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MUMBAI MUNICIPAL CORPORATION

**FROM THE DESK OF
MUNICIPAL COMMISSIONER**

No. MCCC/A/1386

Dt: 13/03/2023

The following Committee is hereby constituted to formulate the strategy for implementation of Mumbai's Air Pollution Mitigation Plan as announced in the BMC Budget for the year 2023-24:-

- | | | |
|------------------------|------------------------|------------------|
| 1. Shri. Sanjeev Kumar | AMC (WS) | Chairman |
| 2. Shri Atul Patil | Director (E.S.& P.) | Member Secretary |
| 3. Shri Ulhas Mahale | DMC (Infra) | |
| 4. Smt. Chanda Jadhav | DMC (SWM) | |
| 5. Shri Manish Patel | ChE (Roads) | |
| 6. Shri. Sunil Rathod | ChE (DP) | |
| 7. Shri Kartik Langote | Representative of MPCB | |
| 8. Shri. S.B. Gite | Ex.Engg.(MCO) | |

TORs. of Committee are as under:

1. Find out reasons for high degree of air pollution in Mumbai.
2. Suggest measures to reduce / minimise air pollution due to infrastructure projects, such as Metro, Roads, SWD, Coastal Roads, STPs. etc.
3. Measures to minimise air pollution due to building construction projects.
4. Monitoring mechanism for overseeing the implementation of air pollution mitigation measures including penalising the delinquents.

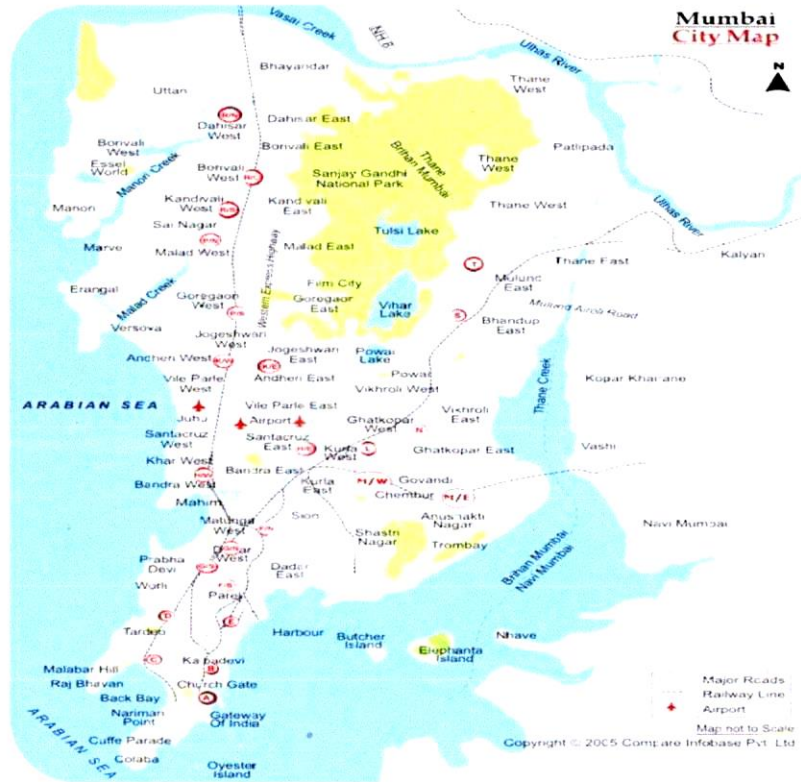
The committee shall give its objective report in seven working days.

13/3-23.
Municipal Commissioner

Copy To: _____

Mumbai Air Pollution Mitigation Plan

(In compliance with Hon. MC Order dtd. 13.03.23)



Brihanmumbai Municipal Corporation (BMC)

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Mumbai's Air Pollution Mitigation Plan

1. Preamble-

Mumbai City is witnessing a growth in construction & infrastructure projects. Large numbers of these projects and contributions from other sources such as Vehicular Emission, Industries, Unclean Fuel usage, etc. are creating a challenge in the form of rising Air Pollution levels.

Deterioration of Ambient Air Quality leads to environmental concerns and will lead to health problems based on the exposure duration and levels of pollutants.

Various short-term and long-term activities are being undertaken for the prevention and control of air pollution in Mumbai City. This winter, Mumbai witnessed noticeable rise in the air pollution levels due to prevailing longer calm weather conditions combined with emissions from various sources of air pollution.

Thus, to strike a balance between controlling pollution levels and strengthening Mumbai's infrastructure, the Brihanmumbai Municipal Corporation (BMC) has decided to introduce and enforce an immediate action plan for the mitigation and prevention of rising air pollution levels in Mumbai City.

2. Instructions from Hon. M.C on Mumbai's Air Pollution Mitigation Plan:

Hon. M.C. has constituted a committee on 13/03/2023 to formulate the strategy for implementation of "Mumbai's Air Pollution Mitigation Plan" as announced in the BMC Budget for the Year 2023-24.

The TOR's of the Committee are as under:

- 1) Find out the reasons for the high degree of air pollution in Mumbai.
- 2) Suggest measures to reduce / minimize air pollution due to infrastructure projects, such as Metro, Roads, SWD, Coastal Roads, STPs, etc.
- 3) Measures to minimize air pollution due to building construction projects.
- 4) Monitoring mechanism for overseeing the implementation of air pollution mitigation measures including penalizing the delinquents.

3. Proposed Action Plan:

Brihanmumbai Municipal Corporation (BMC) has conducted few meetings with committee members and technical advisory committee members to formulate Mumbai's Air Pollution Mitigation Plan. Literature Review of existing actions plans¹, reports², guidelines³ etc. was also taken into account.

Mumbai's Air Pollution Mitigation Plan will help to improve air quality by identifying immediate practical and result oriented actions including the long-term strategies that needs to be undertaken by concerned departments to reduce the emissions from various air pollution sources.

The Action Plan has included-

⇒ Identification of Air Pollution Sources-

- To understand important sources of Air Pollution in Mumbai city for-
- **i) Source Wise Inventory of important information related to Air Pollution Source-**
 - To generate the information related to sources,
 - to effectively implement the mitigation plan targeting sources,
 - corrective measures that can be undertaken during implementation,
 - target setting for further improvement etc.
- **Categorization of Projects-**
 - To enforce guidelines stringently for Building and Construction Projects & Road Projects.
- **ii) Source Wise Actions to Mitigate Air Pollution-**
 - To undertake immediate actions for prevention & control of Air Pollution.
 - Details on the Long-term Actions that can be undertaken.
- **iii) Checklist on Actions-**
 - To assess the actions that will be undertaken by various departments.
- **iv) Source Wise Enforcement Mechanism for Immediate Action Plan-**
 - To develop ward level task force for enforcement of immediate action plan.

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- **v) Source Wise Monitoring Mechanism for Immediate Action Plan-**
 - To monitor the progress of implementation of immediate action plan.
- **vi) Actions for Non-Compliance-**
 - To undertake stringent actions on defaulters based on the inspection.
- **vii) Review Mechanism-**
 - To review the implementation of the progress of implementation of immediate action plan.
- **viii) Corrective Actions-**
 - To undertake the corrective measures on limitations & the implementation of the progress of implementation of immediate action plan based on the periodic review.

