

**ACTION PLAN FOR CONTROL OF AIR POLLUTION  
FOR  
NON – ATTAINMENT CITY OF GUJARAT (VADODARA)**

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020					
Vehicles	Launch extensive drive against polluting vehicles for ensuring strict compliance	On going	RTO, CoT, Traffic police	Continuous Process	From regular budget of the concerned department	<p>Below is the details provided by the concern agency in the last 10 years:</p> <p>Number of total vehicles : 1117875</p> <p>(1) Vehicles running on CNG : 25515</p> <p>(2) Vehicles running on Battery : 373</p> <p>(3) Vehicles running on Petrol : 1002697</p> <p>(4) Vehicles running on Diesel : 84501</p> <p>(5) Vehicles running on Other fuel, if any : 4789</p> <ul style="list-style-type: none"> <li>• Re-registration of non-transport vehicle is done after 15 years from the date of registration, if motor vehicle is fit for road worthiness.</li> <li>• Renewal of certificate of fitness in respect of transport vehicles: 2 years for vehicles upto 8 years old and 1 year for vehicles older than 8 years, if the motor vehicles is fit for road worthiness.</li> <li>• Number of cases 12,567 and Fine levied is Rs. 31,47,900 without PUC certificate in 2019 by the traffic police.</li> </ul>					
	Prevent parking of vehicles in the non-designated areas	Long	Traffic police, VMC	Continuous Process	As per VMC budget	<p>VMC has prepared a draft of parking policy in April-2019, which is under process of approval in their General Body.</p> <p>Existing pay and parking location with its capacity is as under</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Location</th> <th>Capacity</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sr. No.	Location	Capacity		
Sr. No.	Location	Capacity									

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																		
	Development of Multi-layer parking				Appx. Rs. 7.14 crores	<table border="1"> <tr> <td>1.</td> <td>Khandrav market</td> <td>Two-Wheeler-180</td> </tr> <tr> <td>2.</td> <td>Near railway station</td> <td>Four-wheeler-8 to 10</td> </tr> <tr> <td>3.</td> <td>Near Heerakbag, railway station</td> <td>Two-Wheeler-350</td> </tr> <tr> <td>4.</td> <td>MangalBajar opposite Khajuri masjid</td> <td>Two-Wheeler-300</td> </tr> <tr> <td>5.</td> <td>Padmavati Basement</td> <td>Two-Wheeler-500</td> </tr> <tr> <td>6.</td> <td>Zulelaal Temple to Manoranjan Hotel</td> <td>Two-Wheeler-450</td> </tr> </table> <p>Multi-layer parking is proposed near Bank of Baroda, RC dutt road with capacity of 61 four wheeler and 78 two-wheeler.</p> <p>Towing cranes are being operated continuously to lift and levy penalty for parking at unauthorized places.</p> <p>Towing crane cases in 2019 are 15,217 and fine levied is Rs. 43,48,800 rupees. Towing cranes provided by VMC.</p>	1.	Khandrav market	Two-Wheeler-180	2.	Near railway station	Four-wheeler-8 to 10	3.	Near Heerakbag, railway station	Two-Wheeler-350	4.	MangalBajar opposite Khajuri masjid	Two-Wheeler-300	5.	Padmavati Basement	Two-Wheeler-500	6.	Zulelaal Temple to Manoranjan Hotel	Two-Wheeler-450
1.	Khandrav market	Two-Wheeler-180																						
2.	Near railway station	Four-wheeler-8 to 10																						
3.	Near Heerakbag, railway station	Two-Wheeler-350																						
4.	MangalBajar opposite Khajuri masjid	Two-Wheeler-300																						
5.	Padmavati Basement	Two-Wheeler-500																						
6.	Zulelaal Temple to Manoranjan Hotel	Two-Wheeler-450																						
	Enhance parking fee by 3 – 4 times	Mid	VMC	2 Years	----	As covered in Draft Parking Policy of VMC																		
	Prepare action plan to check fuel adulteration and random monitoring of fuel quality data	On going	RTO, Civil Supply	Continuous Process	----	<p>Since the civil supply department is now not issuing any licenses, they are not inspecting or carrying out drive regarding fuel adulteration, except in case of complaint.</p> <p>Further, alteration of vehicles from petrol to diesel is not allowed by RTO.</p>																		

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																					
	Prepare plan for widening of road and improvement of infrastructure for decongestion of road	Long	VMC	3 Years	Swarnim Jayanti Mukhyamantri shaheri vikas yojana , 14 <sup>th</sup> Finance board & smart city  Bridge Projects financial allocation is : A+B+C+D= Rs. <b>672.1 Crores</b> (details of A, B,C, and D is given bellow)  Proposed work (A) : Rs. 319 Crores	<p><b>Bridge Projects :</b></p> <p>In Vadodara city traffic survey is conducted by Central Government organization of CRRI and widening of existing bridges and new bridges are done as per their recommendation. Some of which have been completed, some are in progress and another seven new such works are proposed. For improving traffic flow following actions taken / planned.</p> <p><b>(A) Proposed work :</b></p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Name of work</th> <th>Estimated Amount (Rs. In. Cr.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Construction of New Fly over bridge on Manek park junction</td> <td>49</td> </tr> <tr> <td>2</td> <td>Construction of New Fly over bridge on Vrundavan junction</td> <td>49</td> </tr> <tr> <td>3</td> <td>Construction of New Fly over bridge on Khodiyaar Nagar junction</td> <td>49</td> </tr> <tr> <td>4</td> <td>Construction of New Fly over bridge on Sardar Estate junction</td> <td>42</td> </tr> <tr> <td>5</td> <td>Construction of New Fly over bridge on Sangam crossing junction</td> <td>42</td> </tr> <tr> <td>6</td> <td>Construction of New Fly over bridge on Vasana road crossing</td> <td>43</td> </tr> </tbody> </table>	Sr. No	Name of work	Estimated Amount (Rs. In. Cr.)	1	Construction of New Fly over bridge on Manek park junction	49	2	Construction of New Fly over bridge on Vrundavan junction	49	3	Construction of New Fly over bridge on Khodiyaar Nagar junction	49	4	Construction of New Fly over bridge on Sardar Estate junction	42	5	Construction of New Fly over bridge on Sangam crossing junction	42	6	Construction of New Fly over bridge on Vasana road crossing	43
Sr. No	Name of work	Estimated Amount (Rs. In. Cr.)																									
1	Construction of New Fly over bridge on Manek park junction	49																									
2	Construction of New Fly over bridge on Vrundavan junction	49																									
3	Construction of New Fly over bridge on Khodiyaar Nagar junction	49																									
4	Construction of New Fly over bridge on Sardar Estate junction	42																									
5	Construction of New Fly over bridge on Sangam crossing junction	42																									
6	Construction of New Fly over bridge on Vasana road crossing	43																									

