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

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	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	 Below is the details provided by the concern agency in the last 10 years Number of total vehicles: 1117875 (1) Vehicles running on CNG: 25515 (2) Vehicles running on Battery: 373 (3) Vehicles running on Petrol: 1002697 (4) Vehicles running on Diesel: 84501 (5) Vehicles running on Other fuel, if any: 4789 Re-registration of non-transport vehicle is done after 15 years from the date of registration, if motor vehicle is fit for road worthiness. Re-registration of the transport vehicle is done on every year by issuing certificate of fitness on application of owner of motor vehicle. Number of cases 12,567 and Fine levied is Rs. 31,47,900 without PUC certificate in 2019 by the traffic police.
	Prevent parking of vehicles in the non-designated areas	Long	Traffic police, VMC	Continuous Process	As per VMC budget	VMC has prepared a draft of parking policy in April-2019, which is under process of approval in their General Body. Existing pay and parking location with its capacity is as under Sr. Location Capacity No. 1. Khanderav market Two-Wheeler-180 2. Near railway station Four-wheeler-8 to 10 3. Near Heerakbag, Two-Wheeler-350

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
	Development of Multi- layer parking				Appx.7.14 crores	railway station 4. MangalBajar opposite Two-Wheeler-300 Khajuri masjid 5. Padmavati Basement Two-Wheeler-500 6. Zulelaal Temple to Two-Wheeler-450 Manoranjan Hotel Multi-layer parking is proposed near Bank of Baroda, RC dutt road with capacity of 61 four wheeler and 78 two-wheeler. Towing cranes are being operated continuously to lift and levy penalty for parking at unauthorized places. Towing crane cases in 2019 are 15,217 and fine levied is Rs. 43,48,800 rupees. Towing cranes provided by VMC.
	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, Civi Supply	Continuous Process		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. Further, alteration of vehicles from petrol to diesel is not allowed by RTO.

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	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	SwarnimJaya ntiMukhyam antrishaheriv ikasyojana , 14 th Finance board & smart city Bridge Projects financial	In V Gove bridg recor some prop / pla	ge Projects: 'adodara city traffic survey is conducted and conducted an	ning of existing as per their een completed, such works are
					allocation is : A+B+C+D= 672.1	Sr.	Name of work	Estimated Amount (Rs. In. Cr.)
					crores(detail s of A, B,C,	1	bridge on Manek park junction	49
					and D is given bellow)	2	bridge on Vrundavan junction	49
					Proposed	3	bridge on Khodiyaar Nagar junction	49
					work (A): 319 Crores	4	bridge on Sardar Estate junction	42
					313 610163	5	Construction of New Fly over bridge on Sangam crossing junction	42
						6	Construction of New Fly over	43

