

MAHARASHTRA POLLUTION CONTROL BOARD

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No. 228/2048/MPCB

Date : 27/01/2020.

To,

The Member Secretary,
Central Pollution Control Board,
Parivesh Bhavan, East Arjun Nagar,
Delhi-110 032.

Sub : Submission of Compliance Report in the matter of
Original Application No.606/2018.

Sir,

May I refer to the order dated 12/09/2019 and 07/01/2020 passed by the Hon'ble National Green Tribunal, Principal Bench, New Delhi in the matter of Original Application No.606/2018 – Compliance of Solid Waste Management Rules, 2016.

In compliance of the order passed by the Hon'ble NGT in the above matter, the first quarter report was submitted on 09/07/2019 and the gap analysis report in the CPCB format for the State of Maharashtra was submitted on 07/11/2019. As per the Hon'ble NGT order dated 07/01/2020, the report of the State of Maharashtra in the redesigned format given by the CPCB in respect of Solid Waste Management, Restoration of Polluted River Stretches and Air Quality Management of Non-Attainment Cities is submitted herewith.

This is submitted with the approval of the Hon'ble Chief Secretary of the State of Maharashtra.

Yours faithfully,

(E. Ravendiran, IAS)
Member Secretary

Encl: As above

Copy submitted for favour of information to :

1. Hon'ble Chief Secretary, Govt. of Maharashtra.
2. Hon'ble Principal Secretary, Environment Deptt., Govt. of Maharashtra.
3. Hon'ble Chairman, Maharashtra Pollution Control Board, Mumbai.

Copy to: Regional Officer(HQ)/Law Officer(P&L Divn.I), MPCB, Mumbai- for information and necessary action.

Report of State of Maharashtra in the matter of O.A. 606/2018 as per CPCB format

Solid Waste Management			
Sl. No		Issue	Remarks
1	a	What is the quantity of MSW generated in the state	23845 MT/Day
2	a	What is the quantity of MSW processed in the state	13276 MT/Day
3	a	What is the quantity of MSW sent to the landfills	2371 MT/Day
4	a	Is door-to-door collection /segregation & transportation of segregated waste being done in the entire State	Yes
	b	If not, please provide percentage coverage of the State as per "4a" above	--
	c	If not, please provide timeframe for coverage of entire state as per "4a" above	--
	d	If not, has destination of disposal for mixed waste been identified for areas in which segregation of waste is not being done	--
5	a	Is all waste generated in the state processed in the waste processing facilities	Partially
	b	If not, please provide percentage coverage of the State as per "5a" above	56%
	c	If not, please provide timeframe for above for coverage of entire state for "5a" above	December 2020
6	a	Have all dumpsites in the state been cleared	Partially – Work is in progress
	b	If not, please indicate the number of dumpsites in which work has commenced and percentage of waste cleared	1) Total 203 sites identified. 2) Work has completed in 23 ULBs. 3) Work in process in 117 ULBs 4) 2315102 MT waste is cleared till date.
	c	If not, please provide timeframe for clearing of all dumpsites	Dec-21
7	a	Have rates for procurement of services/equipment (to do away with the tendering process) required for solid waste management been standardized	All procurement is being done through Government of India's E-Marketing Portal (GEM).

	b	If not, please provide timeframe for standardizing of the same	--
8	a	What action has been initiated against the defaulting officers/ organization (financial penalty, Entry in ACR,etc) responsible for Solid Waste Management	Directions have been issued by MPCB under Section 5 of EP Act for Environmental compensation to the ULBs.
	b	If yes, please provide the details	Directions are issued to 221 ULB's.
	c	If, no ,please provide the details of action proposed to be taken against the defaulting officers/organizations (financial penalty, Entry in ACR,EC, Prosecution etc)	--
9	a	Has environmental management cell been created in the state for monitoring key environmental issues.	MPCB has Constituted Technical Advisory Committee at state level and Divisional level.

Sewage Management in Maharashtra

S.No		Issue	Remarks	Comments
1	a	Quantity of Sewage generated in the State	9758 MLD	There are 391 ULBs in state of Maharashtra generating 9758 MLD of sewage generation and having STP capacity of 7747 MLD (Existing 3532 + ongoing 4214 = 7747 MLD - STP capacity)
2	a	Quantity of Sewage treated in the State	3532 MLD	
3	a	Existing Coverage of Sewerage Network	7410 KM	In Maharashtra 32 cities have at least a partial conventional underground sewerage collection system.
4	a	Has Sewage generation (town / City wise) been estimated for present and future population? Please provide details of the same	Yes (Partially)	Not all the ULBs estimated the Sewage generation for present and future population.
5	a	Has adequate treatment capacity been developed for treatment of sewage?	No	Maharashtra generating 9758 MLD of sewage generation and having STP capacity of 7747 MLD (Existing 3532 + ongoing 4214 = 7747 MLD - STP capacity)
	b	If not, then what is present percentage of sewage being treated?	36%	43% of STP capacity ongoing.
	c	If not, please provide the the timeframe by which all sewage generated in the State shall be treated	2028	Sewage treatment will be fulfilled through providing STPs by 2024 for all urban local bodies except Mumbai. Mumbai will be completed by 2028. Nagar Panchayat will meet the target by Dec. 2020 through septage management.
6	a	Please provide details of STPs (Town/ City Wise) along with details on compliance status and treatment capacity	Annexure-I	-

S.No		Issue	Remarks	Comments
7	a	Is entire sewage generated from each town being linked with sewerage network in the state?	No	The major cities and towns have provided collection network which is very old and it could not meet with the present requirement. The sewage is being treated by diverting from the nalla and taken to the sewage treatment facility.
	b	If not, then what is the present current percentage of sewage being collected through the existing sewerage network?	30%	-
	c	If not, then please provide the timeframe by which all sewage generated in the State shall be collected through sewerage network	2028	Sewage collection will be provided by 2024 for all urban local bodies except Mumbai. Mumbai will be completed by 2028. Nagar Panchayat will meet the target by Dec. 2020 through septage management.
8	a	Have all drains carrying waste water in each town / city been identified	Yes (for Cities/Towns along the polluted stretches)	Drains carrying wastewater in 62 towns / cities along the polluted river stretches have been identified. Rest for all cities/towns is under progress.
	b	Provide details on the pollution load due to these drains	Details Enclosed in Table 1	-
	c	Has in-situ treatment of wastewater being carried out in all such drains for reduction of pollution load?	No	Demonstration project has been started for in-situ treatment of wastewater at kotwali village drain on Vashisthi River and NABARD sponsored 100 village sewage treatment executing MJP for 100 MLD proposed in three years, 20 MLD work is in progress.

S.No		Issue	Remarks	Comments
	d	If not, then please indicate the number of drains in which in-situ treatment of waste water has commenced	It is proposed	-
	e	If not, then please provide the the timeframe within which in-situ treatment of wastewater shall be carried out in all such drains for reduction of pollution load	NA	-
9	a	Have all bulk users for reuse of wastewater been identified?	Yes (Partially)	Few Urban Local Bodies have identified Bulk user for Industrial, agriculture and Infrastructure projects.
	b	Is all treated wastewater from the STPs being reused for different purposes?	No	Treated / Partially treated / untreated sewage is being discharged to the nearby nalla or river, further, it is being utilized for irrigation purposes.
	c	If not, then what is current percentage of wastewater being reused?	5%	At present Koradi TPS is reusing 130 MLD of treated sewage generated by Nagpur Municipal Corporation and 18 MLD sewage is reused by RCF, Mumbai taken from drain of the MCGM. In addition to this all infrastructure projects are mandated to recycle 60% of the sewage is being recycled. The Total Quantity is 395 MLD.
	d	If not, then please provide the timeframe within which all treated wastewater from STP shall be reused for different purposes	2030	Action plan for utilization of treated sewage has been formulated with target to reuse at least 25% of treated waste water within one year to reuse 60% of treated waste water by 2025 and to reuse 100% of treated waste water by 2030.

Review of compliance to Hon'ble NGT Directions for Control of River Pollution

1. Name of State/ UT		: Maharashtra	
2. No of identified Polluted River Stretches P-I to P-V		: 53	
3. Water Quality			
A. Polluted River Stretch (Range in Year 2019)		(List Enclosed)	
BOD (mg/l)	Min		
	Max		
Fecal Coliform (MPN/100ml)	Min		
	Max		
In absence of FC, TC may be given			
B. Has the State identified all pollution contributing drains		: Yes Details provide in table 1 (List Enclosed)	
4. Action plan addressing the gaps			
A. Gap assessment in sewage treatment completed		: Yes Details provide in table 2	
B. Gap assessment for industrial pollution completed		: Yes Details provide in table 3	
C. Solid waste management addressed		: Yes Details provided in table 4	
D. Other Wastes		: Yes Details provided in table 5	
5. Measures taken for			
A. Control of Illegal Ground Water Abstraction		: Yes	
B. River catchment/ Basin Management		: Yes	
C. Flood Plain Zone Protection		: Yes	
D. E Flow maintenance & Watershed Management		: No	
E. Ground water recharge/ Rain water harvesting		: Yes	
F. Setting up of Biodiversity Parks, Greenery/ plantation along the banks of river stretch		: Yes	
G. Removal of encroachments		: Yes	
6. Progress in line with target dates of March 2021		: No	

Table 1: Details of drains contributing to pollution in polluted river stretch (List Enclosed)

Table 2: Details for sewage management (in MLD) (Details Enclosed)

Generated	Processed/ Treated	Gap
9758	3532	2011

Table 3: Details for industrial effluent management (in MLD)

Generated	Processed/ Treated	Gap
404.93	404.93	Nil

Table 4: Details for MSW (in TPD)

Generated	Processed/ Treated	Gap
23845	13276 (MSW Processed)+2371 (SLF)=15647	8198

Table 5: Details for other wastes (in TPD)

Type of Waste	Generated	Processed/ Treated	Gap
BMW	62.4	62.1	0.3
HW	3021.6	3021.6	0.0
Plastic Waste	1122.3	613.6	508.7
E Waste	2678.0	25.0	2653.0
C& D waste	4545.0	75 (processed) +4470(Landfill)	00

Review of compliance to Hon'ble NGT Directions for control of Air Pollution in Non-attainment cities- Maharashtra

1. Name of the State/UT : Maharashtra
2. Number of cities identified as Non-attainment cities : 18
3. Detail on Air quality monitoring infrastructure with regard to Manual, real time station:
 Installed Manual Monitoring Station: 78
 CAAQM Stations installed: 23
 CAAQM Station installation under process: 40
 Total Manual Monitoring Stations proposed in the State is : 126
 Total additional CAAQMS Stations proposed in the State : 49
 Board has already approved the proposal and procurement is under process.
4. Whether city action plans prepared for all Non-Attainment Cities : Yes
 CPCB has approved action plan of 17 Non-Attainment cities.
 Action Plan of Thane city submitted to CPCB on dtd. 27.09.2019 and approval is awaited.
5. Whether the assessment and installation of the requisite number of monitoring stations in the non-attainment cities completed :
 Yes (Enclosed as Table 1)
 Assessment of requisite no. of monitoring stations in NACs completed.
 Existing CAAQM station in NACs: 19
 Required CAAQM station in NACs: 46
 Existing Manual station in NACs: 55
 Required Manual station in NACs: 07
6. Have polluting sources identified : Yes (Enclosed as Table 2)
 (Source Apportionment/Emission Inventory)
 Source Apportionment & Emission inventory study work awarded to IIT(B) & NEERI, Nagpur for 10 cities on dtd. 17.03.2016 and for 7 cities on dtd. 17.06.2019.
 NEERI & IIT(B) submitted short term study report.
7. Does short term actions to control dust emissions as per city action plan, regularly A) implemented & monitored? : Yes
 (Details Enclosed as Annexure
 City Level Implementation Committee constituted under District Collector/Municipal Corp.

Commissioner vide GR dtd. 18.09.2019 and closely monitors monthly progress status

Use of mechanical road sweeping machine, creating green zone along traffic corridor, blacktopping of the roads, utilization of C&D (Construction and demolition) waste for pot hole filling, etc. actions already implemented to control dust emissions. City wise details provided in Annexure-A.

8. Does short term actions to control emissions from waste burning and dumping as per city A) action plan, regularly implemented & monitored?

: Yes
(Details Enclosed as Annexure

City Level Implementation Committee constituted vide GR dtd.18.09.2019.

Cities have initiated actions like installation of Garbage/waste processing plant, procurement of Ghanta-Gadies, tippers, dumpers for scientific waste handling, imposition of levy/ fine for open burning, installation of waste to energy plants, etc. to control emissions from waste burning and dumping. City wise details provided in Annexure-A.

9. Micro level planning for each of actions in the city plan framed?

: Yes

10. Implementation status of city plans in % Enclosed as Table-4

: City-wise details

Following key initiatives implemented by cities as per action plan:

- Procurement e-Buses for public transportation
- Promoting green mode of transportation by developing bicycle tracks
- Public e-Bike sharing scheme
- Installation of Remote Sensor based/ online PUC systems
- Smart parking project with identification new parking locations.

	<ul style="list-style-type: none"> Improvement in public transport system- METRO Rail project, increase in CNG operated vehicle, battery operated vehicle, etc Deployment of traffic synchronization system
11. Status of Emergency Response System developed including GRAP	<p>: Yes</p> <p>Relevant departments including State Disaster Management, Meteorological Dept., Environment Dept. working collaboratively to refine existing emergency response system based on GRAP (Graded Response Action Plan)</p>
12. Public Grievance Redressal Portal status	<p>: Yes</p> <p>Currently Public Grievance addressed with Aaple Sarkar Portal.</p> <p>Development of CPCB SAMEER like portal is in progress.</p>
13. Progress in line with the timelines mentioned in the approved plan	<p>: Yes</p> <p>Most of the actions are in line with action plan timelines.</p>
14. Constitution of District Level Committee covering each Non-Attainment city	<p>: Yes</p> <p>City Level Implementation Committees constituted under District Collector/Municipal Corp. Commissioner vide GR dtd. 18.09.2019</p>

Table 1: Status of Monitoring Station in Non-attainment cities

Sr.No.	City Name (with population as per 2011 Census)	CAAQM stations		Manual Stations		Remark
		Existing stations	Required stations	Existing stations	Required stations	
1	Akola (4,25,817)	0	1	3	0	CAAQM stations required Qty. at non- attainment cities, where presently not in existence are under procurement.
2	Badlapur (1,74,226)	0	1	1	2	
3	Chandrapur (3,20,379)	2	0	6	0	
4	Jalgaon (4,60,228)	0	1	3	0	
5	Jalna (2,85,577)	0	1	2	1	
6	Latur (3,82,940)	0	1	3	0	
7	Amravati (6,47,057)	0	3	3	0	
8	Kolhapur (5,49,236)	0	3	3		
9	Sangli-Miraj- Kupawad (5,02,793)	0	3	3	0	
10	Solapur (9,51,558)	0	3	2	0	
11	Ulhasnagar (5,06,098)	0	3	2	1	
12	Aurangabad (11,75,116)	1	4	3	1	
13	Nagpur (24,05,665)	1	4	4	0	
14	Navi Mumbai Municipal Corporation (11,20,547)	2	3	5	0	
15	Nashik (14,86,053)	1	4	4	0	
16	Pune (31,24,458)	1	4	4	0	
17	Thane (18,41,488)	0	5	3	0	
18	Greater Mumbai (1,24,42,373)	11	1	1	2	
	Total	19	46	55	07	

Table 2: Status of Source Apportionment (SA)/Emission Inventory (EI)

Name of the State	City Name	Status of SA/EI	Study conducted by	Year	Expected time for completion of the study	Remark
Maharashtra	Mumbai	Work order for conducting SA study for 10 cities awarded to IITB & NEERI vide letter dtd. 17.03.2016	IIT(B) & NEERI	2016	Dec 2020	Short term report submitted by IIT(B) and NEERI for 10 cities
	Pune					
	Nagpur					
	Nashik					
	Amravati					
	Aurangabad					
	Chandrapur					
	Kolhapur					
	Navi Mumbai					
	Solapur	Work order for conducting SA study for 7 cities awarded to IITB & NEERI vide letter dtd. 17.06.2019	IIT(B) & NEERI	2019	Dec 2020	IIT(B) and NEERI will share short term progress report shortly.
	Akola					
	Jalna					
	Latur					
	Ulhasnagar					
	Jalgaon					
	Badlapur					
	Sangli					

Annexure-A

City	7. Does short term actions to control dust emissions as per city action plan, regularly Implemented & monitored?	8. Does short term actions to control emissions from waste burning and dumping as per city action plan, regularly implemented & monitored?
Aurangabad	Yes , Mechanical Road Sweeping machine Since 2015 at cost of Rs 75 Lakhs, per day capacity is 25km/day	Yes , 10 Garbage processing plant expected to process 30MT waste each is in process (5-10 Cr)
Jalna		Yes , Jalna SWM DPR approved on 12.04.2018 for Rs 16.52 Crs Procurement of vehicles -33 Ghantagadies received, 4 Tippers, 2 Dumpers to be delivered Technical sanction for Bio mining & Bio-mechanization, Civil work in progress for Waste Processing center at Samangaon
Badlapur		Yes , Awareness camping conducted Under Swachh Survekshan 19 against open burning Council appointed Agency to levy spot fine to the defaulters against open burning. No expenses will incurred as Council will get 51% royalty of the total fine collected.
Jalgaon	Yes , Guideline for safe disposal of Construction and demolition were incorporated in building permission process	Yes , Continuous public awareness campaign is run by health department
Amravati	Yes , Plantation along the roadside, order issued to planning and development department to control fugitive dust emission, create green buffer zone	Yes , order issued to field officer and power have been delegated to panelized violators, Public awareness through print media.
Nagpur	Yes , Developed green buffer at road dividers, Vertical garden at metro rail corridor, Internal Tar road in Major large scale industry, Closed container transport.	Yes , Installed 10 shredding machine for horticulture waste
Nashik	Yes , Phase wise blacktopping of W.B.M. roads in Panchavati, Nashik road, Satpur, New Nashik, Nashik East and Nashik West division is planned. WBM roads 110 km and Concrete 2 km (ongoing) and completion by June 2020. Budgetary provision made by NMC	Yes , Heavy penalty mechanism for open burning of garbage. A special squad has been formed for identification of open burning of garbage or waste. NMC grievance app named NMC e -connect has been developed Waste To Energy plant: Technology employed is Bio Methanation process. Capacity of plant is 30Tper day. Details of land fill sites : NMC has

		constructed sanitary land fill sites for process rejects and inert material.
Ulhasnagar	Yes, Shubham Construction has been given the work order for 8 years to collect and transport the waste to a facility, C7D waste used to fill pot holes of road.	<p>Yes, 360 MT solid waste is generated each day out of which 199.61 T is wet waste and 106.37 T is dry waste. Wet waste is composted at 3 locations. There are 3 composting pits and 1 shed for dry waste segregation and processing.</p> <p>From Chhatrapati Shivaji Maharaj vegetable market in Ulhasnagar 5, 2.5 T vermicompost is prepared. At Panel 15 TVC compound Ulhasnagar-4, 2T is generated from vegetable waste of Shri Krishna Market. Vadariya Foundation Panel No.8 in Ulhasnagar -2 the pit is 4T capacity.</p> <p>In Panel No. 2 vegetable market and Panel No. 8 domestically generated 350 T wet waste will be processed.</p> <p>In Premnagar Ulhasnagar-4 according to City Development Plan, UMC has established a shed for dry waste segregation and processing amounting to Rs 19 Lakhs.</p>