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																					
					On going work (B) : Rs. 222.18 Crores + Rs. 40.99 Crores (tender under approval)	<table border="1"> <tr> <td></td> <td>Near petrol pump</td> <td></td> </tr> <tr> <td>7</td> <td>Construction of New Fly over bridge Near Sama Pond</td> <td>45</td> </tr> </table> <p><b>(B) On Going Work :</b></p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Name of work</th> <th>Tender amount (Rs. In Cr.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Genda circle to Manisha chowkadi Fly over Bridge</td> <td>222.18</td> </tr> <tr> <td>2</td> <td>Construction of railway over Bridge from ManjalpurDarbarchokadi to Atladara on Ahmedabad - Mumbai BG Railway line at Vadodara</td> <td>40.99 (Tender under approval)</td> </tr> </tbody> </table> <p><b>(C) Completed work:</b></p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Name of work</th> <th>Cost of work (Rs. In cr.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Sama - Harani river over Bridge</td> <td>13.8</td> </tr> </tbody> </table>		Near petrol pump		7	Construction of New Fly over bridge Near Sama Pond	45	Sr. No.	Name of work	Tender amount (Rs. In Cr.)	1	Genda circle to Manisha chowkadi Fly over Bridge	222.18	2	Construction of railway over Bridge from ManjalpurDarbarchokadi to Atladara on Ahmedabad - Mumbai BG Railway line at Vadodara	40.99 (Tender under approval)	Sr. No	Name of work	Cost of work (Rs. In cr.)	1	Sama - Harani river over Bridge	13.8
	Near petrol pump																										
7	Construction of New Fly over bridge Near Sama Pond	45																									
Sr. No.	Name of work	Tender amount (Rs. In Cr.)																									
1	Genda circle to Manisha chowkadi Fly over Bridge	222.18																									
2	Construction of railway over Bridge from ManjalpurDarbarchokadi to Atladara on Ahmedabad - Mumbai BG Railway line at Vadodara	40.99 (Tender under approval)																									
Sr. No	Name of work	Cost of work (Rs. In cr.)																									
1	Sama - Harani river over Bridge	13.8																									
					Completed work ( C ) : Rs. 13.8 Crores																						

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																								
					<p>Completed Widening work (D) : Rs. 76.13 Crores</p> <p>Road Projects financial allocation is : A+B+C= Rs. <b>195.89</b> Crores (details of A, B, and C is given bellow)</p> <p>Proposed work (A) : Rs. 66.5 Crores</p>	<p><b>(D) Completed Widening work :</b></p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Name of work</th> <th>Cost of work (Rs. In cr.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Vadsar Landfill River Bridge widening</td> <td>13.13</td> </tr> <tr> <td>2</td> <td>Shastri Bridge ROB near polytechnic</td> <td>31</td> </tr> <tr> <td>3</td> <td>Vishvamitry Bridge ROB near railway station</td> <td>32</td> </tr> </tbody> </table> <p><b>Road Projects :</b></p> <p>Details of the proposed projects, on-going projects and completed project work are mentioned as under.</p> <p><b>(A) Proposed work :</b></p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Name of work</th> <th>Estimated amount (Rs. In. Cr.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Road From Manisha Crossing To Vasana old Municipal Limit</td> <td>15.00</td> </tr> <tr> <td>2</td> <td>Road From Genda circle to old Municipal Limit Gorwa.</td> <td>35.00</td> </tr> <tr> <td>3</td> <td>Harni Road from Motibhai Patel circle (Harnitalav) to Golden chokdi</td> <td>16.50</td> </tr> </tbody> </table>	Sr. No	Name of work	Cost of work (Rs. In cr.)	1	Vadsar Landfill River Bridge widening	13.13	2	Shastri Bridge ROB near polytechnic	31	3	Vishvamitry Bridge ROB near railway station	32	Sr. No.	Name of work	Estimated amount (Rs. In. Cr.)	1	Road From Manisha Crossing To Vasana old Municipal Limit	15.00	2	Road From Genda circle to old Municipal Limit Gorwa.	35.00	3	Harni Road from Motibhai Patel circle (Harnitalav) to Golden chokdi	16.50
Sr. No	Name of work	Cost of work (Rs. In cr.)																												
1	Vadsar Landfill River Bridge widening	13.13																												
2	Shastri Bridge ROB near polytechnic	31																												
3	Vishvamitry Bridge ROB near railway station	32																												
Sr. No.	Name of work	Estimated amount (Rs. In. Cr.)																												
1	Road From Manisha Crossing To Vasana old Municipal Limit	15.00																												
2	Road From Genda circle to old Municipal Limit Gorwa.	35.00																												
3	Harni Road from Motibhai Patel circle (Harnitalav) to Golden chokdi	16.50																												

