

Testing Laboratory is certified by **ISO 9001:2015**& **ISO 45001:2018** Recognized by **MoEFCC** as **"Environmental Laboratory"** valid up to 24.04.2025. **Laboratory:** P-1, MIDC Mohopada, Rasayani, Dist. Raigad, 410222, E-mail: <u>pglab@aespl.co.in</u> Tel: 9112844844, **CIN**: U74999MH2001PTC132091 UDYAM-MH-19-0029787

### Monitoring Period: November 2024

### **Purpose:**

The objective of the monitoring is to understand the Ambient Air quality, Ambient Noise quality, Ground water quality at Navi Mumbai International Airport site and nearby villages.

Location of site: Navi Mumbai International Airport , At Ulwe, Panvel Taluka, Raigad District, Maharashtra. Scope:

The scope of work includes:

Assessment of the present status of following components of environment:

- Ambient Air monitoring at 9 locations and DG Stack Monitoring at 1 Location
- Ambient Noise monitoring at 10 locations and DG Noise Monitoring at 1 Location
- Ground water monitoring at 4 locations





Testing Laboratory is certified by **ISO 9001:2015**& **ISO 45001:2018** Recognized by **MoEFCC** as **"Environmental Laboratory**" valid up to 24.04.2025. **Laboratory**: P-1, MIDC Mohopada, Rasayani, Dist. Raigad, 410222, E-mail: <u>pglab@aespl.co.in</u> Tel: 9112844844, **CIN**: U74999MH2001PTC132091 UDYAM-MH-19-0029787

### Analysis Data:

### • Ambient Air monitoring

| Monitoring Dates & Duration         | : | 11 <sup>th</sup> November 24 to 13 <sup>th</sup> November 24; 24 hourly     |  |
|-------------------------------------|---|---|--|
|                                     |   | monitoring.   |  |
| Analysis Dates                      | : | 12 <sup>th</sup> November 24 to 20 <sup>th</sup> November 24                |  |
| Locations covered (AAQ 9 Locations) | : | Owale, Pargaon, Ulwe node, NMIA Project site, Kille Gavthan,                |  |
|                                     |   | Balaji Project Office, Diwale Koliwada, Jui & Panvel.                       |  |
| Parameters covered for AAQ.         | : | 12 Parameters as per National Ambient Air Quality Standards<br>(NAAQS)2009. |  |

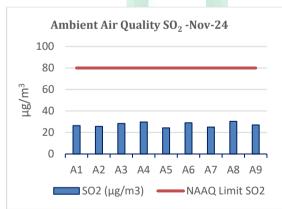
Analysis values except SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, O<sub>3</sub>, NH<sub>3</sub> and CO at all 9 locations are found below detection levels (BDL).

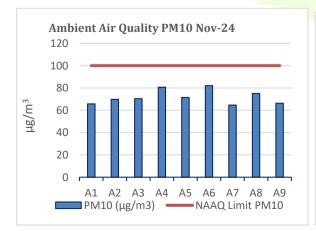
| Sr. No. | Parameter                               | Result | Limits as per NAAQS 2009 | Unit              |
|---------|---|--------|--------------------------|-------------------|
| 1.      | Benzo(a) pyrene as B(a)P                | < 0.5  | 1.0 ***                  | ng/m <sup>3</sup> |
| 2.      | Lead as Pb                              | < 0.5  | 1.0 *                    | μg/m <sup>3</sup> |
| 3.      | Nickel as Ni                            | < 5.0  | 20 ***                   | ng/m <sup>3</sup> |
| 4.      | Arsenic as As                           | < 5.0  | 6.0 ***                  | ng/m <sup>3</sup> |
| 5.      | Benzene[C <sub>6</sub> H <sub>6</sub> ] | < 0.2  | 5.0 ***                  | μg/m <sup>3</sup> |

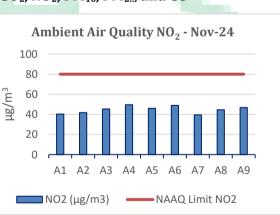
[\*] 24 hourly monitoring values; [\*\*] 1 hourly monitoring values; [\*\*\*] annually monitoring values.

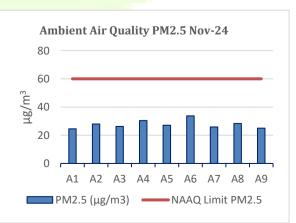
**Conformity Statement**: The monitoring undertaken indicates that Ambient Air Quality Values for monitored parameters are within the levels stipulated under National Ambient Air Quality Standards (NAAQS)2009 for all 9 locations.

