BRIHANUMBAI MUNICIPAL CORPORATION

Environment & Climate Change Department

DMC/Env. & CC./ 1011_ date 2 5 NOV 2025

Subject: Standard Operating Procedure (SOP) for implementation of GRAP for Air Pollution Mitigation

A meeting of Environment & Climate Change Dept. with Hon. Municipal Commissioner was held in the chamber of the Hon. Municipal Commissioner on 24.11.2025 to review the increasing AQI levels at certain Continuous Ambient Air Quality (CAAQM) stations across Mumbai and actions being taken by BMC. During the meeting, the need for immediate and coordinated mitigation measures was discussed, particularly with respect to major air pollution sources such as construction activities, open burning of waste, road dust resuspension, and wood/coal/diesel based bakeries. The matter regarding implementation of Graded Response Action Plan (GRAP) measures beyond the notified AQI thresholds was also discussed.

Accordingly, the Hon. Municipal Commissioner has directed that a Standard Operating Procedure (SOP) be followed to effectively address air pollution in Mumbai which is under:

- 1) GRAP Stage IV measures will be applied, when City level AQI goes above 200 for consecutive three (3) days.
- 2) Individual CAAQMS stations shall be monitored closely upon crossing AQI 200, and the following actions shall be undertaken:
 - (a) From 200 to 300 AQI for individual CAAQM station: Positive interventions like deep cleaning, road washing with water tankers, use of misting machines, strict control on open burning, closing of conventional fuel based unlicensed bakery units (within 2kms. radius of CAAQM Station) shall strictly be implemented to contain the AQI below 200. Also, strict compliance of 28 point guidelines shall be observed on the construction sites.
 - (b) If the AQI at any CAAQM station remains above 300 for consecutive three (3)

 days: All polluting units (within 2kms. radius of CAAQM Station) such as construction & redevelopment (demolition) sites, RMC plants, bakeries,

departmental construction works (BMC, SRA, MHADA, Metro etc.) shall be stopped until the AQI shows improvement.

All Assistant Commissioner and concerned departments shall ensure strict compliance with the above SOP.

Encl.: 1. List and address of CAAQM stations

2. GRAP Document

Avinash Kate

D.M.C (Env. & C.C.)

Assistant Commissioner (A to T) Ward

Ch. Eng. (SWM)

Ch. Eng. (SWD)

Ch. Eng. (Roads & Traffic)

Ch. Eng. (Bridges)

Ch. Eng. (SO)

Ch. Eng. (SP)

Ch. Eng. (MSDP)

Ch. Eng. (WSP)

Ch. Eng. (BM)

Ch. Eng. (Coastal Road)

Director (ES&P)

DMC (Zone I to VII)

| Sr. No | Zone | Wards | Station Name | Station Address | Station Operated by |
|--------|----------|-------|---|---|---------------------|
| 1 | Zone I | A | Colaba | Indian Metcorogical Department, | SAFAR by IITM |
| 2 | | A | Colaba, Mumbai | Nananbhai Moosa Marg, Near RC Sewage Treatment Plant premises, Near Afghan Church, SBS Road, | MPCB |
| 3 | | Е | Byculla | Veer Jijamata Udyan, Byculla (E) | BMC |
| 4 | | Е | Mazgaon | ST Joseph Bapista Garden, Bandarwada hill Reservoir, Magaon | SAFAR by IITM |
| 5 | Zone II | F/N | Sion | Sion Hospital | MPCB |
| 6 | | F/S | Sewri | Sewri-Koliwada BMC School Complex, Sewri (East) | BMC |
| 7 | | G/S | Worli | Lal Bahadur Shastri Garden, 60, Worli Hill Road, Siddharth Nagar, | SAFAR by IITM |
| 8 | | G/S | Worli | National Environmental Engineering Research Institute (NEERI) premises , 89-B, Dr. Annie Besant Road | MPCB |
| 9 | Zone III | H/E | Bandra Kurla Complex, Mumbai | BKC Traffic junction, Nandadeep Garden Kalanagr, Bandra (E) | SAFAR by IITM |
| 10 | | K/E | Andheri | 2, Guru Hargovindji Road, S B Singh | SAFAR by IITM |
| 11 | | H/E | Bandra Kurla Complex, | Near Asian Heart hospital, BKC | MPCB |
| 12 | | H/E | Kherwadi- Bandra East,Mumbai | Government Polytechnic Campus, 49, Ali Yavar Jung Marg, | MPCB |
| 13 | Zone IV | | Chhatrapati Shivaji Intl. Airport (T2) | Chhatrapati Shivaji International Airport Premises, Terminal-2, Near Gate no: 6, Mumbai- 400099 | MPCB |
| | | K/W | Vile Parle | M/s HBT/Cooper Hospital & Medical Collage, Bhakti Vedanta Swami Marg, Juhu Scheme Vileparle-West, M | MPCB |
| 14 | | P/N | Malad | Malad Malavani Residential Area, Near Fire Station, Malad (W) | SAFAR by IITM |
| 15 | | P/N | Mindspace- Malad West | APJ Abdul Kalam Vanoudyan, Near Interface bldg, Link Road Malad (W) | MPCB |
| 17 | Zone V | L | Kurla | Phoenix Market City Mall premises, LBS Marg, Kurla West, Mumbai- 400070 | MPCB |
| 18 | | | Chembur | TISS Library Deonar Govandi (E), Chembur. | SAFAR by IITM |
| 19 | | M/E | Govandi | Shivaji Nagar BMC Hindi School No.2, Govandi (East) | ВМС |