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																													
					Ongoing work (B) : Rs. 113.85 Crores	<p><b>(B) Ongoing works:</b></p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Name of work</th> <th>Tender amount (Rs. In Cr.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Airport circle to saradar estate char rasta road widening</td> <td>11.35</td> </tr> <tr> <td>2</td> <td>Sardar estate char rasta to Gurukul char rasta road widening</td> <td>5.28</td> </tr> <tr> <td>3</td> <td>R C Dutt Road</td> <td rowspan="2">21.2</td> </tr> <tr> <td>4</td> <td>Road From Havmore Circle to AkotaDandiya Bazar Bridge</td> </tr> <tr> <td>5</td> <td>BPC Road</td> <td rowspan="2">32.69</td> </tr> <tr> <td>6</td> <td>Road From Amit nagarcircle toDumad crossing.</td> </tr> <tr> <td>7</td> <td>Road From Vrundavan char rasta to waghodiya by pass</td> <td rowspan="2">37.52</td> </tr> <tr> <td>8</td> <td>Road From Sardar estate char rasta to ajwa bypass</td> </tr> <tr> <td>9</td> <td>Road From Soma Talav to Kapurai bypass up to municipal limit</td> <td rowspan="2">5.81</td> </tr> <tr> <td>10</td> <td>Sama canal parallel main road (O.G. Area – South Side)</td> </tr> </tbody> </table>	Sr. No.	Name of work	Tender amount (Rs. In Cr.)	1	Airport circle to saradar estate char rasta road widening	11.35	2	Sardar estate char rasta to Gurukul char rasta road widening	5.28	3	R C Dutt Road	21.2	4	Road From Havmore Circle to AkotaDandiya Bazar Bridge	5	BPC Road	32.69	6	Road From Amit nagarcircle toDumad crossing.	7	Road From Vrundavan char rasta to waghodiya by pass	37.52	8	Road From Sardar estate char rasta to ajwa bypass	9	Road From Soma Talav to Kapurai bypass up to municipal limit	5.81	10	Sama canal parallel main road (O.G. Area – South Side)
Sr. No.	Name of work	Tender amount (Rs. In Cr.)																																	
1	Airport circle to saradar estate char rasta road widening	11.35																																	
2	Sardar estate char rasta to Gurukul char rasta road widening	5.28																																	
3	R C Dutt Road	21.2																																	
4	Road From Havmore Circle to AkotaDandiya Bazar Bridge																																		
5	BPC Road	32.69																																	
6	Road From Amit nagarcircle toDumad crossing.																																		
7	Road From Vrundavan char rasta to waghodiya by pass	37.52																																	
8	Road From Sardar estate char rasta to ajwa bypass																																		
9	Road From Soma Talav to Kapurai bypass up to municipal limit	5.81																																	
10	Sama canal parallel main road (O.G. Area – South Side)																																		
					Completed																														

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020									
					works with widening (C) : Rs. 15.54 Crores	<p><b>(C ) Completed works with widening:</b></p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Name of work</th> <th>Cost of work (Rs. In cr.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Vadasar bridge to sushen circle road widening</td> <td>8.44</td> </tr> <tr> <td>2</td> <td>Tarasali vegetable market to sushen circle road widening</td> <td>7.10</td> </tr> </tbody> </table>	Sr. No.	Name of work	Cost of work (Rs. In cr.)	1	Vadasar bridge to sushen circle road widening	8.44	2	Tarasali vegetable market to sushen circle road widening	7.10
Sr. No.	Name of work	Cost of work (Rs. In cr.)													
1	Vadasar bridge to sushen circle road widening	8.44													
2	Tarasali vegetable market to sushen circle road widening	7.10													
	Deploy traffic police for smooth traffic flow at identified vulnerable areas	Short	Traffic Police, VMC	1 Year	----	Presently, traffic police is already provided at the major junction points.									
	Prepare plan for construction of expressways/bypasses to avoid congestion due to non-destined vehicles	Long	VMC	3 Years		By-pass road to Vadodara is already provided. 70 m wide Sevasi – Ataladara by-pass road is proposed.									
	Steps for promoting & operating battery operated vehicles	Long	RTO	3 Years	----	Below is the details provided by the concern agency in the year 2016, details of Vehicles running on Battery: 173. There is no increase in number of battery operated vehicles.									
	Synchronize traffic movements/introduce intelligent traffic systems for lane-driving	Mid	VMC, Traffic police,	2 Years	Rs. 35 lakh Funding sought from MoEF&CC	<ul style="list-style-type: none"> <li>Total numbers of traffic signal in Vadodara city are 45, out of which 41 are with timer.</li> <li>There are 04 traffic signals without timer.</li> <li>There are 28 points without traffic signal.</li> </ul>									

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																		
					under NCAP	<ul style="list-style-type: none"> <li>32 traffic signals are operational on cross roads. Reported to VMC by Traffic Branch for installing signals at points where presently there is no traffic signal.</li> </ul>																		
	Installation of remote sensor based PUC system	Long	RTO	3 Years	No plan submitted	Total PUC stations are 64 Petrol : 40 Diesel: 24 All 64 PUC stations are connected with NIC software.																		
	CNG stations for private vehicles and auto-rickshaws	Short	Vadodara Gas Limited, VMC, Adani Gas Limited,	1 Year	Rs. 50.93 Crores by VGL	06 (AGL) + 18 (VGL) CNG stations are in operation AGL : 02 Online Station, 04 Daughter Stations (Maintaining Status quo) <ul style="list-style-type: none"> <li>Expansion proposal is pending with VMSS since 27/11/2014.</li> </ul> VGL: 02 Online station, 03 Mother Stations, 13 Daughter Booster Stations.  It is proposed to establish another 11 CNG stations during the year 2020-2021.  Details of Proposed 11 CNG station <table border="1" data-bbox="1406 1129 2128 1390"> <thead> <tr> <th>Sr. No.</th> <th>Location</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Alamgir</td> <td>DBS</td> </tr> <tr> <td>2.</td> <td>Jarod</td> <td>DBS</td> </tr> <tr> <td>3.</td> <td>Gajrawadi</td> <td>Mother Station</td> </tr> <tr> <td>4.</td> <td>Karjan</td> <td>DBS</td> </tr> <tr> <td>5.</td> <td>Vadu</td> <td>DBS</td> </tr> </tbody> </table>	Sr. No.	Location	Type	1.	Alamgir	DBS	2.	Jarod	DBS	3.	Gajrawadi	Mother Station	4.	Karjan	DBS	5.	Vadu	DBS
Sr. No.	Location	Type																						
1.	Alamgir	DBS																						
2.	Jarod	DBS																						
3.	Gajrawadi	Mother Station																						
4.	Karjan	DBS																						
5.	Vadu	DBS																						

