

AIR ACTION PLAN FOR VADODARA CITY

Sr. No	Issue	Proposed Action (Pl. note: The following are some of the action points that have been listed by some of the state governments, or discussed in the consultation meetings or EPCA has considered. This is not an exhaustive list. All proposed action points must be detailed out as much as possible)	Implementing Agency	Target date for completion of ongoing activity and that of proposed activity and planned improvements	Status	Remarks
1.	VEHICULAR POLLUTION					
1	New Vehicles Roadmap for improving vehicle technology (Vehicle-category-wise cars (diesel and petrol), two-wheelers, three-wheelers, medium duty vehicles, heavy duty vehicles truck and buses, any other)	The Current status Status of implementation of Bharat II norms Proposed Plan and deadline i.Introduction of Bharat-III norms ii.Introduction of EURO IV norms iii.Implementation of Bharat stage-II norms for 2 and 3 Wheelers iv.Introduction of emission warranty for vehicles	COT, Transport Dept.GOG COT, Transport Dept.GOG .	These deadlines will be followed as notified by GOI.	Registration of only vehicles that are Bharat II compliant is not made compulsory in the State of Gujarat	--

2	Improvement in Fuel Quality	<p>Current Status</p> <p>a. Reduction of Sulphur content in diesel and petrol to 0.05% and lower levels immediately</p> <p>b. Reduction in benzene content to 1% in petrol</p> <p>Proposed</p> <p>c. Plan for introduction of Euro III and Euro IV fuels</p>	COT, Transport Dept. GoG, F C AND CA Dept	As Notified by GOI As per GOI guidelines	Ethanol blend petrol was launched in Gujarat in year 2003 and premium grade. MS (Petrol)/HSD (low sulfur) introduced in the city by IOCL & HPCL. ---	---
3	In –Use vehicles					
i.	Phasing out of old vehicles	<p>a. Phasing out of 15 years old commercial vehicles and all diesel three wheelers</p> <p>b. Plans to lower the age Gap further</p>	VMC/COT / Transport Dept VMC/COT / Transport Dept	a. Definite policy yet to be decided No policy defined	--- ---	---

ii.	<p>Vehicle inspection</p> <p>Up gradation planned for the PUC system (petrol/CNG, and diesel vehicles)</p>	<p>Level of compliance. How many vehicles come for inspection currently and failure rate for different categories of vehicles.</p> <p>Policy measures to ensure that all vehicles come for tests. Modifications in test procedures and standards and additional pollutants to be introduced for testing in all categories of vehicles planned.</p>	<p>COT / Transport/ FC & CA</p> <p>COT / Transport/ FC & CA</p>	<p>31/03/2005</p> <p>It is proposed 1.Computarised PUC system 2.Third party auditing of PUC center</p>	<p>On road inspection regularly carried out by RTO staff carry out surprise checking of PUC centers.</p> <p>Cases- Traffic Dept. Year 2002 - 21 977 Year 2003 - 20198 up to 10 March 2004 -1230. 390 vehicles were detected for generation of Black smoke emission in yr 2003-04 @ Rs.76000 fine recovered. Details up to July 2004 being collected.</p> <p>78 PUC station are in operation in city.</p> <p>Registration of two PUC center cancelled after auditing.</p> <p>---</p>	<p>---</p> <p>---</p>
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		<p>Institutional systems put in place or planned for rigorous auditing and inspection of these centers.</p> <p>On Road inspection of vehicles planned and periodicity and coverage</p>		<p>All PUC center must be supported by tuning center to bring down the emission level.</p> <p>Task Force under chairmanship of District Collector is to Decide the frequency and location for Inspection</p> <p>On Going process</p>	<p>GPCB, Traffic and Forensic Dept. had conducted two auto exhaust camp and one fuel adulteration checking camp</p> <p>Surprise checking of vehicles with fine imposing mechanism and giving vide publicity for awareness is introduced</p> <p>Surprise checking of vehicles with fine imposing mechanism and giving vide publicity for awareness is introduced</p>	<p>---</p> <p>---</p>
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iii.	Centralized Inspection & Maintenance system	a. Provide a phase-in plan of improved centralized inspection and maintenance programme to replace the current PUC system. Prioritize the vehicle segments like commercial vehicles that would be first, brought under the advanced inspection system.	Police Commissioner/COT/ Transport Dept	Existing system of Inspection & Maintenance will be rigorously followed. It is proposed to direct all Fuel and Automobile dealers to have inspection and maintenance system to ensure PUC compliance.	On going process	---
iv.	Bypassing transit traffic	Plans for the following: a. Restriction on plying of interstate/intercity buses in city. b. By pass	Office of Police Commissioner / VMC / VUDA	All ready in Implementation	a. By pass at NH- 8 is already in operation b.. Three Fly over are already existing to avoid congestion. One over bridge at Chhani is already completed in 2003 and put in operation. And *VMC has proposed three more fly over bridge namely 1. Navayard to Gorwa	