| 20 | | | Chembur | CTS no.345,346,347,349, Near Municipal school, Near Mahul village, Chembur – 400 071 | MPCB |
|----|----------|-----|----------------|---|---------------|
| 21 | Zone VI | N | Ghatkopar | New Pumping Station Ghatkopar, Eastern Express Highway, Ghatkopar€ | ВМС |
| 22 | | S | Bhandup | Water Treatment Plant Bhandup Complex | SAFAR by IITM |
| 23 | | 3 | Powai | IIT-Mumbai campus, Powai, Mumbai-400076 | MPCB |
| 24 | | Т | Mulund West | M/s Johnson and Johnson premises, LBS Marg, Mulund, Mumbai-400080 | MPCB |
| 25 | Zone VII | | Borivali | CTI & RC, BMC, Abhinav Nagar, Behind National Park, Borivali East-400066 | SAFAR by IITM |
| 26 | | R/C | Borivali East | Near Lion Safari, Sanjay Gandhi National Park, Borivali East, Mumbai- 400066 | MPCB |
| 27 | | | Kandivali | Charkop Maternity Home, Kandivali (East) | BMC |
| 28 | | R/S | Kandivali East | M/s Mahindra and Mahindra Ld. Premises, Western Express Highway, Kandivali-East, Mumbai- 400101 | МРСВ |

Appointment of Authorities for implementation of Graded Response Action Plan (GRAP) in the State of Maharashtra under different Air Quality Index categories

An Application bearing No.681/2018 have been registered on the basis of a News Item published in "Times of India" under the heading "NCAP with multiple timelines to clear air in 102 cities to be released around August 15" before the Hon'ble National Green Tribunal, Principal Bench, New Delhi.

The matter was recently reviewed by the Hon'ble NGT vide order dated 20/11/2019, wherein, the Hon'ble NGT has directed to develop Emergency Response System including Graded Response Action Plan (GRAP) for the State of Maharashtra.

The air quality of the State of Maharashtra with monitoring data available till date, is mostly observed to be in the range of satisfactory (PM2.5: $31\text{-}60\mu\text{g/m3}$, PM10: $51\text{-}100\mu\text{g/m3}$) to moderately polluted (PM2.5: $61\text{-}90\mu\text{g/m3}$, PM10: $101\text{-}250\mu\text{g/m3}$), for which actions are included in non-attainment city action plans. A detail of Graded Response Action Plan for implementation under different Air Quality Index (AQI) categories and Responsible Authorities is as under:

| S.N. | Actions | Responsible Authority |
|------|---|--|
| Ι | Emergency/ Sev | ver+ |
| | (ambient PM2.5or PM10concentration value of | 300μg/m3 or 500μg/m3 respectively |
| | persist for 48 hours or more) | |
| 1 | | Concerned Traffic Police, RTO |
| | Stop entry of truck, heavy vehicles into the city | |
| 2 | Stop construction activities | Concerned Municipal Corporation |
| | | and concerned Regional Officer of MPCB |
| 3 | Introduce odd and even scheme for private | Concerned Traffic Police, RTO |
| | vehicles based on license plate no. and minimize exemptions | |
| 4 | Task force to take decision on any additional | Members of Task Force Committee |
| | steps including shutting of any activities/ | appointed vide Government |
| | institutes/ offices | Resolution dated 18/09/2019 of City |
| | | level implementation committee. |

| II | | |
|-----|---|---|
| | Severe | 1 : 250+ / 2 420+ / 2 |
| | (ambient PM2.5or PM10concentration val | |
| 1 | Close major polluting industrial units like brick | |
| | kilns, hot mix plants, stone crusher, thermal | Regional Officer, Maharashtra |
| | power plant etc. | Pollution Control Board |
| 2 | Intensify public transport services. Introduce | Concerned Municipal Corporation/ |
| | differential rates to encourage off-peak travel. | Council, Transport Department |
| 3 | Increase frequency of mechanized cleaning of | Concerned Municipal Corporation/ |
| III | road and sprinkling of water on roads Very Poor | Council |
| 111 | (ambient PM2.5or PM10 concentration value is b | etween 121-250ug/m3or 351-430 |
| | µg/m3 respectively) | etween 121 250μg/m501 551 150 |
| 1 | Stop use of diesel generator sets | Concerned Regional Officer/Sub- |
| | | Regional Officer, Maharashtra |
| | | Pollution Control Board / |
| | | Concerned Municipal Corporation/ |
| 2 | Enhance parking fee by 2.4 times | Council |
| 2 | Enhance parking fee by 3-4 times | Concerned Municipal Corporation/ Council, Transport Department |
| 3 | Increase bus/metro services by augmenting | Concerned Municipal Corporation/ |
| | contract buses and increasing frequency of | |
| | service | , , |
| 4 | Alert in newspapers/TV/radio to advise people | Concerned Regional Officer/Sub- |
| | with respiratory and cardiac patients to avoid | Regional Officer, Maharashtra |
| | polluted areas and restrict outdoor movement. | Pollution Control Board, Concerned |
| IV | Moderate to p | Municipal Corporation/ Council |
| 1 V | (ambient PM2.5 or PM10 concentration value | |
| | µg/m3 respectively) | 120 μg/me 01 101 200 |
| 1 | Stringently enforce/stop garbage burning in | Concerned Municipal Corporation |
| | landfills and other places and impose heavy | |
| | fines on person responsible | |
| 2 | Stringently enforce rules for dust control in | Concerned Regional Officer / Sub- |
| | construction activities and close non-compliant | Regional Officer of MPCB, |
| 3 | sites Stringently enforce pollution control regulations | Concerned Municipal Corporation Concerned Regional Officer/Sub- |
| 3 | in industries | Regional Officer, Maharashtra |
| | in madelies | Pollution Control Board |
| 4 | Deploy traffic police for smooth traffic flow at | Concerned Traffic Police |
| | identified vulnerable areas | |
| 5 | Strict vigilance and enforcement of PUC norms | Concerned RTO, Traffic |
| 6 | Do periodic mechanized sweeping on roads | Concerned Municipal Corporation |
| | with heavy traffic and water sprinkling also on | |
| | unpaved roads | |
| 7 | Information dissemination Social media, mobile | Concerned Municipal Corporation, |
| | Apps should be used to inform people about the | MPCB |
| | pollution levels, contact details of control room, | |

| enable | them | to | report | polluting |
|------------|-------------|----------|-----------|--------------|
| activities | s/sources t | o the | concerned | authorities, |
| and action | ons that v | vill be | taken by | government |
| based on | the level | of polli | ution. | |

The city level implementation committee of NCAP constituted vide Government Resolution No NCA 2018/CR.196(2)/T.C.2, dtd. 18/09/2019 in respective Non-Attainment cities will be responsible for implementation of emergency response action plan based on GRAP in respective of Non-attainment cities.