4. Major Air Pollution Sources identified

⇒ 1) Dust arising from Construction & Demolition Activity from various projects,
⇒ 2) Road Dust & its Resuspension,
⇒ 3) Open burning of Solid Waste/Garbage & Other Waste,
⇒ 4) Unclean Fuel usage in Hotels, Restaurants, Dhabas, Bakeries, & Other Establishments,
⇒ 5) Crematoria,
⇒ 6) Industries- <ul style="list-style-type: none">• Ready Mix Concrete (RMC) Batching Plant- Commercial & Captive Plant,• Casting Yard Plants,• Hot Mix Plants,• Red, Orange & Green Industries having high Air Pollution score &• Informal Sector- Pottery etc.
⇒ 7) Vehicular Emission,
⇒ 8) Unclean Fuel usage in Households,
⇒ 9) Pollution from neighbourhood areas of BMC,
⇒ 10) Other Sources- <ul style="list-style-type: none">i) Pigeon Feeding Sites.ii) Fire Crackers etc.

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5. Control of Air Pollution from Building Construction Activity

5.1) Inventory of Building Construction Projects-

The ward wise template will include information related to ongoing Building Construction Project-

Number & Location of Building Construction Project having Plot Area	
>4,000 Sq. Mtr. (Large Project)	<4,000 Sq. Mtr. (Small Project)

5.2. Actions to Mitigate Air Pollution –

These guidelines are mandatorily to be undertaken by all the ongoing & proposed Building Construction projects.

5.2.1. Guidelines for Building Construction Projects-

Phase	Environmental Guidelines for Prevention & Control of Dust
Demolition Works-	
Demolition of existing structure	1) Erection of continuous Dust or Wind Breaking Tin/Metal Sheet of more than 20 Feet Height around the periphery of entire Construction Project Site.
	2) Tarpaulin/Green Cloth/Jute Sheet to be used on scaffolding covering an entire area under demolition structure. Regular Cleaning of Tarpaulin or Jute Sheet to be undertaken.
	3) Avoid on-site Crushing & Hammering of Demolition Material.
	4) Water Sprinkling shall be continuously carried out so that the Debris shall remain in wet condition.
	5) Water Fogging should be carried out during the Excavation & Loading & Unloading of material.
	6) C & D waste generated within the premises / site of work is transported to the designated unloading site strictly as per the BMC approved C & D Waste Management Plan.

Construction Works-	
During construction	1) Erection of continuous Dust or Wind Breaking Tin/Metal Sheet of more than 20 Feet Height around the periphery of entire Construction Project Site.
	2) Tarpaulin/Green Cloth/Jute Sheet to be mandatorily used to cover the floor where any construction activity is in progress and two floors below it.
	Regular Cleaning of Tarpaulin or Jute Sheet to be undertaken.
Excavation	1) During the start of the Excavation, soil strata shall be suitably watered/water sprinkled from time to time.
	2) Water Fogging should be carried out during the Excavation, Loading & Unloading of material.
Storage of Construction & Demolition Material	1) Loose Soil, Sand, Construction Materials and Debris of any kind & quantity should be stored in the demarcated/dedicated area, properly barricaded & fully covered/enclosed/protected with tarpaulin.
	2) Complete Ban on dumping of Construction Material and Debris on Public Roads, Footpaths, Pavements & Open Area.
	3) Appropriate dust extraction system with appropriate Air Pollution Control Technology to be provided, if required.
Super Structure Construction	1) Chutes, Skips & Transfer Point used for dropping/transfer of material shall be enclosed & should be properly operated & maintained to avoid emission & spillage.
	2) Water Sprinkling & Water Fogging should be carried out during construction & super structure construction activity, material handling operations, loading as well as unloading of material.
	3) Grinding, cutting, drilling, sawing & trimming should be carried out in enclosed area and Water Sprinkling & Water Fogging to be used.
	4) Mixing and manual batching of concrete at the site should be avoided. However, in unavoidable circumstances, it should be done in an enclosed/confined area.
	5) Mixing of materials for plaster should be undertaken in enclosed/confined area.
Transportation (Vehicles carrying construction material and	1) Inside the project premises, vehicle movement should be slow & should be carried out only on fixed route.
	The fixed route should be paved or hard top & regularly sprinkled with water.

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construction debris & Other Vehicles)	2) All vehicles should be thoroughly cleaned after unloading of material.
	3) All vehicles carrying material should be fully covered and protected so as to ensure dust from construction material or debris does not become air-borne during transportation.
	4) All vehicles carrying material should mandatorily obtain Pollution under Control Certificate (PUC) & shall produce it as & when asked.
	5) All vehicles carrying material should be loaded in proper manner to avoid spillage & overloading.
	6) After loading & unloading of material, two level tyre washing facility shall be provided at all exit points. The waste water generated shall be collected & treated/reused in construction process before disposal.
	7) C & D waste generated within the premises / site of work shall be transported to the designated unloading site strictly as per the BMC approved C & D Waste Management Plan.
Others	1) Only after mild water sprinkling- Brushing, Brooming & Sweeping should be undertaken on daily basis. Daily Cleaning to be carried out at Entry & Exit of Gate & Nearby Roads for removal of Dust. If possible, vacuum sweeping be carried out at Dust Laden areas/routes.
	2) Other unpaved surfaces & areas with loose soil should be adequately water sprinkled.
	3) Use of Green Walls, Screens, Other Vegetation Barriers & any other innovative dust minimizing technologies.
	4) DG Set (if installed) to be compliant with CPCB/MPCB Standards. If possible, Temporary Power Supply connections to be obtained.
	5) Mandatorily use of Personal Protective Equipment (PPE)- Mask, Goggles etc.
	6) All Project attracting Environmental Clearance shall carry out Third Party Ambient Air Monitoring every fortnightly from NABL/MoEF&CC Laboratory.
	7) Complete Ban on use of New/ Discarded Wood &/or Wood Products by construction workers, security guards etc. as a cooking fuel or bonfires to prevent open burning.
	8) Discarded Wood &/or Wood Products from Construction and Demolition Activity to be disposed off in scientific manner to avoid the open burning.

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5.2.2. Ready-Mix Concrete (RMC) Batching Plants- Commercial & Captive Plant-

All the Ready-Mix Concrete (RMC) Batching Plants- Commercial & Captive Plant have to obtain the Maharashtra Pollution Control Board (MPCB) Consent to Establish & Operate and have to comply to the 'Guidelines for citing criteria of Ready-Mix Concrete (RMC) plant' published by Notification vide No. MPCB/AS(T)/TB/B-436 dated 7th November 2016.

https://www.mpcb.gov.in/sites/default/files/standing_orders/RMC_Gazette_circular.pdf

5.3. Categorization of Building & Construction Projects-

Based on Plot Area, the Building & Construction Projects are categorized into-

Sr. No.	Category of Projects	Plot Area Classification
1)	Large Projects	>4,000 Sq. Mtr.
2)	Small Projects	Upto 4,000 Sq. Mtr.