Navi Mumbai

Table 4: Format for progress of implementation of action plan

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Monthly special drive at toll plaza for random checking of PUC for vehicles.	Number of random checks in Month & Year.	0	Implementation started in January 2020. Already Implementation Direction letter have been served to Dy. RTO, Vashi by Hon. Commissioner of Navi Mumbai.	Sep-2019	6 months Deviation.	March-2020	--	--
2	Conducting workshops under the SWACHH-BHARAT Abhiyaan in schools, colleges & road shows and Street Plays for awareness of air pollution control.	Number of workshops conducted & Number of people targeted.	50	Implementation Started in November 2019. Under Swachh Bharat Abhiyaan NMMC ranked 7 th in India for Swatch Sarvekshan for year 2018-2019. NMMC Ward Wise Public Awareness Action Plan prepared & implementation will start by February 2020.	Continuous Activity	Continuous Activity	Continuous Activity	--	--

3	Vehicle maintenance check by sensor base PUC equipment.	Number of vehicles checked per month & per year.	0	Implementation started in January 2020. Already Implementation Direction letter have been served to Dy.RTO, Vashi by Hon. Commissioner of Navi Mumbai.	Sep-2019	6 months Deviation.	March-2020	--	--
4	NMMT introduce air condition public city buses in the year 2015- 16 public survey is conducted for that out of 6000 citizens, 1200 citizens switch over from using of private vehicle to city transport.	Number of increases in public transport buses compare to last year.	100	Already Implemented.	Continuous Activity	Continuous Activity	Continuous Activity	--	--
5	Odd - Even dates parking on internal roads in residential & commercial area. No parking zone in Traffic area.	Number of areas demarcated as parking & non-parking zone.	15	NMMC has prepared city level parking plan having designated & non-designated parking areas & notification for same has been published. Tender has been floated on 10th December 2019 for Nerul Plot No-10, Sector-29.	Sep-2019	6 months Deviation.	March-2020	--	--
6	Vigilance & checking is done by petroleum company.	Number of vigilance & checking done.	0	Yet to Implement.	Sep-2019	6 months Deviation.	March-2020	--	--
7	Along Thane Belapur road construction of 3 nos. of flyover on existing road.	Number of flyovers completed.	100	Already Implemented.	Dec-2019	No Deviation.	--	--	--
8	Agency appointed for traffic survey and impact	Number of accidental black spot identified	10	NMMC has appointed consultant agency.	For Study-Sep-2019	6 Month Delay	For Study-March 2020	--	--

	assessment of all major roads in Navi Mumbai city for lay bye lane. Identify for accidental Black spot, junction improvement. Implementation will do according that.	& junctions improved.			For Implementation-June 2021	No Deviation	For Implementation-June 2021		
9	292 CC TV cameras is installed at police headquarter with collaboration of NMMC to smart traffic management.	--	100	Already Implemented.	Continuous Activity	Continuous Activity	Continuous Activity	--	--
10	Making some roads one-way during pick hours.	Number of roads designated as one-way.	10	Implementation Started from January 2020.	Dec-2019	6 Month Delay	June-2020	--	--
11	Computerized PUC check stations to avoid fake certificate.	Number of stations created.	100	Already in Existence.	Dec-2019	No Deviation.	--	--	--
12	NMMC having good quality of public transport system. AC/ Non-AC city buses. Trans Harbor railway.	--	100	Completed/Achieved. Non-AC buses- 388. A/C Buses are 90. Electric buses are 31. Routes-61.	Continuous Activity	Continuous Activity	Continuous Activity	--	--
13	NMMC not operating vehicle with more than 10 year	--	100	Already Implemented.	--	--	--	--	--
14	No BS III NMMC vehicle operating in the city	--	100	Already Implemented.	--	--	--	--	--
15	Already in practice Green plantation/vegetation in divider & Rotary, island is already done on PPP basis	Number of trees planted.	100	Already Implemented.	--	--	--	5.71 Cr.	--
16	NMMC's concrete road length = 63.5 km Bituminous road length	Number of roads constructed.	100	Already Implemented.	Continuous Activity	Continuous Activity	Continuous Activity	15 Cr.	

	=441.5 km.								
17	NMMC has successfully completed concretization of 19 junctions	--`	100	Already Implemented.	--	--	--	--	--
18	NMMC having water fountain at 3 junctions Proposes water fountain after traffic survey feasible study at junction	Number of fountains constructed.	100	Total 12 Fountains have been constructed at Traffic intersection or near to major roads in Navi Mumbai.	--	--	--	--	--
19	Blacktopping of metaled Roads including pavement of Road shoulders	Random Checking for road quality.	100	NMMC has already well-planned concrete & bituminous road in the Navi Mumbai City. Regular repair & if required re-construction of old roads is carried out by NMMC.	--	--	--	--	--
20	Wall to Wall Paving (Brick)	Random Checking for wall to wall paving quality.	100	NMMC has already well-planned concrete & bituminous road in the Navi Mumbai City. Regular repair & if required re-construction of old roads is carried out by NMMC.	--	--	--	--	--
21	All road is plan and designed.	Random Checking for road quality.	100	NMMC has already well-planned concrete & bituminous road in the Navi Mumbai City. Regular repair & if required re-	--	--	--	--	--

				construction of old roads is carried out by NMMC.					
22	Daily road sweeping is done manually on internal roads. On major roads sweeping is done by 6 nos. of sweeping machine with dust collection vacuum suction system.	Checking of targeted road cleaned.	100	Already Implemented.	--	--	--	--	--
23	Regular collection, segregation and disposal of garbage as per SWM rule 2016. Awareness program to society / NMMC Sweeper/ garbage worker for prevention of garbage/leaves burning.	Checking of road & garbage collection.	100	NMMC through 119 vehicles collect garbage from NMMC sweeper & garbage worker after proper segregation for scientific disposal at Turbhe Landfill Site having capacity 8 dumpers separately deployed for collection of green waste. 167 nos. of garden composting pit is provided.	--	--	--	--	--
24	Appointed Nuisance detection squad.	--`	100	Appointed Nuisance Detection Squad.	--	--	--	--	--
25	8 dumpers separately deployed for collection of green waste, gasification / Composting in processing plant NMMC having 167 nos. of garden composting pit is provided for composting of horticultural waste produce in that garden.	Checking for garbage collection & segregation for green waste.	100	NMMC through 119 vehicles collect garbage from NMMC sweeper & garbage worker after proper segregation for scientific disposal at Turbhe Landfill Site having capacity	--	--	--	--	--

				<p>8 dumpers separately deployed for collection of green waste.</p> <p>167 nos. of garden composting pit are provided.</p>					
26	At society level: - source segregation, composting and Urban farming is promoted.	Random checking for garbage collection & segregation n.	100	<p>NMMC through 119 vehicles collect garbage from NMMC sweeper & garbage worker after proper segregation for scientific disposal at Turbhe Landfill Site having capacity</p> <p>8 dumpers separately deployed for collection of green waste.</p> <p>167 nos. of garden composting pit is provided.</p>	--	--	--	--	--
27	<p>Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and suppression units</p> <p>Already implemented under Development Control Rules of corporation.</p>	Checking of fugitive emission through Air Quality Monitoring Results.	100	Already Implemented.	--	--	--	--	--

28	<p>Better construction practices with PM reduction of 50%</p> <p>Direction issued to Construction agencies and contractor in tender condition</p>	<p>Checking of fugitive emission through Air Quality Monitoring Results.</p>	100	Already Implemented.	--	--	--	--	--
29	<p>Online complaint portal platform available on NMMC website where citizens can send complaints, track the status and provide feedback.</p> <p>Awareness program for policy makers, people, drivers- mechanic, traffic police, health professionals, academicians Public transport saves valuable space and energy compared to private transport, and can make a healthy profit at the same time. Encouragement program for public transport by giving them some priority on the road over cars</p>	<p>Online complaint received & complaint redress.</p> <p>Number of people Awared.</p>	0	In Process.	Continuous Activity	Continuous Activity	Continuous Activity	--	--
30	Navi Mumbai having coastal (creek) 25k.m. along the west coast. It is connected to Mumbai, promotion of water	Number of roads constructed.	0	Yet to implement.	Continuous Activity	Continuous Activity	Continuous Activity	--	--

	transport is under pipeline to reduce traffic congestions.								
Implementation period : 01 to 03 years									
1	As a part of Eco city proposal of battery-operated vehicles run from railway station to high foot fall area in city is under process	Number of battery-operated vehicles run in city by Public Transport as well as Private Vehicles.	50	Partially Implemented Under the central government' s FAME-2 program, NMMC has already received 30 electric buses under NMMT & are plying on road from October 2019 & for more 100 electric buses letter of award is issued & will be available in fleet at end of 2020. Total 200 Nos. of electric buses have been proposed in Navi Mumbai City by NMMC/NMMT.	June-2020	No Deviation.	--	--	--
1	As a part of Eco city proposal of battery-operated vehicles run from railway station to high foot fall area in city is under process	Number of battery-operated vehicles run in city by Public Transport as well as Private Vehicles.	100	Partially Implemented NMMC as a part of public bicycle sharing system has given contract to M/s. Yulu Bikes Pvt. Ltd. & M/s. Citi Cycle India Pvt. Ltd. for 5 years in all 8 nodes/zones to operate renting of bicycles & e-bikes to residents.	June-2020	No Deviation.	--	--	--
2	3 & 4 electric charging station for 3 & 4-wheeler to promote	Number of charging stations in & across Navi Mumbai City.	0	Partially Implemented	June-2019	No Deviation.	--	--	--

	electric/battery operated vehicle in the city.			The DPR is submitted to Department of Heavy Industries on 4th December 2019 for 3-4 wheeler charging stations in & around Navi Mumbai.					
3	Check post at entry point of city to prevent and divert entry of vehicles. a) Those only use to pass city. b) Entering in the city at APMC market.	Number of vehicles checked.	0	Yet to implement.	By June-2020 by RTO By Dec-2019 by APMC	No Deviation 6 Month Delay	June-2020 June-2020	-- --	-- --
4	From MSW to CNG / Biogas at landfill site from biomass 200MTPD	Number of Gas generated & Number of MSW treated for CNG/Biogas.	0	Proposal For Expression Of Interest Submitted.	June-2021	No Deviation	June-2021	100 Cr.	
5	Hybrid - 3 Nos city buses	Number of Hybrid Buses running on road.	100	2 Number of hybrid bus plying on NMMC road.	June-2020	No Deviation	June-2020	4 Cr.	
6	Electric - 30No. Of city buses. Propose DPR submitted to state Govt.	Number of Electric Buses running on road.	60	30 Electric buses are already running on road & 100 number	June-2020	No Deviation	June-2020	80 Cr.	Already in working
7	50 nos. of public transport buses are of BS-IV fuel. DOC in BS-II vehicle will be implemented.	--	0	Yet to implement.	June-2021	No Deviation	June-2021	--	--
8	Road side and at traffic junction plantation of specific trees which absorbs pollution.	Number of trees planted.	100	In Process	June-2020	No Deviation	June-2020	--	--

9	NMMC has undertaken tree plantation on the open spaces/area /Amrut yojana	Number of trees planted.	100	<p>NMMC has already implementing the green space development in Navi Mumbai City.</p> <ul style="list-style-type: none"> • Details- 2017-18- 2.00 crore was sanctioned. • Proposed tree plantation- 8968. • Status- Completed. • Area Under Plantation- 56,621 Sq.Mtr. 	June-2020	No Deviation	June-2020	5 Cr.	--
10	Improvement in Air pollution control system in Stone crushers	Air Quality Index.	100	No stone crusher activity is allowed in Navi Mumbai Municipal Area.	June-2020	No Deviation	June-2020	1 Lakh Per Unit	--
11	No NOC/consent grant in corporation area	--	0	Yet to implement	June-2020	No Deviation	June-2020	--	--
12	Work order is issued for the C&D waste Processing & Disposal Plant at 20 MT/Hour	Number of C&D waste processed per day.	25	In process.	June-2020	No Deviation	June-2020	11 Cr.	--
13	Restoration of stone quarry by using C & D waste	Number of quarries restored.	25	In process.	June-2020	No Deviation	June-2020	25-30 Lakhs	--
14	Monitoring of DG sets and action against violations Squad shall be appointed Squad shall be appointed	Number of DG set installed & action taken.	0	Yet to implement	June-2020	No Deviation	June-2020	--	--

15	Reduction in DG set operation/ Un-interrupted power supply Squad shall be appointed	Number of DG set installed & action taken.	0	Yet to implement	June-2020	No Deviation	June-2020	--	--
16	During the time of license allotment letter to Bakeries & Dhabas/Hotels, NMMC will insert the condition of a) use of LPG/PNG/Cleaner Fuel. b) If applicable, MPCB Consent Should be obtained. If solid fuels/kerosene will be used, no license will be allotted Bakeries & Dhabas/Hotels.	Number of bakeries/Crematorium & license cancelled for non-compliance.	0	Yet to implement	Oct-2021	No Deviation	Oct-2021	--	--
17	Navi Mumbai having Parsik Hill range along the east coast is deteriorated because of quarrying activities, now quarrying operation is stopped through initiative by District collector office and MPCB, NMMC after refilling of abundant quarry by C&D waste tree plantation is proposed on Parsik hill to increase green coverage of city.	Number of trees planted.	0	Yet to implement.	June-2020	No Deviation	June-2020	--	--
Implementation period : 03 to 05 years									
1	NMMC / NMMT vehicle check by sensor base PUC equipment.	Number of vehicles checked per month & per year.	100	Completed/Achieved.	June-2022	No Deviation.	--	--	Revision of year submitted

				Every 6-month PUC certification is done by sensor base PUC equipment for all NMMT buses/vehicles by RTO approved service center.					to CPCB/MPCB for approval.
2	Existing Public Transport frequency of City buses now 472 nos. Increasing no of buses by detailed study of the City. It Minimizing use of personal vehicles. 2 nos. Increasing no of buses by detailed study of the City. It Minimizing use of personal vehicles.	Number of increases in public transport buses compare to last year.	0	Yet to Implement.	June-2022	No Deviation.	--	--	Revision of year submitted to CPCB/MPCB for approval.
3	Prepared parking plan for city by implementing multilevel parking scheme in open spaces, on covered open nallhas.	Number of multilevel parking & available of parking space in Navi Mumbai City.	15	Implementation Started at Vashi.	June-2022	No Deviation.	--	--	Revision of year submitted to CPCB/MPCB for approval.
4	NMMC will control for NMMT vehicle of city buses. BS- VI version launching in India by 2020.	--	15	Implementation Started by NMMT.	June-2022	No Deviation.	--	--	--
5	By pass cable stress road from Airoli to Vashi & Vashi to C.B.D. Belapur i.e. Costal Road for the approach of new airport in Navi Mumbai	Number of kilometers of road constructed.	0	Yet to Implement.	June-2022	No Deviation.	--	--	--
6	Smart traffic management system could be exposed.	Number of Automatic Signals / SensorBased signals installed.	10	Yet to implement.	June-2022	No Deviation.	--	4-5 Cr.	Revision of year submitted to CPCB/MPCB for approval.

7	Under the SWACHH-BHARAT Abhiyaan Awareness drive for citizens for new vehicles, by arranging Expo/Exhibitions in the city	Number of Awareness Drive conducted.	0	Yet to implement.	June-2022	No Deviation.	--	--	Revision of year submitted to CPCB/MPCB for approval.
8	Standards For New & In Use Vehicles	--	0	Yet to implement.	June-2022	No Deviation.	--	--	Revision of term & year submitted to CPCB/MPCB for approval.
7	Ethanol Blending	--	0	Yet to implement.	June-2022	No Deviation.	June-2022	--	Revision of term & year submitted to CPCB/MPCB for approval.
8	Bio diesel pilot project done for public transport	--	0	Yet to implement.	June-2022	No Deviation.	June-2022	--	Revision of year submitted to CPCB/MPCB for approval.
9	NMMC with the help of LPG & PNG Company will organize the free enrolment camp for LPG/PNG connection. With the help of CSR Fund, BPL Households & will be provided with stoves, pipes & regulators at the subsidized rates.	Number of households provided with LPG/PNG connections.	0	Yet to implement.	April-2024	No Deviation.	April-2024	--	Revision of action, term & year is submitted to CPCB/MPCB for approval.

	Public Awareness will be created to showcase the harmful effects of solid fuel & showcase the benefits of cleaner fuels.								
10	With the help of food & civil supply department, Navi Mumbai will target to achieve Kerosene free city. Public Awareness will be created to showcase the harmful effects of kerosene & showcase the benefits of cleaner fuels.	Quantity of kerosene distributed in Navi Mumbai City.	0	Yet to implement.	April-2024	No Deviation.	April-2024	--	Revision of action, term & year is submitted to CPCB/MPCB for approval.
11	With the help of NEERI & MNRE, NMMC will sensitized people to use the improved cookstove for high overall thermal efficiency, reduced fuel consumption and reduced emissions	Number of people sensitized.	0	Yet to implement.	April-2024	No Deviation.	April-2024	--	Revision of action, term & year is submitted to CPCB/MPCB for approval.
Implementation period Above 05 years									
1	RTO will control private vehicles by 2020.	--	0	Yet to Implement.	--	--	--	--	--
2	City is supplied with BS IV stage diesel which has low Sulphur content	--	0	On Going	--	--	--	--	--
3	Check post at entry point of city	--	0	Yet to Implement.	--	--	--	--	--

*The highlighted portions will be as per the approved city action plans.