## Analysis Data for SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> and CO







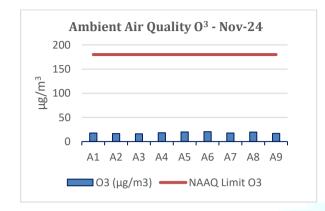


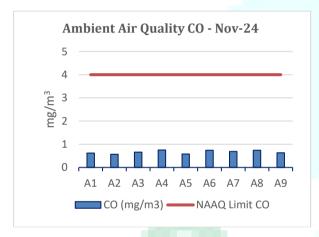
We Are Listening & Want to Improve - Complaint Register is Available with us Reg. Office: 110, Hiren Light Industrial Estate, Mogul Lane, Mahim, Mumbai - 400016Tel: 022 42127500 E-mail: contact@aespl.co.in



## ADITYA ENVIRONMENTAL SERVICES PVT. LTD.

Testing Laboratory is certified by **ISO 9001:2015**& **ISO 45001:2018** Recognized by **MoEFCC** as **"Environmental Laboratory"** valid up to 24.04.2025. **Laboratory**: P-1, MIDC Mohopada, Rasayani, Dist. Raigad, 410222, E-mail: <u>pglab@aespl.co.in</u> Tel: 9112844844, **CIN**: U74999MH2001PTC132091 UDYAM-MH-19-0029787





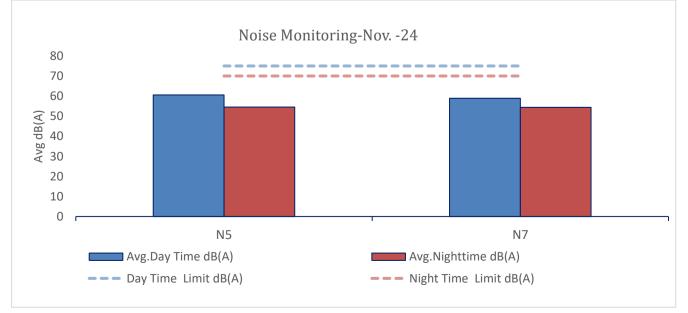
| <b>A</b> 1<br>500 | mbient Air NH <sub>3</sub> - Nov-24 |
|-------------------|-------------------------------------|
| 400               |                                     |
| 300 gm<br>200 gm  |                                     |
| /8n 200           |                                     |
| 100               |                                     |
| 0                 |                                     |
|                   | A1 A2 A3 A4 A5 A6 A7 A8 A9          |
|                   | ■NH3 (µg/m3) ——NAAQ Limit NH3       |

| Name of the Location |
|----------------------|
| Owale                |
| Pargaon              |
| Ulwe Node            |
| NMIA Project Site    |
| Kille Gavthan        |
| L&T project office   |
| Diwale Koliwada      |
| Panvel               |
| Jui                  |
|                      |

• Ambient Noise

| Monitoring Dates & Duration      | : | 11 <sup>th</sup> November 24 to 13 <sup>th</sup> November 24; 24 hourly monitoring. |
|----------------------------------|---|---|
| Locations covered (10 Locations) | : | Owale, Pargaon, Ulwe nod <mark>e,</mark> NMIA Project site, Kille Gavthan,          |
|                                  |   | L&T Project Office, Diwale Koli Wada, Jui, Panvel & Karanjade.                      |

### Industrial Noise

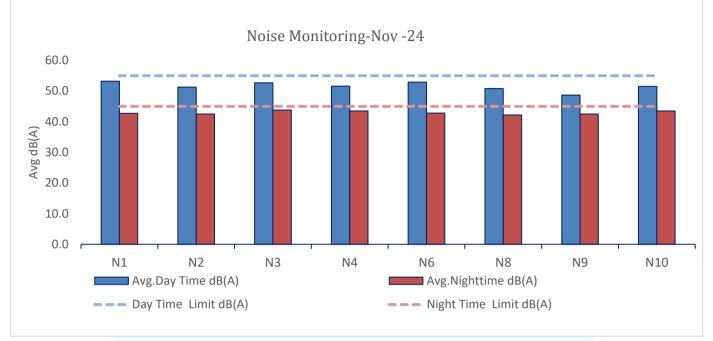




## ADITYA ENVIRONMENTAL SERVICES PVT. LTD.

Testing Laboratory is certified by **ISO 9001:2015**& **ISO 45001:2018** Recognized by **MoEFCC** as **"Environmental Laboratory**" valid up to 24.04.2025. **Laboratory**: P-1, MIDC Mohopada, Rasayani, Dist. Raigad, 410222, E-mail: <u>pglab@aespl.co.in</u> Tel: 9112844844, **CIN**: U74999MH2001PTC132091 UDYAM-MH-19-0029787

