

19 February 2026

Chris Schneider  
Managing Director  
National Ceramic Industries Australia  
PO Box 765  
Maitland NSW 2320

Dear Chris

## **Environmental Monitoring for National Ceramic Industries Australia - January 2026**

Please find enclosed the documentation for the environmental monitoring carried out for National Ceramic Industries Australia during January 2026. Sampling methodology and adopted assessment criteria are detailed below.

### **1.0 Sampling Methodology**

Sampling was performed by AECOM Australia Pty Ltd (AECOM) and sample analysis was carried out by ALS (NATA accreditation 825). All sampling and analysis were carried out in accordance with Environmental Protection Authority (EPA) approved methods with reference to the following Australian Standards:

- monitoring of fine suspended particulates (PM<sub>10</sub>) on the EPA six-day cycle in accordance with:
  - *AS/NZS 3580.9.6 (2015) Methods for the Sampling and Analysis of Ambient Air – Determination of Suspended Particulate Matter – PM<sub>10</sub> High Volume Sampler with Size Selective Inlet – Gravimetric Method.*
- monitoring of fluorides in ambient air in accordance with:
  - *AS/NZS 3580.13.2 (2013) Determination of fluorides – Gaseous and acid-soluble particulate fluorides – Manual, double filter paper sampling.*
- meteorological monitoring in accordance with:
  - *AS 3580.1.1 (2016) – Methods for sampling and analysis of ambient air – Part 1.1 – Guide to siting air monitoring equipment.*
  - *AS 3580.14 (2014) – Methods for sampling and analysis of ambient air – Part 14: Meteorological monitoring for ambient air quality monitoring.*
- monitoring of surface water quality in accordance with:
  - *AS/NZS 5667.1:1998 (R2016) Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.*
  - *AS/NZS 5667.4:1998 (R2016) Guidance on sampling from lakes, natural and manmade.*

### **2.0 Assessment Criteria**

Suspended particulate loads are assessed against the impact assessment criteria defined in the Project Approval conditions (09\_0006 – National Ceramic Industries Australia Tile Manufacturing Facility Expansion Project, 19 January 2012). The assessment criteria for PM<sub>10</sub> (particulate matter with an aerodynamic diameter of less than 10 µm) are:

- 50 µg/m<sup>3</sup> over a 24-hour period
- 30 µg/m<sup>3</sup> as an annual average.

Ambient fluoride concentrations are assessed against the guidelines defined in NSW EPA *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (NSW EPA (2022)).

The NSW EPA impact assessment criteria for ambient fluoride are:

- 2.9 µg/m<sup>3</sup> over a 24-hour period
- 1.7 µg/m<sup>3</sup> over a 7-day period.

Surface waters are assessed in accordance with default trigger values for physical and chemical stressors for southeast Australia in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZG, 2018). These values are:

- pH in the range of 6.5 - 8.5 (Table 3.3.2 - NSW Lowland River)
- electrical conductivity (EC) in the range of 125 – 2200  $\mu\text{S}/\text{cm}$  (Table 3.3.3 - NSW Lowland River).

### 3.0 Monitoring Results

Monitoring results for the month of January 2026 are presented in the attachments to this letter. Monitoring results for the preceding two months are also presented to demonstrate quarterly trends in results.

The January 2026 monitoring results show that exceedances of the  $\text{PM}_{2.5}$  24hr Criteria ( $25 \mu\text{g}/\text{m}^3$ ) and the  $\text{PM}_{10}$  24hr Criteria ( $50 \mu\text{g}/\text{m}^3$ ) were recorded on 31 January 2026. A bushfire was recorded near Oyster Cove and Medowie, in the Port Stephens LGA, on 29 to 31 January 2026, resulting in significant smoke and consequently poor air quality regionally, impacting as far as Sydney and Muswellbrook. It is probable that these events impacted the  $\text{PM}_{10}$  results on 31 January 2026, and hence they have been excluded from the rolling annual averages for both locations. An Environmental Incident Report detailing these results was submitted to the Major Projects Portal 17 February 2026.

The samples for both locations on 1 and 7 January 2026 were invalidated due to the filter papers not being changed in between runs. Consequently, catch-up runs were performed on 9 January 2026 at both locations. A catch-up was conducted on 21 January 2026 at the Northwest location but was unable to be conducted at the Southeast location due to the unit malfunctioning. As a result, the Southeast  $\text{PM}_{10}$  sampler was replaced (with a spare unit) and calibrated on 22 January 2026. The replacement unit remains on site at the time of writing while the faulty unit is assessed. The remaining catch up sample required at the South East location will be performed during February.