- Date of direction for ground implementation of action plan (Zero Date)

Table 4: Format for progress of implementation of action plan- Pune

S.No	Action Point	Unit of Measure ment of Progress	Implementation status		Action Completi on Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Public Awareness- display on LED boards		Completed	LED display boards are installed at 12 prominent locations in & around the Pune city. The display board shows real time, AQI status including PM10, PM2.5, NO2, CO, O3, UV-index, Temperature, Rainfall, Wind Speed 1.Pashan, 2.Shivajinagar, 3.Pune Airport, 4. Alandi, 5.Katraj Zoo, 6.Camp, 7.Pimpri, 8.Chinchwad, 9.PMC, 10.Swargate, 11.Tilak Chowk, 12.Mandai	Completed	NA	NA		
Implementation period : 01 to 03 years									
	Promotion of CNG fuel: Subsidy to three wheeler Auto-rickshaws running on CNG		In Progress	Since 2012, PMC has given subsidy of Rs. 12000 per auto fitted with CNG kit. Till 2019, total 16,534 Auto-rickshaws have taken benefit of this subsidy. The budget of Rs.1Cr has been allotted for the Year 2020. The subsidy work for year 2019 is under progress and will be completed by Dec 2019.	2020	NA	Dec, 2020	1 Cr	

S.No	Action Point	Unit of Measure ment of Progress	Implementation status		Action Completi on Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
	Promoting Electric buses		In Progress	25 Electric buses made operational since Feb2019. Considering the successful running of Electric buses, 25 new Electric Buses have been added to fleet, thus totaling up to 150 Electric buses. Planning for buying 350 more E-buses to reach the target of 500 E-buses for Pune City.	2020	NA	Dec, 2020	5 cr	
Implementation period : 03 to 05 years									
	Prepare action plan for widening of road and improvement of Infrastructure for de-congestion of Roads.		In Progress	Total length of roads in city is 2065 km. PMC has been widening roads as per the prescribed road widths in the Development Plan. Flyovers are constructed as per the recommendations in Comprehensive Mobility Plan of Pune city.	Continuo us				
	Promoting Bicycles in Pune		In Progress	Pune Cycle Plan was prepared by PMC in 2017 through a project supported by the Ministry of Urban Development, Govt. of India. It consists of : - Identification of a city-wide cycle track network and cycle-safe streets.	2022	NA	2022	5 cr	

S.No	Action Point	Unit of Measure ment of Progress	Implementation status		Action Completi on Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
				- A detailed project report for a city-wide Public Bicycle Scheme. - Bicycle Parking Facilities and integration with Public Transit. - Design Guidelines for planning and implementing cycle-friendly infrastructure. - Recommendations for Institutional Mechanisms, Capacity-building and Financial Planning for implementing the plan. As on Dec.2018, there are 8000 bicycles deployed in Pune City & registered users are 400000. Strategy for Cycling Promotion and Awareness and Education Campaigns.					
	Metro Rail transport		In Progress	Total 31.25kms of Metro in 1st Phase; Construction work already in progress Corridor 1: PCMC to Swargate: 16.6km & with 14 stations. PMRDA has proposed extesion from Swargate to Katraj. Corridor 2: Vanaz to Ramwadi: 14.7km & with 16 stations; launch expected by Dec19. PMRDA has proposed new	2021	NA	2021	11420 cr	

S.No	Action Point	Unit of Measure ment of Progress	Implementation status		Action Completi on Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
				corridor from Hinjewadi to Shivajinagar 23.33km					
Implementation period : Above 05 years									
	Phasing out old bus fleet of more than 12 years		In Progress	Out of 1974 bus fleet, there are 123 buses more than 12 years old. These buses are to be phased out from service.	In Progress	NA	2024	123 Cr	
	Sulphur reduction in diesel		In Progress	City is being supplied with BS IV stage Diesel which has low sulphur content. As per GoI regulations, when new norms will be suggested, the new type of fuels will be introduced in the city, in consultation with Oil companies.	Continuo us	NA	2024		

*The highlighted portions will be as per the approved city action plans.

Table 4: Format for progress of implementation of action plan- Nashik

S.No	Action Point	Unit of Measure ment of Progress	Implementation status		Action Completi on Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Synchronizing Traffic movements/ and to Introduce Intelligent Traffic systems for Lane Driving by introducing COMMAND & CONTROL ROOM: Around 800 cameras are being installed in the city traffic police regularize traffic violations related to Motor Vehicle Act through CCTVs. And by introducing Public Bike Sharing Project		Completed	ITMS - DPR in progress. Under the smart city project, COMMAND & CONTROL ROOM (in execution) around 800 cameras are being installed in the city traffic police regularize traffic violations related to Motor Vehicle Act through CCTVs. ☐ PUBLIC BIKE SHARING PROJECT (completed)	Completed	NA	NA	25 cr	
2	Installation of Remote Sensor based PUC systems by upgrading 34 PU centers out of 54 PUC		Completed	Total 54 PUC in Nashik 34 PU centres from 1st April, 2019 upgraded to remote sensor based PUC system (Online) having the capacity to send the data remotely to the regulatory authority.	Completed	NA	NA	1 cr	
3	Greening of open areas, garden community places, schools and housing societies.		Completed	Garden department of NMC planted around 11000 trees under AMRUT in 2019-20. "DEVRAI" project executed to plant and maintain the local	Completed	NA	NA	5 cr	

				trees like Pipal and others. 50,000 Trees planted at cost of Rs 6.5 crore, under NDTL 5000 tree plantation in 2 months, Devrai 5000 tree plantation within 4 months, 2000 Bel tree plantation in 1 month, AMRUT 4500 trees to be planted in 2 months.					
4	Electric Bus			Electric Bus (Procurement and operation) GCC for 150 no of busses under phase-II scheme					
5	Public Bicycle sharing projects			Under Smart City initiative's Public Bicycle sharing projects, city administration is encouraging the people of Nashik to use more and more bicycles for short commuting distances.					
Implementation period : 01 to 03 years									
	Introducing water fountains at Major Traffic intersection, wherever feasible								
	Establishment of a Continuous Air Quality Monitoring station within the city		In Progress	MPCB will establish 2 CAAQMS within Nashik city at Divisional Commissioner office and Guru Gobind Singh Engineering College. An Electronic Display Board is also to be proposed to be installed to provide information to the citizens about air quality and enhance awareness.	In Progress	NA	June, 2020	2.4 cr	

	Proper collection of horticulture waste and its disposal following composting cum gardening approach.		In Progress	<p>Separate collection mechanism for entire horticulture waste and windrow composting (10-15 T) implemented in the MSW treatment facility Compost Plant near Pandhav Leni Caves.</p> <p>A special squad has been formed for identification of open burning of garbage or waste.</p> <p>NMC grievance app named NMC e -connect has been developed for public to inform such incidences.</p> <p>Waste To Energy plant: Presently, around 500 units (kwh) of electricity is generated per day.</p>	Completed	NA	NA	8 cr	
	Synchronize Traffic movements/Introduce Intelligent Traffic systems for Lane Driving		In Progress	Intelligent Traffic Management System - DPR is in progress. Under the smart city project, COMMAND & CONTROL ROOM (in execution) around 800 cameras are being installed in the city traffic police regularize traffic violations related to Motor Vehicle Act through CCTVs.					

	Solar project		In Progress	Provision of 1MW across Govt. buildings at Nashik Smart city. Till date 256 KW solar panel installation completed					
	Waste To Energy plant		In Progress	<p>Technology employed is Bio Methanation process. Capacity of plant is 30Tper day.</p> <p>Waste comprising of food and kitchen waste (15 T) and septage of septic tanks (15 T) is processed in the plant.</p> <p>Presently, around 500 units (kwh) of electricity is generated per day. Plant is commissioned since last 1 year.</p> <p>Cost of the project is Rs. 8 cr, out of which, GIZ Germany has funded Rs. 6.8 cr and NMC has funded 1.2 cr. Plant is connected to MSEDCL grid</p>					
Implementation period : 03 to 05 years									
	Thermal Power Plant		In Progress	M/s. MahaGenco has informed that tendering process of FGD is in process. CPCB has given direction on 11/12/2017 to a) Plant shall meet emission limit of PM by installing ESP by March					

				31,2021 in unit 4 & 5. B) Plant shall install FGD by March 31,2021 in unit 3, 4 & 5 so as to comply SO2 emission limit. C) Plant shall take immediate measures like installation of low NOx burners, providing Over fire Air (OFA) etc. and achieve progressive reduction so as to comply NOx emission limit by the year 2022.					
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*The highlighted portions will be as per the approved city action plans.

Kolhapur Municipal Corporation

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

	(A)	(B)						(E)
	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost
			% Completed	Details				
(i)	Vehicle emission	Launch extensive drives against polluting vehicles for ensuring strict compliance	in progress					
(ii)		Launch public awareness campaigns for air pollution control, vehicle maintenance, minimising use of personal vehicles, lane discipline etc.	in progress		12-18 months			
(iii)		Prevent parking of vehicles at Non designated areas.	in progress		12-18 months			
(iv)		Initiate steps for retrofitting of particulate filters in Diesel vehicles, when BS-V filters are available	in progress		12-18 months			
(v)		Prepare action plan to check fuel adulteration and random monitoring of fuel quality data	in progress		12-18 months			
(vi)		Prepare action plan for widening of road and improvement of Infrastructure for decongestion of Roads.	in progress		12-18 months			
(vii)		Prepare Plan for the construction of expressways/bypass to avoid congestion	in progress		12-18 months			
(viii)		Steps for Promoting Battery operated vehicles.	in progress		12-24 months			

Kolhapur Municipal Corporation

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

	(A)	(B)						(E)
	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost
			% Completed	Details				
(ix)		Insall weigh in Motion bridges at the borders of the cities/Towns and states to prevent overloading of vehicles.	in progress		12-24 months			
(x)		Synchronize Traffic movements/Introduce Intelligent Traffic systems for Lane Driving	in progress		12-18 months			
(xi)		Installation of Remote Sensor based PUC systems	in progress		12-24 months			
SCS-1		Sulphur reduction in diesel	in progress		60 months			
SCS-2		Introduction of new technology vehicles	in progress		60 months			
SCS-3		Provide good public transport system	in progress		60 months			
SCS-4		Standards for new and in-use vehicles	in progress		60 months			
SCS-5		Alternative fuels	in progress		60 months			
SCS-6		implementation of BS-V norms	in progress		60 months			
SCS-7		Electric/Hybrid Vehicles	in progress		60 months			
SCS-8		OE-CNG for new public transport buses	in progress		60 months			
SCS-9		Ethanol blending (E10-10% blend)	in progress		60 months			

Kolhapur Municipal Corporation

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

	(A)	(B)						(E)
	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost
			% Completed	Details				
SCS-10		Bio-diesel (B5/B10:5-10% blend)	in progress		60 months			
SCS-11		Retro-fitment of Diesel Oxidation Catalyst (DOC) in 4-Wheeler public transport (BS-II and BS-III)	in progress		60 months			
SCS-12		Retro-fitment of Diesel Particulate Filter in 4- wheeler public transport(BS-III city buses)	in progress		60 months			
SCS-13		Banning of 10 year old commerical vehicles	in progress		60 months			
SCS-14		Inspection/maintenance to all BSII & BSIII commerical vehicles	in progress		60 months			
SCS-15		Restrict commercial vehicle entering city by having ring roads.	in progress		60 months			
(i)	Resuspension	Prepare plan for creation of green buffers along the Traffic corridors	in progress		60 months			
(ii)		Maintain Pothole Free Roads for Free flow Traffic	in progress		12-24 months			
(iii)		Introduce water fountains at Major Traffic intersection, wherever feasible.	in progress		12-24 months			
(iv)		Greening of open areas, garden, community places, schools and housing societies.	in progress		12-24 months			
(v)		Blacktopping of metaled Roads including pavement of Road shoulders	in progress		12-24 months			
SCS-1		Wall to Wall paving (brick)	in progress		12-24 months			

Kolhapur Municipal Corporation

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

	(A)	(B)						(E)
	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost
			% Completed	Details				
SCS-2		Road design improvement	in progress		12-24 months			
(i)	Biomass/trash burning, landfill waste burning	Launch extensive drives against open burning of biomass, crop residue, garbage, leaves etc.	in progress		12-24 months			
(ii)		Regular check and control, of burning of Municipal Solid waste	in progress		12-24 months			
(iii)		Proper collection of Horticulture waste and its disposal following composting-cum-gardening approach	in progress		12 Months			
(iv)		Ensure ban on burning of agricultural waste and crop residues and its implementation.	in progress		12 Months			
SCS-1		Strict compliance of ban on open burning	in progress		12-18 Months			
(i)	Industry	Identification of Brick Kilns and their regular monitoring including use of designated fuel and closure of unauthorized units.	in progress		6 Months			
(ii)		Conversion of natural draft brick kilns to induced draft	in progress		12 Months			
(iii)		Action against non-complying industrial units	in progress		60 Months			
SCS-1		Sulphur reduction in fuel	in progress		12 Months			
SCS-2		Improved Combustion technology	in progress		12-18 Months			
SCS-3		Alternate fuel	in progress		12-18 Months			

Kolhapur Municipal Corporation

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

	(A)	(B)						(E)
	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost
			% Completed	Details				
SCS-4		Promoting cleaner industries	in progress		12-18 Months			
SCS-5		Location specific Emission reduction	in progress		12-18 Months			
SCS-6		Fugitive emission control	in progress		12-18 Months			
SCS-7		Banning of new industries in existing city limit	in progress		12-18 Months			
SCS-8		Installation /upgradation of air pollution control systems	in progress		12-18 Months			
SCS-9		Use of high grade coal	in progress		12-18 Months			
SCS-10		Regular audit of stack emissions for QA/QC	in progress		12-18 Months			
(i)	Construction and Demolition Activities	Enforcement of construction & demolition rules.	in progress		12-18 Months			
(ii)		Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and suppression units.	in progress		12-18 Months			
SCS-1		Better construction practices with PM reduction of 50%	in progress		12-18 Months			
SCS-2		Banning of operation of Brick kilns in city area	in progress		12-18 Months			
SCS-3		Ensure carriage of construction material in closed/covered Vessels	in progress		12-18 Months			

Kolhapur Municipal Corporation

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

	(A)	(B)						(E)
	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost
			% Completed	Details				
SCS-1	Domestic fuel burning	Shift to LPG from solid fuel & kerosene for domestic applications	in progress		12-18 Months			
SCS-2		Better cook-stove designs	in progress		12-18 Months			
SCS-1	Mining	Effort for good mining practices	in progress		12-18 Months			
SCS-2		Greenbelt for activity zone and the buffer zone for each mining area	in progress		12-18 Months			
SCS-3		Maintenance of mine area roads	in progress		12-18 Months			
(i)	DG sets	Monitoring of DG sets and action against violations	in progress		12-18 Months			
SCS-1		Reduction in DG set operation /Un-interrupted power supply	in progress		12-18 Months			
SCS-1	Bakeries /Crematoria	Use of LPG in Hotels and "Dhabas" and renewable fuel/oil/Electricity/gas etc in Crematoria	in progress		12-18 Months			
	Other (city specific)		in progress		12-18 Months			

Table 4: Format for progress of implementation of action plan- SOLAPUR

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remark
			% Completed	Details					
Implementation period : Immediate action – 6 months									
	Banning of 15 year old commercial vehicles	reduction of Air Pollution Load from existing vehicles-Medium	Continuous Process	RTO has banned 15-year-old vehicles strictly	Continuous Process				
	Public awareness campaigns for air pollution control, vehicle maintenance, minimising use of personal vehicles, lane discipline etc.	pollution from existing vehicle to get reduced - Low		IEC Agencies are appointed under Smart City for awareness regarding pollution control and ill-effects of climatic change. Integration of SMC and various NGOs to create awareness among citizens of city.	In-process		Up to March 2021	Approx. Rs. 50 Lakhs for the year 2019-21.	
	Anti-Adulteration Cell formed for checking fuel adulteration and random monitoring of fuel quality data	reduction of Air Pollution Load from existing vehicles-low	Continuous process	Continuous activity by Anti-Adulteration Cell is carried out.	Continuous process				
	Maintaining green buffers along the Traffic corridors	reduction of Air Pollution Load from re-suspended dust low	Continuous Process	1) Main roads of Solapur City are swepted twice in day and Once in night. 2) Land and Estate Dept., SMC has selected private agencies who have shown voluntary approach towards developing and maintaining green buffers along the Traffic corridors	Continuous Process				
	Black topped of	reduction of Air		Majority of the existing	Continuous				

	metalled Roads including pavement of Road shoulders	Pollution Load from Re-Suspended dustflow		metalled roads have blacktopping.	Process				
	Mass awareness drives against open burning of biomass, crop residue, garbage, leaves etc.	Reduction of Air Pollution Load from Solid Waste disposal- Medium		The solid waste generated in the city is mostly collected, transported and processed every day. SMC has banned burning of garbage, leaves, biomass, & crop residue within SMC limit with a fine of Rupees 5000 to 25000 is imposed.	Continuous Process				
	Proper collection of Horticulture waste and its disposal following composting-cumgardening approach	reduction of Air Pollution Load from Solid Waste disposal- Medium		SMC implemented proper collection and processing of Horticulture waste through designated Tippers/carrier vehicles followed by composting is in progress at SMC's designated processing facility. Composting cum Gardening approach is in process. Ongoing activity	Continuous Process				
Implementation period : 01 to 03 years									
	Regular Checking of vehicular emission and issue of pollution under Control Certificate (PUC).	pollution from existing vehicle to get reduced - Low		RTO to have PUC monitors for PM & Gaseous air pollutants random checking of polluting vehicles & take strict action against them to make maintenance compulsory. At present the vehicle manufacturers have to comply with the BSVI standards applicable to all since April, 2020.			Up to March 2022	Rs. 25 lakhs (approx. cost for monitoring systems)	
	construction of expressways/bypass to avoid congestion	reduction of Air Pollution Load from existing vehicles-low		Work for 5.15km Bypass route work is completed by SMC. 2)Survey work of Two flyovers from Puna naka to			Up to March 2022	Rs. 26Cr for construction	

				saat Rasta and from Boramani Naka to Vijapur Road @ 12km by NHAI to remove the congestion				of Bypass	
	Promoting Battery operated vehicles.	Reduction of Air Pollution Load from existing vehicles- Medium		1) Solapur has started implementation of E-Bikes. There are three newly open showrooms of E-Bikes in Solapur. 2) SMC and RTO has started initiating use of Erickshaws and CNG Vehicles among citizens of the city. 3) Procurement process of 25 Ebuses under SMT project is in General Body for approval.			Up to December 2022		
	Introduce 25 Ebuses for public transportation	Reduction of Air Pollution Load from new vehicles- Medium		Proposed under SMC General Body to introduce 25 E-buses for public transportation.			Up to December 2020	Approx. Rs. 10.0 Cr	
	Greening of open areas, garden, community places, Schools and housing Societies.	Reduction of Air Pollution Load from re-suspended dust		1) Near about 5 open areas are developed with various plantations under Amrut Project and 5 open areas development is in process. 2) New 1 Ayurvedic garden is under tender process. 3) Under 33 Cr Tree plantation project, 53,000 tree plantation is in process in 22 locations of city.			Up to December 2020	Rs. 15.0 Cr	
	Strict Enforcement of construction & demolition rules.	Reduction of Air Pollution Load from C&D projects- High		Regular Inspection and Checking of Construction and demolition activities Monitoring of C&D projects	In-process		Up to March 2022		
Implementation period : 03 to 05 years									
	Widening of road and improvement of Infrastructure for	Reduction of Air Pollution Load from existing vehicles- low		The road widening of about 50km in city areas under process and 10km road widening work is completed	In-process		Up to March 2023	Rs. 150.0 cr for widening	

	decongestion of Roads.			under SMART City.				& maintenance	
	Procurement of 50 E-buses	reduction of Air Pollution Load from existing vehicles-Medium		Procurement of 50 E-buses under SMT project is work in progress.			Up to March 2023	Approx. Rs. 30.0	
Implementation period : Above 05 years									

*The highlighted portions will be as per the approved city action plans.