5.4. Checklist on Actions-

Based on the above environmental guidelines, the checklist will be prepared by concerned department/ward.

5.5. Enforcement Mechanism-

- 1) The above guidelines will be immediately circulated to all the Project Proponents/Architect/Land Surveyors through Online AutoDCR Systems.
- 2) The concerned Project Proponent and registered site supervisor shall be responsible to comply the said guidelines.
- 3) The guidelines will also be circulated for enforcement to other departments such as,
 - Special Planning Authorities such as Maharashtra Housing & Area Development Authority (MHADA), Maharashtra Industrial Development Corporation (MIDC), Mumbai Metropolitan Region Development Authority (MMRDA), Mumbai Port Trust (MPT), Maharashtra State Road Development Corporation (MSRDC) & Slum Rehabilitation Area (SRA).
 - Other Government Departments such as Airport Authority of India (AAI), Indian Defence, Mumbai Maritime Board (MMB), Public Works Department (PWD), Railways & Maharashtra Forest Department.

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5.6. Monitoring Mechanism-

- 1) Concerned Project Proponent/Architect/ Land Surveyors shall submit online self-certification complying on said guidelines on weekly basis.
- 2) BMC's Auto DCR portal will be provided with separate tab to submit the progress of Dust Mitigation Measures of site along with photos/videos.

5.7. Actions for Non-Compliance-

- 1) On failure of compliance, Warning Letter to be issued to the project proponent for rectification/compliance within a week.
- 2) Pursuant to the warning letter, if the project proponent fails to comply then further penal action as per provisions of MMC/MRTP Act including issuing stop work notice shall be initiated.

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6. Control of Air Pollution from Road & Bridge Construction Activity

6.1. Inventory of Road & Bridge Construction Works-

The ward wise template will include information related to number of ongoing construction/demolitions works of Road & Bridge Construction Works such as- Major Roads, Minor Roads, Flyovers, Bridges, Rail over Bridges (RoBs), Foot over Bridges (FoBs).

Ongoing construction/demolitions of	Name	Locations	Number	Details (in Km.)	Remarks
Major Roads					
Minor Roads					
Flyovers					
Bridges					
Rail over Bridges (RoBs)					
Foot over Bridges (FoBs)					

6.2. Actions to Mitigate Air Pollution-

These guidelines are mandatorily to be undertaken by all the ongoing & proposed Road Construction Works.

6.2.1. Guidelines for Road & Bridge Construction Works such as Major Roads, Minor Roads, Flyovers, Bridges, Rail over Bridges (RoBs), Foot over Bridges (FoBs)-

Phase	Environmental Guidelines for Prevention & Control of Dust
Trenching	1) Before the start of the excavation or trenching work, continuous metal barricades shall be provided around the work site. Tarpaulin/Green Cloth/Jute Sheet to be used to cover the open area of metal barricade.

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Phase	Environmental Guidelines for Prevention & Control of Dust
Excavation	1) During the start of the Excavation, soil strata or roads shall be suitably watered/water sprinkled from time to time.
	2) Water Fogging should be carried out during the Excavation, Loading & Unloading of material.
	3) C & D waste generated within the premises / site of work is transported to the designated unloading site as per the BMC approved C & D Waste Management Plan.
Storage of Material	1) Sand, Construction Materials and Debris of any kind & quantity should be stored in the demarcated/dedicated area, properly barricaded & fully covered/enclosed/protected with tarpaulin.
	2) All Debris generated shall be removed within 24 hrs. of generation.
Construction	1) Construction activity, loading & unloading of material shall be carried out properly to avoid emission & spillage out of the barricade.
	2) Water Sprinkling should be carried out during construction activity, material handling operations, loading as well as unloading of material.
Cement Concrete Wearing Course	1) Mandatorily Use of water during the concrete road joint cutting.
Transportation (Vehicles carrying construction material and construction debris)	1) All vehicles should be thoroughly cleaned after unloading of material.
	2) All vehicles carrying material should be fully covered and protected so as to ensure dust from construction material or debris does not become air-borne during transportation.
	3) All vehicles carrying material should mandatorily obtain Pollution under Control Certificate (PUC) & shall produce it as & when asked.
	4) All vehicles carrying material should be loaded in proper manner to avoid spillage & overloading.
Others	1) Brushing, Brooming & Sweeping of road work as well as road side parallel to metal barricade should be undertaken.
	2) Mandatorily use of Personal Protective Equipment (PPE)- Mask, Goggles etc.
	3) Complete Ban on use of New/ Discarded Wood &/or Wood Products by construction workers, security guards etc. as a cooking fuel or bonfires to prevent open burning.

	4) Discarded Wood &/or Wood Products from Construction and Demolition Activity to be disposed off in scientific manner to avoid the open burning.
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6.3. Categorization of Road Works Projects-

Based on road width, the Road Works Projects are categorized into-

Sr. No.	Category of Road Works Project	Width
1)	Major Road	> 9 meters
2)	Minor Road	< 9 meters

6.4. Checklist on Actions-

Based on the above environmental guidelines, the checklist will be prepared by concerned department/ward.

6.5. Enforcement Mechanism-

- 1) The above guidelines will be immediately circulated to all the Contractors for implementation.
- 2) The concerned contractors shall be responsible to comply with the said guidelines.
- 3) The guidelines will also be circulated for enforcement to other departments such as,
 - Special Planning Authorities such as Maharashtra Housing & Area Development Authority (MHADA), Maharashtra Industrial Development Corporation (MIDC), Mumbai Metropolitan Region Development Authority (MMRDA), Mumbai Port Trust (MPT), Maharashtra State Road Development Corporation (MSRDC) & Slum Rehabilitation Area (SRA).
 - Other Government Departments such as Airport Authority of India (AAI), Indian Defence, Mumbai Maritime Board (MMB), Public Works Department (PWD), Railways & Maharashtra Forest Department.

6.6. Monitoring Mechanism-

- 1) Concerned contractor shall submit self- certification complying on said guidelines on weekly basis to the concerned Department's Deputy Chief Engineer.

6.7. Actions for Non-Compliance-

- 1) On failure of compliance, Warning Letter to be issued to the contractor for rectification/compliance.
- 2) Pursuant to the warning letter, if the contractor fails to comply or shows negligence towards adoption & enforcement of guidelines then further stringent action including penal actions as per contract conditions will be initiated.

7. Control of Air Pollution from Urban & Civic Infrastructure Activity

7.1. Inventory of Urban & Civic Infrastructure Projects-

The ward wise template will include information related to number of ongoing construction/demolitions works of-

- a) Urban Infrastructure such as Metro, Mono, Projects of MMRDA, MSRDC, PWD, Railway Construction Projects etc.
- b) Civic Infrastructure Projects of BMC's Departments- Hydraulic Engineer (H.E.), Water Supply Projects (W.S.P.), Sewerage Operations (S.O.), Sewerage Projects (S.P.), Storm Water Drains (S.W.D.), Municipal Sewage Disposal Projects (M.S.D.P.), Mechanical & Electrical (M&E), Coastal Road etc.