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020		
						6.	Vega	DBS
						7.	Mahuvad	DBS
						8.	Vasna - Bhayali Road	DBS
						9.	Desar	DBS
						10.	ChhotaUdepur	DBS
						11.	Muval	DBS
						Existing CNG Station details:		
						<b>Sr. No.</b>	<b>Location</b>	<b>Type</b>
						1.	Subhanpura, Racecourse, Vadodara -	Mother Station
						2.	Near GSFC, Dashrath Village, Vadodara -	Mother Station
						3.	Nizampura, Vadodara	Mother Station
						4.	Near Bhailal Amin Hospital, , Gorwa	Online Station
						5.	Harinagar Char Rasta, Gotri Road, Vadodara	DBS
						6.	Dumad Savli Highway, Vadodara	DBS
						7.	Lal Guru Farm, Raypura Road, Bhaili, Vadodara	DBS
						8.	State Highway No.11, Village Kelanpur, Vadodara	DBS
						9.	At & Po Bhilapur State Highway No.11, Vadodara	DBS

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																								
						<table border="1"> <tr> <td>10.</td> <td>AT. Duttapura, PO. Limda, Waghodia,</td> <td>DBS</td> </tr> <tr> <td>11.</td> <td>Near KalaliFatak, Atladra Road, Vadodara</td> <td>DBS</td> </tr> <tr> <td>12.</td> <td>Opp. Apsara Cinema, Pratapnagar, Vadodara</td> <td>DBS</td> </tr> <tr> <td>13.</td> <td>DabhoiWaghodia Ring Road, Soma Talao</td> <td>Online Station</td> </tr> <tr> <td>14.</td> <td>SamaJunaJakatnaka, SamaSavli Road, Vadodara</td> <td>DBS</td> </tr> <tr> <td>15.</td> <td>Near Health Unit, Padra, Vadodara</td> <td>DBS</td> </tr> <tr> <td>16.</td> <td>Pioneer Medical Campus, Ajwa - Nimeta Road, Sayajipura, Vaadodara</td> <td>DBS</td> </tr> <tr> <td>17.</td> <td>Nr. ChandanTheater, Opp.Arihant Farm, Bhimpura</td> <td>DBS</td> </tr> </table>	10.	AT. Duttapura, PO. Limda, Waghodia,	DBS	11.	Near KalaliFatak, Atladra Road, Vadodara	DBS	12.	Opp. Apsara Cinema, Pratapnagar, Vadodara	DBS	13.	DabhoiWaghodia Ring Road, Soma Talao	Online Station	14.	SamaJunaJakatnaka, SamaSavli Road, Vadodara	DBS	15.	Near Health Unit, Padra, Vadodara	DBS	16.	Pioneer Medical Campus, Ajwa - Nimeta Road, Sayajipura, Vaadodara	DBS	17.	Nr. ChandanTheater, Opp.Arihant Farm, Bhimpura	DBS
10.	AT. Duttapura, PO. Limda, Waghodia,	DBS																												
11.	Near KalaliFatak, Atladra Road, Vadodara	DBS																												
12.	Opp. Apsara Cinema, Pratapnagar, Vadodara	DBS																												
13.	DabhoiWaghodia Ring Road, Soma Talao	Online Station																												
14.	SamaJunaJakatnaka, SamaSavli Road, Vadodara	DBS																												
15.	Near Health Unit, Padra, Vadodara	DBS																												
16.	Pioneer Medical Campus, Ajwa - Nimeta Road, Sayajipura, Vaadodara	DBS																												
17.	Nr. ChandanTheater, Opp.Arihant Farm, Bhimpura	DBS																												
	CNG stations for GSRTC & Vinayak Logistic.	Long	Adani Gas Limited, Vadodara Gas Limited, GSRTC, VMC	3 Years	----	There are 3 dedicated CNG stations for GSRTC buses & City Vinayak Bus Service at Race course, Dashrath and Nizampura provided by VGL and presently meeting with the requirements. However, there are no buses of Vadodara GSRTC division plying on CNG. AGL to maintain status quo.																								
	Entire fleet of buses run by City Vinayak Logistic on	Short	VMC, City Vinayak	1 Year	----	Existing fleet details are as under: <ul style="list-style-type: none"> <li>• Diesel operated A.C. buses : 20</li> </ul>																								

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020
	CNG mode					<ul style="list-style-type: none"> <li>• CNG operated buses : 125</li> <li>• CNG operated buses under CM grant : 20</li> </ul> Thus, total 145 buses are plying on CNG and consuming around 1,00,000 Kg of CNG/Month.
	Increase bus services by augmenting contract buses and increasing frequency of service.	Short	VMC, City Vinayak	1 Year	----	Presently entire VMC area is covered through this bus service – City Vinayak operated on contract basis. Contract is for ten years since year 2017. Work related to extending the services to the Seven villages recently incorporated in VMC limit is going on.
	Entire fleet on Ahmedabad-Vadodara route on CNG mode and buses being operated by Vadodara division shall be converted to CNG mode in phase manner.	Mid	GSRTC	2 Years	Rs. 40 Crores for Electric Buses & Rs. 28 Crores for BS VI compliant diesel buses	Presently, no diesel buses plying on road are more than 10 years old.  Fleet operating – passes from Vadodara (Central Bus Station, Kirtistambh and Bhutadizampa) are 1479 * 2 trips. Vadodara depot has 68 buses whereas Vadodara Division has 383 buses. There are no buses operating on CNG. Divisional Controller vide their email dt. 29/07/2020 that purchasing of CNG chasis/vehicle is policy matter and will convey it to their higher management. However, it has been informed that GSRTC is in process of allocating: <ul style="list-style-type: none"> <li>• 100 BS VI compliant diesel buses are going on and expected within 1 year.</li> <li>• 20 electric buses (9 m &amp; 12 m long) are going on and expected within 2 years.</li> </ul>
	Expanding network of city bus	Short	VMC, City Vinayak	1 Year	----	Presently 165 buses are covering the VMC area through 1800 fleet (900 * 2).
	To promote public					Work related to extending the services to the Seven villages

