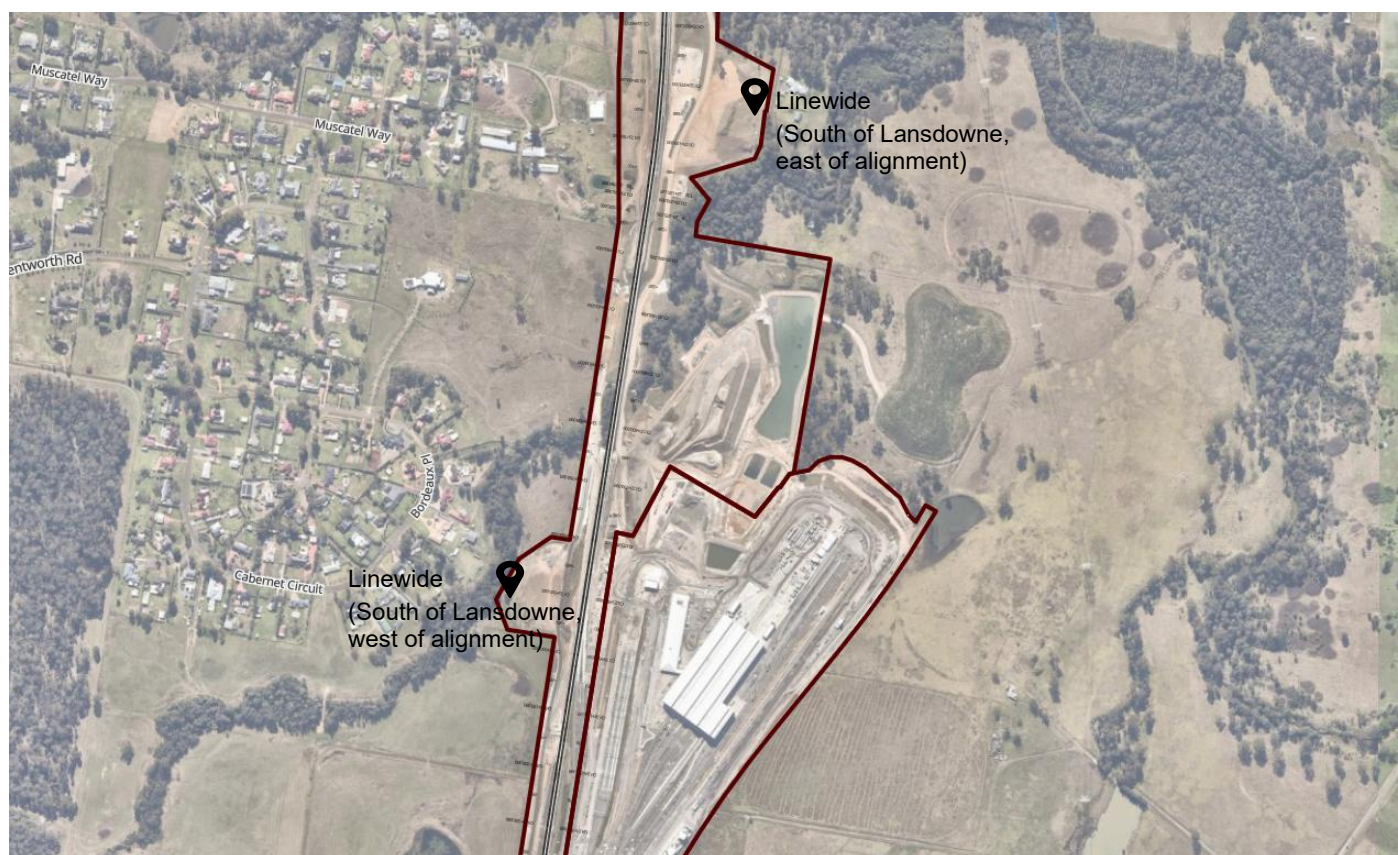


FIGURE 3 REAL TIME AIR QUALITY MONITORING LOCATIONS WITHIN LINEWIDE AND SMF SITE BOUNDARY, ORCHARD HILLS

### 3.2.4 Criteria for Particulate Matter

Air quality data is collected using a single-channel, light-scattering laser photometer used in real-time for aerosol mass readings via the SiteHive device. The monitoring device uses a sheath air system that isolates the aerosol in the optics chamber to keep the optics clean for reliability. Table 4 details the adopted air quality monitoring criteria on particulate matter in response to complaints.

**TABLE 4 CRITERIA FOR PARTICULATE MATTER**

| Pollutant                  | Average Time | Criteria             | Source               |
|----------------------------|--------------|----------------------|----------------------|
| Particulate Matter (PM10)  | 24 hours     | 50 µg/m <sup>3</sup> | Air NEPM (NEPC 2021) |
|                            | Annual       | 25 µg/m <sup>3</sup> |                      |
| Particulate Matter (PM2.5) | 24 hours     | 25 µg/m <sup>3</sup> |                      |
|                            | Annual       | 8 µg/m <sup>3</sup>  |                      |

## 4 Results Summary and Management Response

### 4.1 Visual Air Quality Monitoring

All site inspections conducted by the PLM Environment team (at least once a week) and Site Supervisors (daily) reported dust management and air quality as compliant following the implementation of appropriate mitigation measures in accordance with AQMP (refer to examples within Appendix B – Visual Air Quality Inspection Photos). The daily review of meteorological conditions (sometimes hourly depending on forecasts) determined what level of dust/air quality mitigation was required at each site.

