

AIR Quality

Sample No. Air Monitoring AM 3 Sample Description : Near Weighbridge- ISWM Site, Kanjur (E-25092.250, N-50005.620) Units : $\mu\text{g}/\text{m}^3$ for all parameters except Methane & Carbon monoxide

| Sr. No | Parameters | Baseline Values Mar 2012 Ashwamedh | Aug 2014 | Oct 2014 | Dec 2014 | March 2015 | May 2015 | July 2015 | Sep 2015 | Oct 2015 | Nov 2015 | Dec 2015 | Jan 2016 | Jan 2014 (Revised EIA) | Permissible Limits as per MSW (M&H) Rules, 2000 | | | | | | | | | | | | |
|---------------------------------|---|------------------------------------|----------|----------|----------|------------|----------|-----------|----------|----------|----------|----------|----------|------------------------|---|-----|-----|-----|------|----|------|------|----|-----|-----|----|---|
| 1 | Sulphur Dioxide $\mu\text{g}/\text{m}^3$ | 20.8 | 15 | 13 | 11 | 15 | 12 | <10 | <10 | 12 | 22 | 15 | 21 | 21.08 | 120 | | | | | | | | | | | | |
| 2 | Suspended Particulate Matter $\mu\text{g}/\text{m}^3$ | 412 | 250 | 98 | 78 | 86 | 108 | 46 | 195 | 296 | 219 | 391 | 457 | 305.16 | 500 | | | | | | | | | | | | |
| 3 | Methane mg/m^3 | 2.36 | 2.1 | 2.0 | 2.00 | 2.03 | <0.33 | <0.3 | 1.6 | 2.1 | 1.3 | 6.1 | 2.8 | <0.02 | 650 | | | | | | | | | | | | |
| 4 | Ammonia $\mu\text{g}/\text{m}^3$ | 86.4 | 2.1 | 2.5 | 2.0 | 2.2 | 79 | 15 | 12 | 22 | 20 | 17 | 23 | 7.59 | 400 | | | | | | | | | | | | |
| 5 | Carbon Monoxide mg/m^3 | 1.54 | 2.2 | 2.0 | 1.4 | 1.2 | 0.9 | 1.3 | 0.6 | 1.4 | 0.8 | 1.0 | 0.9 | <0.4 | 1hr- 2 8hrs-1 | | | | | | | | | | | | |
| Permissible limits NAAQS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Particulate Matter PM 10 $\mu\text{g}/\text{m}^3$ | NA | 99 | 68 | 36 | 65 | 79 | 31 | 95 | 95 | 96 | 246 | 327 | 92.71 | 100 | | | | | | | | | | | | |
| 7 | Particulate Matter PM 2.5 $\mu\text{g}/\text{m}^3$ | NA | 58 | 35 | 17 | 29 | 24 | <10 | 28 | 58 | 49 | 82 | 112 | 54.17 | 60 | | | | | | | | | | | | |
| 8 | Nitrogen Dioxide $\mu\text{g}/\text{m}^3$ | 40 | 20 | 24 | 20 | 20 | 34 | 11 | 28 | 34 | 31 | 44 | 61 | 22.61 | 80 | | | | | | | | | | | | |
| 9 | Hydrogen Sulphide $\mu\text{g}/\text{m}^3$ | Nil | 24 | 32 | 14 | 8 | 4 | 3 | 2.8 | 5.9 | 8 | 7 | 0.8 | <0.1 | - | | | | | | | | | | | | |
| 10 | Benzene $\mu\text{g}/\text{m}^3$ | Nil | <0.5 | 2.2 | 0.6 | <1 | <1 | <1 | 23.6 | 77.6 | 2 | 85 | 55 | <2.1 | 5* (Annual Avg) | | | | | | | | | | | | |
| 11 | Ethyl Benzene $\mu\text{g}/\text{m}^3$ | Nil | } VOCs | } VOCs | } VOCs | } VOCs | } VOCs | } VOCs | } VOCs | } VOCs | } VOCs | } VOCs | } VOCs | } VOCs | NA | - | | | | | | | | | | | |
| 12 | Toluene $\mu\text{g}/\text{m}^3$ | Nil | | | | | | | | | | | | | NA | - | | | | | | | | | | | |
| 13 | Ortho-Xylene $\mu\text{g}/\text{m}^3$ | Nil | | | | | | | | | | | | | <0.5 | 6.0 | 4.1 | 5.1 | <0.5 | <1 | 14.7 | 90.6 | <1 | 140 | 120 | NA | - |
| 14 | Meta-Xylene $\mu\text{g}/\text{m}^3$ | Nil | | | | | | | | | | | | | NA | - | | | | | | | | | | | |
| 15 | Para-Xylene $\mu\text{g}/\text{m}^3$ | Nil | | | | | | | | | | | | | NA | - | | | | | | | | | | | |
| 16 | Ozone $\mu\text{g}/\text{m}^3$ | NA | 11 | 38 | 32 | 7 | 12 | 6 | 20 | 42 | 19 | 32 | 20 | NA | 100 | | | | | | | | | | | | |
| 17 | Lead $\mu\text{g}/\text{m}^3$ | NA | <0.01 | 0.13 | 0.02 | 0.15 | 0.01 | 0.02 | 0.07 | 0.04 | 0.07 | 0.03 | 0.1 | NA | 1 | | | | | | | | | | | | |
| 18 | Benzo-a-Pyrene ng/m^3 | NA | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | 1* (Annual Avg) | | | | | | | | | | | | |
| 19 | Arsenic ng/m^3 | NA | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 2 | <1 | NA | 6* (Annual Avg) | | | | | | | | | | | | |
| 20 | Nickel ng/m^3 | NA | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | 20* (Annual Avg) | | | | | | | | | | | | |