All remaining ambient  $\text{PM}_{10}$  results were below the short-term impact assessment criterion ( $50 \mu\text{g}/\text{m}^3$ ) as defined in the DPIE Project Approval (Schedule 3, Condition 15, Table 2). The  $\text{PM}_{10}$  rolling annual average concentration at the Southeast site remains below the Project Approval annual criterion of  $30 \mu\text{g}/\text{m}^3$  with an average of  $15.8 \mu\text{g}/\text{m}^3$  following the January monitoring period. The Northwest annual average is also below the criteria and is sitting at  $18.8 \mu\text{g}/\text{m}^3$  following the completion of the January monitoring period.

Fluoride results for January remain below the relevant assessment criteria at both the Northwest and Southeast monitoring sites with no exceedances of either the 24-hour ( $2.9 \mu\text{g}/\text{m}^3$ ) or 7-day ( $1.7 \mu\text{g}/\text{m}^3$ ) criteria this month.

Pond 4, being the last detention pond on site before water potentially leaves the site is monitored for pH, electrical conductivity and temperature on a weekly basis. The adopted ANZG 2018 guidelines for pH and conductivity are the default trigger values for slightly disturbed aquatic ecosystems in NSW lowland rivers. pH measurements for this reporting month were within the guideline values of 6.5 to 8.5 pH units for all January inspections. Pond 4 was not observed to be discharging from site during any January inspections. Electrical conductivity measurements for January were within both upper and lower limits of the adopted guidelines. Water temperature was also measured however no guideline is available for assessment.

A figure showing the monitoring locations and monitoring results and plots can be found attached along with the wind rose for January. Laboratory certificates, field sheets and calibration data along with relevant meteorology data can be provided on request.

If you require any further information, please contact Cyé Buckland on 0488 777 160.

Yours faithfully,



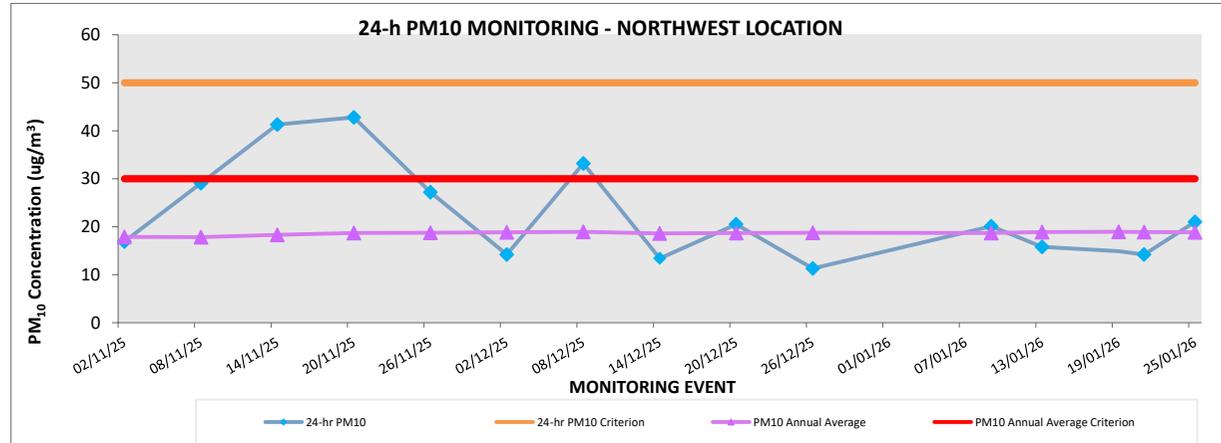
cye.buckland@aecom.com  
Mobile: +61 488 777 160

encl: Monitoring data tables and charts, wind rose, monitoring locations

### North West Monitoring Location - 24 hour PM10 Monitoring

North West - 24 hour PM10 Monitoring				
November 2025 to January 2026				
Monitoring Event	24-hr PM <sub>10</sub>	24-hr PM <sub>10</sub> Criterion	PM <sub>10</sub> Annual Average	PM <sub>10</sub> Annual Average Criterion
	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	
2-Nov-25	16.9	50	17.9	30
8-Nov-25	29.1	50	17.8	30
14-Nov-25	41.3	50	18.3	30
20-Nov-25	42.8	50	18.7	30
26-Nov-25	27.2	50	18.8	30
2-Dec-25	14.2	50	18.8	30
8-Dec-25	33.2	50	18.9	30
14-Dec-25	13.4	50	18.6	30
20-Dec-25	20.5	50	18.7	30
26-Dec-25	11.3	50	18.7	30
9-Jan-26	20.1	50	18.7	30
13-Jan-26	15.8	50	18.9	30
19-Jan-26	14.9	50	19.0	30
21-Jan-26	14.2	50	18.9	30
25-Jan-26	21	50	18.8	30