Inspections/observations during high wind days either found existing measures such as watercarts and speed limits were effective in managing dust or additional measures were implemented such as ceasing dust generating works (Appendix A).

#### 4.1.1 Complaints/Incident Management Response

This section discusses the complaints and incidents that have occurred during this reporting period. Air quality monitoring data has been derived from Site-Hive real-time monitoring which accounts for dust parameters PM2.5 and PM10.

During the reporting period there were two dust related complaints and one odour related complaint from three properties lodged with PLM regarding potential air quality issues from site. Complaints were mainly focussed around Orchard Hills, which is to be expected given scope of works in this area are generally larger scale earthworks and in closer proximity to residential properties when compared to other areas of the project. Subsequent investigations, detailed in Table 5 demonstrate compliance with the daily PM2.5 and PM10 criteria, and Appendix C includes real-time dust monitoring data collected during the environmental team's investigation. Dust mitigation measures were either deemed adequate, or additional mitigation measures were agreed to, all dust complaints are closed.

There were no air quality incidents during the reporting period.

TABLE 5 COMPLAINT SUMMARY DURING REPORTING PERIOD

| Relevant Site/Work Area | Date received | Closest monitoring location                                                 | PM10 $\mu\text{g}/\text{m}^3$ (24 hour average) | PM2.5 $\mu\text{g}/\text{m}^3$ (24 hour average) | Wind Speed (m/s) and Direction | Investigation summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|---------------|-----------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Orchard Hills Station   | 04/09/2025    | Portion 1 North<br>Linewide, South of Lansdowne Road, east of the alignment | 12                                              | 3                                                | 7.8, NW                        | Works in the vicinity of the complaint with the potential to generate dust included operation of the Orchard Hills concrete batch plant and associated construction activities. The batch plant and surrounding site are largely stabilised with concrete, vegetation, geofabric and polymer, with dust managed through the use of watercarts, hoses, water cannons, sprinklers, rumble grids and wheel washes. During periods of elevated wind, work activities are reviewed and adjusted as required to minimise dust generation. An inspection of the batch plant entrance and surrounding roads identified no concrete residue, with weekly environmental and fortnightly joint inspections also confirming no issues. Roads surrounding the project are routinely monitored and repaired as required. |

| Relevant Site/Work Area       | Date received | Closest monitoring location                                                 | PM10 $\mu\text{g}/\text{m}^3$ (24 hour average) | PM2.5 $\mu\text{g}/\text{m}^3$ (24 hour average) | Wind Speed (m/s) and Direction | Investigation summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------|-----------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stabling Maintenance Facility | 17/09/2025    | Portion 1 South<br>Linewide, South of Lansdowne Road, east of the alignment | 5                                               | 2                                                | 7.8, SW                        | Works in the vicinity of the complaint included Line Wide North track construction and SMF CSR works, located approximately 1.5 km and 500 m from the complainant respectively. An investigation of the SMF and Line Wide North sites confirmed no chemicals capable of generating odour were present, with construction activities limited to concreting, structural works and earthworks, which do not pose a chemical odour risk. Noise and dust monitoring confirmed compliance with project limits, with mitigation measures in place. Based on the investigation, the neighbouring Bingo waste facility was identified as the more likely source of the reported odour. |
| Orchard Hills Station         | 02/10/2025    | Portion 1 North<br>Linewide, South of Lansdowne Road, east of the alignment | 14                                              | 3                                                | 11.9, WSW                      | Works in the vicinity of the complaint with the potential to generate dust were inspected following the complaint. High winds of up to 57 km/h were recorded at the time; however, two watercarts were operating across the site, and dust was observed to be effectively managed. Wind conditions were continuously monitored throughout the day, with mitigation measures adjusted as required. PLM confirmed works would be modified or ceased if dust could no longer be effectively controlled.                                                                                                                                                                          |

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### **4.1.2 Odour monitoring**

One odour complaint was received during this reporting period, which triggered an investigation that confirmed no odour generating works were occurring. The neighbouring Bingo Waste facility was identified as the likely source of the reported odour.

### **4.1.3 Plant inspections**

All site plants are routinely inspected and serviced as per their specific specification to ensure the plants are correctly maintained, with visual checks completed during weekly inspections. No defective plant emissions were noted during site inspections.

# Appendices

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Air Quality Construction Monitoring Report August 2025 to July 2026

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## **Appendix A      Visual Air Quality Inspection Observations**

## SMF Dust Management 02102025

Environmental Observation • SSTOM



Case PMJV-ENV-OBS-196  
By [REDACTED]  
Status Closed  
Due 16/10/2025

### Details

**Project Location**  
Stabling and Maintenance

**Inspection Date & Time**  
16/09/2025 11:30 AM

**Activities taking place during inspection**  
CSR, Stockpile Management, earthworks

#### Weather Conditions

Sunny

Windy

#### Detail of Observation

4X Water Carts ensuring haul roads are constantly wet down during windy conditions. Haul roads/dust intensive works wet down. Water carts consistently filling up with Water from SMF Basin. Dust suppression effective. Wind gusts measured up to 57 km/h at 10:37am.