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

Completed Widening work (D): 76.13 Crores Road Projects financial allocation is: A+B+C= 195.89 Crores (details of A, B, and C is given bellow) Proposed work (A): 66.5 Crores Cynder Widening work: Sr. No Name of work 1 Vadsar Landfill River Bridge wide 2 Shastri Bridge ROB near polyter Vishvamitry Bridge ROB near rai 3 station Road Projects: Details of the proposed projects, on-goic completed project work is mentioned as (A) Proposed work: Sr. No No No No Name of work 1 Road From Manisha Crossing To Vasana old Municipal Limit Nosana From Genda circle to old Municipal Limit Gorwa.	Source Group	-	 Time Target for mplement ation	Financial Allocation		Any other information Status as on August -2020	
work (D): 76.13 Crores Sr. No Name of work 1 Vadsar Landfill River Bridge wid 2 Shastri Bridge ROB near polyted Vishvamitry Bridge ROB near rai 3 station Road Projects financial allocation is: A+B+C= 195.89 Crores (details of A, B, and C is given bellow) Proposed work (A): 66.5 Crores Road Projects: Details of the proposed projects, on-goi completed project work is mentioned as (A) Proposed work: Sr. No Road Projects: Details of the proposed projects, on-goi completed project work is mentioned as (A) Proposed work: Sr. No Road Projects: Details of the proposed projects, on-goi completed project work is mentioned as (A) Proposed work: Sr. No Road Projects: A+B+C= 195.89 Crores (details of A, B, and C is given bellow) Proposed work (A): Road From Manisha Crossing To Vasana old Municipal Limit 2 Road From Genda circle to old Municipal Limit Gorwa.		,		•	(D) Co	mpleted Widening work :	
Road Projects financial allocation is: A+B+C= 195.89Crores (details of A, B, and C is given bellow) Proposed work (A): 66.5 Crores Shastri Bridge ROB near polyted Vishvamitry Bridge ROB near rai 3 station Road Projects: Details of the proposed projects, on-goid completed project work is mentioned as completed project wor				work (D):		Name of work	Cost of work (Rs. In cr.)
Road Projects financial allocation is: A+B+C= 195.89Crores (details of A, B, and C is given bellow) Proposed work (A): 66.5 Crores Vishvamitry Bridge ROB near rai 3 station Road Projects: Details of the proposed projects, on-goi completed project work is mentioned as (A) Proposed work: Sr. No. Name of work 1 Road From Manisha Crossing To Vasana old Municipal Limit 2 Road From Genda circle to old Municipal Limit Gorwa.					1	Vadsar Landfill River Bridge widening	13.13
Road Projects financial allocation is: A+B+C= 195.89Crores (details of A, B, and C is given bellow) Proposed work (A): 66.5 Crores Road Projects: Details of the proposed projects, on-goi completed project work is mentioned as some completed					2	Shastri Bridge ROB near polytechnic	31
Road Projects financial allocation is: A+B+C= 195.89Crores (details of A, B, and C is given bellow) Proposed work (A): 66.5 Crores Details of the proposed projects, on-goic completed project work is mentioned as an allocation is: A Proposed work: (A) Proposed work: Sr. No. Name of work Vasana old Municipal Limit 2 Road From Genda circle to old Municipal Limit Gorwa.					3		32
195.89 Crores (details of A, B, and C is given bellow) Proposed work (A): 66.5 Crores Sr. Name of work No. Name of work Vasana old Municipal Limit Road From Genda circle to old Municipal Limit Gorwa.				Projects financial allocation is : A+B+C=	Details	of the proposed projects, on-going pro eted project work is mentioned as unde	•
Proposed work (A): 66.5 Crores 1 Vasana old Municipal Limit Road From Genda circle to old Municipal Limit Gorwa.				(details of A, B, and C is		Name of work	Estimated amount (Rs. In. Cr.)
work (A): 66.5 Crores Road From Genda circle to old Municipal Limit Gorwa.					1	Road From Manisha Crossing To	15.00
					2	Road From Genda circle to old	35.00
3 circle (Harnitalav) to Golden					3	Harni Road from Motibhai Patel circle (Harnitalav) to Golden	
chokdi						chokdi	16.50

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation		Any other information Status as on August -2020	
						(B) O	ngoing works:	
					Ongoing work (B): 113.85 Crores	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
						4	R C Dutt Road Road From Havmore Circle to AkotaDandiya Bazar Bridge	21.2
						6	BPC Road Road From Amit nagarcircle toDumad crossing.	32.69
						7	Road From Vrundavan char rasta to waghodiya by pass	32.03
						8	Road From Sardar estate char rasta to ajwa bypass	37.52
						9	Road From Soma Talav to Kapurai bypass up to municipal limit	37.32
						10	Sama canal parallel main road (O.G. Area – South Side)	5.81
							,	

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation		Any other information Status as on August -2020	
					Completed works with	(C) Co	ompleted works with widening:	
					widening (C) : 15.54 Crores	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			ntly, traffic police is already provided on points.	at the major
	Prepare plan for construction of expressways/bypasses to avoid congestion due to non-destined vehicles	Long	VMC	3 Years			ss road to Vadodara is already provided. wide Sevasi – Ataladara by-pass road is p	roposed.
	Steps for promoting & operating battery operated vehicles	Long	RTO	3 Years		year 2	is the details provided by the concern 016, details of Vehicles running on Batte ncrease in number of battery operated v	ery: 173. There
	Synchronize traffic movements/introduce intelligent traffic systems for lane-driving	Mid	VMC, Traffic police,	2 Years	35 lakh Funding sought from MoEF&CC	ou • Th	otal numbers of traffic signal in Vadoda at of which 41 are with timer. here are 04 traffic signals without timer. here are 28 points without traffic signal.	ra city are 45,