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																																		
	transportation system, parking charges may be made costlier					recently incorporated in VMC limit is going on.																																		
	Bypassing of traffic in peak hours at major traffic intersections, near railway station and interstate bus terminals	Short	VMC, RTO, Traffic Police	1 Year		<p>Traffic monitoring and Public alert system should be developed to avoid traffic jam.</p> <p>At present 16 places are identified by VMC as high traffic spot</p> <table border="1"> <thead> <tr> <th>Sr.No.</th> <th>Location</th> </tr> </thead> <tbody> <tr><td>1.</td><td>Harinagar cross road</td></tr> <tr><td>2.</td><td>Fatehganj cross road</td></tr> <tr><td>3.</td><td>IPCL circle</td></tr> <tr><td>4.</td><td>Genda Circle cross road</td></tr> <tr><td>5.</td><td>Ambedkar Circle cross road</td></tr> <tr><td>6.</td><td>Chakali circle cross road</td></tr> <tr><td>7.</td><td>Malhar point cross road</td></tr> <tr><td>8.</td><td>Havemore cross road</td></tr> <tr><td>9.</td><td>Manisha cross road</td></tr> <tr><td>10.</td><td>Sushen Circle</td></tr> <tr><td>11.</td><td>Aksharchok</td></tr> <tr><td>12.</td><td>Tarsali Vegetable market</td></tr> <tr><td>13.</td><td>Sangam cross road</td></tr> <tr><td>14.</td><td>AkotadandiyaBajar cross road</td></tr> <tr><td>15.</td><td>Vrundavan Cross road</td></tr> <tr><td>16.</td><td>Kaladhoda circle</td></tr> </tbody> </table>	Sr.No.	Location	1.	Harinagar cross road	2.	Fatehganj cross road	3.	IPCL circle	4.	Genda Circle cross road	5.	Ambedkar Circle cross road	6.	Chakali circle cross road	7.	Malhar point cross road	8.	Havemore cross road	9.	Manisha cross road	10.	Sushen Circle	11.	Aksharchok	12.	Tarsali Vegetable market	13.	Sangam cross road	14.	AkotadandiyaBajar cross road	15.	Vrundavan Cross road	16.	Kaladhoda circle
Sr.No.	Location																																							
1.	Harinagar cross road																																							
2.	Fatehganj cross road																																							
3.	IPCL circle																																							
4.	Genda Circle cross road																																							
5.	Ambedkar Circle cross road																																							
6.	Chakali circle cross road																																							
7.	Malhar point cross road																																							
8.	Havemore cross road																																							
9.	Manisha cross road																																							
10.	Sushen Circle																																							
11.	Aksharchok																																							
12.	Tarsali Vegetable market																																							
13.	Sangam cross road																																							
14.	AkotadandiyaBajar cross road																																							
15.	Vrundavan Cross road																																							
16.	Kaladhoda circle																																							
	Ban on supply of loose 2-T oils at petrol pumps and	Short	Civil Supply, Oil	1 Year	----																																			

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020
	outside		Companies			
	Introduction of pre-fuel oil and expansion of pre-mixed outlets.	Long	Civil Supply, Oil Companies	3 Years	----	
	Introduction of Bharat VI compliant fuel	Short	Oil Companies	Less than 1 Year	----	IOC has already provided infrastructure facilities for producing Bharat VI compliant fuel and has already started supplying since 01/04/2020.
	Ensuring Ethanol blended fuel as per the State Policy	On going	Civil Supply, Oil Companies	----	----	Blending of 10% ethanol is started.
<b>Re-suspension of road dust and other fugitive emissions control</b>	Prepare plan for creation of green buffers and paving along the traffic corridors	Mid	VMC	Continuous Process	Rs. 35 lakhs Fund sought from MoEF&CC under NCAP.	Presently, regular routine maintenance work is being carried out.
	Maintain potholes free roads for free-flow of traffic	Short	VMC, Transport Dept.	Continuous Process		
	Introduce water fountains at major traffic intersection, wherever feasible	Long	VMC	Continuous Process		
	Greening of open areas, gardens, community places, schools and housing societies	Long	VMC	Continuous Process		
	Blacktopping of metalled	On going	VMC	Ongoing		

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020
	road including pavement of road shoulders					
	Increase frequency of mechanized cleaning of road and sprinkling of water on roads. Identify road stretches with high dust generation.	Mid	VMC	2 Years	Rs. 400 lakhs (@ 50 lakh capital cost per sweeper & 50 lakh for 1 year's O&M) Fund sought from MoEF&CC under NCAP	Presently, 8 Numbers of road sweeper machines are operational in VMC limit for suppression of dust particles.  Additional, 4 numbers of sweepers are proposed.
<b>Construction Activities</b>	Enforcement of construction & Demolition Rules	Short	VMC, GPCB	1 Year	@ Rs. 400/MT  Rs. 35 Lakhs for C & D wastes management facility – Funding sought from MoEF & CC under NCAP.	<ul style="list-style-type: none"> <li>• Circular issued for levying administrative charges of C &amp; D waste.</li> <li>• VMC published Notification for proper handling &amp; management of construction &amp; demolition waste as per the Construction &amp; Demolition Waste Management Rules-2016.</li> <li>• In this VMC notified 2 locations for disposal of Construction &amp; Demolition Waste wide notification pro no. 687/2018-19.</li> <li>• VMC allotted work for C&amp;D Waste collection and treatment to DNP Infrastructure Pvt. Ltd. Collection started by agency.</li> </ul>
<b>Biomass and garbage</b>	Launch extensive drive against open burning of bio-mass, crop residue,	Short	VMC	1 Year	Rs. 45 Crores/Year	<ul style="list-style-type: none"> <li>• VMC has implemented three tier garbage collection systems as a part of integrated solid waste management plan including door to door waste collection, solid waste</li> </ul>