Table 4: Format for progress of implementation of action plan- Ulhasnagar

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Greening of open areas, garden community places, and schools and housing societies.		Completed	UMC has undertaken plantation under AMRUT scheme. Green spaces development completed.	Completed plantation of approx. 500 nos. of trees.	NA	NA	1.25 cr	
	Proper collection of horticulture waste and its disposal following composting cum gardening approach.		In process	360 MT solid waste is generated each day out of which 199.61 MT is wet waste and 106.37 MT is dry waste. Wet waste is composted at 3 locations. There are 3 composting pits and 1 shade for dry waste segregation and processing. From Chhatrapati Shivaji Maharaj vegetable market in Ulhasnagar-5, qty of vermicompost prepared is 2.5 MT. At Panel 15 TVC compound Ulhasnagar-4, 2MT is generated		NA	NA		

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from target timeline, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
				<p>from vegetable waste of Shri Krishna Market. Vadariya Foundation Panel No.8 in Ulhasnagar -2 the pit is 4 MT capacity.</p> <p>In Panel No. 2 vegetable market and Panel No. 8 domestically generated 350 MT wet waste will be processed.</p> <p>In Prem nagar Ulhasnagar-4 according to City Development Plan, UMC has established a shade for dry waste segregation and processing amounting to Rs.19 Lakhs</p>					
Implementation period : 01 to 03 years									
1	Proper disposal for the C&D waste.		In Progress	<p>48 tonnes of C&D waste is generated each day. Since 20th March, 2015 Shubham Construction has been given the work order for 8 years to collect and transport the waste to a facility. With the help of 2 JCB and 8</p>	2020	NA	Dec, 2020		

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
				Dumper C&D waste is collected and taken to Bhumi Foundation, Kalyan where it is used for filling up potholes in the road					
2	Establishment of a Continuous Air Quality Monitoring station within the city		In Progress	MPCB will establish 2 CAAQMS in Ulhasnagar city at Gol maidan garden and Sapna garden respectively.	2020	NA	June, 2020	2.5 Cr	
3	Launch public awareness campaigns for air pollution control, vehicle maintenance, minimizing use of personal vehicles, lane discipline etc.		In Progress	Awareness Campaigns with public and Workshops in schools and colleges planned from Dec, 2019 Air Quality Awareness Workshops planned in schools and colleges	2020	NA	Dec, 2020	10 Lakhs	
Implementation period : 03 to 05 years									
1	Prepare action plan for widening of road and improvement of road infrastructure for decongestion of roads		In Progress	1) Construction of CC pavement & drain from Kansai Bridge to Babasaheb Ambedkar Chowk, Bharat NagarUlhasnagar- 4 2) Widening and construction of CC pavement & drain from	Continuous	NA	Dec, 2022	666 cr	

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from target timeline, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
				<p>Kailash Colony to Palegaon Jakat Naka, Durgapada,Ambernath and Akasah colony to Palegaon.</p> <p>3) Construction of CC pavement & drain from Katkeshwar mandir to Mharal Naka & Bus Stop to Birla Gate upto Kalyan Murbad Highway, Ulhasnagar – 1</p> <p>4) Construction of CC pavement & drain from Section 25 to ROB Via Laal Chakki, Ulhasnagar</p> <p>This road widening work would be undertaken by MMRDA. for an amount of Rs 30 crores</p> <p>In May, 2018, the Chief Minister of Maharashtra has sanctioned Rs. 350 crores for the development of Ulhasnagar. From these</p>					

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
				funds concretization of 31 roads for 286 crores .					
	Promotion of CNG fuel: Subsidy to three wheeler Auto-rickshaws running on CNG		In process	CNG based rickshaws at subsidized rates are being made available in the Market and promoted in the city.		No deviation	In process		

Sangli

Sr · No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Requirement financial resources
			% Completed	Details				
1	Vehicle emission	Pollution monitoring and source attribution by collaborating with sangli Pollution Control regional office to ensure that sangli has an adequate network of air quality monitoring stations , Remote Sensor based PUC systems, mobile monitoring systems, on road monitoring systems, ambient air monitoring systems		The installation of Remote Sensor RFID based PUC systems will be proposed under consultation of Transport Commissioner agency will take the expertise of CSIR-NEERI for its installation, Geo Tagging of Locations for its ,implementation and monitoring	90 months			

		Prepare action plan to check fuel adulteration and random monitoring of fuel quality data by collaborating with Department of Science & Technology for ensure that independent data on air pollution is available in real time		Establishing adulteration cell and Checking fuel adulteration with coordination of anti adulteration cell which is a continuous process.	12-18 months			Rs. 3.5 Crores/ machine Ref: Swachhindia. ndtv.com
		Prepare action plan for widening of road and improvement of Infrastructure for decongestion of Roads. Development of bicycle tracks along roads to promote use of cycles. Separate bicycle tracks will ensure safe cycling along busy roads and will result in increased use of bicycles.		The existing development of roads will reduce the congestion on existing roads thereby reducing the vehicular emissions. Effective implementation of parking policy should be done.	18-24 months		-	Survey and random checking work-Rs. 5-10 lakhs,, Ref: http://urban.rajasthan.gov.in/content/dam/raj/udh/organizations/ruiddp/Downloads/BSR/RUIDP%20ISOR-%202017.pdf

	Vehicle emission	Identification of areas where space for more parking is required and developing parking facility Prevent parking of vehicles at Non designated areas.		Addition to existing parking facility it is propose to develop parking lots IN areas having high traffic density in city markets, commercial areas. Similar parking facility to be developed in other congested areas.	12-18 months			Survey/ maintenance work-Rs. 10-20 lakhs, pothole maintenance-Rs. 20000 approx. based on the size
		Introduction of Vehicle emissions control technologies such as oxidation-reduction catalytic converters, advanced catalytic converters, and lean-burn combustion For diesel fuelled vehicles.		Must increase awareness regarding use of new technologies by taking events	28 -24 months			Approx. 5 crores for parking area development
	Vehicle emission	Launch extensive drives against polluting vehicles for ensuring strict compliance		RTO to have portable monitors for PM and Gaseous air pollutants, random checking of polluting vehicles and take strict action against them to make maintenance compulsory. At present the vehicle manufacturers have to comply with the BSIV standards applicable to all since April, 2017	12-18 months			-
	Vehicle emission	Initiate steps for retrofitting of particulate filters in Diesel vehicles		Policy making decision Up to some extent light motor vehicle & auto rickshaw are presently running on petrol & LPG dual combination. To reduce the	12-18 months			Approx. 5 crores (approx. cost for

				impact of air pollution by public transport vehicles the use of CNG, battery operated system, E-Rickshaw are the options which will be implemented in future step by step.				monitoring systems)
		public awareness campaigns for vehicle emission control through proper vehicle maintenance, minimising use of personal vehicles, lane discipline etc.stopping of engines while idling in inter sections.		display boards at various traffic intersections to be used for the advertisement	12-18 months			Rs. 0.5-0.7 lakhs per unit https://dir.indiamart.com/mpcat/diesel-particulate-filters.html
		Identification of traffic congestion hot spots and prepare Plan for the construction of bypass/flyovers to avoid congestion		Feasible	12-18 months		-	Approx. 10 lakhs for the year 2018-19 at 20-25 locations (for digital display boards, organising plays, video cuts, audio recording play)
	Vehicle emission	Install weigh in Motion bridges at the borders of the cities/Towns and states to prevent overloading of vehicles.		Plan to install weighing check post for heavy goods carrying vehicles has to be carried out consultation with Regional Transport office.	12-18 months			project consultancy work-Rs. 5-10 lakh.

		Steps for Promoting electric, Battery operated vehicles.		Already initiated electric fleet of 06 electric e-rickshaw for solid waste transport, sangli To promote electric vehicles.	12-24 months			Rs 12 Lakhs per unit for 100 tonne load capacity Ref : India Mart
		implementation of BS-VI norms		At present the vehicle manufacturers have to comply with the BSIV standards applicable to all since April, 2017	60 months			-
		Hybrid Vehicles		Organising Awareness programs for encourage use of hybrid vehicles	60 months			-
2	Resuspension	Prepare plan for creation of green buffers along the Traffic corridors. The total road in the city is partially paved/unpaved. The present annual PM 2.5 emissions is 1.5 tons which will decrease after paving.		Partially done. green buffers at road dividers, channelizer, traffic islands and on both sides of the roads were developed. This work may be extended to other highly polluted roads	12-24 months			-
		Greening of open areas, garden, community places, schools and housing societies.		SMKC has already started developing green spaces around the city. new gardens are proposed in the city under Amrut mission.	12-24 months			Approx. 40 lakhs (for 20 water fountains)
		Blacktopping of metaled Roads including pavement of Road shoulders		Majority of the metaled roads have blacktopping	12-24 months			As per the requirement

3	Solid waste management/Biomass/trash burning, landfill waste burning	Regular check and control, of burning of Municipal Solid waste		Already implemented strict rules regarding open burning as penalty of rs 5000 if found guilty.	12 Months			Already covered above
		Launch extensive drives against open burning of biomass crop residue, garbage, leaves etc.Ensure ban on burning of agricultural waste and crop residues and its implementation.		Measure are taken to implement rules to restrict open burning of crop residue.	12-18 Months			As per the requirement
		Proper collection of Horticulture waste and its disposal following composting-cum-gardening approach		Presently SMKC has installed 24 bio composting bed in 24 gardens.	12 Months			As per DPR of SWM
		Alternate fuel ...Efficacy of use of solar power in Industries and other control measures needs to be studied		Alternative option for use of biogas/ other renewable solid fuels such as MSW briquettes etc. may be probed for co-firing in LSI, MSI alongwith control	12-18 Months			Industry to undertake
		Fugitive emission control		Major Large Scale industries have internal tar road & sprinkler system for vehicular movement. Transportation is done in closed containers for raw material, byproducts, products are etc.	12-18 Months			-

		Promote use of briquettes instead of wood		Presently SMKC is using briquettes for crematoria	12-18 Months			Approx. Rs. 12-40 Lakhs per unit Ref: India Mart
11	Other (city specific)	Wastewater treatment plant		Already completed 5 sewage treatment plant	18 to 24 months			Rs. 1000 per sq. ft Ref. https://www.indiamart.com/proddetail/natural-stone-wall-bricks-16478046533.html

Table 4: Format for progress of implementation of action plan- Aurangabad

Sr.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1.	Launch extensive drives against polluting vehicles for ensuring strict compliance			Regular and monthly basis drives at Toll plaza & Extensive during winter months.	In process	No deviation as such			
2.	Launch public awareness campaigns for air pollution control, vehicle maintenance, minimising use of personal vehicles, lane discipline etc.			Short (Regular & Extensive campaigns during winter months particularly Pre & Post Diwali)	In process	No deviation as such			
3.	Prevent parking of Vehicles at Non designated areas			Implementation executed by imposing fine/penalty	In process	No deviation as such			
4.	Promoting Battery operated vehicles			Charging point & Training Centre inaugurated by Mayor in Oct, 2017. . 50 rickshaws ordered.				1 crore	

Implementation period : 01 to 03 years									
1.	Widening of road and improvement of Infrastructure for decongestion of Roads.			PWD has proposed New Ring Road 60 width passing through Chikalthana and fringe area, 60m wide road Mitmita and Bhavsingpura to join Pune and Nashik road	In process	No deviation as such		5 crores	
2.	Provision of Dust cleaners for major roads (4 nos.)				In process	No deviation as such	In process	2 crores	
3.	Synchronize Traffic movements/Introduce Intelligent Traffic systems for Lane Driving			Project execution Under Smart city initiative of GoI	At Planning stage	No deviation as such		2 crores	
Implementation period : 03 to 05 years									
	Installation of Remote Sensor based PUC systems			10 nos. of PUCs approved	In process	No deviation as such			
	Synchronize Traffic movements/Introduce Intelligent Traffic systems for Lane Driving			Project Execution Under Smart city initiative of GoI	At Planning stage			2 crores	
Implementation period Above 05 years									
	Restrict commercial vehicles entering city by having ring roads			PWD has proposed New Ring Road 60 width passing through Chikalthana and fringe area, under Smart city initiative of GOI				5 crores	

	Shift to cleaner fuels – 100% All types of fuel to Natural gas			AMC Aurangabad and MPCB Aurangabad along with NGOs has initiated development of Green Buffer zone along industrial region of all MIDC areas in Aurangabad. Industries can plant trees along the boundary line of area.	In process	No deviation as such			
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*The highlighted portions will be as per the approved city action plans.

- **Date of direction for ground implementation of action plan (Zero Date)**

Table 4: Format for progress of implementation of action plan for Chandrapur

Sr. No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1.	Launch extensive drives against polluting vehicles for ensuring strict compliance. No heavy duty Vehicle through city			Monthly special drive at toll plaza for random checking of PUC for vehicles.	In process	No deviation as such			
Implementation period : 01 to 03 years									
1.	Overloading of vehicles to be stopped			Checking when vehicles leave industries with their guarantee that the vehicle is not carrying more material than its designated loads.	In process	No deviation as such			
2.	Regular I & M Programme			Set up a mechanism of Inspection and Maintenance programme for all vehicles in the district through automated system assessment.	In process	No deviation as such			
Implementation period : 03 to 05 years									
1.	Public Transport Improvement			There is a need of at least 75 additional buses in addition to industrial transport systems being	In process				

				made available by industries for its workers.					
2.	Pilots on Bios wale for dust reduction			Bioswale design and implementation for roadside improvement to control dust	In process	No deviation as such			
Implementation period Above 05 years									
1.	Phasing out polluting engines and vehicles beyond a fixed period of use			All commercial vehicles should be phased out after 8 years of age or subjected to two years extension after rigorous I&M tests centres	At planning stage	No deviation as such			
2.	Designated place for truck parking and maintenance related activities.			Separate designated place should be allocated to prevent illegal parking and repair shops on road and kerb side	At planning stage	No deviation as such			
3.	Road Dust reduction			Blacktopping of metaled Roads including pavement of Road shoulders	In process	No deviation as such			
4.	Concrete Roads			More Concrete Roads to be made in city with planning of over 50% main roads to be concretized.	In process	No deviation as such			

5.	Road Design for improved traffic management			Current road design makes the kerb side open and that leads to illegal movement of vehicles.	In planning stage				
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*The highlighted portions will be as per the approved city action plans.

- **Date of direction for ground implementation of action plan (Zero Date)**

Format for State wise review of compliance to Hon'ble NGT Directions for control of Air Pollution in Non-attainment cities : Nagpur

Table 4: Format for progress of implementation of action plan

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Industry	Banning of operation of brick kilns in city area	Completed	Already banned	--	--	---	---	--
Implementation period : 01 to 03 years									
	Reduction of Vehicle emission	Launch extensive drives against polluting vehicles for ensuring strict compliance	Partially Completed	<ul style="list-style-type: none">6 Nos of E-buses procurement by NMC.RTO & Traffic dept. launched extensive drives against polluting vehicles on regular basis	12-18 Month	No	In progress	Approx. 10 crores (approx. cost for monitoring systems)	
	Reduction of Vehicle emission	Launch public awareness campaigns for vehicle emission control through proper vehicle maintenance, minimizing use of personal vehicles, lane discipline etc. stopping of engines while idling in intersections	Completed (continuous process)	<ul style="list-style-type: none">Daily Public awareness through variable massager System (VaMs) at 53 different site in Nagpur City.Daily displaying of weather and air parameter on VaMS at 53 different site in Nagpur City.	12-18 Month	No	In progress	Approx. 50 lakhs for the year 2018-19 at 20-25 locations (for digital display boards)	

	Reduction of Vehicle emission	Prevent parking of vehicles at Non designated areas. Identification of areas where space for more parking is required and developing parking facility	Under progress	<ul style="list-style-type: none"> • In addition to existing NMC parking facility it is proposed to develop parking slots in Dantoli to Kachipura Square. • Similar parking facility to be developed in other congested areas. • RTO launched no parking drive in city on regular basis. • Proposal of banning travel buses inside city limit is under consideration with NMC to reduce vehicle pollution in city. 	12-18 Month	No	In progress	Approx. 20 crores for parking area development	
	Reduction of Vehicle emission	Synchronize Traffic movements/Introduce Intelligent Traffic systems for Lane Driving		<ul style="list-style-type: none"> • 3600+ CCTV installed at 700 critical traffic junction. • City traffic has been centrally monitored at city operation center. • 10 sensor based air monitoring station installed and data is stored at city operation center. 	12-24 Month	No	In progress	Rs. 100 lakhs per traffic intersection	

[illegible]

	Reduction of Vehicle emission	Introduction of new technology vehicles		<ul style="list-style-type: none"> 6 Nos of E-buses procurement by NMC along with battery charging stations in lakadgang depo total project cost for same is approx. Rs. 8 Cr. Approved proposal for 50 diesel standard bus was already converted in CNG Total no of E-Vehicles E-Rickshaw:1256 E-Bike:439+E Cars:97 E-ola, Ubar:91 	60 months	No	--		
		Provide good public transport system		<ul style="list-style-type: none"> At present 237 standard Diesel buses, 150 midi, 06 E buses has been deployed. 	60 months	No	In progress	Approx. 5 crores (for introduction of 20 new buses for public transport)	
Implementation period Above 05 years									

*The highlighted portions will be as per the approved city action plans.