		c. Restriction of entry of non-destined commercial vehicles in the city		It is already implemented	<p>2. Vadsar Railway crossing 3. Akota to Dandia Bazar</p> <p>Second phase of N.H NO-1 from Nadiad to Vadodara is under final stage and likely to be commissioned very soon, which will help in decreasing the traffic.</p> <p>c. Passing of Heavy vehicles through the city is already restricted</p>	
v.	Proportioning of 2T oil for two stroke engines	<p>a. Installation of premix oil dispensers for 2-stroke 2 and 3 wheelers.</p> <p>b. Measures to ban sale of loose 2T oil.</p>	Food, Civil Supplies & Consumers Affairs (FC & CA) Department, Oil Companies	On going process	<p>a. There are Total 43- outlets, Dispensers having premix oil details up to July 2004 being collected.</p> <p>b. Continuing action</p>	Action will be taken for conversion of Premix Dispensers.

4	Adulteration of fuels	<p>a. Setting up of facility for independent fuel testing in the city.</p> <p>b. Improvement planned for more effective monitoring of retail outlets, depots and tankers etc.</p> <p>c. Status of implementations of naphtha, kerosene and solvents control order. Propose how to make the implementation effective.</p> <p>d. Any plans for public broadcast of defaulting petrol pump</p>	<p>Food, Civil Supplies & Consumers Affairs (FC & CA) Department, Traffic Police, and COT, Forensic Science Lab(FSL)</p>	<p>31/12/2004</p> <p>On going process</p> <p>On going process</p> <p>Existing drive will be continued</p>	<p>FSL is independent testing lab. A team consisting of FSL, RTO & Civil supply is formed for fuel testing & Monitoring .</p> <p>Cases for Kerosene mixed Petrol Year 2002 - 80 Year 2003 -204 up to 10/03/4-114 The details up to July 04 being collected. <u>Vehicle caught</u> Year 2002-913 Year 2003-1126 up to 10/3/04-114</p> <p>Names of the defaulting petrol pumps are published in news paper</p>	---
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		<p>e. Plans to make penalty more stringent to act as strong deterrent</p> <p>f. Rationalization of state taxes on imported kerosene and other solvent/fuels etc to narrow the price gap</p> <p>g. Any other measure like electronic markers system etc.</p>		<p>e. At present there is no plan to make penalty more stringent.</p> <p>f. –</p> <p>g. --</p>	<p>e. The Transport department & District Supply Dept. have already started the drive to check the fuel adulteration.</p> <p>f. –</p> <p>g. --</p>	<p>---</p> <p>Policy may be decided by GoG.</p> <p>Not in existence yet.</p>
5	Alternative fuels					
i.	Introduction of cleaner fuel(s) LPG/CNG	Indicate the priority vehicles segments like three wheelers, small commercial vehicles, buses etc that would be targeted for phased introduction of alternative fuels Give a schedule of implementation.	GAIL/Adani / VMC/ Transport Dept./ COT/ F C & C A Dept/	GAIL/Adani 31/12/2005	Two CNG station installed and more are being installed.	--