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020
burning	garbage, leaves, etc.					<p>collection by container lifting and direct collection from open spot / nuisance spot.</p> <ul style="list-style-type: none"> <li>Total 289 door to door vehicles are utilized for Door to Door waste collection with compartmentalized arrangement of collection of Biodegradable (Wet) and Non Bio degradable waste (Dry waste) and 111 open/nuisance spot vehicles are utilized for open spot collection.</li> </ul>
					Rs. 62 Crores	<ul style="list-style-type: none"> <li>As per capping and social upliftment component of SWM DPR, VMC has awarded work order to M/s Zigma Global Enviro Pvt. Ltd. For bioremediation of legacy waste at Atladara. Now after 2 years total 3.75 lakh MT legacy waste is remediated and total 17 acres of land reclaimed. Total project cost = Rs. 23.61 Crores</li> <li>At now, landfill Phase-2 filled at saturation capacity, hence VMC have allotted Lol to M/S. Zigma Global Environ Pvt. Ltd. to Bio-remediate 4.0 lakh MT of legacy waste in landfill Phase-1 (Project Cost=34 Crore).</li> <li>After Completion of Project, landfill Phase-1 will be reused for landfilling of MSW.</li> </ul>
					48 Crore	<ul style="list-style-type: none"> <li>In Landfill development and Related Machinery Component of SWM DPR, VMC have invited a tender for Construction and development of landfill Phase-2 and same work sent in standing committee for approval Total Project Cost=43 Crore</li> <li>After completion of Project VMC will dispose inert &amp; MSW in a secured &amp; scientific way.</li> </ul>
					240 Crore	<ul style="list-style-type: none"> <li>1000 TPD Capacity Waste to Energy Project Facility at</li> </ul>

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020
					(PPP Mode)	R.S.No.346, Makarpura. Under which work of Concession agreement signed and Power Purchase Agreement, land lease agreement signed and construction work is under progress. Plant will be operational by March-2021 <ul style="list-style-type: none"> <li>At now, Pre-processing of MSW is operational from 2nd November,2018 having capacity of 700 MT/Day.</li> </ul>
					PPP Mode	<ul style="list-style-type: none"> <li>Small scale plants of 15 TPD and 5 TPD based on Bio-methanation technology are operational for Treatment of Hotel Kitchen Biodegradable Waste from Bulk Waste Generators at Voragamdi and Gajarawadi accordingly.</li> </ul>
					60.00lakh	<ul style="list-style-type: none"> <li>Organic Waste Converter Machines of 0.1 and 0.5 TPD are placed at BWG locations to illustrate Onsite Composting.</li> </ul>
					Rs. 6.0 Cr. (PPP mode)	<ul style="list-style-type: none"> <li>VMC allotted LOI to M./s. Ecovision Pvt. Ltd. for collection &amp; treatment of Plastic waste. Work commenced from June-2019. Till date total 70.00 M.T plastic waste collected and recycled by M./s. Ecovision Pvt. Ltd.</li> </ul>
					Rs. 0.90/Kg (PPP mode)	<ul style="list-style-type: none"> <li>VMC have allotted W.O. to M/s. Snel Bioscience Pvt. Ltd to collect Hotel-kitchen waste collection and transportation from 21st January, 2019. Agency Shall collect Rs.0.90/KG directly from the waste generators, hence no any financial burdan bear by VMC for this Work.</li> </ul>
	Regular check and control of burning of municipal solid wastes	On going	VMC	Continuous Process	----	Wards Sanitation team regularly check beat of each sweeper.

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020
	Proper collection of horticulture waste (biomass) and its disposal following composting-cum gardening approach	On going	VMC	Continuous Process	Lakh 45	3 Nos. of OWC Machine (500 Kg capacity) installed for onsite composting of the Garden waste.
<b>Industries</b>	Action against non-complying industrial units	On going	GPCB, Industrial association	Continuous Process	----	Regular monitoring is being carried out. Suitable actions are taken based on the severity of the non-compliances including issuance of closure order, levying bank guarantee as well as environment damage compensation etc.
	Restriction on using unauthorized fuel	On going	GPCB, Industries Associations, Industrial Units	Continuous Process	----	Industrial units shall use authorized fuel as consented and shall not use any unauthorized fuel. GPCB has already notified a list of approved fuel and GPCB is carrying out monitoring of the industries.
	Strengthening of air pollution control measures and ensuring emission standards	Short	GPCB, Industrial units, Industries Associations	1 Year	----	Industrial units consuming solid fuel required to upgrade air pollution control system based on the fuel consumption and / or capacity of utility by installing ESP / bag filters / multi cyclone separator so that ambient air in an area met with the AAQ norms of PM <sub>10</sub> and PM <sub>2.5</sub> .  Guide line for coal handling, circular dt.27/08/2019 regarding usage of 20% agro briquette / bio-fuel / briquette as well as office order on provision of additional scrubber shall also be complied with.
	Adoption of cleaner fuel	Mid	GPCB, VGL, Industrial units	2 Year	----	Industrial units using solid fuel shall adopt cleaner fuel wherever it is feasible considering availability of gas and economics.