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
					under NCAP	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.
	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 autorickshaws	Short	Vadodara Gas Limited, VMC, Adani Gas Limited,	1 Year		 06 (AGL) + 18 (VGL) CNG stations are in operation AGL: 02 Online Station, 04 Daughter Stations (Maintaining Status quo) Expansion proposal is pending with VMSS since 27/11/2014. 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
					50.93 Crores by VGL	Sr. Location Type
						1. Alamgir DBS
						2. Jarod DBS
						3. Gajrawadi Mother Station
						4. Karjan DBS 5. Vadu DBS

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation		Any other information Status as on August -20	
						6.	Vega	DBS
						7.	Mahuvad	DBS
						8.	Vasna - Bhayali Road	DBS
						9.	Desar	DBS
						10	ChhotaUdepur	DBS
						11.	Muval	DBS
						Sr. No.	CNG Station details: Location	Туре
						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.	DumadSavli 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	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation		Any other information Status as on August -20	
						10.	AT. Duttpura, 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		Vinay Nizar the Vado	e are 3 dedicated CNG stations for vak Bus Service at Race cour npura provided by VGL and pres requirements. However, there dara GSRTC division plying on CNs quo.	rse, Dashrath and ently meeting with are no buses of
	Entire fleet of buses run byCity Vinayak Logisticon	Short	VMC, City Vinayak	1 Year		1	g fleet details are as under: esel operated A.C. buses : 20	

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
	CNG mode					 CNG operated buses: 125 CNG operated buses under CM grant: 20 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	40 Crores for Electric Buses & 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 Process of allocating 100 BS VI compliant diesel buses are going on and expected within 1 year. 20 electric buses (9 m & 12 m long) are going on and expected within 2 years.
	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	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	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		Traffic monitoring and Public alert system should developed to avoid traffic jam. At present 16 places are identified by VMC as high traf spot
						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	Short	Civil Supply,	1 Year		
	oils at petrol pumps and		Oil Companies			

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
	outside Introduction of pre-fuel oil	Long	Civil Supply,	3 Years		
	and expansion of pre- mixed outlets.	Long	Oil Companies	3 Tears		
	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.
Re- suspension of road	Prepare plan for creation of green buffers and paving along the traffic corridors	Mid	VMC	Continuous Process	35 lakhs Fund sought from	Presently, regular routine maintenance work is being carried out.
dust and other fugitive emissions	Maintain potholes free roads for free-flow of traffic	Short	VMC, Transport Dept.	Continuous Process	MoEF&CC under NCAP.	
control	Introduce water fountains at major traffic intersection, wherever feasible	Long	VMC	Continuous Process	15.50 Crores Fund sought from XV-FC	Bio-diversity park at Govindnagar, New garden development at Newly added 7 villages in corporation limit, development of green and urban plots with Miyawaki Plantation, tree plantation at road side and shrub plantation in central verge
	Greening of open areas, gardens, community places, schools and housing societies	Long	VMC	Continuous Process		of 25 km area in newly added villages in corporation limit, development of landscape island opposite railway station proposed.
	Blacktopping of metalled road including pavement of	On going	VMC	Ongoing		

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
	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	Sweeper Machines: Rs. 18.09 Crores and Road Washer Machines: Rs. 21.00 Crores Fund sought from XV-FC	Presently, 8 Numbers of road sweeper machines are operational in VMC limit for suppression of dust particles. Additional, 12 numbers of sweeper machines of latest technology proposed (Purchase cost: Rs. 8.76 Crores + O & M Cost: Rs. 9.33 Crores) Presently there is no road washer machine. Road washer machines for cleaning of dust from road (4 road washer machine for 4 zones. (Purchase cost: Rs. 5.00 Crores + O & M Cost: Rs. 16.00 Crores)
Constructio n Activities	Enforcement of construction & Demolition Rules	Short	VMC,GPCB	1 Year	Rs. 400/MT Rs. 35 Lakhs for C & D wastes management - Funding sought from XV-FC Rs. 48 Lakhs for Construction of advanced C & D wastes management site -	 Circular issued for levying administrative charges of C & D waste. VMC published Notification for properhandling&management of construction&demolition waste as per theConstruction&Demolition Waste Management Rules-2016. In this VMC notified 2locations fordisposal of Construction&Demolition Wastewide notification pro no. 687/2018-19. VMC allotted work for C&D Waste collection and treatment to DNP Infrastructure Pvt. Ltd. Collection started by agency.