	<p>* Based on this plan estimate the demand for cleaner fuel over the time frame for implementation.</p> <p>* Provide plan and schedule for setting up of infrastructure facility for dispensing and (compressing) of gas.</p> <p>*Number of stations with capacities planned. If feasibility plans are under preparation report its results and indicate a tight time frame for its completion.</p>		<p>GAIL/Adani 31/12/2005</p> <p>GAIL/Adani 31/12/2005</p> <p>GAIL is likely to set up two-mother station and three-booster station for CNG in Vadodara City by 31/12/2005.</p>	<p>*Approved vehicle 266 LPG and 91 CNG up to 2003 and details are being updated up to July 2004</p> <p>*Laying of the pipeline by Adani Group in GIDC Nandesari is completed Work at PCC Area& toward city is going on.</p> <p>*One mother station near GSFC proposal is sent to GOG for approval, Land is allotted GoG.</p> <p>*Gail is proposed to set up online CNG station near Golden chokdi on NH-8 is under progress.</p> <p>*Up gradation of Nizmpura CNG station is completed</p>	---
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					Plan for conversion of vehicles to CNG/LPG already in progress.	--
ii.	Institutional plans for implementation of gaseous fuel programmes.	Provide the institutional plan for specially designed Safety inspection programme for CNG and LPG vehicles and frequency of inspection. How capacity and skills will be created in the inspection centers for safety inspection? Independent auditing and supervision of these centers. Authorisation of conversion workshop and Fitament of kits etc.	GSPC, E&P Dept. Transport Dept./ FC & CA dept UD & UH Dept./ COT/ Distributors GAIL/Adani	The Bill is under process of consideration with GOG. Gas supplying & Gas Distributing Agency are to advertise by 31/12/2004	Draft Gujarat Motor Vehicles (use of fuel) Bill 2003 under consideration. This Bill contains provisions in this regard. Awareness programme going on	--

		<p>Fiscal Measures to encourage replacement of old vehicles with new vehicle on gaseous fuels.</p> <p>Regulatory and fiscal approach to stop fitment of unauthorized conversion kits. (Pl. note : Simple conversion of old diesel engines to gaseous fuels should not be allowed. Diesel vehicles should be replaced with new dedicated gaseous fuel vehicles)</p>	--	--	At present fiscal measures do not exist.	--
iii	Ethanol blend petrol and bio fuel programme if any		FC & CA Dept ,Oil Companies	Already implemented and on going .	All petrol storage Depots like IOC,IBP,HP,BP are blending ethanol from July, 2003 in the city.	---
6.	Traffic and transport management					
		Public transport Current status of public transport in terms of number of buses, load factor etc. and proposed plans to augment the fleet.	GSRTC, ST Dept, Police Commissioner, COT, RTO, VMC, VUDA	GSRTC ,COT By 31/12/2005	28 No. of buses (City) Current travel met by public transport	---

	<p>Plans to move public transport to run on clean fuels.</p> <p>Any other form of public transport planned. Metro, bus rapid transit or any other. Plan, scale and schedule of implementation.</p> <p>Transport Policy Formulation of transport policy to induce a mode shift from private to public modes of transport and implementation including fiscal measures.</p> <p>Formulation and implementation of parking policy. Other measures to reduce traffic congestion: e.g. Planning and construction of by-pass roads. Removal of encroachment of roads, promote non-motorized transport, pedestrians alone etc. Traffic signaling system Penalties for traffic rule violations Any other</p>	<p>GOG/ Transport Dept.</p> <p>VMC/VUDA/ Police commi ssioner/ Home Department</p>	<p>Privatization to run buses only on LPG/CNG or Bharat –II compliant in a phased manner is to be worked out by VMC.</p> <p>--</p> <p>---</p> <p>Under Planning</p>	<p>--</p> <p>--</p> <p>--</p> <p>The measures for easing traffic congestion include diversion of Heavy Vehicles from the city, not permitting cattle driven vehicles during pick hours, removal of street cattle and encroachment from road and improving road conditions.</p>	<p>---</p> <p>Not Proposed Yet</p>
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					Decision for banning heavy vehicles within VMC area already taken by Office of Police commissioner. Sixty timers already installed at various traffic junction within city.	
7	Fiscal measures	Fiscal measures to discourage use of older and polluting vehicles (e.g. Bangalore has imposed green tax on old vehicles etc) Any other fiscal measure to control traffic congestion	---	---	---	
8	Industrial pollution control					
		a. Installation of adequate pollution control measures in industries b. Feasibility of alternate cleaner fuels and implementation. c. Monitoring programmer of industries.	Individual Industries Association/ GPCB/IOCL	a. Continuing process b. On going Process c. To be undertaken and verified by GPCB,	a. Continuing process b. AQM stations already fixed and monitoring carried by GPCB c. Air polluting industries are monitored as per CPCB guide lines. Monitoring by special vigilance squad is carried out.	