- **Date of direction for ground implementation of action plan (Zero Date)**

Format for State wise review of compliance to Hon'ble NGT Directions for control of Air Pollution in Non-attainment cities: Akola

Table 4: Format for progress of implementation of action plan

S.N o	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remark
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1									
Implementation period : 01 to 03 years									
	Reduction of Vehicle emission	Launch extensive drives against polluting vehicles for ensuring strict compliance	Partially Completed	Awareness Campaigns with public and in schools and colleges entitled Maha-Yuva Campaigns & Awards 2019(Maharashtra Youth Understanding the Value Of Air)were launched in Aurangabad on 6th June 2019 by MPCB RO	12-18 Month	No	In progress		
	Reduction of Vehicle emission	Installation of Remote Sensor based PUC systems	Completed	• 25 PUCs in operation upgradation started since 15 th April, 2019					

	Resuspension	Greening of open areas, garden community places, schools and housing societies.	Completed	<ul style="list-style-type: none"> LCMC undertook plantation of 27,000 saplings in 2019 under AMRUT scheme 	--	--	--	Rs. 10 Lakhs	
	Solid waste management/Biomass/trash burning, landfill waste burning	Proper collection of horticulture waste and its disposal following composting cum gardening approach.	Completed	<p>LCMC topped D category corporation in country</p> <p>Total waste generation per day-150TPD at cost of Rs 1.5 crores</p> <p>Door to door collection-95%</p> <p>At source segregation</p> <p>Processing of daily waste-95%</p> <p>Advanced machinery for waste processing, which processes 200 tonne of garbage per hour.</p> <p>1 Common Bio Medical waste Treatment , storage, disposal facility(CBMWTSDF) with wet scrubber in MIDC Latur for disposal of BMW</p>	--	--	--	15 Crs	

	Resuspension	Establishment of a Continuous Air Quality Monitoring station within the city		Proposed at Nana- Nani Park behind the LCMC	12 Month			1.5 Crs	
Implementation period : 03 to 05 years									
Implementation period Above 05 years									

*The highlighted portions will be as per the approved city action plans.

- **Date of direction for ground implementation of action plan (Zero Date)**

Table 4: Format for progress of implementation of action plan Latur

Sr. No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1.	Launching of extensive drives for ensuring strict compliance			• Monthly drives on 22 nd of each month and rigorous drives in the winter seasons.		No deviation	In process		
2.	Creating green buffers along traffic corridors			• Latur Municipal Corporation has planned for plantation of tress in order to create a green corridor.		No deviation	In process		
Implementation period : 01 to 03 years									
1.	Regular monitoring of brick kilns and closure of unauthorized units			• Tehsildar Latur has closed 100 brick kiln units within the city limits.		No deviation	In process		
2.	Proper Management of MSW, BMW.			• Regular check and control on open burning. • Latur Municipal Corporation to provide processing plant of capacity 100 MT for waste processing		No deviation	In process		

Implementation period : 03 to 05 years									
1.	Installation of remote sensor based PUC systems			<ul style="list-style-type: none"> Sensor based 16 nos. of PUC's have been approved. 		No deviation	In process		
Implementation period Above 05 years									
1.	Promotion of battery operated e-rickshaws and charging stations for the same			<ul style="list-style-type: none"> E-rickshaws are being promoted by giving subsidies to drivers and also for boosting employment. 		No deviation	In process	1 crores	
2.	Action plan preparation for widening of roads and improvement of infrastructure			<ul style="list-style-type: none"> Main road widening is under process 		No deviation	In process	8 crores	

*The highlighted portions will be as per the approved city action plans.

- Date of direction for ground implementation of action plan (Zero Date)

Badlapur

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Air Pollution Control	Vehicle Emission		1.Stakeholder Workshop on Air Quality Awareness organized by KBMC along with MPCB on 13th Aug, 2019.2.Council has provided 20 wardens to traffic Police to control road congestion and free flow of traffic.	Start June 2019 - Dec 2021	No deviation	In-process	Rs 15 Lakhs	
		Launch public awareness campaigns for air pollution control, vehicle maintenance, minimizing use of personal vehicles, lane discipline etc.		Stakeholder Workshop on Air Quality Awareness organized by KBMC along with MPCB on 13th Aug, 2019. Campaigns with public and in schools and colleges planned and to be launched soon. Council has provided 20 wardens to traffic Police to control road congestion and free flow of traffic.	Start June 2019 - Dec 2021	No deviation	In-process	Rs 15 Lakhs	
2	Resuspension	Prepare plan for creationof green buffers along the Traffic corridors		Amrut Green SpaceProject for 2015-16, 2016-17, 2017-18 completed. Plantation under "July Vanmohastav" (2000 saplings along roadsides : Cost Rs. 12.4 L)	2019-2020	No deviation	Completed	Rs 3.2 Cr	
		Greening of open areas, garden, community places, schools and housing societies		1 July - 30 Sept. 2019 KBMC planted 5000 saplings at 30 different opens spaces and garden periphery. (Cost Rs. 25.6) Also 7000 saplings are distributed free of cost to schools and citizens.	Continuous process	No deviation	Completed	Rs 5.75 Cr for 2019-20	
		Introduce water fountains at Major Traffic intersection, wherever feasible		Installation of VAYU instruments	Nov 2019 - May 2020	No deviation	in progress	Short identifying 5 spots cost of Rs 2Lakh per site total 10 Lakhs	
		Maintain Pothole Free Roads for Free Flow Traffic		Yearly tender allotted to repair pothole Continuous process At cost of Rs. 3.10 lakhs	Continuous process	No deviation	In-process	Rs 90 Lakhs	
3	Biomass/trash burning, landfill waste burning	Launch extensive drive against open burning of biomass, crop residue, garbage, leaves etc.		Awareness camping conducted Under Swachh Survekshan 19 against open burning Council appointed Agency to levy spot fine to the defaulters against open burning. No expenses will incurred as Council will get 51% royalty of the total fine collected.	Regular basis Start 2018	No deviation	Completed	Rs 10 Cr	
		Proper collection of horticulture waste and its disposal following compositing cum gardening approach		Garden waste Composting using twin trumlers is operational in 11 KBMC gardens (Cost of Rs 99000)	201-2020	No deviation	Completed	Rs 10Lakhs	
4	Industry	Installation/Up gradation of air pollution control system		2 Industries Fine organics and Ambernath Organics changed to cleaner fuel PNG in Badlapur 15 industries in Add. Ambernath MIDC will also switch to cleaner fuel	Continuous process	No deviation	In-process	-	
5	Construction and Demolition Activities	Enforcement of construction & demolition rules		KBMC is appointing separate agency for construction and transportation of C & D waste and will act as facility.	Continuous process	No deviation	In-process	-	
		Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and suppression units		KBMC will incorporate the terms and conditions in Building permission	Continuous process	No deviation	In-process		

Badlapur									
S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : 01 to 03 years									
1	Air Pollution Control	Prepare action plan for widening of road and improvement of road infrastructure for decongestion of roads		Road widening in progress as per City development plan.Council passed resolution on 29.07.19 to prepare DPR to develop all roads and intersections for effective traffic management. Concrete Road work of Panvel bypass started by MMRDA	2019- 2022	No deviation	In-process	Rs 15 Lakhs	
2	Industry	Establishme nt of a continuous Air Quality Monitoring station within the city with display Board		MPCB is planing to install 1 CAAQMS Station in Badlapur in addition to 3 manual monitoting station	Dec 2019- June 2020	No deviation	In-process		
		Alternate fuel		Textile and Chemical industries in Badlapur, Old Ambernath and Add Ambernath MIDC using coal/ wood should convert to Natural Gas.	2020	No deviation	In-process		
Implementation period : 03 to 05 years									
1	Vehicle pollution	Prepare action plan for widening of road and improvement of Infrastructur e for decongestio n of Roads.		Katai Naka Badlapur State Highway-widened to a six lane highway . 100 feet bypass road Neral Badlapur Highway. Easy Connectivity between Kalyan And Karjat. NMMT bus services active on this route. .ShailPhata Karjat Road passes through Badlapur connecting to Navi Mumbai. .Vangni Karjat State Highway 21.1 Kms State Highway .Kalyan Badlapur Vangni State Highway 27.80 Kms Long Highway .Virar Alibaug Road (Multimodal Corridor) part of the 126 Kms long Virar Alibaug Multi Modal corridor, is a proposed 20 Kms road between Dombivali and Badlapur that will bypass Kalyan. .Vasai Virar to panvel bypass via Badlapur .Other highways being upgraded to 4lanes to and from karjat to Khopoli or Pune.	2019-2022	No deviation	In-process		
Implementation period Above 05 years									
1	Vehicle pollution	Prepare Plan for the construction of expressway s/bypass to avoid congestion		100 feets bypass road, Vasai Virar to Panvel Bypass via Badlapur	Planned	No deviation	In-process		

Jalgaon									
S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Vehicle Emission Control	Promoting battery operated vehicles by public awareness campaign		Awareness campaign successfully organised by municipal corporations in 2018	2017-2018				
		Intelligent traffic system at major traffic junctions		At 24 major traffic junctions, CCTV servilliance is now activated and running successfully.					
		Launch extensive drive against polluting vehicles		Awareness campaign successfully organised by traffic department on 04.02.2019	2017-2018				
		Launch public awareness campaign for air pollution control, vehicles maintenance manazing of personal vehicles and using public transport, lane disciplin		Awareness campaign successfully organised by traffic department on 04.02.2019	2017-2018				
		Prevent parking of vehicles on the non-designated ares		Jalgaon municipal corporation has designated 02 major parking slots in main business ares and other at various places within city,	2017-2018				
		Prepared plan to check fuel adultration and randome monitoring of fuel quality data		Communicated to traffic/RTO department, vehicle monotoring is regularly done concerned departments	2017-2018				
2	Resuspension dust control	Prepare pan for creation of green buffer along the traffic corridors		Tender for the work of preparation city development plan is allotted actual work is started and expected to be completed upto 31.06.2020, tender for plantation in road side divider is also published on 06.11.2019	2017-2018				
3	Control of pollution from Biomass burning	Launch extensive drive against open burning of bio mass, crop residue, garbage, leaves etc,		Continuous public awareness campaign is run by Health deptment	2017-2018				
		Regular check and control of burning of Municipal solid waste		Continuous public awareness campaign is run by Health deptment	2017-2018				
4	Industrial Pollution	Action against non-complying industrial units		Continuous penal action are initiated within Minicipal jurisdiction ares	2017-2018				
5	Control of Pollution from Construction and demolition	Ensure carriage of construction materials in closed / covered vessels		Continuous penal action are initiated within Minicipal jurisdiction ares	2017-2018				
		Enforcement of constructions and demolition rules		Guidelines ifor safe disposal of construction and demolition waste were incorporated in building permissions process, and conveying of deposition of construction and demolitionmaterial work is started by corporation.	2017-2018				
6	Control of Air Pollution	Air quality index calculated and disseminated to be people through website		At present air quality of city measured at 03 locations by MPCB and results are displyed on MPCB website	Continuous				
Implementation period : 01 to 03 years									
1	Vehicle Emission Control	Fixing timmer at all traffic junction		Timer facility is available at 4 junctions. Fixing of other junction is in progress	2017-2020				
		Installtion of remote sensing based PUC system		Communicated to RTO department	2017-2019				
		Intelligent traffic system at major traffic junctions		At 24 major traffic junctions, CCTV servilliance is now activated and running successfully.	2017-2020				
		Prepaired plan for widening of road and improvement of infrastructure for decongestion of roads		Tender for the work of preparation of city development plan is allotted actual work is started and expected to be completed upto 31.06.2020	2017-2021				
2	Resuspension dust control	Greening of open ares, gardens, community places, schools and housing scoieties		Work for development od urban green spaces at 27 places with 30000 plants is proposed by municipal corporations, work is completed at 16 places.	2017-2020				
		Prepare plan for fixing water fountains at moior traffic intersection		proposal for making arragements is in progress to be completed december 2020	2017-2020				

Jalgaon									
S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
3	Control of Pollution from Construction and demolition	Control measure for fugitive dust emission from material handling, conveying by sprinkling, curtains, barriers and dust suppression units		Guidelines ifor safe disposal of construction and demolition waste were incorporated in building permissions process.	2017-2020				
		Forming of monitoring committee headed by corporation level		Committee is formed	2017-2020				
Implementation period : 03 to 05 years									
1	Resuspension dust control	Improvement of maintaining potholes free roads for free -flow of traffic		Jalgaon municipal corporation has purchased pot hole repair machine for continuous operation.	Continuous 2017-2020				
		Blacktopping of WBM roads		New carpet proposed on major city road	Continuous 2017-2020				
Implementation period Above 05 years									
1	Vehicle Emission Control	Prepared plan for construction of highway and bypass away from city to avoid conijunty due to heavy vehicles		Bypass on major highway (NH-46) from Jalgaon city is approved and and aquasition process id complete, excution work is in progress	july, 2021				

Jalna									
S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Vehicle emission	Launch public awareness campaigns for air pollution control, vehicle maintenance ,minimising use of personal vehicles, lane discipline etc.		Awareness Campaigns with public and in schools and colleges entitled Maha-Yuva Campaigns & Awards 2019(Maharashtra Youth Understanding the Value Of Air)were launched in Aurangabad on 6 th June 2019 by MPCB RO	in Process 2018				
		Prepare action plan for widening of road and improvement of road infrastructure for decongestion of roads		In progressExpenditure Road concretization- Rs 15 crore Road widening Rs 45 Lakhs	in Process				
		Installation of Remote Sensor based PUC systems		3PUCs in operation upgradation started since 15th April, 2019					
Implementation period : 01 to 03 years									
1	resuspension dust emission	Greening of open areas, garden community places, schools and housing societies.		JMC undertook plantation of 26,000 saplings in 2019 under AMRUT scheme at over 31.5 acres within the city for Rs 2.93 crores	2020				
		Proper collection of horticulture waste and its disposal following composting cum gardening approach		Jalna SWM DPR approved on 12.04.2018 for Rs 16.52 Crs Procurement of vehicles -33 Ghantagadies received, 4 Tippers, 2 Dumpers to be delivered Technical sanction for Bio mining & Bio-methanization Civil work in progress for Waste Processing centre at Samangaon Over 50,000 households sensitized for waste segregation through IEC activities	2020				
		Installation/Up gradation of air pollution control system		Jalna steel industry initiated setting up ESP/Back Filters over furnace(at a cost of Rs 4 Crs/furnace) and civil work has started so within 6 months there would be improvement in the process	In process				
2	Air Pollution control	Establishment of a Continuous Air Quality Monitoring station within the city		Proposed at JES College	In process				
Implementation period : 03 to 05 years									
		Not Given							
Implementation period Above 05 years									
		Not Given							

Mumbai									
S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
1	Vehicle Emission	Regular Checking of vehicular emission and issue of pollution under control (PUC) certificate.		Refer Annexure B (1.4) • PUC checking in every 6 months for BEST buses. • RTO approved agency appointed for issuing the PUC certificate. Certificate displayed inside every bus. • Random PUC check planned by RTO. • As per the provision of Motor Vehicle Act 1988, 1379 cases have been registered in year 2017 and 464 cases have been registered in year 2018 (up to 31st august) by the Traffic control Branch of Mumbai Police for non-compliance of PUC norms.	19-Sep		In-process	Rs 488 Cr	
		Promoting Green mode of transport by creating Cycle tracks.		Promoting Cycle tracks -To promote the green mode of transport, 36 Km Cycle Track Works along with walkway and other infrastructure have been initiated in three Phases. Work of the Pilot project for 2 Kms has been completed in Mulund & from NITIE gate to Vijay Nagar Bridge in Marol.	19-Sep		In-process		
		Efforts for Sulphur reduction in diesel by providing low sulphur content Diesel.		City is supplied with BS IV stage diesel which has low sulphur content	2019-2020		Implemented		
Implementation period : 01 to 03 years									
1	Vehicle Emission	Providing pay & park, PPL (Public Private Lot), multilayer parking and amenity sites for parking of vehicles to avoid parking atNon designated areas		77 locations across Mumbai identified for Pay and Park. It may provide parking for around 15000 vehicles. 26 PPL (Public Private lot) and 29 amenity parking sites are identified.To tackle the parking issues, MMRDA has identified 11 multi level parking locations within BKC. • Traffic Control Branch of Mumbai has taken action against 2,99,721 and 3,23,324 vehicles in the year 2018 from (1st Sept. 2018 to Dec. 2018) and 2019 (upto 19th Aug.) respectively for traffic voilation regarding illegal parking.	June, 2022		In-process		
		Initiate steps for retrofitting of particulate filters in Diesel vehicles, when BS-VI fuels areavailable.		•Letter issued to NEERI for conducting feasibility study for retrofitement of ECD (Emission Control Devices) and to evaluate effect of temperature. Based on the outcome of the study, results will be implemented.	June, 2022		In-process		
		Construction of expressways/bypass road to avoid congestion : a. Coastal Roadb. Gurgaon-Mulund link road		•The Coastal Road is an under construction 8-lane, 29.2-km long freeway that would to run along Mumbai's western coastline connecting Marine Lines in the south to Kandivali in the north. The Coastal Road is projected to be used by 130,000 vehicles daily and is expected to reduce travel time between South Mumbai and the Western Suburbs from 2 hours to 40 minutes.• Goregaon-Mulund link road project work is in process	June, 2022		In-process		