Ongoing construction/demolitions of	Name	Locations	Number	Details (in Km.)	Number of RMC Plant	Number of Casting Yard
Metro Projects						
Mono Projects						
Urban Infrastructure Projects- MMRDA, MSRDC, PWD etc.						
Railway Construction Projects						
Civic Infrastructure Projects-HE, WSP, SO, SP, SWD, MSDP, M&E, Coastal Road etc.						
Others						

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7.2. Actions to Mitigate Air Pollution -

These guidelines are mandatorily to be undertaken by all the ongoing & proposed Road Construction Works.

7.2.1. Guidelines for-

i) Urban Infrastructure such as Metro, Mono, Projects of MMRDA, MSRDC, PWD, Railway Construction Projects etc.

ii) Civic Infrastructure Projects of BMC's Departments such as Hydraulic Engineer (H.E.), Water Supply Projects (W.S.P.), Sewerage Operations (S.O.), Sewerage Projects (S.P.), Storm Water Drains (S.W.D.), Municipal Sewage Disposal Projects (M.S.D.P.), Mechanical & Electrical (M&E), Coastal Road etc.

Phase	Environmental Guidelines for Prevention & Control of Dust
Demolition Works-	
Demolition of existing structure	1) Erection of Tin/Metal Sheet or Metal Barricade around the periphery of entire structure.
	2) Tarpaulin/Green Cloth/Jute Sheet to be used covering an area under demolition structure. Regular Cleaning of Tarpaulin or Jute Sheet to be undertaken.
	3) Avoid on-site Crushing & Hammering of Demolition Material.
	4) Water Sprinkling shall be continuously carried out so that the Debris shall remain in wet condition.
	5) Water Fogging should be carried out during the Excavation & Loading & Unloading of material.
	6) C & D waste generated within the premises / site of work is transported to the designated unloading site strictly as per the BMC approved C & D Waste Management Plan.
Construction Works-	
During construction	1) Erection of Tin/Metal Sheet or Metal Barricade around the periphery of structure.
	2) Tarpaulin/Green Cloth/Jute Sheet to be used to cover the structure & Regular Cleaning of Tarpaulin or Jute Sheet to be undertaken.
Trenching & Excavation	1) During the start of the Excavation, soil strata or surface shall be suitably watered/water sprinkled from time to time.
	2) Water Fogging should be carried out during the Excavation & Loading & Unloading of material.

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Storage of Construction & Demolition Material	1) Loose Soil, Sand, Construction Materials and Debris of any kind & quantity should be stored in the demarcated/dedicated area, properly barricaded & fully covered/enclosed/protected with tarpaulin.
	2) Complete Ban on dumping of Construction Material and Debris on Public Roads, Footpaths, Pavements & Open Area.
	3) Appropriate dust extraction system with appropriate Air Pollution Control Technology to be provided, if required.
Construction & Super Structure Construction	1) Chutes, Skips & Transfer Point used for dropping/transfer of material shall be enclosed & should properly operate & maintain to avoid emission & spillage out of the barricade.
	2) Water Sprinkling & Water Fogging should be carried out during construction & super structure construction activity, material handling operations, loading as well as unloading of material.
	3) Grinding, cutting, drilling, sawing & trimming should be carried out in enclosed area and Water Sprinkling & Water Fogging to be used.
	4) Mixing and manual batching of concrete at the site should be avoided. However, in unavoidable circumstances, it should be done in an enclosed/confined area.
	5) Mixing of materials for plaster should be undertaken in enclosed/confined area.
Transportation (Vehicles carrying construction material and construction debris & Other Vehicles)	1) Inside the project premises, vehicle movement should be slow & should be carried out only on fixed route. The fixed route should be paved or hard top & regularly sprinkled with water.
	2) All vehicles should be thoroughly cleaned after unloading of material.
	3) All vehicles carrying material should be fully covered and protected so as to ensure dust from construction material or debris does not become air-borne during transportation.
	4) All vehicles carrying material should mandatorily obtain Pollution under Control Certificate (PUC) & shall produce it as & when asked.
	5) All vehicles carrying material should be loaded in proper manner to avoid spillage & overloading.
	6) After loading & unloading of material, two level tyre washing facility shall be provided at all exit points. The waste water generated shall be collected & treated/reused in construction process before disposal.
	7) C & D waste generated within the premises / site of work is transported to the designated unloading site strictly as per the BMC approved C & D Waste Management Plan.

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Others	<p>1) Only after mild water sprinkling- Brushing, Brooming & Sweeping of work area as well as road side parallel to metal sheet/barricade should be undertaken on daily basis.</p> <p>Daily Cleaning to be carried out at all Entry & Exit of Gate & Nearby Roads for removal of Dust.</p> <p>If possible, vacuum sweeping can be carried out at Dust Laden areas/routes.</p> <p>2) Other unpaved surfaces, areas with loose soil should be adequately water sprinkled.</p> <p>3) Use of Green Walls, Screens, Other Vegetation Barriers & any other innovative dust minimizing technologies.</p> <p>4) DG Set (if installed) to be compliant with CPCB/MPCB Standards. If possible, Temporary Power Supply connections to be obtained.</p> <p>5) Mandatorily use of Personal Protective Equipment (PPE)- Mask, Googles etc.</p> <p>6) All Project attracting Environmental Clearance shall carry out Third Party Ambient Air Monitoring every fortnightly from NABL/MoEF&CC Laboratory.</p> <p>7) Complete Ban on use of New/ Discarded Wood &/or Wood Products by construction workers, security guards etc. as a cooking fuel or bonfires to prevent open burning.</p> <p>8) Discarded Wood &/or Wood Products from Construction and Demolition Activity to be disposed off in scientific manner to avoid the open burning.</p>

7.2.2. Ready-Mix Concrete (RMC) Batching Plants -

Ready-Mix Concrete (RMC) Batching Plants engaged for the construction of project have to obtain the Maharashtra Pollution Control Board (MPCB) Consent to Establish & Operate and have to comply to the 'Guidelines for sitting criteria of Ready-Mix Concrete (RMC) plant' published by Notification vide No. MPCB/AS(T)/TB/B-436 dated 7th November 2016.

(https://www.mpcb.gov.in/sites/default/files/standing_orders/RMC_Gazette_circular.pdf)

7.2.3. Casting Yard Plants-

Casting Yard Plants engaged for the construction of project have to obtain the Maharashtra Pollution Control Board (MPCB) Consent to Establish & Operate and have to comply with the Environmental Clearance & Consent Conditions.

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7.3. Checklist on Actions-

Based on the above environmental guidelines, the checklist will be prepared by concerned department/ward.

7.4. Enforcement Mechanism-

7.4.1. For Urban Infrastructure Projects-

- 1) The above guidelines will be immediately circulated to all the Agencies for implementation.
- 2) The concerned agencies shall be responsible to comply with the said guidelines.

7.4.2. For Civic Infrastructure Projects (HE, WSP, SO, SP, SWD, MSDP, M&E, Coastal Road etc.) of BMC-

- 1) The above guidelines will be immediately circulated to all the Contractors for implementation.
- 2) The concerned contractors shall be responsible to comply with the said guidelines.