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020									
						<p>Presently, AGL is supplying PNG to 89 industries of GIDC, Nandesari. PNG supplied is : (Maintaining Status quo)</p> <p>FY 2018-19 : 10826470 SCM  FY 2019-20 : 10628701 SCM  FY 2020-21 (Till June) : 2185290 SCM</p> <p>Presently, VGL has provided</p> <ul style="list-style-type: none"> <li>• 2573 commercial connections and expansion plan for the year 2020 – 2021 is another another 30 connections.</li> <li>• 2 industrial connection and expansion plan for the year 2020 – 2021 is another 10 connections.</li> </ul>									
<b>Strengthening of AAQM</b>	Installation & Operation of CAAQMS at Vadodara	Mid	GPCB / VMC	2 Year	500 Lakhs  (360 Lakhs : @ 100 lakhs capital cost per CAAQMS & 20 lakhs for 1 year O&M from MoEF budget under NCAP)	<p>As per criteria on the basis of Census 2011, it is required to establish total 5 CAAQMS. Out of proposed 5 CAAQMS, 2 are proposed under CPSU fund whereas VMC has requested for funding for additional three CAAQMS from MoEF&amp;CC budget under NCAP. Details of the same are given below.</p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Locations of Residential area</th> <th>Funding Details</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Sir Sayajirao Nagar Gruh, Akota, Vadodara</td> <td>MoEF&amp;CC budget under NCAP and</td> </tr> <tr> <td>2.</td> <td>VMSS Karelibaug Water Tank, Karelibaug, Vadodara</td> <td>CPSU funding</td> </tr> </tbody> </table>	Sr. No	Locations of Residential area	Funding Details	1.	Sir Sayajirao Nagar Gruh, Akota, Vadodara	MoEF&CC budget under NCAP and	2.	VMSS Karelibaug Water Tank, Karelibaug, Vadodara	CPSU funding
Sr. No	Locations of Residential area	Funding Details													
1.	Sir Sayajirao Nagar Gruh, Akota, Vadodara	MoEF&CC budget under NCAP and													
2.	VMSS Karelibaug Water Tank, Karelibaug, Vadodara	CPSU funding													

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																		
						<table border="1"> <thead> <tr> <th>Sr. No</th> <th>Locations of Traffic dominant area</th> <th>Funding Details</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>City Command Centre, BadamadiBaug, Vadodara</td> <td>MoEF&amp;CC budget under NCAP</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Locations of Commercial area</th> <th>Funding Details</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Gandhinagar Gruh/Jubilee bag, Sur Sagar, Vadodara</td> <td>MoEF&amp;CC budget under NCAP</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Locations of Industrial Area</th> <th>Funding Details</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>VMC Urban PHC, Vadsar, Makarpura GIDC, Vadodara</td> <td>CPSU funding</td> </tr> </tbody> </table> <p>VMC has given in principle approval for the locations for the establishment of afore mentioned five CAAQMS and these locations are endorsed by joint visit of CPCB, GPCB and VMC representatives.</p>	Sr. No	Locations of Traffic dominant area	Funding Details	1.	City Command Centre, BadamadiBaug, Vadodara	MoEF&CC budget under NCAP	Sr. No	Locations of Commercial area	Funding Details	1.	Gandhinagar Gruh/Jubilee bag, Sur Sagar, Vadodara	MoEF&CC budget under NCAP	Sr. No	Locations of Industrial Area	Funding Details	1.	VMC Urban PHC, Vadsar, Makarpura GIDC, Vadodara	CPSU funding
Sr. No	Locations of Traffic dominant area	Funding Details																						
1.	City Command Centre, BadamadiBaug, Vadodara	MoEF&CC budget under NCAP																						
Sr. No	Locations of Commercial area	Funding Details																						
1.	Gandhinagar Gruh/Jubilee bag, Sur Sagar, Vadodara	MoEF&CC budget under NCAP																						
Sr. No	Locations of Industrial Area	Funding Details																						
1.	VMC Urban PHC, Vadsar, Makarpura GIDC, Vadodara	CPSU funding																						
	Source apportionment study	Mid	GPCB, IIT / NIT / GEMI	2 Year	80 Lakhs	VMC has requested for funding from MoEF&CC budget under NCAP.																		
<b>Public Awareness</b>	Prompting of use of LPG as domestic fuel instead of burning coal, wood and	Short	VGL, VMC	On going		VGL is conducting awareness through publishing hoardings, distribution of pamphlets at their dispensing stations.																		

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020																					
	cow dung cakes.																										
	Launch public awareness campaign for pollution control, vehicle maintenance, minimizing use of personal vehicles, lane disciplines, etc.	Short	CoT, Traffic police, GPCB, VMC	1 Year	20 Lakhs Funding sought from MoEF&CC under NCAP.	----																					
<b>Others</b>	Air Quality Index to be calculated and disseminated to be people through website and other media (on maximum weekly basis for manually operated monitoring stations and real time basis for continuous monitoring stations)	Short	VMC, GPCB	1 Year		<p>Presently there are 05 AAQMS operating under NAMP and additional 03 stations under SAMP. Two CAAQMS are proposed under CPSU and funding for additional three CAAQMS is sought by VMC from MoEF&amp;CC under NCAP. Large scale industries like IOC, GSFC, RIL also have their own AAQMS including CAAQMS provided by Nandesari Industries Association. Monthly average and yearly average data are being compiled and reviewed. Results for PM<sub>10</sub> show higher than norm and PM<sub>2.5</sub> show near to the limit. VMC has also provided continuous environment sensors at various eight locations, i.e.</p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Environment sensors locations</th> <th>Parameters showing on the dashboard</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Gorwa Pumping Station</td> <td>1. Temperature</td> </tr> <tr> <td>2.</td> <td>Mangal Bazar</td> <td>2. Humidity</td> </tr> <tr> <td>3.</td> <td>Transpek Industry Area</td> <td>3. AQI</td> </tr> <tr> <td>4.</td> <td>Atladra Pumping Station</td> <td>4. O3</td> </tr> <tr> <td>5.</td> <td>Bapd (Office of the Ward-9, VMC)</td> <td>Parameter of AQI is NO2, CO, SO2, O3,</td> </tr> <tr> <td>6.</td> <td>Chhani Toll Naka</td> <td>PM2.5, PM10 in</td> </tr> </tbody> </table>	Sr. No	Environment sensors locations	Parameters showing on the dashboard	1.	Gorwa Pumping Station	1. Temperature	2.	Mangal Bazar	2. Humidity	3.	Transpek Industry Area	3. AQI	4.	Atladra Pumping Station	4. O3	5.	Bapd (Office of the Ward-9, VMC)	Parameter of AQI is NO2, CO, SO2, O3,	6.	Chhani Toll Naka	PM2.5, PM10 in
Sr. No	Environment sensors locations	Parameters showing on the dashboard																									
1.	Gorwa Pumping Station	1. Temperature																									
2.	Mangal Bazar	2. Humidity																									
3.	Transpek Industry Area	3. AQI																									
4.	Atladra Pumping Station	4. O3																									
5.	Bapd (Office of the Ward-9, VMC)	Parameter of AQI is NO2, CO, SO2, O3,																									
6.	Chhani Toll Naka	PM2.5, PM10 in																									