Mumbai									
S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
2	Re-Suspension Dust	Creation of green buffers along the Traffic corridors & installation of WAYU (Wind Augmentation and Purifying Units) at urban traffic intersection.		Garden Dept. has achieved the tree plantation target given by government time to time. In year 2016, 7800 trees have been planted in city and about 5000 sapling distributed free of cost. over 1000 garden, R.G. P.G. plots have been developed. •12 no. of spaces below flyover have been cleared of encroachments and developed by providing greenery (6cr) •23 number of spaces below flyover have been identified for beautification at the cost of ₹19 crore. This has resulted in providing additional area of around 35000 sq. Mtrs green space to Mumbai City •To mitigate the flood vulnerability of the city, the RDDP 2034, has demarcated buffers along rivers, creeks and nallas, on either side of the water courses, which are to be maintained as development free zones. This buffer zone will help reduce flooding risks by permitting water bodies to flood their banks without affecting people. These buffers, wherever possible, will be city wide open spaces that would be walkable along with their use for environment. •M.P.C.Board, IIT (B) and NEERI have come together to develop and install WAYU (Wind Augmentation and Purifying Units) to improve Ambient Air Quality at Urban traffic intersections. Initially, these (25 no) systems have been installed at 5 locations in Mumbai.	June, 2022		In-process	Rs 25 Cr	
		Introduce water fountains at Major Traffic intersection, wherever feasible by establishing Garden Infrastrure Cell (GIC).		Regarding installation of fountains; Garden Infrastructure Cell (GIC) of MCGM is established. However, it is to state that it is not feasible as it could need additional area which may result in reduction of space for vehicles.	June, 2022		In-process		
		Greening of open areas, garden, community places, schools and housing societies		An area of 300 acres at Cuff Parade is being developed as Green Park for which Tata Consultancy Engineering (TCE) has been appointed as Consultants•Special emphasis been paid to implementation of D.P.under which 29 plots have been developed as garden and parks at the cost of ₹11 crore.•The Draft DP 2034 has proposed following to be counted as Public Open Spaces viz. RGs, PGs, public/semi- community spaces, layout RGs, designated public open spaces, open spaces in educational institutions and other public institutions. The quantum of existing open spaces and proposed open spaces proposed in the Draft DP 2034 is as follows:- Reservations of PG/Garden/Green Belt etc. 1892.22 Designations of RG/PG/Garden etc. 1633.67 Layout RG's which will be available after development of lands under layout. 964.78 NDZ +Tourism Development Area +Salt Pan 850 Aarey POS 800 Sanjay Gandhi National Park RG 588 Buffer for the Rivers/nallas 472.05 Open Spaces in the jurisdiction of Special Planning Authorities Viz. MIDC/MMRDA 428.05Out of proposed Conversion of Industrial lands 117.64Proposed Coastal Road Promenade 88	June, 2022		In-process	Rs 393 Cr	
3	Biomass/trash burning, landfill waste burning	Providing Organic Waste Compost machines , decentralization of processing of Waste, dry waste collection centers.		•The system of separate collection is in place. Organic Waste Compost machines are proposed to be installed in all Municipal markets.•Efforts are being taken to motivate decentralization of processing of waste. Dry waste is segregated at 32 dry waste centers	June, 2022		In-process		
Implementation period : 03 to 05 years									
Implementation period Above 05 years									

Mumbai									
S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
1	Vehicle Emission	Public awareness campaigns, workshops, VMS boards, Auto Expo for promoting Eco friendly Mobility		MPC Board has organized "Eco friendly Mobility for Clean Air" workshop in collaboration with NEERI, Mumbai first where innovative solutions like commuter's choice program, retro fitment, introduction of Metro, etc. were discussed. With stakeholders including other government agencies, NGOs, expert from Industries, research institutes, • Public Awareness message to observe lane discipline and air pollution control have been displayed on 36 VMS boards installed across the City. Similarly, various awareness programs are organized time to time especially during Road Safety Week.	Continuous & Regular Activity		In-process	Rs 110 Cr	
		Introduction of CNG, Hybrid Electric buses for public transport. Providing Metro and Monorail transport services.		<p>• To improve the air quality BEST introduced CNG buses for the first time in India in 1997. The fleet of CNG was increased gradually and presently 62% of our fleet is operated on green fuel i.e. on CNG. CNG buses of Nos. 1851 are already in BEST fleet since 1997. This technology has already established. b) Newly developed 25 Nos. of hybrid electric and 6 Nos. of pure electric is available. c) Commuter choice program is planned providing efficient public transport in the Mumbai City. To improve the air quality BEST Undertaking introduced CNG buses for the first time in India in 1997. The fleet of CNG was increased gradually and presently 62% of BEST fleet is operated on green fuel i.e. on CNG. d) To improve air quality further BEST Undertaking has made efforts to introduce buses with less / no emissions. With the help of MMRDA shortly 25 hybrid electric buses will be inducted into our fleet (15 buses already received) e) 4 nos. of electric buses with zero emission are already in operation and 2 nos. of more buses will be inducted shortly. f) AC buses procured by MMRDA and operated by BEST are in service from Bandra/Kurla to BKC throughout the peak period. g) Metro system is designed to reduce traffic congestion in the city. Project is built in three phases over a 15-year period, with overall completion expected in 2025. h) Monorail of 20.21 kilometres line is fully elevated, and connects Jacob Circle in South Mumbai with Chembur in eastern Mumbai. i) MMRDA also decided to appoint Indian Port Rail and Ropeway Corporation Ltd to prepare a project report for ropeways from Malad to Marve and Gorai to Borivli, each of 4.5 km. The projects can boost east-west connectivity, along with connectivity to Malad Metro station on Metro-2A corridor and Marve; and further, to Borivli station on Western Railway, Metro-2A and Gorai jetty.</p>	Continuous & Regular Activity		In-process	<p>a) each CNG bus costs Rs. 55 lakhs b) each pure electric bus costs Rs. 1.7 crores c) each AC Hybrid Electric bus costs Rs. 2.3 crores d) Metro project 1 Lakh Cr. e) Monorail 3000 cr</p>	
2	Re-Suspension Dust	Maintain Pothole Free Roads for Free Flow Traffic by implementing Road Maintenance management system (RMMS)		To ensure that the roads are regularly maintained and to achieve longevity of the roads with lesser expenditure, Road Maintenance Management System (RMMS) is implemented in MCGM where every road is numbered and a small group of these roads are formed. • Responsibility of each road is put under a Sub-Engineer designated as Road Engineer (RE). RE prepares estimates and look after the maintenance of each road under his jurisdiction. • Priority list of the roads to be repaired is prepared. 1. City Division- No. of roads= 177, Cost 385.62 Cr. 2. Eastern Suburb Division (E.S)- No. of roads= 125, Cost 285.22 Cr. 3. Western Suburb Division (W.S)- No. of roads= 137, Cost 234.96 Cr	Continuous & Regular Activity		In-process		
		Blacktopping of metalled Roads including pavement of Road shoulders		Asphalt and resurfacing of roads of 98 km. has been completed at the cost of ₹1148 crore. In the year 2019-20 about 370 kms roads are proposed to be improved. Of this, about 106 kms roads are proposed in CC and 172 kms in Asphalt and resurfacing of about 92 kms roads is proposed	Continuous & Regular Activity		In-process	Rs 1520 Cr	

Mumbai									
S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
3	Biomass/trash burning, landfill waste burning	Launch extensive drive against open burning of biomass, crop residue, garbage, leaves by appointing Nuisance Detectors and Clean-up Marshals are appointed. Providing door to door garbage collecting services.		As majorly Door to Door collection is being practiced, no occurrences are reported. Moreover to monitor and control these kinds of lapses, Nuisance Detectors and Clean-up Marshals are appointed.	Continuous & Regular Activity		In-process		

NGT OA 606/2018 Date 07/01/2020 - Solid Waste Management in the State of Maharashtra

S.N.	Questions		Remarks			
1		Numbers of ULBs	384+07(Cantonment Board)			
2		Over all waste management status in States/UTs	Quantity (MTPD)	Percentage		
a		Quantity of MSW generated (TPD)	23845			
b		Quantity of MSW collected (TPD)	23540	99%		
c		Quantity of MSW segregated & transported (TPD)	17781	75%		
d		Quantity of MSW processed (TPD)	13276	56%		
e		Quantity of MSW disposed in secured land fill site (TPD)	2371	10%		
f		Gap in Solid Waste Management UTs (TPD) [1(a)- I(d)- 1(e)]	8198	34%		
g		Solid Waste Management Plan	SWM DPRs has been sanctioned in 383 ULBs and remaining ULBs have SWM facilities in place			
3		Waste Collection	Existing	Target	Gap	Timeframe
a		ULBs in which waste door-to-door collection is implemented(No.)	384	384	0	Ongoing
b		ULBs in which segregation of waste is implemented (No.)	384	384	0	Ongoing
c		ULBs in which transportation of segregeted waste is implemented (No.)	384	384	0	Ongoing
4		Waste Processing				
a		Material Recovery facilities	Existing	Target	Gap	Timeframe
	(i)	Total Capacity (TPD)	4900	-	-	-
	(ii)	Number	454	-	-	-
	(iii)	Number of ULBs covered	384	384	0	-
b		Recycling	Existing	Target	Gap	Timeframe
	(i)	Total Capacity (TPD)	18	-	-	-
	(ii)	Number	4	-	-	-
	(iii)	Number of ULBs covered	4	-	-	-

c		<u>Composting</u>	Existing	Target	Gap	Timeframe
	(i)	Total Capacity (TPD)	7500	-	-	-
	(ii)	Number	387	-	-	-
	(iii)	Number of ULBs covered	370	384	14	2020 December
d		<u>Biomethanation</u>	Existing	Target	Gap	Timeframe
	(i)	Total Capacity (TPD)	1000	-	-	-
	(ii)	Number	54	-	-	-
	(iii)	Number of ULBs covered	28	Not applicable to all ULBs	-	-
e		<u>RDF</u>	Existing	Target	Gap	Timeframe
	(i)	Total Capacity (TPD)	1000	-	-	-
	(ii)	Number	13	-	-	-
	(iii)	Number of ULBs covered	11	Not applicable to all ULBs	-	-
f		<u>Waste to Energy Plants</u>	Existing	Target	Gap	Timeframe
	(i)	Total Capacity (TPD)	-	-	-	-
	(ii)	Number	-	-	-	-
	(iii)	Number of ULBs covered	-	Not applicable to all ULBs	-	-
4		Waste Disposal				
a		<u>Landfill</u>	Existing	Target	Gap	Timeframe
	(i)	Total Capacity (T)	-	-	-	-
	(ii)	Number	18	-	-	-
	(iii)	Number of ULBs covered	18* (* 320 Landfill sites have been identified and work is under process in 302)	384	366	2020 December

5		Legacy Waste Waste management		
a		Number of dumpsites (No.)	203	
b		Quantity of Waste dumped at dumpsites (Tons)	28065119	
c		Number of dumpsites cleared (No.	23	
d		Number of dumpsites in which biomining has commenced (No.)	117	
e		Time frame for clearing all dumpsites	2021 December	
6		Other Information		
a		Information regarding development of model towns/cities/villages	Annexure I - 3 Cities & 3 Towns; Annexure II - 99 Villages	
b		Creation of Environmental cell	Some of the Municipal Corporations have established environmental cell.	
c		Standardization of rates for procurement of services/equipment (to do away with the tendering process) required for solid waste management	Procurement of the vehicles and other equipment is being done through Government of India's E-Marketing Portal (GEM).	

**Annexure 1: List of model cities and Towns identified by
Urban Development Department Govt. of Maharashtra**

Corporations identified for model

1	Navi Mumbai Municipal Corporations
2	Nashik Municipal Corporations
3	Chandrapur Municipal Corporations

Councils identified for model

1	Karad Municipal Council (district- Satara)
2	Lonavala Municipal Council (district- Pune)
3	Mul Municipal Council (district- Chandrapur)

**Annexure 2: List of Model Village Panchayats received from RDD on 03.07.2019
& 04.11.2019**

Sr no.	District	Sr No. of Village	Village Panchayat names
1	Buldhana	1	Ajispur, tal- Buldhana
		2	Singaon Jahangir, Tal- Deugaonraja
		3	Shelgaon Bajar, Tal- Motala
2	Yavatmal	4	Bori Arab, Tal- Darvha
		5	Mukutban, Tal- Zari Jamhi
		6	Dahegaon, Tal- Ralegaon
3	Washim	7	Lohara, Tal- Karanja
		8	Vai, Tal- Karanja
		9	Wadhavi, Tal- Karanja
4	Wardha	10	Kannamvar gram, Tal- Karanja
		11	Wardhmaneri, Tal- Arvi
		12	Shirpur, Tal- Devali
5	Bhandara	13	Paldongari, Tal- Mohadi
		14	Palora, Tal- Pavani
		15	Gadegaon, Tal- Lakhani
6	Chandrapur	16	Jugnada, Tal- Brahmapuri
		17	Bhadurni, Tal- Mul
		18	Ashta, Tal- Pombhurni
7	Jalna	19	Sipora Bazar, Tal- Bhokardan
		20	Nandkheda, Tal- Badnapur
		21	Pimpalvadi, Tal- Jalna
8	Latur	22	Mavalgaon, Tal- Ahmadpur
		23	Algarwadi, Tal- Chakur
		24	Ramwadi (Kharola), Tal- Renapur
9	Parbhani	25	Sonpeth, Tal- Tivthana
		26	Gangakhed, Tal- Sangalewadi
		27	Jintur, Tal- Digras
		28	Kandali, Tal- Bhokar

10	Nanded	29	Ibrahimpur, Tal- Deglur
		30	Shelgaon Gauri, Tal- Naigaon
11	Ahmednagar	31	Takalimiya, Tal- Rahuri
		32	Rajapur, Tal- Sangamner
		33	Loni Budruk, Tal- Rahata
12	Jalgaon	34	Aadgaon, Tal- Erandol
		35	Mengaon, Tal- Jamner
		36	Sawatkheda, Tal- Jamner
13	Sangli	37	Bhatwadi, Tal- Shirala
		38	Panavalewadi, Tal- Tasgaon
		39	Sawalwadi, Tal- Miraj
14	Satara	40	Apshinge, Tal- Satara
		41	Banwadi, Tal- Karad
		42	Bavdhan, Tal- Vai
15	Kolhapur	43	Shinganapur, Tal- Karvir
		44	Ghotavade, Tal- Radhanagari
		45	Yadrav, Tal- Shirol
16	Solapur	46	Wadala, Tal- North Solapur
		47	Shevate, Tal- Pandharpur
		48	Mandave, Tal- Malashiras
17	Akola	49	Sarav, Tal.- Barshi Takali
		50	Palsod, Tal- Akot
		51	Nelura, Tal- Patur
18	Amravati	52	Rasegaon, Tal- Achalpur
		53	Ghodaasgaon, Tal- Anjangaon Surji
		54	Savanga, Tal- Varud
19	Aurangabad	55	Patoda, Tal- Aurangabad
		56	Kumbephal, Tal- Aurangabad
		57	Jogeshwari, Tal- Gangapur
20	Beed	58	Hatola, Tal- Ambejogai
		59	Deshmukh Takali, Tal- Parali Vaijanath

		60	Massajog, Tal- Kej
21	Dhule	61	Anchale, Tal- Dhule
		62	Bramhane, Tal- Shindkheda
		63	Arthe Budruk, Tal- Shirpur
22	Gadchiroli	64	Paradi, Tal- Gadchiroli
		65	Jambhali, Tal- Dhanora
		66	Arat todi, Tal- Kurkheda
23	Gondia	67	Gongale, Tal- Sadakarjuni
		68	Shiregaon Bandh, Tal- Arjuni Moregaon
		69	Bhagi Shirpur, Tal- Devari
24	Hingoli	70	Jambarunandh, Tal- Hingoli
		71	Khillar, Tal- Sengaon
		72	Devala Turk, Tal- Aundhanaganath
25	Nagpur	73	Venokoni, Tal- Narkhed
		74	Mahalgaoon, Tal- Kamtee
		75	Bramhani, Tal- Nagpur
26	Nandurbar	76	Asane, Tal- Nandurbar
		77	Rajvihir (Dhekati), Tal- Taloda
		78	Watavi, Tal- Navapur
27	Nashik	79	Jakhori, Tal- Nashik
		80	Lokhandewadi, Tal- Dindori
		81	Bhutane, Tal- Chandawad
28	Pune	82	Tikekarwadi, Tal- Junnar
		83	Kanhewadi Phe Chakan, Tal- Khed
		84	Vitthalwadi, Tal- Shirur
29	Raigad	85	Dhatav, Tal- Roha
		86	Ambepur, Tal- Alibag
		87	Chavani, Tal- Panvel
30	Ratnagiri	88	Bharane, Tal- Khed
		89	Kadavai, Tal- Sangameshwar
		90	Nachane, Tal- Ratnagiri

31	Sindhudurg	91	Baparde, Tal- Deogad
		92	Kushevada, Tal- Vengurla
		93	Kudase Khurd, Tal- Dodamarg
32	Thane	94	Morni, Tal- Bhiwandi
		95	Vehlonde, Tal- Shahapur
		96	Kudavali, Tal- Murbad
33	Palghar	97	Hamarapur, Tal- Wada
		98	Bordi, Tal- Dahanu
		99	Umaroli, Tal- Palghar