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation Funding sought from	Any other information Status as on August -2020
Biomass and	Launch extensive drive against open burning of	Short	VMC	1 Year	XV-FC 45 Crore/Year	VMC has implemented three tier garbage collection systems as a part of integrated solid waste management
garbage burning	bio-mass, crop residue, garbage, leaves, etc.				Fund sought from XV-FC	 plan including door to door waste collection, solid waste collection by container lifting and direct collection from open spot / nuisance spot. 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.
					62 Crores	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.
						 At now, landfill Phase-2 filled at saturation capacity, hence VMC have allotted LOI 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). After completion of Project, landfill Phase-1 will be reused for landfilling of MSW.
					48 Crores	In Landfill development and Related Machinery

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
						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
					240 Crores (PPP Mode)	 1000 TPD Capacity Waste to Energy Project Facility at 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. At now, Pre-processing of MSW is operational from 2nd November, 2018 having capacity of 700 MT/Day.
					PPP Mode	Small scale plants of 15 TPD and 5 TPD based on Biomethanation technology are operational for Treatment of Hotel Kitchen Biodegradable Waste from Bulk Waste Generators at Voragamdi and Gajarawadi accordingly.
					Lakh 45.00 Fund sought from XV-FC	Organic Waste Convertor Machines of 0.1 and 0.5 TPD are placed at BWG locations to illustrate Onsite Composting.
					Crore 6.0 (PPP Mode)	 VMC allotted LOI to M/S Ecovision Pvt. Ltd. for collection &treatment of Plastic waste. Work commenced from June-2019. Till date total 70.00 MT plastic waste collected and recycled by M/S Ecovision Pvt. Ltd.
					Rs. 0.90/kg (PPP Mode)	 VMC have allotted W.O. to M/S Snel Bioscience Pvt. Ltd. to collect Hotel-kithen waste collection and transportation from 21st January, 2019. Agency shall collect Rs. 0.90/KG directly from the waste generators, hence no any financial burden bear by VMC for this

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
	Regular check and control of burning of municipal solid wastes	On going	VMC	Continuous Process	Rs. 8.25 Crores Fund sought from XV-FC	work. Wards Sanitation team regularly check beat of each sweeper. It is proposed to provide automatic spraying and fogging system for land fill site.
	Proper collection of horticulture waste (biomass) and its disposal following composting-cum gardening approach	On going	VMC	Continuous Process	Lakh 45 Fund sought from XV-FC	3 Nos. of OWC Machine (500 Kg capacity) installed for onsite composting of the Garden waste.
Industries	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_{10} and $PM_{2.5}.$

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
						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.
	Control of Fugitive Emission	Short	GPCB, Industrial units, Industries Associations	Continuous Process		Within city limit of Vadodara, there are total 47 air pollution potential industrial units out of which 28 are red category industry. Good practices like cleaner production and cleaner technology to be adopted in fuel handling, process control in closed system and housekeeping. For the control of fugitive emission drums to be placed within closed room and chemical storage tanks to be provided with scrubbing system.
	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. Presently, AGL is supplying PNG to 89 industries of GIDC, Nandesari. PNG supplied is: (Maintaining Status quo) FY 2018-19: 10826470 SCM FY 2019-20: 10628701 SCM FY 2020-21 (Till June): 2185290 SCM Presently, VGL has provided • 2573 commercial connections and expansion plan for the year 2020 – 2021 is another another 30 connections. • 2 industrial connection and expansion plan for the year

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation		Any other information Status as on August -20	20
Strengthen ing of AAQM	Installation & Operation of CAAQMS at Vadodara	Mid	GPCB / VMC	2 Year	500 Lakhs	As per establis propos funding	0 – 2021 is another 10 connections criteria on the basis of Census 20 sh total 5 CAAQMS.Out of propose ed under CPSU fund whereas VMG for additional three CAAQMS from NCAP. Details of the same are given Locations of Residential area	11, it is required to ed 5 CAAQMS, 2 are C has requested for m MoEF&CC budget a below.
					for 3 stations (Supply, installation & commissioni ng, operation and maintenance of CAAQMS	No 1. 2.	Sir Sayajirao Nagar Gruh, Akota, Vadodara VMSS Karelibaug Water Tank, Karelibaug, Vadodara	Funding Details MoEF&CC budget under NCAP and CPSU funding
				under XV – FV 2 stations under CPSU Fund	Sr. No 1.	Locations of Traffic dominant area City Command Centre, BadamadiBaug, Vadodara	Funding Details MoEF&CC budget under NCAP	
						Sr. No	Locationsof Commercial area Gandhinagar Gruh/Jubilee bag, Sur Sagar, Vadodara	Funding Details MoEF&CC budget under NCAP