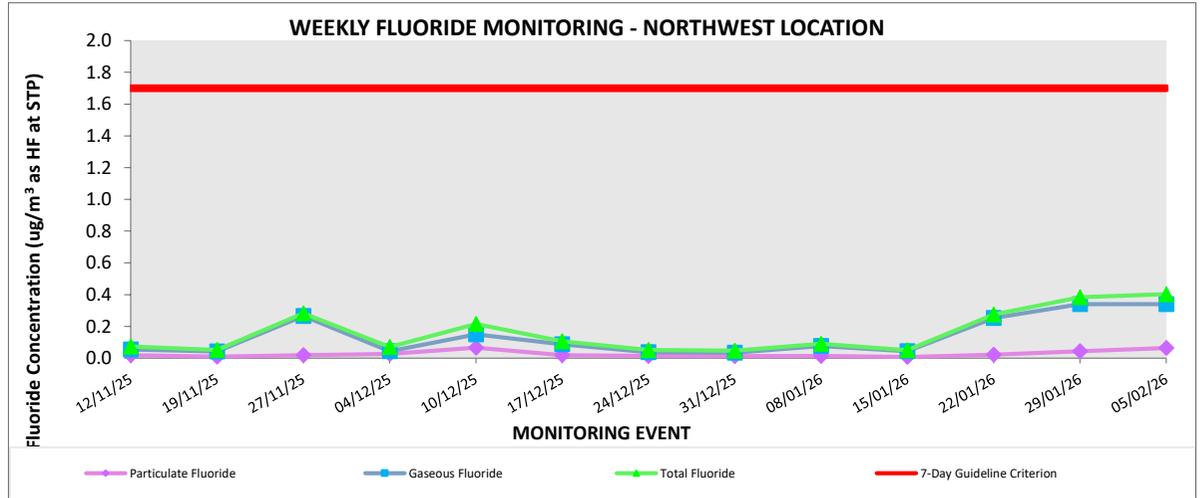
Samples on 1 and 31 January invalidated.



### North West Monitoring Location - 7 Day Fluoride Monitoring

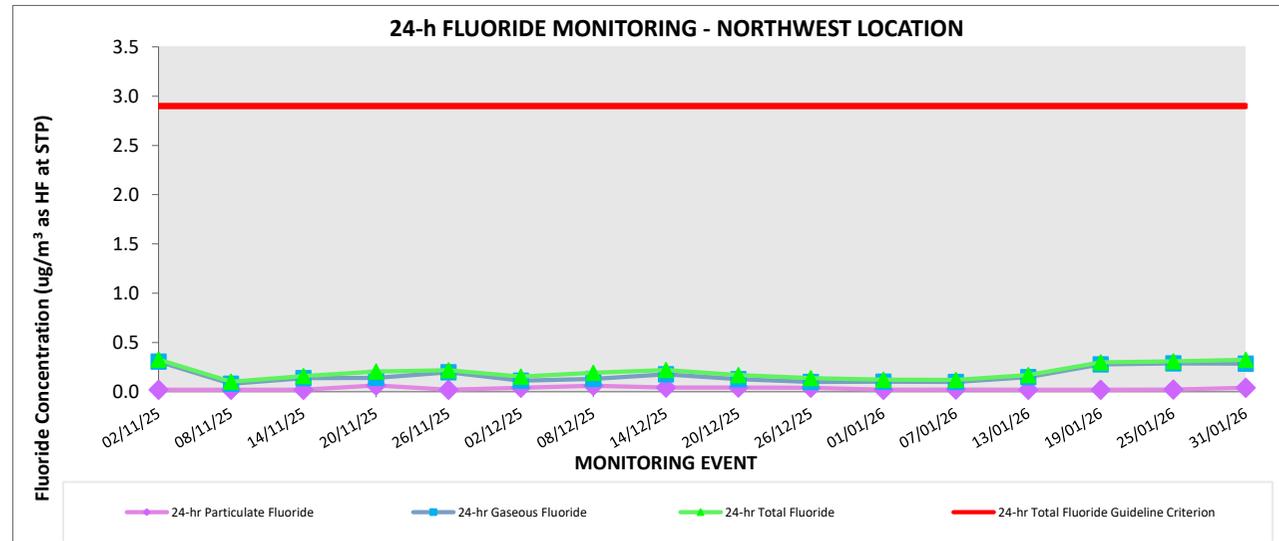
North West - 7 Day Fluoride Monitoring	
November 2025 to February 2026	

Monitoring Event		Particulate Fluoride	Gaseous Fluoride	Total Fluoride	7-Day Guideline Criterion
Start Date	End Date	( $\mu\text{g}/\text{m}^3$ as HF at STP)			
End Date	12-Nov-25	0.018	0.055	0.073	1.7
12-Nov-25	19-Nov-25	0.009	0.042	0.051	1.7
19-Nov-25	27-Nov-25	0.018	0.265	0.283	1.7
27-Nov-25	4-Dec-25	0.026	0.044	0.070	1.7
4-Dec-25	10-Dec-25	0.066	0.149	0.215	1.7
10-Dec-25	17-Dec-25	0.019	0.087	0.106	1.7
17-Dec-25	24-Dec-25	0.014	0.038	0.052	1.7
24-Dec-25	31-Dec-25	0.013	0.034	0.047	1.7
31-Dec-25	8-Jan-26	0.014	0.076	0.090	1.7
8-Jan-26	15-Jan-26	0.007	0.043	0.050	1.7
15-Jan-26	22-Jan-26	0.022	0.253	0.275	1.7
22-Jan-26	29-Jan-26	0.043	0.340	0.383	1.7
29-Jan-26	5-Feb-26	0.063	0.340	0.403	1.7