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020					
						<table border="1"> <tr> <td>7.</td> <td>Makarpura G.I.D.C.</td> <td rowspan="2">(µg/m<sup>3</sup>)</td> </tr> <tr> <td>8.</td> <td>Jambuva Police Check Post</td> </tr> </table> <p>for the continuous monitoring of various six air quality parameters viz. NO<sub>2</sub>, CO, SO<sub>2</sub>, O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>. The values are made available through online mobile application.</p> <p>Ambient air quality measured under NAMP/SAMP of Vadodara during COVID 19 Janata Curfew and National Lockdown suggested as :</p> <ul style="list-style-type: none"> <li>• 43.9% reduction in PM<sub>10</sub>, 37.3% reduction in PM<sub>2.5</sub>, 52.0% reduction in SO<sub>2</sub> and 53.2% decrease in NO<sub>2</sub> in industrial area;</li> <li>• 48.7% reduction in PM<sub>10</sub>, 49.4% reduction in PM<sub>2.5</sub>, 64.4% reduction in SO<sub>2</sub> and 60.2% decrease in NO<sub>2</sub> in residential area;</li> <li>• 62.7% reduction in PM<sub>10</sub>, 56.3% reduction in PM<sub>2.5</sub>, 57.6% reduction in SO<sub>2</sub> and 53.3% decrease in NO<sub>2</sub> in commercial area.</li> <li>• Thus, overall trend for decrease was established as &gt;Residentialarea/Commercial area&gt;Industrial area.</li> </ul>	7.	Makarpura G.I.D.C.	(µg/m <sup>3</sup> )	8.	Jambuva Police Check Post
7.	Makarpura G.I.D.C.	(µg/m <sup>3</sup> )									
8.	Jambuva Police Check Post										
	Engage with concerned authorities on continual basis for maximizing coverage of LPG/PNG for	Short	VMC, VGL, Civil Supply	1 Year	27.57 Crores by VGL including networking	<b>DSO:</b> 100% target has been achieved through 70,854 LPG connection issued under “Pradhan MantriUjjwalaYojana”.					

Source Group	Action	Implementation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implementation	Financial Allocation	Any other information Status as on August -2020
	domestic and commercial cooking with target of 100 % coverage				cost for industries also	<p><b>VGL:</b> Presently as on June 20, there are 1,51,482 domestic connections provided by VGL through network of MDPE pipeline 2270.49Kms. and 53.80 Kms of steel pipeline. Expansion plan for the year 2020 -2021 is another 26,000 domestic connections.</p> <p><b>AGL:</b>Presently there are 580 domestic connections are provided by AGL through MDPE network of 10.79 Kms at Koyali Village. (Maintaining Status quo)</p>
	Electric/Gas based crematorium	Mid	VMC	2 Year	35 Lakhs Funding sought from MoEF&CC under NCAP	There are total 22 crematoriums wherein 14 are gas / electric pyres where as 75 are casting pyres.

### Annual Average of Ambient Air Quality under NAMP

Location	Year	Average values in $\mu\text{g}/\text{Nm}^3$			
		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>
GPCB Office GERIVasahat	2014	78	28	13	19
	2015	78	20	10	15
	2016	94	31	12	23
	2017	97	33	16	22
	2018	167	55	19	22
	2019	108	35	19	25
	2020 (till Mar – 20)	87	26	20	23
	2020 (Apr, May)	47	16	8	9
Location	Year	Average values in $\mu\text{g}/\text{Nm}^3$			
		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>
DandiaBazar Fire station	2014	90	34	14	21
	2015	86	31	13	19
	2016	98	31	14	23
	2017	117	39	17	24
	2018	196	63	20	25
	2019	120	35	21	25
	2020 (till Mar – 20)	109	29	21	24
	2020 (Apr, May)	53	18	8	10

### Annual Average of Ambient Air Quality under SAMP

Location	Year	Average values in $\mu\text{g}/\text{Nm}^3$			
		PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>
Bapod Nagarpalika school No.16	2014	82	30	13	20
	2015	77	27	11	19
	2016	96	31	13	22
	2017	105	36	18	24
	2018	222	69	20	26
	2019	136	38	20	24
	2020 (till Mar – 20)	104	28	20	24
	2020 (Apr, May)	51	17	8	10
Location	Year	Average values in $\mu\text{g}/\text{Nm}^3$			
		PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>
Chhani ChisttyaNagar,Nr.Kal pvrux Soc.	2014	92	33	15	21
	2015	88	32	13	20
	2016	101	33	14	24
	2017	109	39	16	22
	2018	193	62	20	24
	2019	125	35	21	27
	2020 (till Mar – 20)	100	27	20	24
	2020 (Apr, May)	54	17	8	10
Location	Year	Average values in $\mu\text{g}/\text{Nm}^3$			
		PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>
Gotri Opp.GayatriVidhyala y	2014	85	31	14	20
	2015	87.0	30	12	20
	2016	101	32	14	23
	2017	107	36	18	25
	2018	200	64	19	24
	2019	134	37	20	26
	2020 (till Mar – 20)	102	28	20	23
	2020 (Apr, May)	55	18	8	10