

**Ulhasnagar City
Air Pollution Control
Action Plan**

**ACTION PLAN FOR CONTROL OF AIR POLLUTION IN
NON-ATTAINMENT CITIES OF MAHARASHTRA**

ULHASNAGAR



MAHARASHTRA POLLUTION CONTROL BOARD

**KALPATARU POINT, 3rd Floor,
Sion-Matunga Scheme Rd. No.8,
Opp. Sion Circle, Sion (East),
Mumbai-400 022.**

ACTION PLAN FOR CONTROL OF AIR POLLUTION IN NON-ATTAINMENT CITY OF MAHARASHTRA

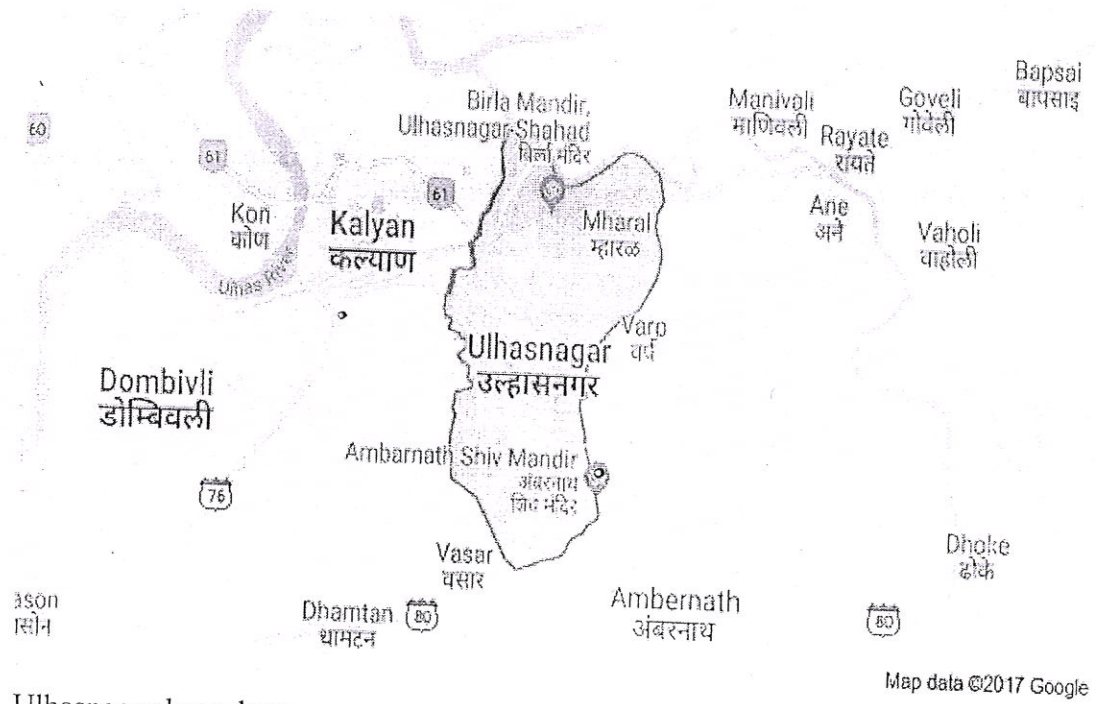
ULHASNAGAR

1. Preamble

Ulhasnagar is a town located in the Thane district of Maharashtra state in Konkan division. This city is part of Mumbai Metropolitan Region managed by MMRDA. Ulhasnagar is a municipal town and the headquarters of the Tahsil bearing the same name. It is a railway station on the Mumbai-Pune route of the Central Railway.