7.5. Monitoring Mechanism-

7.5.1. For Urban Infrastructure Projects-

- 1) Maharashtra Pollution Control Board (MPCB) on weekly basis to monitor the Environmental Clearance & Consent Conditions for Urban & Civic Infrastructure Projects.

7.5.2. For Civic Infrastructure Projects (HE, WSP, SO, SP, SWD, MSDP, M&E, Coastal Road etc.) of BMC-

- 1) Concerned contractor shall submit self- certification complying on said guidelines on weekly basis to the concerned Department's Deputy Chief Engineer.

7.6. Actions for Non-Compliance-

7.6.1. For Urban Infrastructure Projects-

- 1) On failure of compliance, Maharashtra Pollution Control Board (MPCB) will take legal action as per the provision of Water Act, 1974, Air Act, 1984 & Hazardous & Other Waste (Management and Transboundary Movement) Rules, 2016 and as per the MPCB's Enforcement Policy, 2016.

7.6.2. For Civic Infrastructure Projects (HE, WSP, SO, SP, SWD, MSDP, M&E, Coastal Road etc.) of BMC-

- 1) On failure of compliance, Warning Letter to be issued to the contractor for rectification/compliance.
- 2) Pursuant to the warning letter, if the contractor fails to comply or shows negligence towards adoption & enforcement of guidelines then further stringent action including penal actions as per contract conditions will be initiated.

8. Control of Road Dust Resuspension

8.1. Road Improvement & Maintenance –

8.1.1. Actions to Mitigate Air Pollution from

Improvement of Road Infrastructure & Regular Maintenance of Roads for 100% pavement & pothole free roads is effective way to prevent & control Resuspension of Road Dust. It is suggested to undertake below mentioned immediate & long-term actions.

	Actions to be undertaken
Immediate Actions	1) Identify Major & Minor Roads for Bad Patches, Potholes, Unpaved Roads.
	2) Road Repairs works to be undertaken for improvement of Bad Patches.
	3) Filling of Potholes on all roads & special emphasis to be given for Important Roads, Major Roads & Minor Roads with high vehicular traffic movement.
	4) Paving of Unpaved Roads Patches.
	5) Surfacing/Blacktopping on trench patch.
Long-Term Actions	1) Undertake Road Widening Works for Decongestion of Road Traffic.
	2) Removal of obstacles on roads in consultation with Traffic Police to remove traffic bottleneck for smooth vehicle movement.
	3) Conducting audit of Traffic Intersection & if required install Traffic Signals in co-ordination with Traffic Police.
	4) Intelligent Traffic Management System (ITMS) covering all traffic signals.

8.1.2) Checklist on Actions-

Based on the above actions, the checklist will be prepared by concerned department/ward.

8.1.3. Enforcement Mechanism-

- 1) The above actions will be circulated to all the Contractors for implementation.
- 2) The concerned contractors shall be responsible to comply with the said actions.

8.1.4. Monitoring Mechanism-

- 1) Concerned contractor shall submit self- certification complying on said actions on weekly basis to the concerned Department's Deputy Chief Engineer.

8.1.5. Actions for Non-Compliance-

- 1) On failure of compliance, Warning Letter to be issued to the contractor for rectification/compliance.
- 2) Pursuant to the warning letter, if the contractor fails to comply or shows negligence towards adoption & enforcement of actions then further stringent action including penal actions as per contract conditions will be initiated.

8.2. Road Sweeping & Road Cleaning

8.2.1. Inventory for Road Sweeping & Cleaning-

The ward wise template will include information related to Sweeping & Cleaning of-

	Name	Length (in Km.)	Sweeping Type	
			Manual (in Km.)	Operational Mechanical Power Sweeping (MPS) (in Km.) & No. of MPS deployed/in operations
Major Roads				
Minor Roads				

8.2.2. Actions to Mitigate Air Pollution -

Due to large scale construction & infrastructure work & its transportation, frequency of dust generation on roads has been increased. To control this, it is suggested to undertake below mentioned immediate & long-term actions.

	Actions to be undertaken
Immediate Actions	1) Wardwise special inspection drive to identify High & Frequent Dust Laden Major & Minor Roads.
	2) Special drive to be undertaken for Dust Scrapping, Road Brushing, Sweeping & Cleaning of all Public Roads including Highways & special focusing on High & Frequent Dust Laden Major & Minor Roads.
	3) After Road Brushing & Sweeping, Sprinkling of Water during nights to be carried out.
	4) Use of Water Foggers during the day time for control of Dust.
Long-Term Actions	1) Assessment of City's requirement for Mechanical Sweepers & Procurement as per the requirement.
	2) Preference to be given to Regenerative Air Sweeping Machines & Vacuum Power Sweeping Machines over Power Sweepers.
	3) Use of Vehicle Mounted Water Sprinkling Machine & Vehicle Mounted Water Fogging Machine after Road Scrapping, Brushing & Sweeping.

8.2.3. Checklist on Actions-

Based on the above actions, the checklist will be prepared by concerned department/ward.

8.2.4. Enforcement Mechanism-

- 1) The above actions will be circulated to the department/contractor for implementation.
- 2) The concerned department/contractor shall be responsible to comply with the said actions.

8.2.5. Monitoring Mechanism-

- 1) Concerned contractors shall submit self- certification complying on said actions on weekly basis to the concerned Assistant Engineer (SWM).

8.2.6. Actions for Non-Compliance-

- 1) On failure of compliance, Warning Letter to be issued to the contractor for rectification/compliance.
- 2) Pursuant to the warning letter, if the contractor fails to comply or shows negligence towards adoption & enforcement of actions then further stringent action including penal actions as per contract conditions will be initiated.

9. Control of Air Pollution from Open Burning

9.1. Inventory for Open burning of Solid Waste/Garbage & Other Waste-

The ward wise template will include information related to Solid Waste Generation, Collection & Open Burning Locations-

A) Open Burning Solid Waste/Garbage & Other Waste		
Name of Location	Type of Waste- a) Solid Waste/Garbage, b) Horticulture/Garden Waste, c) Plastic Waste, d) E Waste, e) Others.	Tentative Quantity (in MT)

9.2. Actions to Mitigate Air Pollution -

During the discussion, it is highlighted that Burning of- Solid Waste/Garbage, Garden & Horticulture Waste, Plastic Waste, E-Waste in the form of Wire etc. significantly contribute to the rising Air Pollution in Mumbai City. To control this, it is suggested to undertake below mentioned immediate & long-term actions.