13:30 update - 2x water carts redirected north of M&A building and to stockpile for dust suppression in response to increase in gusts around northern end of SMF.

#### Additional attachments



Media - 2025-10-02T122406.799.jfif



Media - 2025-10-02T122401.019.jfif



Media - 2025-10-02T122352.215.jfif



Media - 2025-10-02T122347.071.jfif



Media - 2025-10-02T122337.468.jfif



Media - 2025-10-02T122330.287.jfif



Media - 2025-10-02T122326.513.jfif



Media - 2025-10-02T122319.833.jfif



Media - 2025-10-02T122310.978.jfif



Media - 2025-10-02T122304.944.jfif



Media - 2025-10-02T122258.609.jfif



Media - 2025-10-02T122251.888.jfif



Media - 2025-10-02T122246.995.jfif

**Folder**  
Stabling and Maintenance

**Links**

 PMJV-ENV-DWP-120 - Closed - SMF Dewatering 20250916 NOT USED

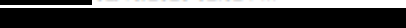
**Timeline**

 02/10/2025 02:02 PM

To 

■ Status changed from In Process to Closed

 02/10/2025 02:02 PM

To 

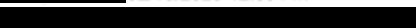
■ Detail of Observation changed from 4X Water Carts ensuring haul roads are constantly wet down during windy conditions. Haul roads/dust intensive works wet down. Water carts consistently filling up with Water from SMF Basin. Dust suppression effective. Wind gusts measured up to 57 km/h at 10:37am. to 4X Water Carts ensuring haul roads are constantly wet down during windy conditions. Haul roads/dust intensive works wet down. Water carts consistently filling up with Water from SMF Basin. Dust suppression effective. Wind gusts measured up to 57 km/h at 10:37am. 13:30 update - 2x water carts redirected north of M&A building and to stockpile for dust suppression in response to increase in gusts around northern end of SMF.

 02/10/2025 02:00 PM

To 

■ Case reopened status changed from Closed to In Process

■  02/10/2025 12:30 PM

To 

Dust suppression observations during 57km/h gusts.

Case linked to  PMJV-ENV-DWP-120 - Closed - SMF Dewatering 20250916 NOT USED

## Air Quality and Dust - Windy Conditions 26/09/2025

Environmental Observation • SSTOM



Case By **PMJV-ENV-OBS-188**  
Status Closed  
Due 10/10/2025

### Details

#### Project Location

Bringelly Service Facility

#### Inspection Date & Time

26/09/2025 02:30 PM

#### Activities taking place during Inspection

Crane in use, site establishment, FRP

#### Weather Conditions

Sunny

Partly Cloudy

Windy

#### Detail of Observation

Weather notifications appeared on computer stating wind gusts in excess of 54km/h would occur. Attended site, conditions were damp as water carts had attended site and dust suppression measures appeared to be working

#### Additional attachments

#### Folder

Bringelly/2025

### Timeline

• 26/09/2025 03:20 PM

To

I acknowledge the Traditional Owners and Custodians of the land on which I now live and work as the First People of this country.

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20250926\_140459.jpg



20250926\_140200.jpg



20250926\_140444.jpg



20250926\_140526.jpg



20250926\_140518.jpg

5 Files

## High wind observation OHE 20251002

Environmental Observation • SSTOM



Case PMJV-ENV-OBS-197  
By [REDACTED]  
Status Closed  
Due 03/10/2025

### Details



#### Project Location

Orchard Hills

#### Inspection Date & Time

02/10/2025 12:30 PM

#### Activities taking place during inspection

Concrete pours, batch plant operations

#### Weather Conditions

Sunny

Windy

#### Detail of Observation

Wind gusts observed up to 61km/hr at Badgerys Creek (12:30pm), 57km/hr at Penrith (10:37am) at BOM weather stations. Site is generally well stabilised/sealed with a watercart observed operating throughout site managing dust well with minimal dust pickup observed. Additional watercart called from another site to assist and an extra watercart has been scheduled for tomorrow.

#### Additional attachments

#### Folder

Orchard Hills

### Timeline



[REDACTED] 03/10/2025 08:49 AM

To [REDACTED]

Status changed from In Process to Closed

Detail of Observation changed from Wind gusts observed up to 61km/hr at Badgerys Creek (12:30pm), 57km/hr at Penrith (10:37am) at BOM weather stations. Site is generally well stabilised/sealed with a watercart observed operating throughout site managing dust well with minimal dust pickup observed. to Wind gusts observed up to 61km/hr at Badgerys Creek (12:30pm), 57km/hr at Penrith (10:37am) at BOM weather stations. Site is generally well stabilised/sealed with a watercart observed operating throughout site managing dust well with minimal dust pickup observed. Additional watercart called from another site to assist and an extra watercart has been scheduled for tomorrow.