Ulhasnagar, a colony of migrants in the aftermath of Partition, is situated 58 km from Mumbai. The once-barren land has developed into a rich town of Thane district. Originally, known as Kalyan Military transit camp, Ulhasnagar was set up especially to accommodate 6,000 soldiers and 30,000 others during World War II. There were 2,126 barracks and about 1,173 housed personals. The majority of barracks had large central halls with rooms attached to either end. The camp had a deserted look at the end of the war and served as a ready and ideal ground for Partition victims. Sindhis, in particular, began life anew in the new land. On August 8, 1949 the first and last Governor-General of India, C. Rajagopalachari, laid the foundation stone. The population of the town which was 80,861 as per the Census of 1961 and more than doubled to 1,68,462 as per the Census of 1971. As per Census of 2001 it is 506,098. Included in the functional category of industry, the town covers an area of 13 square kilometers and is divided into 285 blocks. It is a centre for the production of rayon silk, dyes, ready-made garments, electrical / electronic appliances & confectionaries. The town gets a protected water supply through MIDC. Sanctioned Water Quota at various tapping points is 112 MLD. Fire-fighting service is also available in the town. Educational facilities are provided by 129 primary schools, 56 Secondary Schools, 9 Higher Secondary schools, 3 colleges and 2 Technical Colleges. Entertainment facilities are provided by one stadium and nine cinema theatres besides five auditorium-cum-drama halls. Nine Public Libraries are located in the town. Ulhasnagar is considered as one of the largest denim jeans manufacturer. It has number of small businesses, manufacturing quality denims with an effective cheap labour.

Some of the manufacturers export jeans worldwide from Ulhasnagar. The city is also famous for its furniture market, cloth market and electronic market.



Ulhasnagar boundary map

2. AMBIENT AIR QUALITY MONITORING AT ULHASNAGAR

| Ambient Air Quality Monitored at Powai Chowk | | | |
|--|--------------------------------------|--------------------------------------|---------------------------|
| Date | SO ₂ µg/m ³ | NO _x µg/m ³ | RSPM µg/m ³ |
| 03-05-2017 | 48 | 125 | 233 |
| 07-05-2017 | 47 | 127 | 127 |
| 10-05-2017 | 43 | 132 | 129 |
| 14-05-2017 | 15 | 69 | 132 |
| 17-05-2017 | 18 | 70 | 129 |
| 21-05-2017 | 27 | 66 | 123 |

| | | | |
|------------|----|-----|-----|
| 24-05-2017 | 31 | 84 | 153 |
| 28-05-2017 | 47 | 138 | 243 |
| | | | |
| 04-06-2017 | 28 | 72 | 134 |
| 07-06-2017 | 26 | 100 | 180 |
| 11-06-2017 | 43 | 64 | 119 |
| 14-06-2017 | 41 | 64 | 119 |
| 18-06-2017 | 70 | 81 | 146 |
| 21-06-2017 | 48 | 96 | 175 |
| 25-06-2017 | 45 | 101 | 182 |
| 28-06-2017 | 58 | 125 | 225 |
| | | | |
| 02-07-2017 | 32 | 100 | 115 |
| 05-07-2017 | 38 | 127 | 205 |
| 09-07-2017 | 22 | 71 | 113 |
| 12-07-2017 | 17 | 68 | 110 |
| 23-07-2017 | 55 | 112 | 198 |
| 26-07-2017 | 23 | 62 | 116 |
| | | | |
| 02-08-2017 | 20 | 58 | 194 |
| 06-08-2017 | 48 | 60 | 311 |
| 09-08-2017 | 48 | 65 | 438 |
| 13-08-2017 | 78 | 279 | 437 |
| 16-08-2017 | 25 | 114 | 347 |
| 20-08-2017 | 17 | 53 | 221 |
| 23-08-2017 | 17 | 52 | 324 |

| | | | |
|------------|----|-----|-----|
| 27-08-2017 | 22 | 56 | 236 |
| 30-08-2017 | 24 | 50 | 200 |
| 03-09-2017 | 20 | 61 | 121 |
| 13-09-2017 | 16 | 51 | 410 |
| 17-09-2017 | 31 | 64 | 174 |
| 20-09-2017 | 27 | 59 | 141 |
| 24-09-2017 | 21 | 65 | 190 |
| 27-09-2017 | 25 | 61 | 84 |
| 01-10-2017 | 20 | 102 | 194 |
| 04-10-2017 | 21 | 84 | 311 |
| 08-10-2017 | 36 | 89 | 438 |
| 11-10-2017 | 20 | 53 | 437 |
| 15-10-2017 | 35 | 62 | 347 |
| 22-10-2017 | 20 | 68 | 324 |
| 25-10-2017 | 18 | 92 | 236 |
| 29-10-2017 | 14 | 41 | 200 |