					Consent under the Air Act'81 is granted if industries have provided adequate APC measures and the quality of emission as per the specified norms. 31 units, identified for monitoring 4 times per year.	
9	Thermal power plants					
		<ul style="list-style-type: none"> a. Use of washed/beneficiated coal for coal based TPP b. Installation of bag filter with ESP c. Schemes for utilization of fly ash d. Identification of new sites for fly ash disposal and methods of utilization 	GPCB/GEB	--	--	Vadodara City is not having any Thermal Power Plants within battery limits of VUDA
10.	Strengthening of air quality monitoring network					

i		Plans to strengthen the air quality monitoring e.g. a. Plans to increase number of monitoring stations, improving frequency of monitoring etc. b. Quality control of air quality data c. Monitoring of additional pollutants d. Installation of automatic-monitoring stations	GPCB/GIDC/VMC	It is decided to increase additional three number of monitoring stations with the help of IOCL, IPCL & ALEMBIC Ltd by 31-09-2004	* At present Ambient Air Monitoring is carried out at 3 locations by GPCB AND GEMI . * Three new stations are started at 1.Makarpura 2.Subhanpura 3. Karelibaug is * A workshop for review of an action plan was held on 06/06/03 at Vadodara	--
ii		Plans to develop air pollution inventory for the city. Indicate current efforts and new studies planned with tight deadline.	GPCB in consultation with CPCB	The Board will seek the help of CPCB for this purpose by 31/03/2005	Committee is constituted by GPCB .	--
iii		Plans to sponsor studies on health impact of air pollution in the city.	GPCB /VMC NIOH	NIOH has already undertaken this study.	VMC to engage NIOH by 31/12/2005	To be taken after study of Ahmedabad.

11.	Other sources of pollution					
i.	Hospital incinerators		Hospital authority/IMA /GPCB	Continuous Process	There are one common incinerators and Four individual incinerators for incineration of bio-medical wastes	--
ii.	Generator sets	a. Plan to control numbers b. Monitoring the use of cleaner fuels c. Enforcement of emissions standards for generator sets	GPCB, GIDC	Ongoing process	a. Supply of electricity is regular and so DG sets are not in use big way. b&c. Emission standards are monitored as per CPCB notification.	--
iii.	Biomass burning	Ban open burning of biomass and plan for effective control and finding alternative ways like composting etc	VMC/ VUDA/ GIDC	Ongoing process	* VMC is implementing this and collecting door to door garbage *Existing site at Kalali,where MSW is being composed and sold. The disposal site for MSW at Mujmahuda is finalized.	--

10	Supervisory powers and coordination	Single nodal agency to supervise, monitor and coordinate and report on the progress of implementation of the action plan when it is finalized	Task Force headed by the Chief Secretary, Gujarat	GoG	On going	--
11	Plantations	Targets and implementation plan for : a Tree plantation (to ensure high survival rate) b Green area development – give targets	GIDC/VMC/ Industries Associations	a. On going GIDC to provide Green Belt around estates and also in open space within estates and VMC in their battery limit to create green belts. b. VMC & VUDA to create green Area development Plan by 31/12/2005	Industrial units and Associations have been advised to plant more trees.	--