POLLUTED RIVER STRETCHES IN MAHARASHTRA (Jan to Nov 2019)							
Sr. No.	NAME OF RIVER	POLLUTED STRETCH	BOD (mg/l)		Fecal Coliform (MPN/100 ml)		
			Min	Max	Min	Max	
Priority I							Current Priority
1	GODAVARI	SOMESHWAR TEMPLE TO RAHED	4	28	1.8	9	II
2	KALU	Along ATALE VILLAGE	4	4	540	540	V
3	KUNDALIKA	SALAV TO ROHA	4	15	40	540	III
4	MITHI	POWAI TO DHARAVI	50	50	17000	17000	I
5	MORNA	AKOLA TO TAKALIJALAM	5.2	5.2	34	34	V
6	MULA	BOPODI TO AUNDH GAON	12.5	16.5	1600	1800	III
7	MUTHA	SHIVAJI NAGAR TO KHADAKWASLA DAM	3.2	28	25	1800	II
8	NIRA	SANGAVI TO SHINDEWADI	6.5	12.5	195	900	III
9	VEL	NHAVARE TO SHIKARPUR	9	9	140	140	IV
Priority II							
1	BHIMA	VITHALWADI TO TAKLI	5.5	24	170	1600	II
2	INDRAYANI	MOSHIGAON TO ALANDIGAON	6.5	8.5	350	900	IV
3	MULA-MUTHA	THEUR TO MUNDHWA BRIDGE	16.5	18.5	900	900	III
4	PAWANA	DAPODI TO RAVET	10	26	550	1800	II
5	WAINGANGA	TUMSA TO ASHTI	4	14	39	140	III
6	WARDHA	GHUGHUS TO RAJURA	4.4	8.2	32	130	IV
Priority III							
1	GHOD	ANNAPUR TO SHISHUR	7.5	7.5	550	550	IV
2	KANHAN	BHANDARA TO NAGPUR	7.2	22	40	170	II
3	KOLAR (MAH)	Along Koradi	5.8	5.8	140	140	V
4	KRISHNA	SHINDI TO KURUNDWAD	2.6	8	12	550	IV
5	MOR	JALGAON TO AMODA	9.8	9.8	4	4	IV
6	PATALGANGA	KHADEPADA TO KOPOLI	4	11	34	240	III
7	PEDHI	NARAYANPUR TO BHATKULI	10	10	220	220	IV
8	PENGANGA	MEHKAR TO UMARKHED	4.2	7.2	39	170	IV
9	PURNA	DHUPESHWAR TO ASEGAON	3.6	4.8	39	150	V
10	TAPI	RAVER TO SHAHADA	5.6	9.2	3.7	6	IV
11	URMODI	DHANGARWADI TO NAGTHANE	30	30	350	350	II
12	VENNA	MAHABALESHWAR TO MAHULI	3.5	7.5	50	200	IV
13	WAGHUR	SUNASGAON TO SAKEGAON	3.2	3.2	6.8	6.8	V
14	WENA	KAWADGHAT TO HINDANGHAT	4.7	7.6	33	39	IV
Priority IV							
1	BINDUSAR	SWARAJ NAGAR TO SNEHNAGAR	4.8	4.8	4	4	V
2	BORI	Along AMALNER	3.4	3.4	6.1	6.1	V
3	CHANDRABHAGA	PANDHARPUR TO SHEGAON DHUMALA	7.5	10.5	350	900	III
4	DARNA	IGATPURI TO SANSARI	4.2	5.2	1.8	6	V
5	GIRNA	MALEGAON TO JALGAON	3.2	4.2	2	2	V
6	HIWARA	PACHORA TO NIMBORA	3.5	3.5	6	6	V
7	KOYNA	KARAD TO PAPDARDE	7.5	7.5	550	550	IV
8	PEHLAR	PELHAR DAM TO GOLANI NAKA	4	4	170	170	V
9	SINA	SOLAPUR TO BANKALAGI	9	9	130	130	IV
10	TITUR	Along CHALISGAON, JALGAON	3.2	3.2	2	2	V
Priority V							
1	AMBA	BENSE TO ROHA	4	4	170	170	V
2	BHATSA	SHAHAPUR TO BHADANE	4	4	210	220	V
3	GOMAI	LONKHEDA TO SHAHDA	3.6	3.6	3.7	3.7	V
4	KAN	KAVATHE TO SAKARI	5.2	5.2	4	4	V
5	MANJARA	LATUR TO NANDED BRIDGE	6.5	6.5	2	2	IV
6	PANCHGANGA	SHIROI TO KOLHAPUR	2.4	2.8	12	20	Less Polluted
7	PANZARA	VARKHEDE TO DHULE	7.8	7.8	140	140	IV
8	RANGAVALI	TINTEMLA TO NAVAPUR	11.5	11.5	7	7	III
9	SAVITRI	DADLI TO MUTHAVALI	2.8	3.2	8.2	20	V
10	SURYA	DHAMNI DAM TO PALGHAR	4	4	170	280	V
11	TANSA	Along Thane	4	4	350	350	V
12	ULHAS	KALYAN TO BADLAPUR	4	4	79	110	V
13	VAITARNA	GANDHRE TO SARASHI	4	4	240	240	V
14	VASHISTI	KHERDI TO DALVATNE	3	3	6.8	7.8	V

Table 1: Details of drains contributing to pollution in polluted river stretch

River Stretch: Godavari River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Chikhali Nalla	1.5	18	-
2	Gangapur/Bardan phata nalla.	2.5	2.5 - 7	1.8 - 4.1
3	Someshwar 1 / 2 Nalla.	1	2.5 - 8.6	1.8 - 17
4	Anadwali Nalla	0.5	-	-
5	Chunal Nalla	2	87	-
River Stretch: Kalu River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Neptune	-	-	-
2	Balkrishna Paper Mills	-	-	-
3	Nalla at Santoshimata Mandir, Atale	-	03 to 75	4-170
4	Nalla at Balyani	-	-	-
River Stretch: Kundalika River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Ashtami Bridge, Roha	1.5 / 2.5	3 to 7	7.8 to 94
2	Jackwell, Dhata	-	2.8 to 3.6	4 to 79
3	Are Khurd (Saline Water Zone)	-	3 to 20	7.8 to 130
4	Salav Bridge (Saline Zone)	-	7 to 18	4 to 130
River Stretch: Mithi River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Greater Mumbai	2671	7 to 250	540 to 1600
River Stretch: Morna River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Hingana nalla	-	9	-
2	Dagdi pull nalla	-	5 to 52.8	50 to 240
River Stretch: Mula River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Botanical Garden Nallah	5.5	5.4 to 15	125 to 900
River Stretch: Mutha River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Warje nalla	8.5	2 to 4.5	2 to 140
2	Hingne nalla	4.5	28 to 32	-
3	Wadgoan khurd Nalla	6	9.5 to 20.5	65 to 250
4	Nagzari nalla	7	6.8 to 18.5	80 to 1600
5	Ambil odha nalla	3.5	8 to 25.5	195 to 1600
6	Erandwana nalla	8.5	22 to 28	-
River Stretch: Nira River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Akluj Nalla	0.5	4.5 to 12	140 to 550
2	Khadakhira Nalla	2.5 to 3	3.6 to 6.8	45 to 900
River Stretch: Vel River			Priority: I	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Shikrapur bridge	0.005	3.4 to 7	20 to 140
River Stretch: Bhima River			Priority: II	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Keshavnagar Nalla	-	-	-

2	Nalla at Bhapkar Mala	-	92	-
3	Rangicha Odha at Bhapkar Mala	-	54	-
4	Gopalpur Nalla	2.0-3.0	50	-

River Stretch: Indrayani River			Priority: II	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Nalla Water at Surya Road Nagargaon Bridge	-	15.2	-
2	Nalla water & Nishigandha Society	-	13.7	-
3	Valavan Nalla at Lonavala	-	5.3	-
4	Katavi Raod Nalla at Talegaon	-	6.8	-
5	Nalla at Shivkumar Colony At Talegaon	-	18.3	-
6	Nalla At Siddheswar Temple At Dehu Village	-	25.3	-
7	Nalla at chokhoba Temple Dehu	-	68.5	-
8	Nalla At Khalumbre Village	-	6.1	-
9	NallaNr Mahindra Supply Park, Nighoje	-	5.9	-
10	Nalla Near Mahindra Vehicle HRTS Pond	-	9.5	-
11	Nalla at Kuruli	-	10.2	-
12	Bhagirathi Nalla At Alandi Municipal Council	-	4 to 11.5	5 to 595
13	Kuberganga Nalla	-	4.5	-
14	Mankarnika Nalla	-	38.5	-

River Stretch: Mula-Mutha River			Priority: II	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Keshavnagar Nalla	-	-	-
2	Nalla at Bhapkar Mala	-	92	-
3	Rangicha Odha at Bhapkar Mala	-	54	-

River Stretch: Pawana River			Priority: II	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Kivale Nalla	0.5	4	-
2	Gavade Colony Nalla	1	5 to 16.5	40 to 550
3	Chinchwad Nalla	2	4.8 to 15.5	175 to 550
4	Garware Nalla	1	5.5 to 16.5	140 to 550
5	Sandvik Nalla	1	5.5 to 18.5	130 to 1600
6	Ravet Nalla	1	2 to 6.8	4 to 225
7	Kasarwadi, Nalla	0.5	5.4 to 16.5	140 to 900

River Stretch: Wainganga River			Priority: II	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Nalla coming from Sant Tukdoji Ward	4	35	-
2	Nalla coming from Pauni town	0.7	26	-

River Stretch: Wardha River			Priority: II	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Erai	68.8	3.2 to 12.6	14 to 130
2	BILT Nalla	53	3.6 to 22	27 to 70
3	Local Nalla	1.2	5 to 60	33 to 220
4	Amalnalla	15	4.2 to 12.2	33 to 540
5	Kapangaon Nalla	-	4.2 to 11.4	22 to 540

River Stretch: Ghod River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Nalla from nearby villages	6	3.8 to 10.8	35 to 170

River Stretch: Kanhan River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	JN Road Nalla	-	90	-
2	Ashok Nagar Nalla	-	5	-
3	Lohiya layout Nalla	-	98	-
4	Bagdor nalla,	-	-	-
5	Nalla coming from Janata School	0.2	22	-
6	Nalla coming from Chakradhar nagar	0.2	21	-

River Stretch: Kolar River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Chandkapur village sub drain	0.5	-	-
2	Chicholi village Major drain	0.3	-	-
3	Drain coming from side pond No. 3, Koradi TPS	0.7	3 to 18.1	33 to 170

River Stretch: Krishna River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Sheri Nalla, Sangli	27	33	-
2	Sidharth Nagar Nalla, Sangli	5	92	-
3	Haripur Nalla, Sangli	20	30	-
4	Miraj Nalla, Miraj.	20	43	-
5	Mhaishal Nalla, Mhaishal	0.2	60	-
6	Dhawali Nalla, Dhawali	0.5	4	-
7	Dhamani Nalla	1	5	-
8	Padmale- Mouje Disgra	2.5	3	-
9	Brahmnal Nalla	1.5	3	-
10	Sukhawadi Nalla	0.8	4	-
11	Sarali Nalla	1.5	3	-
12	Bhilawadi Nalla	1	4	-
13	Anugdewadi Nalla	0.3	3	-
14	Dudhondi Nalla	1	5	-
15	Takari Nalla	1	3	-
16	Dudhari Nalla	0.5	3	-
17	Rethareharnax Nalla	0.4	4	-
18	Yedemachindra Nalla	0.8	5	-
19	Narshingpur Nalla	0.3	180	-
20	Kasegaon Nalla	1	3	-
21	Bahe Nalla	3.5	5	-
22	Farnewadi Nalla	2	8	-
23	Borgaon Nalla	1	10	-
24	Hal Nalla, Walwa	3.8	12	-
25	Nagthane Nalla	1	3.4	-
26	Mardwadi Nalla	1.5	52	-
27	Tung Nalla	0.5	5	-
28	Kasabe Didgraj Nalla	0.5	190	-
29	Wai Municipal Council Nalla	-	20 to 270	-
30	Ranmala Nalla at Venna river	-	20 tp 310	-
31	Malkapur Municipal Council nalla	-	20 to 300	-
32	Podacha Odha	-	20 tpo 150	-

River Stretch: Mor River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Padalse Nallah	0.5 to 0.7	3 to 16	1.8 to 2

River Stretch: Patalganga River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Bazar Peth Nalla	5.76	2.6 to 20	2 to 540

River Stretch: Pedhi River			Priority: III	
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Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Amba Nalla	20 to 93	11.76	-
2	Drain from Nimba Gut	0.02 to 0.1	5.2 to 25.2	34 to 170

River Stretch: Penganga River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Lendhi nalla	4.5	3 to 20	11 to 140

River Stretch: Purna River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Drain flowing from Asegaon Purna village, Tal. Chandur Bazar meets to purna river	Min – About 0.01 MLD Max – About 0.029 MLD	16	-
2	Drain flowing from Purnanagar village, Tal. Bhatkuli meets to purna river	Min – About 0.011 MLD Max – About 0.043 MLD	15	-
3	Drain flowing from Sawalapur village, Tal. Achalpur meets to purna river	Min – About 0.01 MLD Max – About 0.018 MLD	17.6	-
4	Drain flowing from Nirul Gangamai village, Tal. Bhatkuli meets to purna river	Min – About 0.01 MLD Max – About 0.012 MLD	12.4	-
5	Drain flowing from Wathoda Shukleshwar village, Tal. Bhatkuli to purna river	Min – About 0.02 MLD Max – About 0.049 MLD	78	-
6	Drain flowing from Darapur village, Tal. Daryapur to purna river	Min – About 0.009 MLD Max – About 0.014 MLD	90	-
7	Drain flowing from Kholapur village, Tal. Bhatkuli to purna river	Min – About 0.080 MLD Max – About 0.093 MLD	58	-

River Stretch: Tapi River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Weekly Bazaar Nalla coming from Bhusawal city	11.4	3 to 7.4	1.8 to 22
2	Aurunavati River	-	2.4 to 9	1.8 to 30

River Stretch:Urmodi River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Valse Nala	0.5 to 1.0 MLD	20 to 250	-
2	Nagthane Nala	0.2 to 0.5 MLD	20 to 200	8 to 120

River Stretch:Venna River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Ranmala, Karanje.Nala	4 to 5	20 to 310	6 to 170

River Stretch:Waghur River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Sakegaon Nallah	0.2	2.6 to 18	1.8 to 4

River Stretch:Wena River			Priority: III	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Hingnaghat town drain coming to Wena River near Railway Bridge.	1.3	3.2 to 10.2	13 to 94
2	Hingnaghat town drain coming to Wena River from Ghat.	-	4.2 to 13.2	17 to 110

River Stretch:Bindusar River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)

Drain	Domestic/ industrial/ mixed	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
1	Subhash Nagar Nala	0.2 to 0.5	2.8 to 8	2 to 4

River Stretch:Bori River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Amalner Nallah	Min: 3 MLD Max: 3.15 MLD	2 to 6	2 to 12

River Stretch:Chandrabhaga River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Gopalpur Nalla	2.0-3.0 MLD	4.8 to 9	7 to 350

River Stretch:Darna River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Ghoti village nalla	0.5	3 to 5.2	1.8 to 2
2	Bhagur Nalla	0.4	3 to 5.2	1.8 to 2
3	Sansari Nalla	0.5	2.6 to 7	1.8 to 2

River Stretch:Girna River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Jalgaon Nalla	Min: 46.5 MLD Max: 58 MLD	3 to 6	1.8 to 14
2	Kolha nalla coming from the Bhadga	Min: 0.3 MLD Max: 0.5 MLD	3 to 7	1.8 to 11

River Stretch:Hiwara River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Pachora Nallah	Min:3 MLD Max:3.2 MLD	3 to 8.4	2 to 12

River Stretch:Koyna River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Koyna river	-	2.0 – 11.0	8-550

River Stretch:Pehlar River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Waliv Nallah, Vasai East	0.12 MLD	2.6 – 7.0	2-110
2	Tungar Nallah, Sativali, Vasai (E)	0.2 MLD	26.6	-
3	Sopara Nallah	0.57 MLD	76	-

River Stretch:Sina River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Degaon Nalla (Odha)	50 to 60	3.8 to 8.5	8 to 195

River Stretch:Titur River			Priority: IV	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Chalishaon nallah	Min: 7.18 MLD Max: 7.21 MLD	6 to 8.6	2 to 4

River Stretch:Amba River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Pali	25	3 to 3.6	7 to 94

River Stretch:Bhatsa River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Khumber Nallah	2.4 to 6	2.4 to 6	
2	Nallah between Juhupada and Chiragpada		4	
3				

River Stretch:Gomai River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)

Drain	Domestic/ industrial/ mixed	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
1	River Goma	-	2.5 – 7.5	2-170

River Stretch:Kan River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	River Kan	-	2.6 – 7.0	2 to 18

River Stretch:Manjara River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Siddheshwar Nallah	0.1 to 0.3	3 to 7.5	2 to 4

River Stretch:Panchganga River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Lakshirth Nalla, Kolhapur	0.2	26	-
2	Jayanti Nalla, Kolhapur	65	19.8	-
3	Dudhali Nalla, at Dudhali, Kolhapur.	24	3.8	-
4	Jamdar Club Nalla	0.4	38	-
5	Siddharth Nagar Nalla	0.1	89	-
6	CPR hospital Nalla,	0.5	14	-
7	Rajhans Nalla	1	16	-
8	Dream World Nalla	1	10	-
9	Dream World Nalla	0.3	12	-
10	Line Bazar Nalla	3	28	-
11	Kasaba Bavada Nalla	0.2	21	-
12	Bapat Camp Nalla	0.5	132	-
13	Kala Odha Nalla	32	20	-
14	Chandur Nalla	7	240	-
15	Gandhinagar Nalla	1.115	-	-
16	Valiwade Nalla,	0.389	120	-
17	Tilawani/Rui Nalla	1.148	20	-
18	Kabnur Nalla (Including Chandur nalla)	7	-	-
19	Hupri Nalla	1.8	-	-
20	Shirdhon Nalla	0.9	-	-
21	Shirol Nall	1	-	-

River Stretch:Panzara River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	River Panzara	-	2.4 – 6.0	2-920

River Stretch:Rangavali River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Navapur city carries untreated domestic sewage to Rangavali river	-	2.6 to 6.4	2 to 10

River Stretch:Savitri River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Dadli Bridge Nallah	0.2 to 0.25	2 to 3	7 to 94

River Stretch:Surya River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	River Surya	-	2.6 – 5.0	2-220

River Stretch:Tansa River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Tansa River	-	2.8 – 6.0	5 to 49

River Stretch:Ulhas River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)