NA- Not Available Nil- Below Detection Limit Parameters 1 to 5 are as per MSW (M & H) Rules, 2000 Parameters 6 to 20 are additional parameters

as per requirements of MCGM authorities.

AIR Quality

Sample No. : Air Monitoring AM 3 Sample Description : Shri Baburao Paranjape MCGM Garden (E-25092.250,N-50005.620) Units : $\mu\text{g}/\text{m}^3$ for all parameters except Methane & Carbon monoxide

| Sr. No. | Parameters | Baseline Values Mar 2012 Ashwamedh | May 2012 Ashwamedh | Aug 2012 (Env Care) | Nov 2012 (Env Care) | Dec 2012 (Env Care) | Feb 2013 (Env Care) | Apr 2013 (Env Care) | July 2013 (Env Care) | Sept 2013 (Env Care) | Jan 2014 (Revised EIA) | June 2014 (UL-Tec) | Permissible Limits as per MSW(M&H)Rules, 2000 |
|---------|---|--|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------------|------------------------------|--------------------------|--|
| 1 | Sulphur Dioxide $\mu\text{g}/\text{m}^3$ | 23.1 | 25.8 | 21.06 | 22.17 | 18.74 | 19.25 | 21.53 | 20.20 | 19.64 | 20.35 | 7 | 120 |
| 2 | Suspended Particulate Matter $\mu\text{g}/\text{m}^3$ | 262 | 229 | 236.75 | 146.76 | 169.67 | 154.57 | 141.03 | 181.69 | 151.62 | 142.76 | 128 | 500 |
| 3 | Methane mg/m^3 | 1.23 | 0.78 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | 3.608 | 650 |
| 4 | Ammonia $\mu\text{g}/\text{m}^3$ | 11.3 | 19.8 | 5.21 | 5.28 | 3.01 | 4.82 | 5.63 | 4.18 | 3.83 | 7.8 | 1.4 | 400 |
| 5 | Carbon Monoxide mg/m^3 | 1.06 | 1.27 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | 2.2 | 1hr-2 8hrs-1 |
| | | | | | | | | | | | | | Permissible limits NAAQS |
| 6 | Particulate Matter PM 10 $\mu\text{g}/\text{m}^3$ | NA | 118 | 69.97 | | 66.62 | 63.37 | 96.35 | 65.51 | 68.98 | 66.67 | 106 | 100 |
| 7 | Particulate Matter PM 2.5 $\mu\text{g}/\text{m}^3$ | NA | NA | 41.67 | | 29.17 | 37.50 | 37.50 | 41.67 | 29.17 | 41.67 | 29 | 60 |
| 8 | Nitrogen Dioxide $\mu\text{g}/\text{m}^3$ | 20 | 20 | 23.25 | 23.11 | 20.87 | 20.42 | 22.30 | 21.75 | 20.89 | 20.35 | 6 | 80 |
| 9 | Hydrogen Sulphide $\mu\text{g}/\text{m}^3$ | NII | NII | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 8 | - |
| 10 | Benzene $\mu\text{g}/\text{m}^3$ | 0.38 | 0.32 | <2.1 | <2.1 | <2.1 | <2.1 | <2.1 | <2.1 | <2.1 | <2.1 | <0.5 | 5'(Annual Avg) |
| 11 | Ethyl Benzene $\mu\text{g}/\text{m}^3$ | NII | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | { | - |
| 12 | Toluene $\mu\text{g}/\text{m}^3$ | NII | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | { | - |
| 13 | Ortho-Xylene $\mu\text{g}/\text{m}^3$ | NII | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.5 | - |
| 14 | Meta-Xylene $\mu\text{g}/\text{m}^3$ | NII | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | { | - |
| 15 | Para-Xylene $\mu\text{g}/\text{m}^3$ | NII | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | { | - |
| 16 | Ozone $\mu\text{g}/\text{m}^3$ | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <2 | 100 |
| 17 | Lead $\mu\text{g}/\text{m}^3$ | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <0.1 | 1 |
| 18 | Benzo-a-Pyrene ng/m^3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <0.5 | 1'(Annual Avg) |
| 19 | Arsenic ng/m^3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 | 6'(Annual Avg) |
| 20 | Nickel ng/m^3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 9.0 | 20'(Annual Avg) |

NA- Not Available NI- Below Detection Limit Parameters 1 to 5 are as per MSW (M & H) Rules, 2000 Parameters 6 to 20 are additional parameters as per requirements of MCGM authorities.