[REDACTED] 03/10/2025 08:48 AM

To [REDACTED]

■ Case reopened status changed from Closed to In Process

■ [REDACTED] 02/10/2025 12:48 PM

To [REDACTED]



20251002\_123720.jpg



20251002\_123657.jpg



20251002\_123716.jpg

3 Files

## Wind Observation 05/11/2025

Environmental Observation • SSTOM



Case PMJV-ENV-OBS-223  
By [REDACTED]  
Status Closed  
Due 19/11/2025

### Details



#### Project Location

Bringley Service Facility

#### Inspection Date & Time

04/11/2025 03:30 PM

#### Activities taking place during inspection

Crane in use, site establishment, FRP, dust suppression in progress

#### Weather Conditions

Overcast

Windy

#### Detail of Observation

Wind gusts of 106km/h recorded at 1:08pm. Staff at BSF contacted and asked for a visual update. Water carts were in use, no dust witnessed leaving site.

Attended site at 3:30pm, witnessed water carts in use at BSF. Crane ceased use. No dust visible on site. Laydown area and central hardstand and crane pad areas also washed down.

#### Additional attachments

#### Folder

Bringley/2025

### Timeline

• [REDACTED] 05/11/2025 11:45 AM

To [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

I acknowledge the Traditional Owners and Custodians of the land on which I now live and work as the First People of this country.

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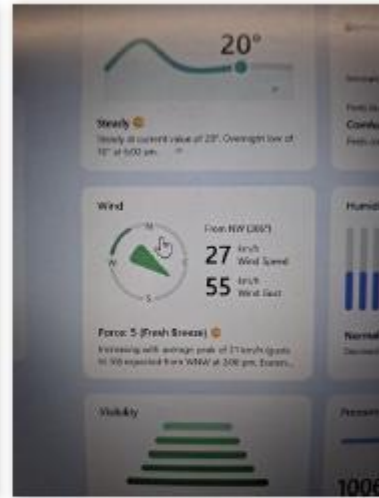
Screenshot 2025-11-05 114050.png



IMG\_20251104\_160525.jpg



IMG\_20251104\_160517.jpg



20251104\_124102.jpg



IMG\_20251104\_160527.jpg

5 Files

## High Wind OHE 20251111

Environmental Observation • SSTOM



Case PMJV-ENV-OBS-225  
By [REDACTED]  
Status Closed  
Due 11/11/2025

### Details



**Project Location**  
Orchard Hills

**Inspection Date & Time**  
11/11/2025 03:30 PM

**Activities taking place during Inspection**  
Batch plant operations, concrete pour

**Weather Conditions**

Sunny

Windy

**Detail of Observation**

High winds observed (41km/hr with gusts up to 63km/hr). No visible dust pickup observed with watercart managing site well.

**Additional attachments**



20251111\_161231(0).jpg

**Folder**

Orchard Hills

**Timeline**

• [REDACTED] 11/11/2025 04:17 PM  
To [REDACTED]



## Wind Observation - Air Quality and Dust - AEC

Environmental Observation • SSTOM



|        |                  |
|--------|------------------|
| Case   | PMJV-ENV-OBS-259 |
| By     | [REDACTED]       |
| Status | Closed           |
| Due    | 19/02/2026       |

### Details



#### Project Location

Aerotropolis

#### Inspection Date & Time

18/02/2026 11:00 AM

#### Activities taking place during inspection

Crane in use, site establishment, dust suppression in progress

#### Weather Conditions

Partly Cloudy

Overcast

Windy

#### Detail of Observation

Wind gusts of 56Km/h but were not forecast. Water carts were in progress, no dust was witnessed leaving site.

#### Additional attachments

#### Folder

Aerotropolis/2026

### Timeline

• [REDACTED] 19/02/2026 11:10 AM

To [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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aec a 29-01-2026.jpg

1 File



## Wind Observation - Air Quality - BSF - 29/07/2026

Environmental Observation • SSTOM



Case PMJV-ENV-OBS-325  
By [REDACTED]  
Status Closed  
Due 12/08/2026

### Details

#### Project Location

Bringelly Service Facility

#### Inspection Date & Time

29/07/2026 12:40 PM

#### Activities taking place during Inspection

Crane in use, site maintenance, FRP

#### Weather Conditions

Sunny

Partly Cloudy

Windy

#### Detail of Observation

Windy conditions noticed. Attended site and water cart had just been evident by the wet internal haul road. No tracking onto Derwent Road. Gusts of 50km recorded at the time. No dust visible leaving site

#### Additional attachments

#### Folder

Bringelly/2026

### Timeline

• [REDACTED] 29/07/2026 03:24 PM

To [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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BSF - 29-07.png

1 File

## Wind Observation - Air Quality & Dust - 02/06/2026

Environmental Observation • SSTOM



Case **PMJV-ENV-OBS-279**  
By [REDACTED]  
Status **Closed**  
Due **16/06/2026**

### Details

**Project Location**  
Luddenham

**Inspection Date & Time**  
02/06/2026 01:45 PM

**Activities taking place during Inspection**  
Crane in use, FRP & MEP works, dust suppression in progress

**Weather Conditions**  
Sunny

Partly Cloudy

#### Detail of Observation

Wind gusts of 44km recorded. Observations of site were that vehicle speeds remained low with no dust being generated from vehicles. No dust from existing stockpiles that were in use.

Water cart has been in attendance every hour with no deliveries of sedimentary materials today.