### North West Monitoring Location - 24 hour Fluoride Monitoring

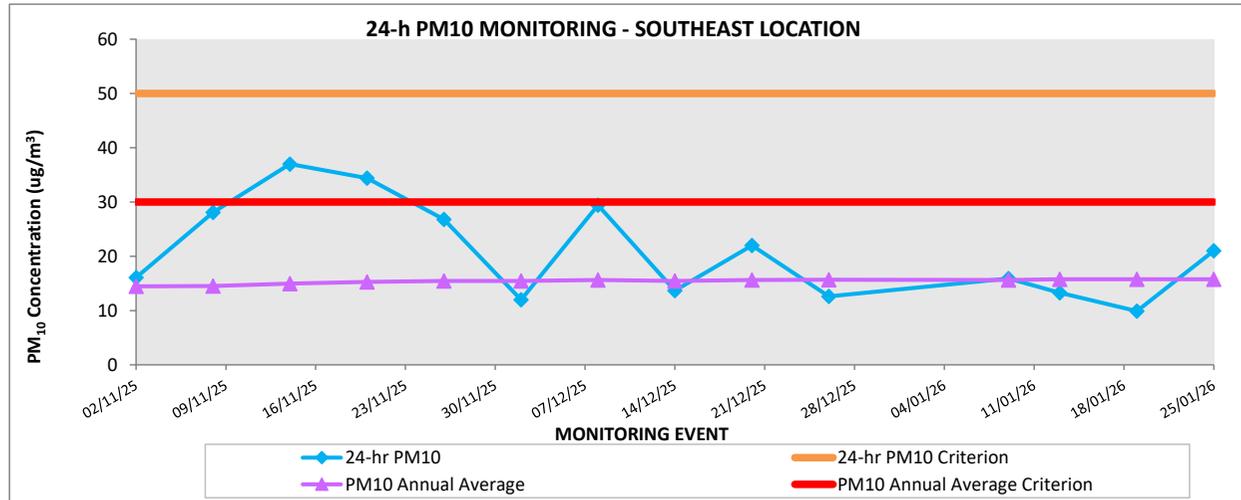
North West - 24 hour Fluoride Monitoring				
November 2025 to January 2026				
Monitoring Event	24-hr Particulate Fluoride	24-hr Gaseous Fluoride	24-hr Total Fluoride	24-hr Total Fluoride Guideline Criterion
	( $\mu\text{g}/\text{m}^3$ as HF at STP)			
02-Nov-25	0.021	0.306	0.327	2.9
08-Nov-25	0.021	0.081	0.102	2.9
14-Nov-25	0.021	0.138	0.159	2.9
20-Nov-25	0.065	0.142	0.207	2.9
26-Nov-25	0.021	0.198	0.219	2.9
02-Dec-25	0.041	0.112	0.153	2.9
08-Dec-25	0.062	0.131	0.193	2.9
14-Dec-25	0.044	0.178	0.222	2.9
20-Dec-25	0.043	0.128	0.171	2.9
26-Dec-25	0.04	0.099	0.139	2.9
01-Jan-26	0.021	0.102	0.123	2.9
07-Jan-26	0.022	0.100	0.122	2.9
13-Jan-26	0.021	0.15	0.171	2.9
19-Jan-26	0.021	0.279	0.300	2.9
25-Jan-26	0.022	0.288	0.310	2.9
31-Jan-26	0.04	0.285	0.325	2.9