	Actions to be undertaken
Immediate Actions	1) 100% Collection of Solid Waste/Garbage by BMC & transfer to Dumping Site. Special emphasis in Slums Areas etc. where sizeable number of Littering (open dumping) is carried out.
	2) Wardwise special inspection drive to identify the Open Burning Spots.
	3) Wardwise special cleanliness drive to immediately remove Littered (open dumped) Solid Waste/Garbage, Garden & Horticulture Waste, Plastic Waste, E-Waste etc.
	4) Deployment of Nuisance Detectors (N.D.) for taking action & penalising the defaulters (involved in Littering, Dumping & disposal by burning) as per Greater Mumbai Cleanliness and Sanitation Bye-Laws 2006

Long-Term Actions	1) 100 % Collection of Solid Waste/Garbage by BMC & transfer to Dumping Site.
	2) Inspection Calendar to regularly check the vulnerable spots for control of Littered (open dumped) & Open Burning of Solid Waste/Garbage, Garden & Horticulture Waste, Plastic Waste, E-Waste etc.
	3) Increase in penalty fine of acts under Greater Mumbai Cleanliness and Sanitation Bye-Laws.
	4) Public Awareness & Public Outreach Programs to be carried out.
	5) Google Mapping of Existing Solid Waste Collection Centres, Dry Waste Segregation Centres, Horticulture Waste Composting facility so that waste will be channelized to facility.
	6) 100 % scientific treatment of waste that is generated.
	7) 100 % treatment of Legacy Waste to prevent spontaneous fire.
	8) Promotion of Reduce, Reuse & Recycling to lower down the waste generation.

9.3. Checklist on Actions-

Based on the above actions, the checklist will be prepared by concerned department/ward.

9.4. Enforcement Mechanism-

- 1) The above actions will be circulated to the Contractors for implementation.
- 2) The concerned contractors shall be responsible to comply with the said actions.

9.5. Monitoring Mechanism-

- 1) Concerned contractor shall submit self- certification complying on said actions on weekly basis to the Ward Assistant Engineer (SWM).

9.6. Actions for Non-Compliance-

- 1) On failure of compliance, Warning Letter to be issued to the contractor for rectification/compliance.
- 2) Pursuant to the warning letter, if the contractor fails to comply or shows negligence towards adoption & enforcement of actions then further stringent action including penal actions as per contract conditions will be initiated.

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10. Control of Air Pollution from Unclean Fuel

10.1. Inventory of Fuel Usage-

The ward wise template will include information on-

11.1.1.) Fuel usage by Hotels, Restaurants, Dhabas, Bakeries, & Other Establishments-

	Total Number	Name	Location	Coal or wood charcoal fired Tandoor, Specify	Daily Quantity of Coal or Wood Charcoal used (in Kg.)	Type of Cooking Fuel Used	Daily Quantity of Fuel used (in Kg./Ltr.)	Details of channelization or Control system provided for Emission (Yes/No & Details)	Chimney / Stack Height (in mtr.)
Hotels									
Restaurants									
Banquet Halls									
Dhabas									
Bakeries									
Eateries									
Eating Stall on Street									

10.2. Actions to Mitigate Air Pollution -

Hotels, restaurants, etc. use large amount of coal & other fuel mixtures. Coal is one of the largest contributors of PM 10. Other unclean fuel usage in hotels, restaurants, etc. also adds to Air Pollution. To control this, it is suggested to undertake below mentioned immediate actions-

	Actions to be undertaken
Immediate Actions	1) Special Drive to be undertaken to identify the Hotels, Restaurants, Banquet Halls etc. using unclean fuel as well as using coal to fire Tandoor.
	2) Immediate directions to be given to convert the existing unclean fuel to cleaner fuel.

10.3. Checklist on Actions-

Based on the above actions, the checklist will be issued to Ward Level Task Force.

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10.4. Enforcement Mechanism-

- 1) The above actions will be circulated to the concerned departments, owners & operators of Hotels, Restaurants, Dhabas, Bakeries, & Other Establishments for implementation.
- 2) The concerned departments, owners & operators shall be responsible to comply with the said actions.

10.5. Monitoring Mechanism-

Ward Level Task Force in co-ordination with the concerned departments shall visit to Hotels, Restaurants, Dhabas, Bakeries, & Other Establishments to monitor the compliance.

10.6. Actions for Non-Compliance-

- 1) On failure of compliance, Warning Letter will be issued to the establishments for rectification/compliance.
- 2) Pursuant to the warning letter, if the establishments fail to comply or shows negligence towards adoption & enforcement of actions then further stringent action will be initiated.

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11. Control of Air Pollutions from Crematoria

11.1. Inventory of Crematoriums -

The template will include ward wise information on-

Name & Location of Crematorium & details of Cremation Facility	Total Cremation Pyre & Furnace	Number of Wood Pyre Set (Conventional)	Pyre set		Type of Air Pollution Control System (APCS) Provided	Number of Eco-friendly Pyre Set	Number of PNG Cremation System (With APC)	Number of Electric Cremation System (With APC)	Chimney/ Stack Height (in Mtr.)
			With APC	Without APC					

11.2. Actions to Mitigate Air Pollution -

Massive piles of firewood are burnt in the cremation process. This process generates various pollutants in large number. In Mumbai, these crematoriums are in residential areas & thus, it is essential to control the emission from Crematoriums. The below actions can be undertaken to control the emission-

	Actions to be undertaken
Immediate Actions	<p>1) As all crematoriums in Mumbai have more than 01 pyre/furnace, the Wood Pyre Cremation not having Air Pollution Control System (APCS) should be avoided for usage (if possible). Instead, wood pyre crematoria having APCS or Electric/PNG based crematoriums shall be preferred.</p> <p>2) Immediate assessment of all Crematoriums for working & adequacy of Air Pollution Control System (APCS) to be undertaken. If the APCS working found to be inadequate, immediate repairing/refurbishment works to be undertaken.</p> <p>3) Public Awareness Posters to be placed on entry gate of crematoriums to motivate citizens to use the Eco-friendly pyre/ Electric/PNG based furnace crematoriums instead of wood pyre crematorium.</p>
Long-Term Actions	<p>1) Target based conversion or new installation of PNG based furnace crematoriums.</p>
	<p>2) Advanced Control System should be adopted in place of Conventional APC system.</p>

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11.3. Checklist on Actions-

Based on the above actions, the checklist will be prepared by concerned department/ward.

11.4. Enforcement Mechanism-

- 1) The above actions will be circulated to concerned department & contractor for implementation.
- 2) The concerned department & contractor of crematoriums shall be responsible to comply with the said actions.

11.5. Monitoring Mechanism-

- 1) Ward Level Task Force in co-ordination with the concerned department shall visit to the crematoriums to monitor the compliance.

11.6. Actions for Non-Compliance-

- 1) On failure of compliance, Warning Letter to be issued to the contractor for rectification/compliance.
- 2) Pursuant to the warning letter, if the contractor fails to comply or shows negligence towards adoption & enforcement of actions then further stringent action including penal actions as per contract conditions will be initiated.