Ambient Air Quality Monitored at Smt. Chandibai Himmatlal Mansukhani College Campus

| Date | SO2 | NOx | RSPM |
|------------|--------------------------|--------------------------|--------------------------|
| | $\mu\text{g}/\text{m}^3$ | $\mu\text{g}/\text{m}^3$ | $\mu\text{g}/\text{m}^3$ |
| 02-04-2017 | 15 | 61 | 115 |
| 03-04-2017 | 17 | 56 | 106 |
| 05-04-2017 | 17 | 52 | 100 |

| | | | |
|------------|----|----|-----|
| 10-04-2017 | 13 | 72 | 133 |
| 12-04-2017 | 14 | 57 | 108 |
| 17-04-2017 | 23 | 51 | 97 |
| 19-04-2017 | 17 | 44 | 87 |
| 24-04-2017 | 18 | 42 | 83 |
| 26-04-2017 | 17 | 47 | 91 |
| | | | |
| 01-05-2017 | 34 | 76 | 139 |
| 03-05-2017 | 45 | 84 | 151 |
| 08-05-2017 | 50 | 92 | 158 |
| 10-05-2017 | 43 | 76 | 139 |
| 15-05-2017 | 18 | 63 | 119 |
| 17-05-2017 | 17 | 77 | 141 |
| 22-05-2017 | 18 | 76 | 139 |
| 24-05-2017 | 27 | 85 | 155 |
| | | | |
| 01-06-2017 | 20 | 72 | 131 |
| 05-06-2017 | 23 | 83 | 151 |
| 08-06-2017 | 27 | 65 | 121 |
| 12-06-2017 | 39 | 57 | 107 |
| 15-06-2017 | 44 | 51 | 99 |
| 19-06-2017 | 31 | 70 | 130 |
| 22-06-2017 | 26 | 65 | 131 |
| 28-06-2017 | 24 | 59 | 111 |
| | | | |
| 03-07-2017 | 28 | 58 | 109 |

| | | | |
|------------|----|----|-----|
| 05-07-2017 | 29 | 66 | 124 |
| 10-07-2017 | 21 | 67 | 124 |
| 12-07-2017 | 19 | 68 | 126 |
| 17-07-2017 | 16 | 60 | 113 |
| 19-07-2017 | 18 | 69 | 127 |
| 24-07-2017 | 18 | 61 | 115 |
| 26-07-2017 | 22 | 71 | 131 |
| | | | |
| 02-08-2017 | 19 | 62 | 115 |
| 07-08-2017 | 25 | 63 | 164 |
| 09-08-2017 | 21 | 74 | 118 |
| 14-08-2017 | 21 | 76 | 179 |
| 16-08-2017 | 22 | 81 | 231 |
| 21-08-2017 | 17 | 50 | 119 |
| 23-08-2017 | 18 | 53 | 189 |
| 28-08-2017 | 22 | 69 | 161 |
| 30-08-2017 | 23 | 61 | 86 |
| | | | |
| 04-09-2017 | 17 | 44 | 99 |
| 06-09-2017 | 19 | 42 | 100 |
| 11-09-2017 | 19 | 48 | 103 |
| 13-09-2017 | 17 | 51 | 154 |
| 18-09-2017 | 22 | 52 | 96 |
| 20-09-2017 | 21 | 52 | 153 |
| 25-09-2017 | 20 | 53 | 87 |
| 27-09-2017 | 23 | 58 | 137 |

| | | | |
|------------|----|----|-----|
| 02-10-2017 | 17 | 95 | 630 |
| 04-10-2017 | 17 | 80 | 293 |
| 11-10-2017 | 16 | 58 | 132 |
| 16-10-2017 | 18 | 51 | 392 |
| 18-10-2017 | 20 | 60 | 128 |
| 22-10-2017 | 19 | 82 | 168 |
| 25-10-2017 | 19 | 66 | 137 |
| 30-10-2017 | 16 | 40 | 87 |

4.0 Monitoring Mechanism for Implementation

The aforesaid action plan shall be implemented by Maharashtra State Pollution Control Board with coordination of concern departments/stakeholders.