### South East Monitoring Location - 24 hour PM10 Monitoring

**South East - 24 hour PM10 Monitoring**  
November 2025 to January 2026

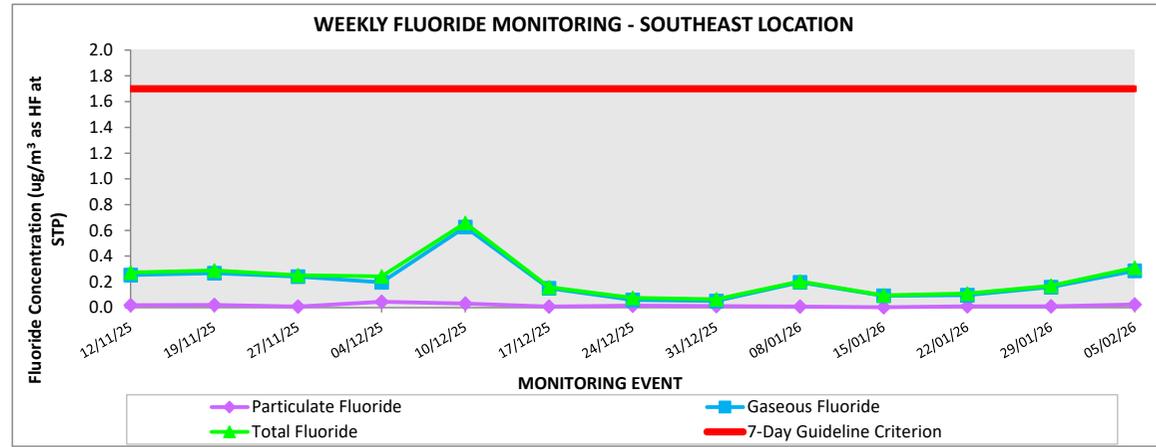
Monitoring Event	24-hr PM <sub>10</sub>	24-hr PM <sub>10</sub> Criterion	PM <sub>10</sub> Annual Average	PM <sub>10</sub> Annual Average Criterion
	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	
02-Nov-25	16.1	50	14.5	30
08-Nov-25	28.1	50	14.5	30
14-Nov-25	37.0	50	15.0	30
20-Nov-25	34.4	50	15.3	30
26-Nov-25	26.8	50	15.4	30
02-Dec-25	12	50	15.5	30
08-Dec-25	29.4	50	15.6	30
14-Dec-25	13.7	50	15.5	30
20-Dec-25	22.0	50	15.7	30
26-Dec-25	12.6	50	15.7	30
09-Jan-26	15.9	50	15.6	30
13-Jan-26	13.3	50	15.8	30
19-Jan-26	9.9	50	15.8	30
25-Jan-26	21	50	15.8	30



### South East Monitoring Location - 7 Day Fluoride Monitoring

#### South East - 7 Day Fluoride Monitoring November 2025 to February 2026

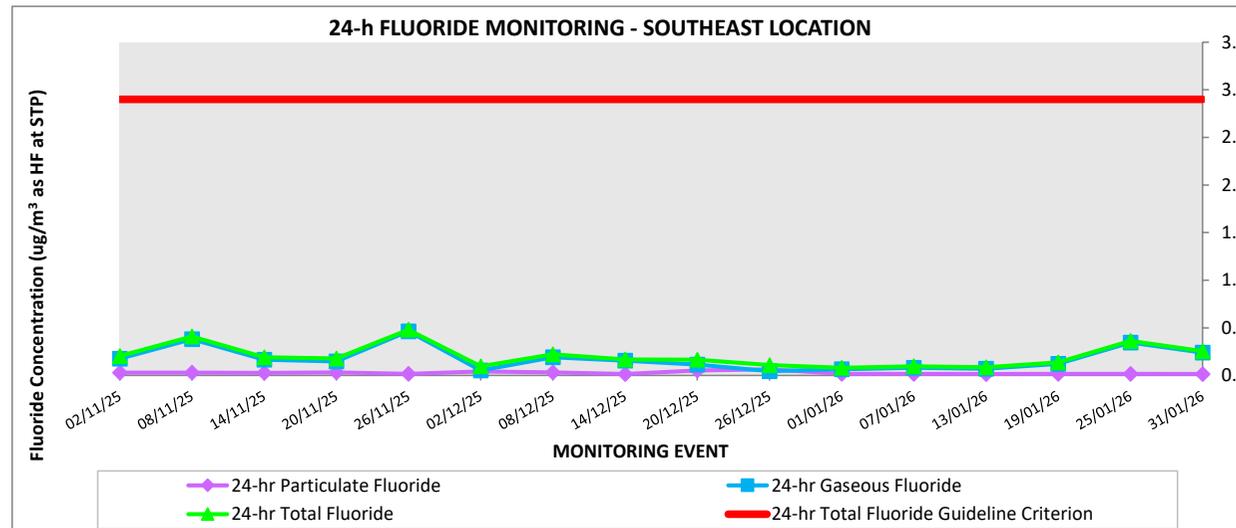
Monitoring Event		Particulate Fluoride	Gaseous Fluoride	Total Fluoride	7-Day Guideline Criterion
Start Date	End Date	( $\mu\text{g}/\text{m}^3$ as HF at STP)			
5-Nov-25	12-Nov-25	0.019	0.254	0.273	1.7
12-Nov-25	19-Nov-25	0.021	0.268	0.289	1.7
19-Nov-25	27-Nov-25	0.009	0.242	0.251	1.7
27-Nov-25	4-Dec-25	0.046	0.197	0.243	1.7
4-Dec-25	10-Dec-25	0.032	0.626	0.658	1.7
10-Dec-25	17-Dec-25	0.009	0.151	0.160	1.7
17-Dec-25	24-Dec-25	0.015	0.061	0.076	1.7
24-Dec-25	31-Dec-25	0.013	0.052	0.065	1.7
31-Dec-25	8-Jan-26	0.008	0.196	0.204	1.7
8-Jan-26	15-Jan-26	0.003	0.092	0.095	1.7
15-Jan-26	22-Jan-26	0.011	0.098	0.109	1.7
22-Jan-26	29-Jan-26	0.010	0.160	0.170	1.7
29-Jan-26	5-Feb-26	0.025	0.285	0.310	1.7