#### Additional attachments

**Folder**  
Luddenham

### Timeline

- [REDACTED] 02/06/2026 04:53 PM  
To [REDACTED]  
Status changed from In Process to Closed
- Inspection Date & Time changed from 07/05/2026 11:00 AM to 02/06/2026 01:45 PM
- [REDACTED] 02/06/2026 04:53 PM  
To [REDACTED]
- Case reopened status changed from Closed to In Process
- [REDACTED] 02/06/2026 04:14 PM  
To [REDACTED]  
[REDACTED]  
[REDACTED]

I acknowledge the Traditional Owners and Custodians of the land on which I now live and work as the First People of this country.  
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07-05-2026 (3).jpg



07-05-2026 (2).jpg

2 Files

# Appendix B      Visual Air Quality Inspection Photos



PHOTO 1 DUST SUPPRESSION WORKS CAPTURED ON 01.04.2026



PHOTO 2 DUST SUPPRESSION WORKS CAPTURED ON 24.06.2026



PHOTO 3 DUST SUPPRESSION WORKS CAPTURED ON 24.07.2026



PHOTO 4 DUST SUPPRESSION WORKS CAPTURED ON 03.02.2026



PHOTO 5 POLYMER APPLICATION WORKS CAPTURED ON 13.07.2026



PHOTO 6 DUST SUPPRESSION WORKS CAPTURED ON 10.03.2026



PHOTO 7 POLYMER APPLICATION WORKS CAPTURED ON 10.03.2026



PHOTO 8 WATERCART FILLING FOR DUST SUPPRESSION CAPTURED ON 02.03.2026



PHOTO 9 DUST SUPPRESSION WORKS CAPTURED ON 22.10.2025



PHOTO 10 DUST SUPPRESSION WORKS CAPTURED ON 29.08.2025

# Appendix C      Real-time Dust Monitoring Data

## Air Quality Complaint 04/09/2025



SSTOM  
Parklife Metro JV

### Dust Monitoring Statistics


**Portion 1 North**

---


**PM2.5**

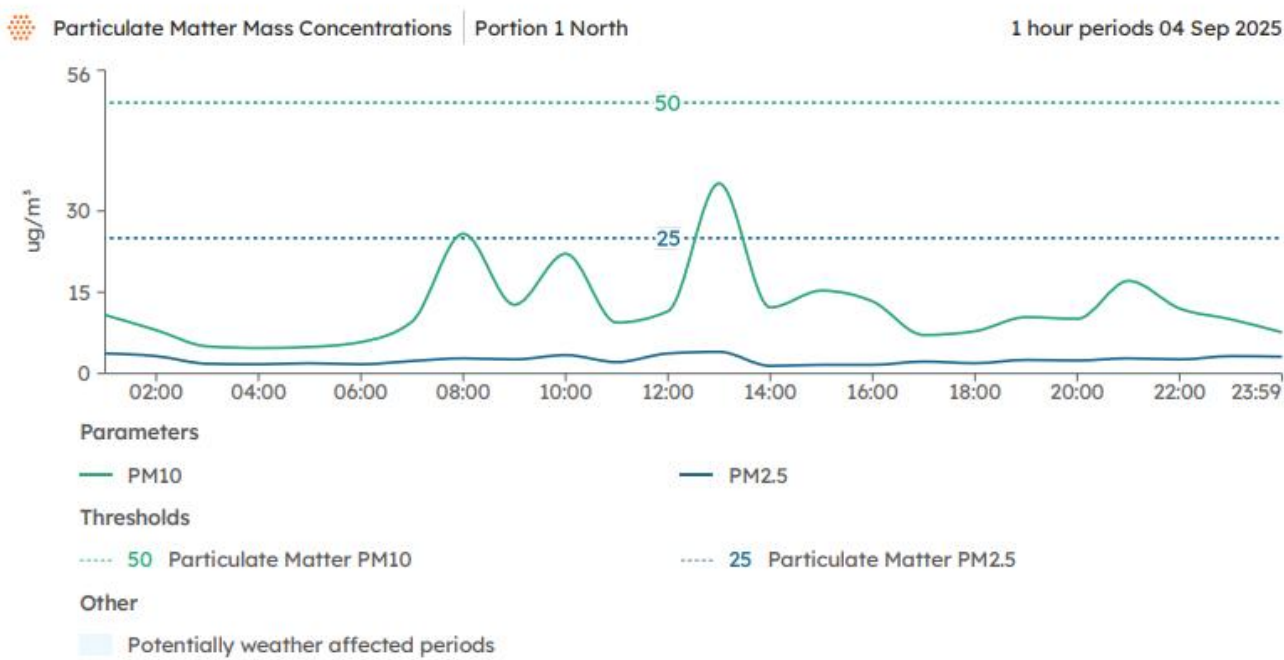
**3**
Average  
µg/m³


**PM10**

**12**
Average  
µg/m³

These averages are statistical means calculated from all samples across the chosen period.