Drain	Domestic/ industrial/ mixed	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
1	Kulgaon Badlapur Municipal Council	13.3	3 to 4	4 to 22
2	Hendre Pada	2 to 3	3 to 4.5	4 to 110
3	CETP Outlet – Badlapur Nalla	7	3 to 4	2 to 22
4	Chikloli Morivali Effluent Treatment plant Nalla	0.25	-	-
5	CETP Outlet – ACMA	0.195	-	-
6	Hendre Pada Nalla)	2 to 3	-	-
7	Waldhuni River	21	-	-
8	Waldhuni River	64	-	-

River Stretch: Vaitarna River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	Vaitarna River	-	3 to 3.5	6.8 to 33

River Stretch: Vashisti River			Priority: V	
Drain	Type	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
	Domestic/ industrial/ mixed			
1	River Vashishti	-	2.0 – 3.6	4 to 49

Table 2: Gap Assessment in Sewage Treatment

Sr. No.	Name of the River Stretch	Priority	Cities/Towns	Type of Local Body	Sewage Generation (MLD)	Sewage Treatment (MLD)	Gap in Treatment (MLD)	Capacity of Proposed STP (MLD)	Timeline for completion of STPs	Remarks
1	Godavari	I	Tryambkaeshwar	Municipal Council	1.0	0.7	0.3	Not Proposed	NA	Gap in the Treatment is 2.0 MLD. Nashik and Nanded cities have almost 100% treatment capacity. Piathan MC has prposed STP of capacity 8 MLD.
2	Godavari	I	Nashik	Municipal Corporation	280.0	280	0.0	32	Mar-21	
3	Godavari	I	Paithan	Municipal Council	1.9	1.7	0.2	8	Apr-21	
4	Godavari	I	Gangakhed	Municipal Council	1.5	0	1.5	Not Proposed	NA	
5	Godavari	I	Nanded	Municipal Corporation	48.0	48	0.0	15	Mar-19	
6	Kalu	I	Kalyan-Dombivli	Municipal Corporation	216.0	122.5	93.50	87	2020	
7	Kundalika	I	Roha	Municipal Council	2.8	0	2.8	5	Jan.2020	Roha MC has stipulated the condition of provision of Septic tank & soak pit while granting the building permission. Rest water is discharged in to saline water zone of Kundalika
8	Mithi	I	Mumbai	Municipal Corporation	2671.0	1998	673.0	2484	2023,2024 & 2025	The stretch flows from heavily dense localities like Pawai, Saki Naka, Kurla, Mahim, BKC & Dharavi. MCGM has planned to install 08 Nos of STPs which will cover entire city of Mumbai
9	Morna	I	Akola Municipal Corporation	Municipal Corporation	45.0	0	45.0	37	Jun-20	02 STPs of Capacity 37 MLD are proposed. At present sewage generation is 35 MLD. 45 MLD is projected value for next ten years.
10	Mula	I	Pune Municipal Corporation	Municipal Corporation	744.0	477	267.0	416	2022	Gap in the treatment capacity is 267 MLD. PMC has proposed 11 STPs with capacity 396 MLD & Pune Cantonment Board has proposed one STP of capacity 20 MLD.
	Mutha	I								
	Mula-Mutha	II								
	Bhima	II								
11	Nira	I	Akluj	Gram Panchayat	1.3	0	1.3	Not Proposed	NA	Gap in the Treatment capacity is 6.3 MLD. 8 MLD STPs is proposed in Phaltan. MPC Board will provide financial & technical assistance to Akluj in next three years.
12	Nira	I	Phaltan Municipal Council	Municipal Council	5.0	0	5.0	8	Dec.2020	
13	Vel	I	Shikrapur	Gram Panchayat	2.0	0	2.0	Not Proposed	NA	Shikrapur is Grampanchayat & there is no proposal of STP. MPC Board will provide financial & technical assistance to small towns to install STPs
14	Pawana	II	Pimpri-Chinchwad	Municipal Corporation	312.0	292	20.0	62	March.2020	Gap in the Treatment capacity is 20 MLD. 05 Nos of STPs with Capacity 62 MLD are proposed in PCMC.
	Indrayani	II								

Table 2: Gap Assessment in Sewage Treatment

Sr. No.	Name of the River Stretch	Priority	Cities/Towns	Type of Local Body	Sewage Generation (MLD)	Sewage Treatment (MLD)	Gap in Treatment (MLD)	Capacity of Proposed STP (MLD)	Timeline for completion of STPs	Remarks
15	Indrayani	II	Alandi	Municipal Council	2.5	0	2.5	DPR prepared, completed by 2021	2021	Gap in the Treatment capacity is 22.5 MLD. 05 Nos of STPs with Capacity 62 MLD are proposed in PCMC. DPR is prepared for Alandi & will be completed by 2021.
16	Wainganga	II	Desaiganj	Municipal Council	3.2	0	3.2	Not Proposed	NA	There is no Treatment provided Three municipal councils have proposed STPs with capacity 33.5 MLD. DPR preparation for STP at Brahmapuri is under preparation. MPC Board will provide financial & technical assistance to Desaiganj in next three years.
17	Wainganga	II	Gadchiroli	Municipal Council	6.8	0	6.8	11.5	Dec.2020	
18	Wainganga	II	Brhmapuri	Municipal Council	2.5	Phytorid Treatment	2.5	DPR Preparation Under Progress	DPR Preparation Under Progress	
19	Wainganga	II	Bhandara	Municipal Council	5.5	0	5.5	15	proposal submitted for technical approval	
20	Wainganga	II	Pauni	Municipal Council	1.0	0	1.0	7	Mar-21	
21	Wardha	II	Chandrapur	Municipal Corporation	41.0	30	11.0	NA	--	Chandrapur has Sewage Treatment capacity of 70.5 MLD. But, inadequate drainage network. Ballarpur & Rajura have no STPs. Ballarpur has proposed one STP with capacity 16 MLD.MPC Board will provide financial & technical assistance to Rajuta in next three years.
22	Wardha	II	Ballarpur	Municipal Council	8.4	0	8.4	16	Jul.2019	
23	Wardha	II	Rajura	Municipal Council	2.1	0	2.1	Not Proposed	NA	There is discharge from villages Annapaur, Kathapur & Phakate.MPC Board will provide financial & technical assistance to villages in next three years.
24	Ghod	III	Shirur	Municipal Council	6.0	6	0.0	NA	NA	
25	Kanhan	III	Kamptee	Municipal Council	1.4	0	1.4	12.5	Technical Approval pending	submitted proposal for provision of sewage Treatment plant of capacity 12.50 MLD to MJP for Technical approval.
26	Kanhan	III	Kanhan Pipri	Municipal Council	8.0	0	8.0	8	Approval Pending	submitted proposal for provision of sewage Treatment plant of capacity 8.0 MLD estimating 32.42 Crs to the Govt of Maharashtra for further approval. Funding by Urban Development.
27	Kanhan		Mouda	Municipal Council	1.4	0	1.4	1	Mar-21	2 nos. of STP of capacity 0.5 MLD each is proposed at 2 locations, which will be expected to be completed by 2020.
28	Kolar	III	Chandkapur Village	Gram Panchayat	1.4	0	1.4	Not Proposed	NA	Chandkapur village,Chicholi village

Table 2: Gap Assessment in Sewage Treatment

Sr. No.	Name of the River Stretch	Priority	Cities/Towns	Type of Local Body	Sewage Generation (MLD)	Sewage Treatment (MLD)	Gap in Treatment (MLD)	Capacity of Proposed STP (MLD)	Timeline for completion of STPs	Remarks
29	Kolar	III	Chicholi Village	Gram Panchayat				Not Proposed	NA	Mahadula Village MPC Board will provide financial & technical assistance to in next three years.
30	Kolar	III	Mahadula Nagar Panchayat	Nagar Panchayat				Not Proposed	NA	
31	Krishna	III	Sangli Miraj Kupwad Municipal Corporation	Municipal Corporation	81.0	60	21.0	23	Completed	There are discharge from other villages.MPC Board will provide financial & technical assistance to villages in next three years to comply with waste management.
32	Krishna	III	Islampur Municipal Council	Municipal Council	9.0	0	9.0	Not Proposed	NA	
33	Krishna	III	Ashta Municipal Council	Municipal Council	1.5	0	1.5	Not Proposed	NA	
34	Krishna	III	Wai Municipal Council	Municipal Council	4.0	0	4.0	6	Technical sanction is pending	DPR forwarded to MJP Pune for technical sanctioning Work is in progress
35	Krishna	III	Satara Municipal Council	Municipal Council	12.8	0	12.8	17	Oct-19	
36	Mor	III	Marul	Gram Panchayat	0.5	0	0.5	Not Proposed	NA	MPC Board will provide financial & technical assistance to villages in next three years to comply with waste management.
37	Mor	III	Nhavi	Gram Panchayat				Not Proposed	NA	
38	Mor	III	Padalse	Gram Panchayat				Not Proposed	NA	
39	Patalganga	III	Khopoli Municipal Council	Municipal Council	5.76	0	5.76	DPR Preparation Under Progress	DPR Preparation Under Progress	DPR preparation under progress for STP at Khopoli.
	Patalganga	III	Khalapur Nagar Panchayat	Nagar Panchayat					Proposal for STP has been approved	
40	Pedhi	III	Amravati	Municipal Corporation	93.0	74.5	18.5	50.5	--	DPR preparation under progress for 05 STPs at Amravati
	Purna	III								
41	Penganga	III	Municipal Council, Mehkar, Dist Buldhana	Municipal Council	3.8	0	3.8	Not Proposed	NA	Govt. Approval awaited for DPR at STP, Umarkhed.MPC Board will provide financial & technical assistance to Mehkar in next three years to comply with waste management.
42	Penganga		Municipal Council, Umarkhed, Dist. Yavatmal	Municipal Council	3.0	0	3.0	9.6	Govt. Approval awaited for DPR	
43	Tapi	III	Bhusawal	Municipal Council	11.0	0.0	11.0	Pending Approval	Pending Approval	Gap in the treatment capacity is 11 MLD. At present no treatment facility at Bhusawal, proposal for closed drain system and STP is submitted to Government for approval.
44	Tapi	III	Shirpur	Municipal Council	5.0	5.0	0.0	NA	NA	
45	Urmodi	III	Valse	Gram Panchayat	0.4	0	0.4	Not Proposed	NA	MPC Board will provide financial & technical assistance to villages in next

Table 2: Gap Assessment in Sewage Treatment

Sr. No.	Name of the River Stretch	Priority	Cities/Towns	Type of Local Body	Sewage Generation (MLD)	Sewage Treatment (MLD)	Gap in Treatment (MLD)	Capacity of Proposed STP (MLD)	Timeline for completion of STPs	Remarks
46	Urmodi	III	Nagthane	Gram Panchayat				Not Proposed	NA	three years to comply with waste management.
47	Waghur	III	Pahur, Dist. Jalgaon	Gram Panchayat	0.5	0	0.5	Not Proposed	NA	MPC Board will provide financial & technical assistance to villages in next three years to comply with waste management.
48	Waghur	III	Neri, Dist. Jalgaon	Gram Panchayat				Not Proposed	NA	
49	Waghur	III	Sakegaon, Dist. Jalgaon	Gram Panchayat				Not Proposed	NA	
50	Wena	III	Hinganghat	Municipal Council	6.3	0	6.3	13.0	Mar-20	No Treatment Facility. 02 STPs are proposed with capacity of 13.5
51	Bindusar	IV	Beed	Municipal Council	22.0	0	22.0	35	Apr-21	No Treatment Facility. 01 STP is proposed with capacity of 35 MLD
52	Bori	IV	Amalner	Municipal Council	3.1	0	3.1	12.6	2021	Work order for 12.6 MLD Capacity STP is issued in Sept.2016
53	Chandrabhaga	IV	Pandharpur	Municipal Council	18.5	15.5	3.0	3.5	--	Namame Chandrabhaga on the line of Namame Ganga announced by Govt. of Maharashtra
54	Darna	IV	Ghoti Village	Gram Panchayat	0.9	0	0.9	Not Proposed	NA	Nashik Municipal Corporation has provided 02 STPs at Chehedi of Capacity 20 & 22 MLD & treated effluent is disposed in Darna River.MPC Board will provide financial & technical assistance to small towns in next three years to comply with waste management.
55	Darna	IV	Bhagur Municipal Council	Municipal Council	0.7	0	0.7	Not Proposed	NA	
56	Darna	IV	Sansari Village	Gram Panchayat	4.2	0	4.2	Not Proposed	NA	
57	Girnna	IV	Jalgaon	Municipal Corporation	48.0	0	48.0	Not Proposed	NA	Board has issued directions to the corporations for compliance of waste management to jalgaon MC
58	Girnna	IV	Bhadgaon	Municipal Council	2.0	0	2.0	Not Proposed	NA	
59	Hiwara	IV	Pachora	Municipal Council	3.0	0	3.0	9	Jul-19	One STP with capacity of 9 MLD is proposed
60	Koyana	IV	Malkapur	Municipal Council	6.1	6.14	0.0	NA	NA	No gap in Treatment
61	Koyana	IV	Karad	Municipal Council	8.5	8.5	0.0	NA	NA	
62	Pelhar	IV	Vasai Virar	Municipal Corporation	105.0	30	75.0	175.02	--	07 STPs with capacity 175 MLD have been proposed
63	Sina	IV	Solapur	Municipal Corporation	90.0	65	25.0	103	Mar-21	3 STPs provided with treatment capacity of 75 MLD, 12.5 MLD and 15 MLD respectively.
64	Titur	IV	Chalisgaon	Municipal Council	7.0	0	7.0	19	Proposal submitted to Government	Proposal submitted to Government for 02 STPs of Capacity 19 MLD

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Sr. No.	Name of the River Stretch	Priority	Cities/Towns	Type of Local Body	Sewage Generation (MLD)	Sewage Treatment (MLD)	Gap in Treatment (MLD)	Capacity of Proposed STP (MLD)	Timeline for completion of STPs	Remarks
65	Amba	V	Pali Village	Gram Panchayat	1.0	0	1.0	Not Proposed	NA	MPC Board will provide financial & technical assistance to villages in next three years to comply with waste management.
66	Bhatsa River	V	Shahapur Nagar anchayat	Nagar Panchayat	2.5	0	2.5	Not Proposed	NA	MPC Board will provide financial & technical assistance to villages in next three years to comply with waste management.
67	Bhatsa River		Vashind Village	Gram Panchayat				Not Proposed	NA	
68	Gomai	V	Shahada	Municipal Council	2.0	0	2.0	Not Proposed	NA	No treatment facility. Will be get done in next three years.
69	Kan	V	Sakri	Nagar Panchayat	0.8	0	0.8	Not Proposed	NA	MPC Board will provide financial & technical assistance to small town in next three years to comply with waste management.
70	Manjara	V	Latur Municipal Corporation	Municipal Corporation	30.0	0	30.0	72	Apr-21	02 Nos of STPs with Capacity 72 MLD have been proposed
71	Panchganga	V	Kolhapur	Municipal Corporation	96.0	72	24.0	93	Mar-20	Kolhapur & Ichalkaranji MCs have proposed 03 STPs with capacity 28 MLD
72	Panchganga	V	Ichalkaranji	Municipal Council	38.0	14	24.0	20	Dec-19	
73	Panchganga	V	Other villages	Gram Panchayat	23.0	0	23.0	Not Proposed	NA	
74	Panzara	V	Dhule	Municipal corporation	36.0	0	36.0	63	DPR submitted	DPR submitted to Government for 02 STPs with capacity of 63 MLD
75	Rangavali	V	Navapur	Municipal Council	2.0	0	2.0	Not Proposed	NA	No treatment facility. Will be get done in next three years.
76	Savitri	V	Mahad	Municipal Council	3.2	0	3.2	Not Proposed	NA	No treatment facility. Will be get done in next three years.
77	Surya	V	09 Villages	Gram Panchayat	--	--	NA	Not Proposed	NA	Will be complied in next three years
78	Tansa River	V	08 Villages	Gram Panchayat	--	--	NA	Not Proposed	NA	Will be complied in next three years
79	Ulhas	V	Ulhasnagar	Municipal Corporation	64.0	0	64.0	74.98	Dec-19	Gap in treatment capacity is 64 MLD. Ulhasnagar MC has proposed 04 STPS with capacity of 74 MLD.
80	Ulhas	V	Ambarnath Municipal Council	Municipal Council	28.0	22	6.0	Not Proposed	NA	
81	Ulhas	V	Kulgaon Badalapur	Municipal Council	26.0	20	6.0	22	2021	
82	Vaitarana	V	Sarsi Village	Gram Panchayat	0.2	0	0.2	Not Proposed	NA	MPC Board will provide financial & technical assistance to villages in next three years to comply with waste management.
83	Vaitarana	V	Gandhre Village	Gram Panchayat				Not Proposed	NA	
84	Vaitarana	V	Pimproli Village	Gram Panchayat				Not Proposed	NA	
85	Vaitarana	V	Koyna Village	Gram Panchayat				Not Proposed	NA	
86	Vashishthi	V	Kherdi Village	Gram Panchayat	0.2	0	0.2	Not Proposed	NA	MPC Board will provide financial & technical assistance to villages in next three years to comply with waste management.
87	Vashishthi	V	Dalvatne Village	Gram Panchayat				Not Proposed	NA	
88	Vashishthi	V	Gane Village	Gram Panchayat				Not Proposed	NA	
89	Vashishthi	V	Khadpoli	Gram Panchayat				Not Proposed	NA	

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Sr. No.	Name of the River Stretch	Priority	Cities/Towns	Type of Local Body	Sewage Generation (MLD)	Sewage Treatment (MLD)	Gap in Treatment (MLD)	Capacity of Proposed STP (MLD)	Timeline for completion of STPs	Remarks
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ULB	Numbers	Sewage Generation	Sewage Treatment	Gap in Treatment	Capacity of Proposed STP	No. of ULBs yet not Proposed STP	No. of ULBs Time Line Provided for STP completion	No. of ULBs yet not provided Time line (DPR/Approval Stage)	No. of ULBs having adequate treatment capacity
Municipal Corporation	17	5001.0	3570	1431.0	3786.5	1	10	3	2
Municipal Council	42	292.3	99	193.3	258	13	15	10	4
Nagar Panchayat	3	3.3	0	3.3	0	3			
Gram Panchayat	27	35.4	0	35.4	0	27			