5. Implementation status

The Chief Secretary, Govt. of Maharashtra to convene the meetings with different concerned departments and direct for compliance of directions for implementation of air quality of Amravati. The Principal Secretary, Environment and Forest, Govt. of Maharashtra to also convene the meeting for follow up of the aforesaid directions. The Maharashtra Pollution control Board continuously conducted the meetings with all stakeholders for preparation of comprehensive action plan for city and its implementation.

Suggested Template for Development of Action Plan for Control of Air Pollution in Non-attainment cities

| Sl.No | Source group | Control option | Expected reduction and impacts | Technical feasibility | Requirement of financial resources | Implementation period (short/mid/long-term) | Time target for implementation | Responsible agency(ies) | Any other information |
|-------|------------------|---|-----------------------------------|----------------------------------|--|---|--------------------------------|---|---|
| | | Monitoring Mechanism | | | | | | <p>Unhassad Municipal Corporation has an Environment Cell (details attached) (see cell-ii) meet once in 2 months and examine the implementation. Commissioner - Head MPCB EC - Meeting Convenor</p> | |
| 1 | Vehicle emission | Launch extensive drives against polluting vehicles for ensuring strict compliance | Moderate | Feasible | Not needed | Short (Regular on bimonthly basis & Extensive during winter months) | Start 2018 | UMC, RTO, Traffic Police, Media | With involvement of Colleges & local NGOs |
| | | Launch public awareness campaigns for air pollution control, vehicle maintenance, minimising use of personal vehicles, lane discipline etc. | Moderate | Feasible | Not needed | Short (Regular & Extensive campaigns during winter months particularly Pre & Post Diwali) | Start 2018 | Traffic police, NGOs, Media, Colleges | With involvement of Colleges & local NGOs, Buses and Display boards at traffic intersections to be used for advertisement |
| | | Prevent parking of vehicles at Non designated areas | Moderate (city's congested areas) | Feasible | Not needed (balanced with fine from impounded vehicles) | Short (Regular monthly checks with fine) | Start 2018 | UMC, Traffic Police | |
| | | Prepare action plan for widening of road and improvement of infrastructure for decongestion of roads. | High | Feasible | No, already 350 crores sanctioned by CM to develop 4 major roads | Mid (in progress) as per City Development Plan 300 road-align road proposed | 2018-2021 | MMRDA, PWD | Concrete 95m near Shreeram Chowk, Vadol flyover |
| | | | | | Yes, 2 crores | 4 dust cleaners needed for major roads | | 0 | |
| | | Prepare Plan for the construction of expressways/bypass to avoid congestion | Moderate | Feasible | Yes | planned | | MMRDA | |
| | | Steps for Promoting Battery operated vehicles - charging stations and infrastructure needed for battery operated vehicles | Moderate | Feasible | Yes, 2 crores | Short | 2018-2021 | UMC, Traffic | Charging point & Training Centre for E rickshaws |
| | | Synchronize Traffic movements/Introduce Intelligent Traffic systems for Lane Driving | Moderate | Feasible | Yes, 1 crores | Mid - Long term | 2018-2020 | MMRDA, PWD | |
| | | Installation of Remote Sensor based PUC systems | Moderate | Not Feasible till next few years | Yes | Mid - Long term | 2020 onwards | Traffic, RTO | |

Suggested Template for Development of Action Plan for Control of Air Pollution in Non-attainment Cities

