

Proposed Action Plan for Control of Air Pollution in Davangere city

1	Name of the City					:	Davanagere
2	Air Pollution concerns					:	PM ₁₀ , PM _{2.5} , SO ₂ and NO ₂
3	Air pollution levels: (provide range of 24-hourly average concentration values; annual average for past five years; No. days in various AQI categories)					:	Annexed as Annexure-IV
4	Months with high air pollution levels					:	January, February, November, December
5	Action plan					:	
Source group	Sl No	Action	Implementati on period (Short- Mid-Long) term	Time Target for implement ation	Responsible Agency	Actions are in progress	
	1.	Establishment of additional CAAQM station	Mid	March 2020	KSPCB	Presently one CAAQMS and two manual stations are working. One more additional CAAQM station has sanctioned by GoK at the cost of Rs. 2.3 crores. Action will be initiated to establish CAAQMS	
	2.	Source apportionment studies and emission inventory in Davanagere city at the cost of Rs. 3.0 Crores (Approx).	Long	March-2021	KSPCB	Emission inventory and Source apportionment study would be conducted and will be completed by June 2021 at a cost of Rs.1.55 crores	
	3.	Phasing out of 15 years old commercial Diesel vehicles	Long	January 2020	Transport Department	Government has issued the GO to ban 15 years old 6 seater and above passenger vehicles in Karnataka vide No.343 dated:14.2.2019.	
	4.	Regular checking of vehicular emission for ensuring compliance to emission norms and drive against polluting vehicles	Short	Continuous Process	Transport Department	The KSPCB along with RTO has conducted joint monitoring programme for vehicle emission checking. Joint Monitoring will be carried out one week in a month. Further there are 8 vehicle emission testing centers are in Davanagere which will be monitored twice in a year.	

5.	Good traffic management and re-direction of traffic movement. Identifying Traffic Choke Points & Installing traffic signal systems	Mid	December 2019	Police Department	In order to avoid the congestion in the road and also increase in the vehicular emission, the Traffic Police has identified 14 choking points. To ease the traffic 13 roads are converted into one way and entry of heavy goods vehicle is restricted in peak hours. Signal lights have installed to ease the traffic at 10 places at a cost of Rs.1.25 crores. Another 48 Nos. signal system at advanced technology are proposed at a cost of Rs. 12 Crores.
6.	Promotion of LPG Operated vehicles	Mid	Continuous programme	Food and Civil Supplies Department	There are 2 LPG dispensing stations are operating. Efforts will be made to increase no of LPG stations.
7.	Prevent and penalize adulteration of fuel with cheap oils and solvents	Short	Continuous Process	Food and Civil Supplies Department	It is a continuous program and in progress.
8.	Gradually restrict sale of un-scientificallly reprocessed oil by the street vendors	Mid	June -2019	Food and Civil Supplies Department	The Department is taking steps
9.	Periodic check of all petrol bunks established in Urban and Rural Districts of Bangalore and initiate action against the violators.	Short	It is a continuous program and in progress	Food and Civil Supplies Department	Once in six months
10.	Periodic checking of Emission monitoring equipments housed in Emission Testing Centers	Short	Continuous Process once in Six Months	Food and Civil Supplies Department	Once in six months

11.	Introduction of battery operated bus service.	Long		KSRTC	The KSRTC will introduce one battery operated bus in Davanagere City by March-2020.
12.	Usage of Bio Fuel in KSRTC buses.	Continuous process		KSRTC	The KSRTC has agreed to mix 10% of Bio Fuel for operating diesel vehicles and blending of Ethanol for petrol vehicles is being done by the Oil companies.
13.	Regular cleaning and sweeping of roads	Short	Continuous Process	City Corporation	There is 1 sweeping machine procured by Davanagere City Corporation and is in operation.
14.	Procurement of more no of mechanical road sweeping machines	Mid	December 2019	City Corporation	One sweeping machines is proposed to procure at a cost of Rs. 63.00 lakhs.
15.	Filling potholes and road cuttings to facilitate smooth flow of vehicles	Short	Continuous Process	City Corporation	Davanagere City Corporation is taking steps to fill up to potholes regularly.
16.	Tree plantation along the roads and development of green belt in open areas, traffic corridors, public places, vacant CA sites.	Short	Continuous Process	City Corporation, Urban Development , and Forest Department.	10,900 plantations done in the city at a cost of Rs 45.00 Lakhs and 20,000 proposed for the year 2019-20 at a cost of Rs 60.00 Lakhs.
17.	Adoption of Parks by industries under CSR	Short	Dec-2019	City Corporation, Urban Development , and Forest Department.	City Corporations and KSPCB to initiate action. 5 Parks and 5 industries identified for the scheme.

18.	Identification and development of C & D waste processing site	Mid	March 2022	City Corporation,	Davanagere City Corporation has identified a abundant quarry and further process under way.
19.	Covering of constructional site	Short	Continuous Process	City Corporation	Davanagere City Corporation is taking steps.
20.	Restriction on storage of constructional materials along the road	short	Continuous Process	City Corporation	Davanagere City Corporation is taking steps.
21.	Transportation of construction materials and wastes in covered system	Short	Continuous Process	City Corporation	Davanagere City Corporation is taking steps.
22.	Prohibition on open burning of municipal solid waste, plastic, horticulture waste, biomass	Short	Continuous Process	City Corporation	As per the SWM Rules of 2016 Government of India, Notification issued by the Corporation banning the open burning of garbage in the public places. The Environmental Engineers are monitoring regularly.
23.	Secondary Transportation of municipal solid waste in covered system	Short	Continuous Process	City Corporation	Solid Waste Management Task Force is constituted at district level to monitor and to take action in this regard. Complaints redressal system is started.
24.	Promotion for use of cleaner fuel in commercial establishments	Short	Continuous Process	KSPCB	Davanagere City Corporation is taking steps.

25.	Ensuring operation of air pollution control systems in industries to meet emission standards	Short	Continuous Process	KSPCB	Regular monitoring of air polluting industries for effective operation of APC equipments.
26.	Regular monitoring of industries and initiation of action against defaulting units.	Short	Continuous Process	KSPCB	70 No. of industries inspected and 9 No. of notices issued for non-compliances. 7 industries taken action for compliance. Further action is being taken for another 2 units.
27.	Publishing Air quality monitoring data in local news media. Strengthening of Compliant redressel Mechanism Awareness programmes on urban pollution issues- 50 No's at the total cost of Rs 5.00 Laks	Short Short Short & Mid	Continuous Process Sept 2019 March 2020	KSPCB	Publishing Air quality monitoring data in local news media. Strengthening of Compliant redressel Mechanism Awareness programmes on urban pollution issues- 50 No's at the total cost of Rs 5.00 Laks.

Annexure - IV

Ambient air quality data at Mothi Talkies, Davangere- 2012-18			
	SO2 µg/m3	NO2 µg/m3	PM10 µg/m3
2012-13	6.0	9.0	134.0
2013-14	7.0	10.4	147.0
2014-15	4.8	7.2	167.0
2015-16	5.7	10.7	216.0
2016-17	5.1	9.8	145.0
2017-18	5.3	10.0	164.6
Standards	50.0	40.0	60.0