### **Residential Noise**



| Looption Code | Name of the       | Noise Levels dB (A) |         |         |           |  |
|---------------|-------------------|---------------------|---------|---------|-----------|--|
| Location Code | Location          | L-day               | L-night | Leq Day | Leq Night |  |
|               | Ind               | ustrial Zone        |         |         |           |  |
| N5            | NMIA Project Site | 60.6                | 54.5    | 61.3    | 54.6      |  |
| N7            | L&T Site Office   | 58.9                | 54.4    | 58.0    | 55.2      |  |
|               | Resi              | dential Zone        |         |         |           |  |
| N1            | Owale             | 53.2                | 42.7    | 55.6    | 43.7      |  |
| N2            | Pargaon           | 51.3                | 42.5    | 54.3    | 43.6      |  |
| N3            | Ulwe Node         | 52.7                | 43.8    | 53.5    | 44.4      |  |
| N4            | Karanjade         | 51.6                | 43.5    | 52.3    | 43.5      |  |
| N6            | Kille Gavthan     | 52.9                | 42.8    | 54.0    | 43.1      |  |
| N8            | Diwale Koliwada   | 50.8                | 42.2    | 52.5    | 42.9      |  |
| N9            | Jui               | 48.7                | 42.5    | 50.1    | 42.6      |  |
| N10           | Panvel            | 51.5                | 43.5    | 52.2    | 43.3      |  |

| Sr. | Sources                    | Noise Levels dB (A) |           |  |
|-----|----------------------------|---------------------|-----------|--|
| No. |                            | Leq Day             | Leq Night |  |
|     | limits as per EPA Standard |                     |           |  |
| 1.  | Rural/Residential Zone (R) | 55.0                | 45.0      |  |
| 2.  | Commercial Zone (C)        | 65.0                | 55.0      |  |
| 3.  | Industrial Zone (I)        | 75.0                | 70.0      |  |
| 4.  | Silence Zone (S)           | 50.0                | 40.0      |  |

**Conformity Statement**: Noise Levels at all the locations were found within the stipulated limits as per EPA

Standard for Industrial and Residential Areas.



# ADITYA ENVIRONMENTAL SERVICES PVT. LTD.

Testing Laboratory is certified by **ISO 9001:2015**& **ISO 45001:2018** Recognized by **MoEFCC** as **"Environmental Laboratory"** valid up to 24.04.2025. **Laboratory**: P-1, MIDC Mohopada, Rasayani, Dist. Raigad, 410222, E-mail: <u>pglab@aespl.co.in</u> Tel: 9112844844, **CIN**: U74999MH2001PTC132091 UDYAM-MH-19-0029787

#### • DG Stack & Noise monitoring:

| Monitoring Dates & Duration       | : | 12 <sup>th</sup> November 24  |  |
|-----------------------------------|---|---|--|
| Analysis Dates                    | : | 14 <sup>th</sup> November 24 to 20 <sup>th</sup> November 24            |  |
| Locations covered (DG 1 location) | : | DG stack monitoring at NMIA Project Site.                               |  |
| Parameters covered for DG         | : | Particulate Matter (mg/Nm <sup>3</sup> ), Sulphur (Kg/day), CO (ppm) fo |  |
|                                   |   | DG stack monitoring.  |  |

#### **Conformity Statement**:

DG stack monitoring results are found to be well within the limits as per MPCB standards.

DG Noise Quality value at NMIA Project Site for insertion loss is within consent limit.

DG set Sound Pressure Level measured at 0.5m from the enclosure & Limit for Insertion loss of 25dBA.

#### • Ground water

| Monitoring Dates   | : | 11 <sup>th</sup> November 24 & 12 <sup>th</sup> November 24 Grab sampling. |  |
|--|---|--|--|
| Analysis Dates   | : | 12 <sup>th</sup> November 24 to 22 <sup>nd</sup> November 24               |  |
| Locations covered.   | : | Dug well water at Kombadbhuje, Owale, Dapoli &                             |  |
| (5 Locations)  |   | Chinchpada.  |  |
| Parameters covered : 59 Parameters as per IS 10500:2012 RA:2018 Drinking w |   | 59 Parameters as per IS 10500:2012 RA:2018 Drinking water                  |  |
|  |   | Specification (Except Radioactive materials).                              |  |

| Sampling Code | Name of the Location                              |
|---------------|---|
| GW - I        | Open well at Kombadbhuje (Depth of water 20 Feet) |
| GW - II       | Open well at Owale (Depth of water 5.0 Feet)      |
| GW - III      | Open well at Dapoli (Depth of water 9.0 Feet)     |
| GW- IV        | Open well at Chinchpada (Depth of water 5.0Feet)  |

**Conformity Statement**: All Dug well water samples are **Pass** as per IS 10500:RA:2018 w. r. t. Chemical analysis & **Fail** for Microbiological analysis.

Rspan

Reshma S. Patil. (Authorized Signatory)



-End of Report-

man

Himani P. Joshi. (Report Reviewed By)