### South East Monitoring Location - 24 hour Fluoride Monitoring

**South East - 24 hour Fluoride Monitoring**  
November 2025 to January 2026

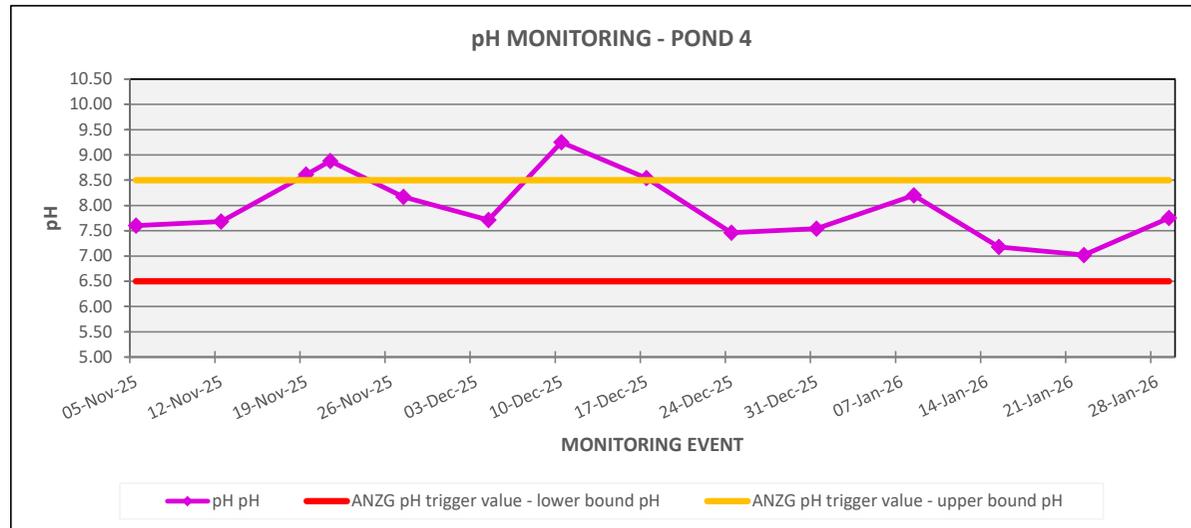
Monitoring Event	24-hr Particulate Fluoride	24-hr Gaseous Fluoride	24-hr Total Fluoride	24-hr Total Fluoride Guideline Criterion
	( $\mu\text{g}/\text{m}^3$ as HF at STP)			
02-Nov-25	0.028	0.176	0.204	2.9
08-Nov-25	0.030	0.380	0.410	2.9
14-Nov-25	0.026	0.165	0.191	2.9
20-Nov-25	0.031	0.148	0.179	2.9
26-Nov-25	0.016	0.464	0.480	2.9
02-Dec-25	0.043	0.052	0.095	2.9
08-Dec-25	0.031	0.191	0.222	2.9
14-Dec-25	0.015	0.154	0.169	2.9
20-Dec-25	0.052	0.114	0.166	2.9
26-Dec-25	0.064	0.045	0.109	2.9
01-Jan-26	0.016	0.064	0.080	2.9
07-Jan-26	0.016	0.081	0.097	2.9
13-Jan-26	0.015	0.071	0.086	2.9
19-Jan-26	0.016	0.122	0.138	2.9
25-Jan-26	0.016	0.346	0.362	2.9
31-Jan-26	0.015	0.241	0.256	2.9