| Sl.No | Source group | Control option | Expected reduction and impacts | Technical feasibility | Requirement of financial resources | Implementation period (short/mid/long-term) | Time target for implementation | Responsible agency(ies) | Any other information |
|--------|--------------|---|--------------------------------|-----------------------|--|---|--------------------------------------|---|---|
| | | Monitoring Mechanism | | | | | | <p>1. Manage Municipal Corporation, for all Environmental (EIA) projects for all projects in 3 months and submit the Implementation, Combi-Order, Head MPCB, B.O. Meeting Convene</p> | |
| SCS-3 | | Provide good public transport system | High | Feasible | No, already in operation | Short-Mid | 2009 UMC got approval for city buses | M&RTC | present 50 mini buses on 26 routes operated by Kestrol Infrastructure https://mumbaiirror.indiatimes.com/mumbai/other/articleshow/16060733.cms |
| SCS-7 | | Electric / Hybrid Vehicles | High | Feasible | | Mid | 2018-2019 | Automobile firms | Discussed under E-Rickshaws |
| SCS-8 | | CE-CNG for new public transport buses | High | Feasible | Already have a CNG station in Vihitawadi | Mid | 2019-2020 | UMC, Oil & Gas companies | |
| SCS-10 | | Bio-diesel (B5/B10: 5 – 10% blend) | High | Feasible | | Mid | 2020 | UMC, MPCB, BIS, Fuel firms | |
| SCS-15 | | Restrict commercial vehicles entering city by having ring roads | Moderate | Feasible | Yes, under City Development Plan | Mid-Long | 2020 | UMC, MMRDA | |
| 2 | I | Resuspension | High | Feasible | Yes, 2 crores | Short (in progress) | 2018 | UMC Horticulture, Rotary Club of Ulhasnagar, Harit Kranti NGO | 25,000 saplings planted each year |
| | II | Maintain Pothole-Free Roads for Free Flow Traffic | High | Feasible | Yes | Regular | | PWD | |
| | III | Introduce water fountains at Major Traffic intersection, wherever feasible | Moderate | Feasible | Not needed | Short (in progress) | 2018 | UMC | |
| | IV | Greening of open areas, garden, community places, schools and housing societies | Moderate | Feasible | | Regular | | UMC Horticulture, NGOs | |

| SIN6 | Source group | Control option | Expected reduction and impacts | Technical feasibility | Requirement of financial resources | Implementation period (short/mid/long-term) | Time target for implementation | Responsible agency(ies) | Any other information |
|--------|---|---|--------------------------------|-----------------------|------------------------------------|---|--------------------------------|--|---|
| | | Monitoring Mechanism | | | | | | Uttarakhand Municipal Corporation has an Environment Cell (details attached) the cell will meet once in 2 months and examine the implementation. Commissioner - Road MPCB (to Meeting Convenor | |
| 3 | Biomass/trash burning, landfill waste burning | Launch extensive drive against open burning of biomass, crop residue, garbage, leaves etc. | High | Feasible | waste processing plants 20 crores | Short | Regular basis start 2018 | UMC, NGOs, Colleges | Garbage processing plants expected to process waste |
| | | Regular check and control of burning of Municipal Solid waste | High | Feasible | Yes | In Progress | By 2020 | AMC | |
| | | Proper collection of Horticulture waste and its disposal following composting -cum -gardening approach | High | Feasible | Yes | In Progress | By 2020 | AMC | |
| | | Action against non-complying industrial units | High | Feasible | MPCB's role | Regular | Regular | MPCB | MPCB RO issues directives and notices |
| SCS-3 | | Alternate fuel (Biogas for Boiler) | Moderate | Feasible | Industry has to take action | In progress | 2019 | MPCB | |
| SCS-4 | | Promoting cleaner industries | High | Feasible | | In progress | 2019 | MPCB | Chemical & Bulk Drug industries solvent recovery units. |
| SCS-8 | | Installation/ Upgradation of air pollution control systems | High | Feasible | | In progress | 2019 | MPCB | |
| SCS-10 | | Regular audit of stack emissions for O&QC | High | Feasible | | In progress | 2019 | MPCB | |
| 5 | Construction and Demolition Activities | Enforcement of construction & demolition rules | Moderate | Feasible | | | Start 2018 | UMC | |
| | | Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and suppression units | High | Feasible | | Short | 2018 | UMC | |
| SCS-1 | | Better construction practices with PM reduction of 50% | Moderate | Feasible | | Mid | 2019 | UMC | |
| SCS-3 | | Ensure carriage of construction material in closed /covered Vessels | Moderate | Feasible | | Short | 2018 | UMC | |
| | | Establishment of a Continuous Air Quality Monitoring Station within the city with display board | High | Feasible | Yes, 2 crores | Medium | 2018 | UMC and MPCB | Currently 2 manual stations run by CHM College |
| 10 | Other (city specific) | | | | | | | | |