### Dust Monitoring Graphs



### Device Details

| Device Serial | Monitoring Points | Model             | Calibration Date | Calibration Due |
|---------------|-------------------|-------------------|------------------|-----------------|
| HEX-000641    | Portion 1 North   | SiteHive Hexanode | 25 Jun 2025      | 25 Jun 2027     |
| HEX-001222    | -                 | SiteHive Hexanode | 23 Jun 2026      | 23 Jun 2028     |

# Air Quality Complaint 17/09/2025



SSTOM

Parklife Metro JV

## Dust Monitoring Statistics

### ▼ Portion 1 South

PM2.5 **2** Average  $\mu\text{g}/\text{m}^3$

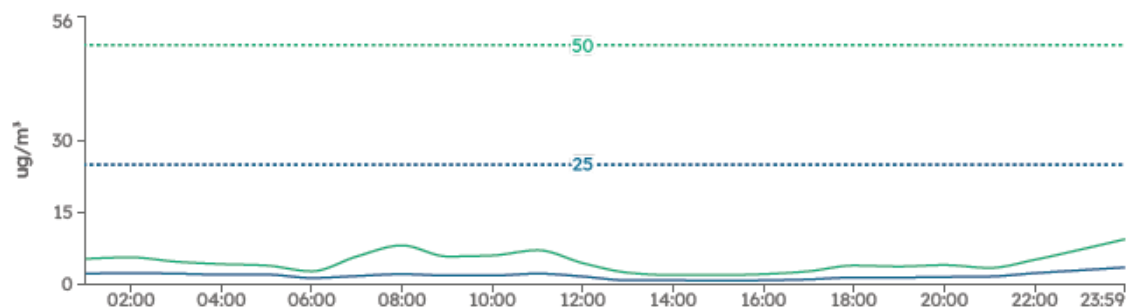
PM10 **5** Average  $\mu\text{g}/\text{m}^3$

These averages are statistical means calculated from all samples across the chosen period.

## Dust Monitoring Graphs

### Particulate Matter Mass Concentrations | Portion 1 South

1 hour periods 17 Sep 2025



#### Parameters

PM10

PM2.5

#### Thresholds

50 Particulate Matter PM10

25 Particulate Matter PM2.5

#### Other

Potentially weather affected periods

## Device Details

| Device Serial | Monitoring Points | Model             | Calibration Date | Calibration Due |
|---------------|-------------------|-------------------|------------------|-----------------|
| HEX-000155    | -                 | SiteHive Hexanode | -                | -               |
| HEX-000224    | -                 | SiteHive Hexanode | -                | -               |
| HEX-000080    | -                 | SiteHive Hexanode | 06 Oct 2023      | 06 Oct 2025     |
| HEX-000642    | -                 | SiteHive Hexanode | -                | -               |
| HEX-001041    | -                 | SiteHive Hexanode | 19 May 2025      | 19 May 2027     |
| HEX-001114    | Portion 1 South   | SiteHive Hexanode | 25 Aug 2025      | 25 Aug 2027     |
| HEX-001093    | -                 | SiteHive Hexanode | 25 Nov 2025      | 25 Nov 2027     |
| HEX-001530    | -                 | SiteHive Hexanode | 15 Apr 2026      | 15 Apr 2028     |

# Air Quality Complaint 02/10/2025



SSTOM

Parklife Metro JV

## Dust Monitoring Statistics


**Portion 1 North**

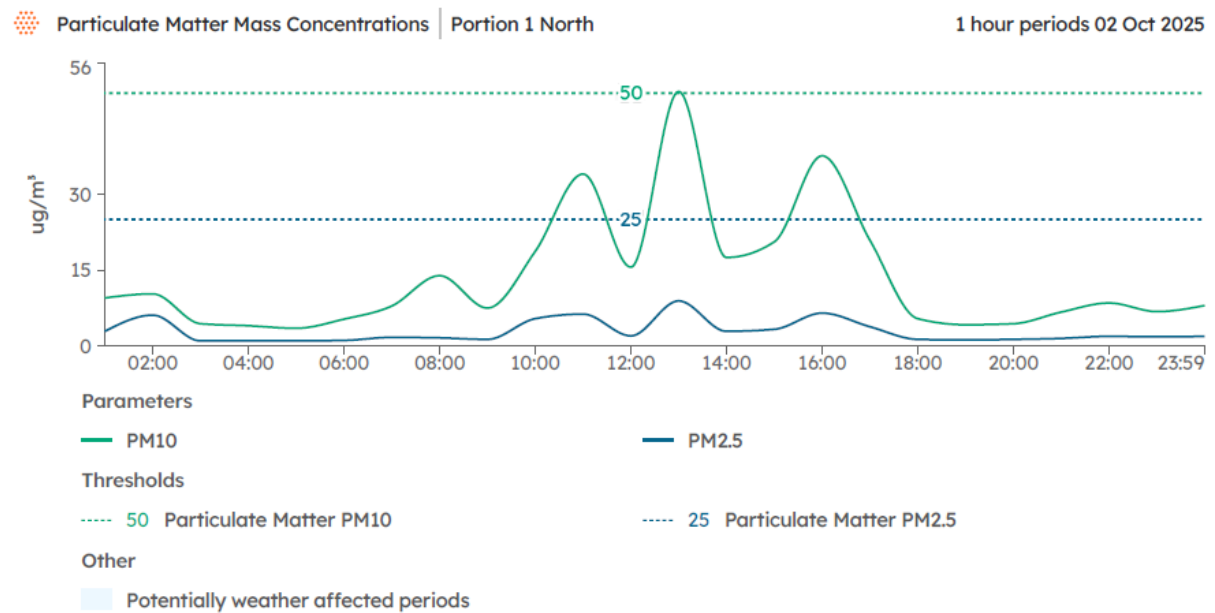
---


**PM2.5**
3 Average  $\mu\text{g}/\text{m}^3$


**PM10**
14 Average  $\mu\text{g}/\text{m}^3$

These averages are statistical means calculated from all samples across the chosen period.