12. Control of Industrial Air Pollution

12.1. Inventory of Industries -

The template will include ward wise information on-

	Name	Location	Engagement for- Government or Private or Both	Quantity
RMC Batching Plant- Commercial				
RMC Batching Plant- Captive Plant				
Casting Yard Plants				
Hot Mix Plants				

Category of Industry	Scale of Industry	Total Number	Number of Air Polluting Industries/Indust ries with Emissions	Details of Fuels Used
Red	Large			
	Medium			
	Small			
Orange	Large			
	Medium			
	Small			
Green	Large			

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	Medium			
	Small			

12.2. Actions to Mitigate Air Pollution -

Mumbai City has many large-scale industries such as Refineries, Thermal Power Plant, Fertilizer, Storage of Chemicals, Automobile industries etc. Mumbai being a financial capital of India also houses many medium- and small-scale industries. These industrial operations are a significant cause of pollutants. For Control of Air Pollution from Industries actions to be undertaken includes-

	Actions to be undertaken
Immediate Actions	1) Inspection Drive to be carried out by Maharashtra Pollution Control Board (MPCB) at all the RMC Batching Plant-Commercial & Captive, Casting Yard Plants, Hot Mix Asphalt Plant to verify the compliance including the Air Pollution Control Measures as per the Consent Conditions.
	2) Issue of Direction Letters to Building & Construction Projects & Infrastructure Projects for compliance of Air Pollution Control Measures as per Environmental Clearance & Consent Conditions.
	3) Issue of Direction Letters to all other Air Polluting Industries for compliance of Consent Conditions.
	4) Enforcement of Action Plan for Large Industries.
	5) Petrochemical Industries to be directed for fence monitoring of VOC's and their emission control.
	6) Regular Audit of Stack Emission for QA/QC in Thermal Power Plant.
	7) Surprise Visit to Industries for Air Sampling.
	8) Actions against unauthorized industrial units.
Long-Term Actions	1) Issue of Advisories for promoting cleaner production in Industries.
	2) Improved Combustion Technology in Industries.

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12.3. Checklist on Actions-

Based on the above actions, the checklist will be issued by Maharashtra Pollution Control Board (MPCB).

12.4. Enforcement Mechanism-

- 1) The above actions will be circulated to all the Industries by Maharashtra Pollution Control Board (MPCB) for implementation.
- 2) The concerned industries shall be responsible to comply with the said actions.

12.5. Monitoring Mechanism-

Maharashtra Pollution Control Board (MPCB) to monitor the Environmental Clearance &/or Consent Conditions.

12.6. Actions for Non-Compliance-

On failure of compliance, Maharashtra Pollution Control Board (MPCB) will take legal action as per the provision of Water Act, 1974, Air Act, 1984 & Hazardous & Other Waste (Management and Transboundary Movement) Rules, 2016 and as per the MPCB's Enforcement Policy, 2016.

13. Control of Vehicular Pollution

13.1. Inventory of Vehicles-

The template will include ward wise information on-

a) Total Numbers of Vehicle Registered (RTO-01, 02, 03 & 47) in

- FY 2020-21,
- FY 2021-22 &
- FY 2022-23?

b) Fuel Wise Details of Vehicles Registered & are on Roads till February 2023-

Vehicle Type	Fuel-Petrol	Fuel-Diesel	Fuel-LPG	Fuel-CNG	Fuel-Electric	Fuel-Others
2-W						
3-W (Rickshaws)						
3-W (Others)						
4-W						
Taxi (Metered)						
Taxi (Tourist Cab)						
Buses (Government)						
Buses (Private)						
School Buses						
Ambulances						
Trucks & Lorries						
Tankers						
Delivery Van (4-W)						
Tractors						
Arti. & Multi. Vehicle						
Others						

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Total						
Vehicles Per 1000 Population						

c) Fuel Wise Details of Vehicles Registered in FY 2021-22-

Vehicle Type	Fuel- Petrol	Fuel- Diesel	Fuel-LPG	Fuel- CNG	Fuel- Electric	Fuel- Others
2-W						
3-W (Rickshaws)						
3-W (Others)						
4-W						
Taxi (Metered)						
Taxi (Tourist Cab)						
Buses (Government)						
Buses (Private)						
School Buses						
Ambulances						
Trucks & Lorries						
Tankers						
Delivery Van (4-W)						
Tractors						
Arti. & Multi. Vehicle						
Others						
Total						

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d) Fuel Wise Details of Vehicles Registered in FY 2022-23-

Vehicle Type	Fuel-Petrol	Fuel-Diesel	Fuel-LPG	Fuel-CNG	Fuel-Electric	Fuel-Others
2-W						
3-W (Rickshaws)						
3-W (Others)						
4-W						
Taxi (Metered)						
Taxi (Tourist Cab)						
Buses (Government)						
Buses (Private)						
School Buses						
Ambulances						
Trucks & Lorries						
Tankers						
Delivery Van (4-W)						
Tractors						
Arti. & Multi. Vehicle						
Others						
Total						

e) Number of PUC Centres in Mumbai City?**f) Number & Location of Pay & Park Facility including Number of Vehicles that can be parked?****g) Number of Vehicles scrapped in FY 2022-23?****h) Number of existing private cars plying on roads that are older than 20 years?****i) Number of existing commercial vehicles plying on roads that are older than 15 years?**

j) Number of Abandoned Vehicles removed in FY 2022-23?
k) Tentative Number of Abandoned Vehicles currently parked on Roads?

13.2. Actions to Mitigate Air Pollution -

The rapid urbanization has resulted in a tremendous increase in the number of motor vehicles. As the number of vehicles continues to grow and the consequent congestion increases, vehicles are now becoming the main source of air pollution in urban India. For Control of Air Pollution from Vehicles actions to be undertaken includes-

	Actions to be undertaken
Immediate Actions	1) Deployment of additional staff on roads for checking of vehicles and vehicular traffic movement management.
	2) Launch extensive drive against polluting vehicles to ensure Strict actions against visibly polluting vehicles.
	3) Strict actions for parking of vehicles at non-designated parking areas.
	4) Regular checking of Vehicular Emission & Issue of Pollution under Control Certificate. Priority will be given to Vehicles carrying Construction & Demolition Material, Heavy Vehicles, Taxis & Rickshaws.
	5) Use of off-peak passenger travel time to move freight & Restriction of entry of heavy vehicles into cities during day time
	6) Check overloading of trucks, lorries & vehicles carrying Construction & Demolition Material.
	7) Covering of Vehicles to be made mandatory for all type of vehicles carrying all type of Construction & Demolition Material.
	8) Removal of Abandoned Vehicles (Khatara Hataav Campaign) for decongestion of road traffic.
Long-Term Actions	1) Phasing out older vehicles as per vehicle scrappage policy.
	2) Traffic Decongestion Plan to be notified comprising Traffic Congestion Points & Decongestion Strategy.

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13.3. Checklist on Actions-

Based on the above actions, the checklist will be issued by Regional Transport Office (RTO) & Mumbai Traffic Police (MTP).

13.4. Enforcement Mechanism-

- 1) The above actions will be given large scale publicity & advertisement.
- 2) These actions will be circulated to stakeholders by Regional Transport Office (RTO) & Mumbai Traffic Police (MTP) for implementation.

13.5. Monitoring Mechanism-

Regional Transport Office (RTO) & Mumbai Traffic Police (MTP) shall carry out special drive by deploying additional staff to inspect the vehicles & monitor actions.

13.6. Actions for Non-Compliance-

On failure of compliance, Regional Transport Office (RTO) & Mumbai Traffic Police (MTP) will take action as per the provision of Motor Vehicles Act.