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation		Any other information Status as on August -2020	0
						Sr. No	VMC Urban PHC, Vadsar, Makarpura GIDC, Vadodara	Funding Details CPSU funding
	Source apportionment	Mid	GPCB, IIT / NIT	2 Year	80 Lakhs	establi location repressive VMC	has given in principle approval for the ishment of afore mentioned five CA ons are endorsed by joint visit of CPC entatives. has requested for funding from	AAQMS and these CB, GPCB and VMC
Public Awareness	Prompting of use of LPG as domestic fuel instead of burning coal, wood and cow dung cakes.	Short	VGL, VMC	On going	Fund sought from XV-FC		conducting awareness through pubution of pamphlets at their dispensir	
	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	100 Lakhs Fund sought from XV-FC.			
Others	Air Quality Index to be calculated and disseminated to be people	Short	VMC, GPCB	1 Year		additio	ntly there are 05 AAQMS operating onal 03 stations under SAMP. To sed under CPSU and funding for	wo CAAQMS are

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation		Any other infor Status as on Aug	
	through website and other media (on maximum weekly basis for manually operated monitoring stations and real time basis for continuous monitoring stations)					CAAQMS is sought by VMC from MoEF&CC u Large scale industries like IOC, GSFC, RIL also hav AAQMS including CAAQMS provided by Nandesa Association. Monthly average and yearly avera being compiled and reviewed. Results for PM ₁₀ s than norm and PM _{2.5} show near to the limit. VMC has also provided continuous environment s various eight locations, i.e.		FC, RIL also have their own ed by Nandesari Industries d yearly average data are sults for PM ₁₀ show higher the limit.
						Sr. No 1. 2. 3. 4. 5. 6. 7.	Environment sensors locations Gorwa Pumping Station Mangal Bazar Transpek Industry Area Atladra Pumping Station Bapd (Office of the Ward- 9, VMC) Chhani Toll Naka Makarpura G.I.D.C. Jambuva Police Check Post	Parameters showing on the dashboard 1. Temperature 2. Humidity 3. AQI 4. O3 Parameterof AQIis NO2, CO, SO2, O3, PM2.5, PM10 in (µg/m3)
						paran made Ambie	ne continuous monitoring oneters viz. NO ₂ , CO, SO ₂ , O ₃ , I available through online moent air quality measured dara during COVID 19 Jana	PM _{2.5} , PM ₁₀ . The values are bile application. under NAMP/SAMP of

Source Group	Action	Implement ation period (Short / Mid / Long term)	Responsible agency (ies)	Time Target for Implement ation	Financial Allocation	Any other information Status as on August -2020
	Engage with concerned authorities on continual basis for maximizing coverage of LPG/PNG for domestic and commercial cooking with target of 100 % coverage	Short	VMC, VGL, Civil Supply	1 Year	27.57 Crores by VGL including networking cost for industries also	 43.9% reduction in PM₁₀, 37.3% reduction in PM_{2.5}, 52.0% reduction in SO₂ and 53.2% decrease in NO₂ in industrial area; 48.7% reduction in PM₁₀, 49.4% reduction in PM_{2.5}, 64.4% reduction in SO₂ and 60.2% decrease in NO₂ in residential area; 62.7% reduction in PM₁₀, 56.3% reduction in PM_{2.5}, 57.6% reduction in SO₂ and 53.3% decrease in NO₂ in commercial area. Thus, overall trend for decrease was established as >Residentialarea/Commercial area>Industrial area. DSO: 100% target has been achieved through 70,854 LPG connection issued under "Pradhan MantriUjjwalaYojana". VGL: 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. AGL:Presently there are 580 domestic connections are provided by AGL through MDPE network of 10.79 KmsatKoyali Village. (Maintaining Status quo)

Source	Action	Implement	Responsible	Time	Financial	Any other information
Group		ation period (Short / Mid / Long term)	agency (ies)	Target for Implement ation	Allocation	Status as on August -2020
	Electric/Gas base crematorium	Mid Mid	VMC	2 Year	35 Lakhs Funding sought from XV-FC	There are total 22 crematoriums wherein 14 are gas / electric pyres where as 75 are casting pyres.