## Dust Monitoring Graphs



## Device Details

| Device Serial | Monitoring Points | Model             | Calibration Date | Calibration Due |
|---------------|-------------------|-------------------|------------------|-----------------|
| HEX-000641    | Portion 1 North   | SiteHive Hexanode | 25 Jun 2025      | 25 Jun 2027     |
| HEX-001222    | -                 | SiteHive Hexanode | 23 Jun 2026      | 23 Jun 2028     |

## Appendix D Calibration Certificates

### Hexanode Calibration Certificate



06 Jul 2026

#### Noise

Thank you for choosing SiteHive for your realtime environmental management. This calibration certificate is valid for the device below.

The Hexanode sound level meter has been pressure calibrated by SiteHive using a NATA Certified (IEC 60942: Sound calibrators) Sound Level Calibrator, at 104 Commonwealth Street, Surry Hills, NSW, 2010.

NATA Certificates of Calibration that comply with the Class 2 performance requirements of IEC 61672.3 are available on request.

| Serial Number | Noiseboard ID          | Calibration Value | Calibration Date | Calibration Due |
|---------------|------------------------|-------------------|------------------|-----------------|
| HEX-001222    | 4273865-009-0426000219 | 3.775923          | 23 Jun 2026      | 23 Jun 2028     |

|                                   |                                                                                              |
|-----------------------------------|----------------------------------------------------------------------------------------------|
| Accuracy:                         | Complies with precision requirements of IEC 61672 for Class 2                                |
| Acoustic overload point:          | 135 dBSPL                                                                                    |
| Frequency Range:                  | 20 Hz ~ 12.5 kHz                                                                             |
| Frequency Rating:                 | Z, A and C weighting                                                                         |
| Parameters (dB):                  | Frequency & time weighted integrations, statistical levels, and more                         |
| Direction of Arrival:             | Device angle & cartesian angle (0°-360°) of dominant noise source                            |
| Reference Sound Level Calibrator: | Lutron SC-941                                                                                |
| Calibration Reference Level:      | 94dB                                                                                         |
| Calibration Reference Frequency:  | 1 KHz                                                                                        |
| Environmental Conditions:         | The environmental conditions remained within the acceptable limits as defined in IEC 61672.3 |

# Hexanode Calibration Certificate



06 Jul 2026

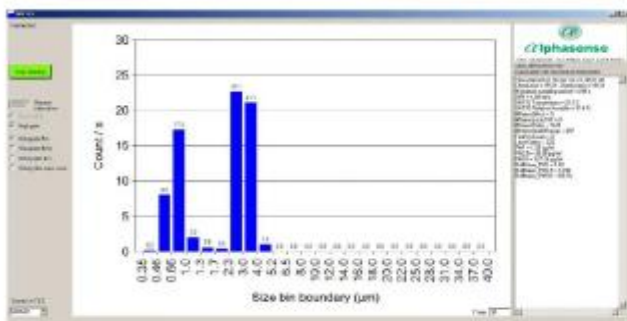
## Dust

Thank you for choosing SiteHive for your realtime environmental management. This calibration certificate is valid for the device below.

The Hexanode utilises the Alphasense N3 Optical Particle Sensor to provide real-time dust measurements. Whilst the N3 does not have any gravimetric sampling capabilities, measurements can be adjusted using a K-Factor if one is available. SiteHive software will also provide measurements from the nearest Government air quality station for reference. The full data sheet for the Alphasense N3 is available [here](#).

| Particle range              | Particle range* $\mu\text{m}$ spherical equivalent size<br>(based on RI of 1.5) | 0.35 to 40 |
|-----------------------------|---------------------------------------------------------------------------------|------------|
| Size categorisation         | Number of software bins                                                         | 24         |
| Sampling interval           | Histogram period (seconds)                                                      | 1 to 30    |
| Total flow rate (typical)   | L/min                                                                           | 5.5        |
| Sample flow rate (typical)  | mL/min                                                                          | 280        |
| Max particle count rate     | Particles/second                                                                | 10,000     |
| Max coincidence probability | %concentration at 106 particles/L                                               | 0.84       |
| Max coincidence probability | %concentration at 500 particles/L                                               | 0.24       |

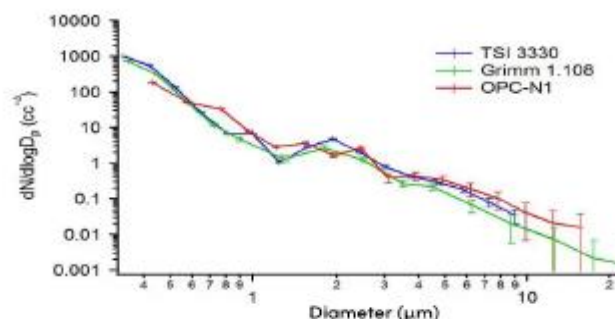
OPC-N3 response to 0.75 and 3  $\mu\text{m}$  PSL calibration standards



OPC-N3 response to a broad size range test dust



Particle Size Derivative Comparison



The OPC-N3 uses the same algorithms for 0.3 - 17  $\mu\text{m}$  as the OPC-N1.