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14. Other Actions to Mitigate Air Pollution

14.1. Greening & Plantation-

	Actions to be undertaken
Immediate Actions	1) Daily Watering to all the Plants, Trees, Plantation on Open Spaces, Traffic Corridors, Gardens.
	2) Daily Water Sprinkling on Recreational Grounds, Play Grounds & Open Spaces.
	3) Greening & Landscaping of all Major & Arterial Roads. Focus to be on stretches with high Dust & high vehicular movement.
	4) Extensive Tree Plantation focusing Traffic Corridor, Open Area etc.
	5) While filling of earth material &/or watering plants on traffic-divider, median & intersection, care must be taken to avoid soil spillage.
	6) Complete Ban on storing loose garden soil on Public Roads, Footpaths, Pavements & Open Area.

14.2. Fountains-

	Actions to be undertaken
Immediate & Long-Term Actions	1) Installation of Water Fountains at traffic intersection & chowks.

15. Capacity Building & Public Outreach Program

For effective implementation of air pollution mitigation plan, Sector specific Workshops on Capacity-Building programmes for all the concerned departments & stakeholders will be undertaken.

As per the guidelines of Ministry of Environment, Forest & Climate Change (MoEF&CC), Annual Program for 'Capacity Building and Outreach Programmes' will be prepared & activities will be undertaken.

In October 2022, Mission LiFE (Lifestyle for Environment) was launched to sensitise and educate the masses on LiFE actions which can promote sustainable living and help tackle climate change. It includes list of 75 individual LiFE actions across 7 categories to practice simple environment-friendly actions (LiFE actions) in their daily lives. Under Mission LiFE, Awareness Programs will be organised.

16. Environment & Lung Health Institute-

Haze forms when weather conditions remain stagnant for a considerable length of time which leads to lingering of dust, smoke and other pollutants along the vertical profile of the city. In some cases, specific weather patterns can cause haze to form in areas somewhat far away from the origination point of the dust, smoke or pollutant particles. Though haze contains dust and smoke particles, however, in dense urban regions it also contains air pollutants such as sulphur dioxide, nitrogen dioxide, ground level ozone, organic aerosols, carbon monoxide and particulate matter. The fine particles that make up haze can go deep into the lungs, and in some cases, enter the bloodstream. Major health risk is posed by the PM_{2.5} which in haze conditions is not purely dust particles but secondary reacted particulate matters. This can penetrate right into the small air sacs in human lungs when inhaled. Its presence can aggravate lung disease, causing asthma attacks, acute bronchitis as also increase susceptibility to respiratory infections. Short-term exposures can lead to in people with heart disease and arrhythmias whereas Long-term will result in reduced lung function and the development of chronic bronchitis including premature mortality.

Looking at the overall changing landscape of air pollution, environmental factors & climate change, major contributing factors for disease burden in city and similarly in many cities of Maharashtra, there is a need to consider an action plan. In near future, there is a possibility of increasing disease burden which need preventive and curative steps. Brihanmumbai Municipal Corporation (BMC) had established Environmental Pollution Research Centre (EPRC) at KEM Hospital few decades back, which worked towards understanding air pollution and health impacts. It is imperative that an Institute is created which will address the whole gamut of issues of health arising from Air Pollution, Environment & Climate Change.

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17. Task Force

17.1. BMC's Ward Level Task Force

Ward Level '03' Task Force will be constituted comprising of below mentioned officers for implementation of Air Pollution Mitigation Action Plan.

Ward Level 01st Task Force will include	Ward Level 2nd Task Force will include	Ward Level 3rd Task Force will include
Assistant Engineer (B&F)	Assistant Engineer (SWM)	Assistant Engineer (Division M&E)
Assistant Engineer (B.P.)	Sub-Engineer (Maintenance)	Medical Officer of Health (MoH)
Sub-Engineer (R.E.)	Horticulture Assistant (Ward)	Sub-Engineer (Ward M&E)
*Oversee Chapter No. 5, 6, 7, 8.1	*Oversee Chapter No. 8.2, 9, 14.1	*Oversee Chapter No. 10, 11

Objective of Ward Level Task Force-

- 1) The Task Force will visit the Projects, Sites to inspect the compliance as per guidelines/actions within a week.
- 2) The Task Force will issue Warning Letter on 1st non-compliance.
- 3) The Task Force will again visit & inspect about the compliance mentioned in the Warning Letter.
If non-compliance is again reported, Task Force will take penal action for 2nd non-compliance with the approval of the concerned Executive Engineer/MoH.
- 4) The Task Force will submit weekly action taken report to the concerned Assistant Commissioner.

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17.2. Works by other Agencies & Departments-

BMC's Ward Level Task Force mentioned in above para 17.1 shall be empowered to visit & inspect Construction/Projects by other agencies/departments such as MHADA, MIDC, MMRDA, MPT, MSRDC, SRA, AAI, MMB & PWD, Railways, Maharashtra Forest Department etc. & take necessary actions as mentioned in above para 17.1.

18. Institutional Mechanism-

Brihanmumbai Municipal Corporation (BMC) is in process to form 'Climate Action Cell'. This cell will comprise of technical subject experts which will be posted at Ward Level & Head Office to co-ordinate & assist with various BMC's department for implementation of Actions for improvement of Air Quality under Mumbai City Air Action Plan and to execute the Mumbai Climate Action Plan (MCAP) for climate resilience & achievement of Net Zero Target.

BMC has also made Budgetary provisions in the Budget Estimates of 2023-24 for control of Air Pollution.

19. Review

The enforcement & implementation of Guidelines & Actions will be reviewed by respective Assistant Commissioner on weekly basis.

Assistant Commissioner shall submit report in prescribed format to the Additional Municipal Commissioner (WS) on 5th & 20th Date of Every Month. If holiday falls on same date, the report shall be submitted on next working day.

20. Corrective Measures

Inventory Data & Action Taken Report (ATR) will be submitted on monthly basis for progress review and further corrective measures to-


- City Level Air Quality Monitoring Committee &
- Technical Advisory Committee.


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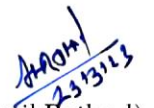
21. References

- 1) Solid Waste Management Rules, 2016.
- 2) C&D Waste Management Rules, 2016.
- 3) Central Pollution Control Board (CPCB).
Circular on harmonization of classification of industrial sectors.
- 4) Maharashtra Pollution Control Board (MPCB).
Guidelines for citing criteria of Ready-Mix Concrete (RMC) plant, 2016.
- 5) Central Pollution Control Board (CPCB).
Guidelines on Environmental Management of C & D Wastes, March 2017.
- 6) Central Pollution Control Board (CPCB).
Guidelines on Dust Mitigation Measures, November 2017.
- 7) Hon. Supreme Court Order vide SLP (Civil) No. D23708/2017 dtd. 15.03.2018.
- 8) Central Pollution Control Board (CPCB), Maharashtra Pollution Control Board (MPCB).
Revised Action Plan for Control of Air Pollution in Non-Attainment Cities of Maharashtra- Mumbai City Action Plan, 2019.
- 9) Central Pollution Control Board (MPCB), Maharashtra Pollution Control Board (MPCB).
Graded Response Action Plan.



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(Satish Gite)
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Ch.E. (D.P.) r.c.


(Ulhas Mahale)
D.M.C.(Infra.)


(Chanda Jadhav)
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