**Pond 4 - Weekly pH Monitoring**  
November 2025 to January 2026

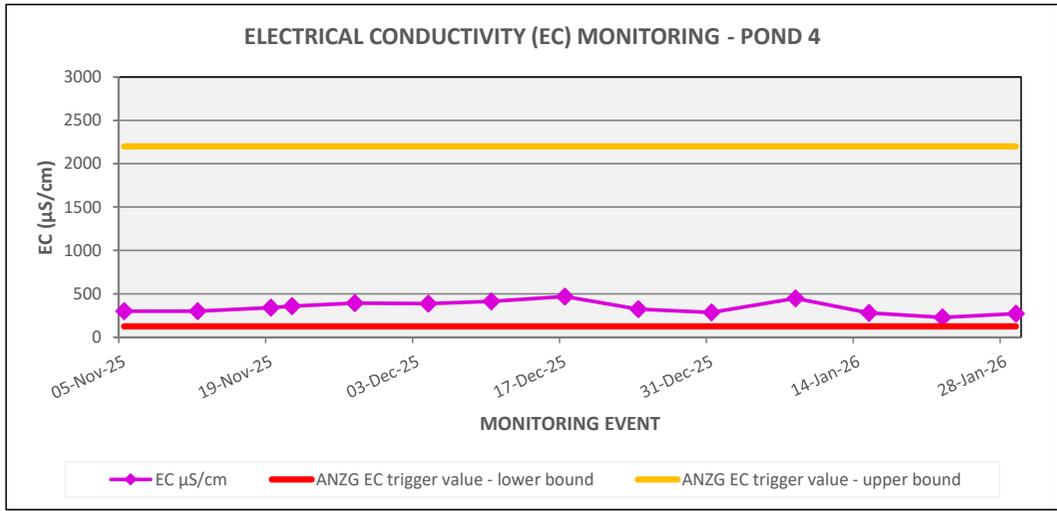
Monitoring Event	pH	ANZG pH trigger value - lower bound	ANZG pH trigger value - upper bound	Unable to sample
	pH	pH	pH	
05-Nov-25	7.60	6.5	8.5	
12-Nov-25	7.68	6.5	8.5	
19-Nov-25	8.61	6.5	8.5	
21-Nov-25	8.88	6.5	8.5	
27-Nov-25	8.17	6.5	8.5	
04-Dec-25	7.71	6.5	8.5	
10-Dec-25	9.25	6.5	8.5	
17-Dec-25	8.54	6.5	8.5	
24-Dec-25	7.46	6.5	8.5	
31-Dec-25	7.54	6.5	8.5	
08-Jan-26	8.20	6.5	8.5	
15-Jan-26	7.18	6.5	8.5	
22-Jan-26	7.02	6.5	8.5	
29-Jan-26	7.75	6.5	8.5	

Indicates results outside the criteria (6.5 - 8.5)



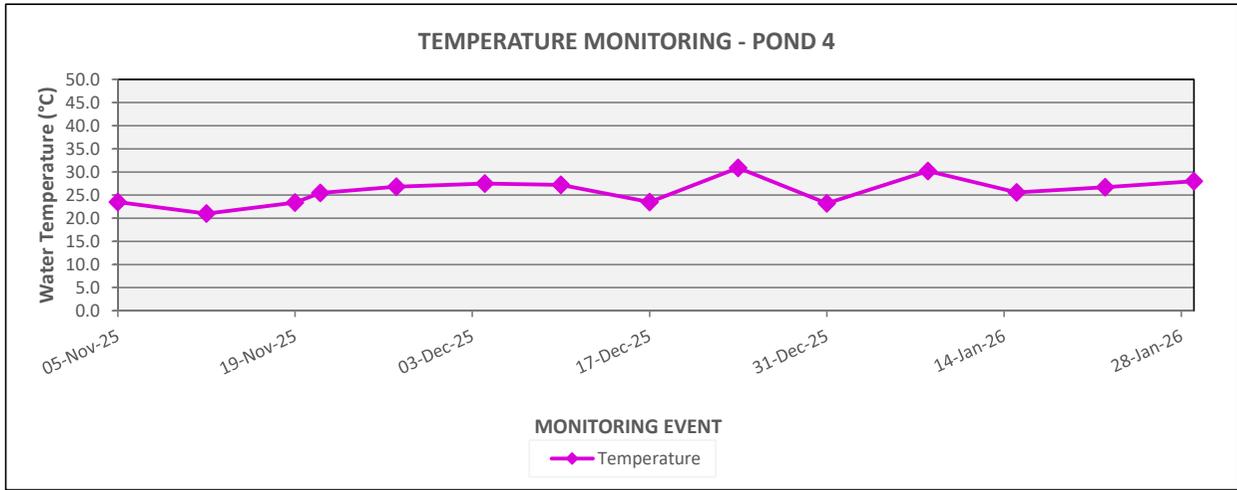
**Pond 4 - Weekly EC Monitoring**  
November 2025 to January 2026

Monitoring Event	EC	ANZG EC trigger value - lower bound	ANZG EC trigger value - upper bound	Unable to sample
	µS/cm	µS/cm	µS/cm	
05-Nov-25	301	125	2200	
12-Nov-25	301	125	2200	
19-Nov-25	340	125	2200	
21-Nov-25	357	125	2200	
27-Nov-25	393	125	2200	
04-Dec-25	387	125	2200	
10-Dec-25	412	125	2200	
17-Dec-25	469	125	2200	
24-Dec-25	324	125	2200	
31-Dec-25	285	125	2200	
08-Jan-26	447	125	2200	
15-Jan-26	279	125	2200	
22-Jan-26	228	125	2200	
29-Jan-26	271	125	2200	