# Hexanode Calibration Certificate



14 May 2026

## Noise

Thank you for choosing SiteHive for your realtime environmental management. This calibration certificate is valid for the device below.

The Hexanode sound level meter has been pressure calibrated by SiteHive using a NATA Certified (IEC 60942: Sound calibrators) Sound Level Calibrator, at 104 Commonwealth Street, Surry Hills, NSW, 2010.

NATA Certificates of Calibration that comply with the Class 2 performance requirements of IEC 61672.3 are available on request.

| Serial Number | Noiseboard ID          | Calibration Value | Calibration Date | Calibration Due |
|---------------|------------------------|-------------------|------------------|-----------------|
| HEX-001530    | 4273865-009-0426000004 | 4.464674          | 14 Apr 2026      | 14 Apr 2028     |

|                                   |                                                                                              |
|-----------------------------------|----------------------------------------------------------------------------------------------|
| Accuracy:                         | Complies with precision requirements of IEC 61672 for Class 2                                |
| Acoustic overload point:          | 135 dB SPL                                                                                   |
| Frequency Range:                  | 20 Hz - 12.5 kHz                                                                             |
| Frequency Rating:                 | Z, A and C weighting                                                                         |
| Parameters (dB):                  | Frequency & time weighted integrations, statistical levels, and more                         |
| Direction of Arrival:             | Device angle & cartesian angle (0°-360°) of dominant noise source                            |
| Reference Sound Level Calibrator: | Lutron SC-941                                                                                |
| Calibration Reference Level:      | 94dB                                                                                         |
| Calibration Reference Frequency:  | 1 KHz                                                                                        |
| Environmental Conditions:         | The environmental conditions remained within the acceptable limits as defined in IEC 61672.3 |

# Hexanode Calibration Certificate



14 May 2026

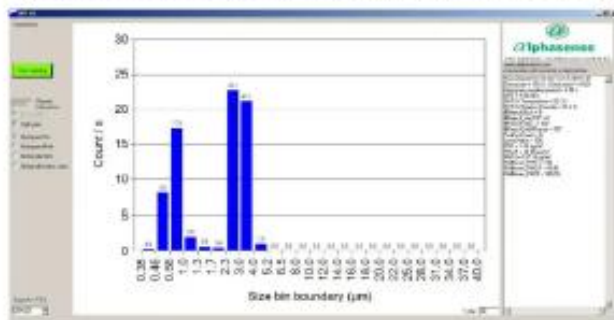
## Dust

Thank you for choosing SiteHive for your realtime environmental management. This calibration certificate is valid for the device below.

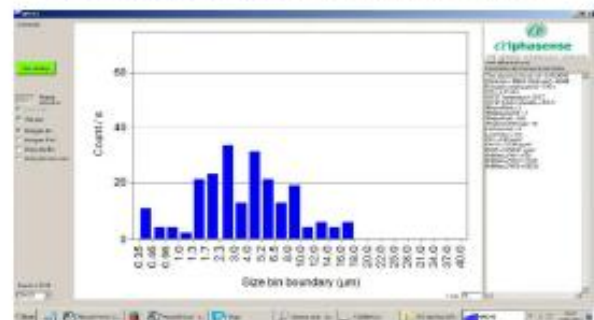
The Hexanode utilises the Alphasense N3 Optical Particle Sensor to provide real-time dust measurements. Whilst the N3 does not have any gravimetric sampling capabilities, measurements can be adjusted using a K-Factor if one is available. SiteHive software will also provide measurements from the nearest Government air quality station for reference. The full data sheet for the Alphasense N3 is available [here](#).

| Particle range              | Particle range* $\mu\text{m}$ spherical equivalent size<br>(based on RI of 1.5) | 0.35 to 40 |
|-----------------------------|---------------------------------------------------------------------------------|------------|
| Size categorisation         | Number of software bins                                                         | 24         |
| Sampling interval           | Histogram period (seconds)                                                      | 1 to 30    |
| Total flow rate (typical)   | L/min                                                                           | 5.5        |
| Sample flow rate (typical)  | mL/min                                                                          | 280        |
| Max particle count rate     | Particles/second                                                                | 10,000     |
| Max coincidence probability | %concentration at 106 particles/L                                               | 0.84       |
| Max coincidence probability | %concentration at 500 particles/L                                               | 0.24       |

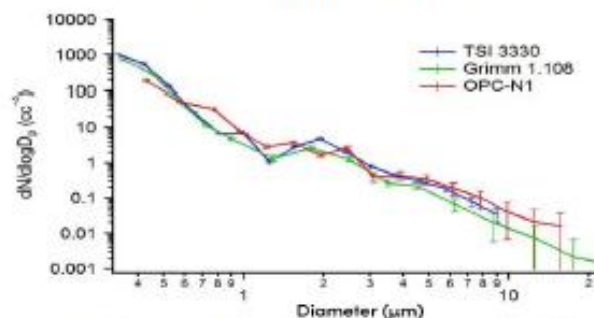
OPC-N3 response to 0.75 and 3  $\mu\text{m}$  PSL calibration standards



OPC-N3 response to a broad size range test dust



Particle Size Derivative Comparison



The OPC-N3 uses the same algorithms for 0.3 - 17  $\mu\text{m}$  as the OPC-N1.