**Pond 4 - Weekly Temperature Monitoring**  
November 2025 to January 2026

Monitoring Event	Temperature	Unable to sample
	°C	
05-Nov-25	23.5	
12-Nov-25	21.0	
19-Nov-25	23.4	
21-Nov-25	25.5	
27-Nov-25	26.8	
04-Dec-25	27.5	
10-Dec-25	27.2	
17-Dec-25	23.5	
24-Dec-25	30.9	
31-Dec-25	23.2	
08-Jan-26	30.2	
15-Jan-26	25.6	
22-Jan-26	26.7	
29-Jan-26	28.0	

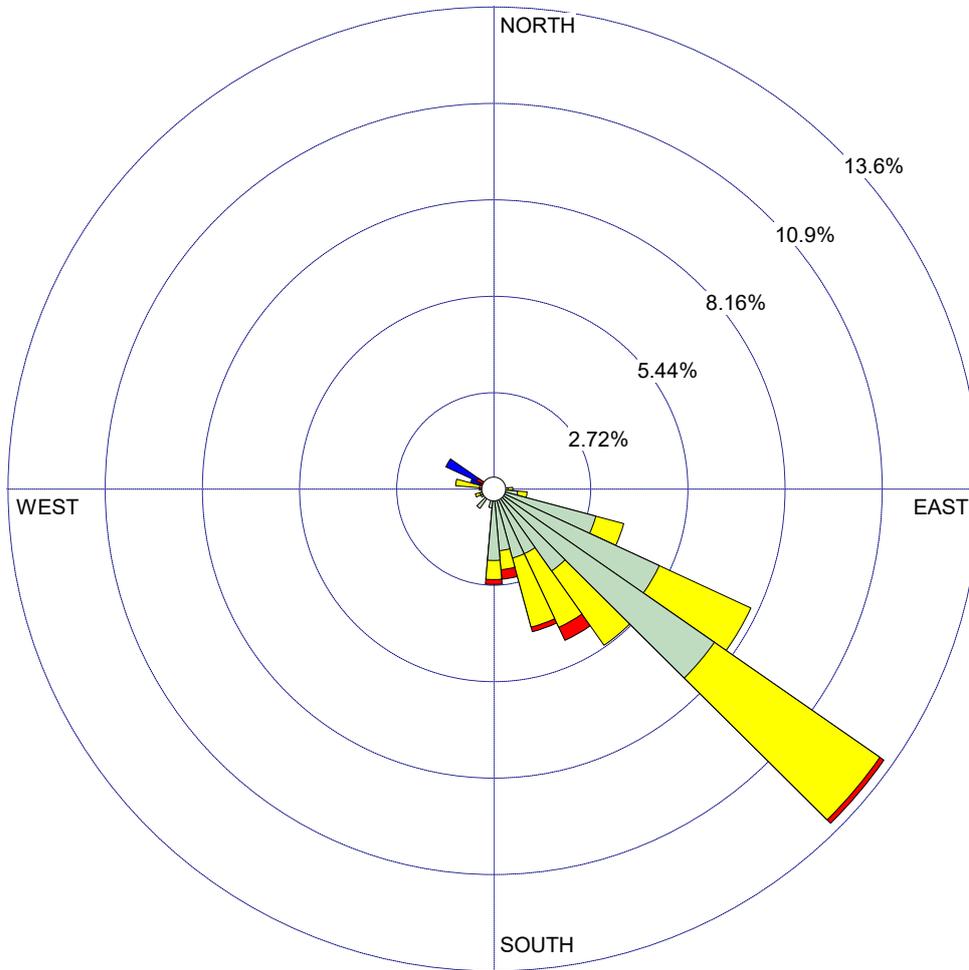


WIND ROSE PLOT:

**NCIA Meteorological Data  
January 2026**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(m/s)

- >= 11.10
- 8.80 - 11.10
- 5.70 - 8.80
- 3.60 - 5.70
- 2.10 - 3.60
- 0.50 - 2.10

Calms: 34.01%

COMMENTS:

DATA PERIOD:

**Start Date: 1/01/2026 - 00:00  
End Date: 31/01/2026 - 23:00**

COMPANY NAME:

MODELER:

CALM WINDS:

**34.01%**

TOTAL COUNT:

**648 hrs.**

AVG. WIND SPEED:

**1.22 m/s**

DATE:

**18/02/2026**

PROJECT NO.:

**60613063**



EPL Point ID	Description
22	PM10 - 24hr (Southeast & Northwest Locations)
23	HF - 24hr & Weekly (Southeast & Northwest Locations)
24	Meteorological Station (Southeast Location)

**Legend**

-  Ambient Air Monitoring Station
-  NCIA Site Boundary
-  Watercourse

