Proposed Action Plan for Control of Air Pollution in Kalaburagi city.

1	Nan	ne of the City				: I	Kalaburagi
2	Air	Pollution concerns					PM ₁₀ , PM _{2.5} , SO ₂ and NO ₂
3	conc	pollution levels: (provide centration values; annual aver arious AQI categories)				: <i>F</i>	Annexed as Annexure-V
4	Mon	ths with high air pollution l	evels			: J	January, February, November, December
5	Acti	on plan				:	
Source	SI No	Action	Implementat ion period (Short- Mid- Long) term	Time Target for implement ation	_	ons	Actions are in progress ncy
	1.	Establishment of additional CAAQM station	Mid	March 2020	KS	SPC	CB Presently one CAAQMS and one manual station are working. One more additional CAAQM station has been sanctioned by GoK at the cost of Rs. 2.3 crores. Action will be initiated to establish one CAAQMS.
	2.	Source apportionment studies and emission inventory in Davanagere city at the cost of Rs. 3.0 Crores (Approx).	Long	March-2021	KS	SPC	CB Emission inventory and Source apportionment study would be conducted and will be completed by June 2020 at a cost of Rs.1.31 crores
	3.	Phasing out of 15 years old commercial Diesel vehicles	Long	January 2020		_	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 conducting joint monitoring programme for vehicle emission checking, so far 1030 vehicles testing have been conducted from April 2018. Further there are 15 vehicle emission testing centers are in Kalaburagi.
5.	Good traffic management and re-direction of traffic movement. Identifying Traffic Choke Points & Installing traffic signal systems	Mid	December 2019	Traffic Police and Smart City Project Authority	In order to avoid the congestion in the Road and also increase in the vehicular emissions, the Traffic Police is identifying the roads which can be diverted for ease of traffic. In this regard, Kalaburagi city has identified 9 places viz Market Chowk, Karge Petrol pump Circle, Jevargi cross, Jagath Circle, SVP(Thimmapura) Chowk, Aland Check Post Circle, Humnabad Circle, Ram Mandir circle, RTO circle.
6.	Promotion of LPG Operated vehicles	Mid	Continuous programme	Transport Department	There are 7 Nos of Auto LPG dispensing stations in Kalaburagi City.
7.	Prevent and penalize adulteration of fuel with cheap oils and solvents	Short	Continuous Process	Food and Civil Supplies	It is a continuous program and in progress.
8.	Gradually restrict sale of un-scientifically reprocessed oil by the street vendors	Mid	June -2019	Food and Civil Supplies Department	Inspections are done to restrict sale.
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	Dec 2020	NEKRTC	The NEKRTC will introduce one battery operated bus in Kalaburgi city by March-2020.
12.	Usage of Bio Fuel in KSRTC buses.	Continuous process	Dec 2020	NEKRTC	The NEKRTC 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 one mechanical sweeping machine procured by Kalaburagi City Corporation.
14.	Procurement of more no of mechanical road sweeping machines	Mid	December 2019	City Corporation	Additional sweeping machines proposed to procure.
15.	Filling potholes and road cuttings to facilitate smooth flow of vehicles	Short	Continuous Process	City Corporation	Kalaburagi City Corporation is taking steps.
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	About 30,000 samplings both garden and road side are made during 2016 to 2019 and proposed additional plantation.
17.	Adoption of Parks by industries under CSR	Short	Dec-2019	City Corporation	City Corporations and KSPCB to initiate action.
18.	Identification and development of C & D waste processing site	Mid	March 2022	City Corporation	Kalaburagi City has identified a site at the existing land fill site and called for tenders at a cost of Rs. 5.1 crores.

19.	Covering of constructional site	Short	Continuous Process	City Corporation	Kalaburagi City Corporation is taking steps.
20.	Restriction on storage of constructional materials along the road	short	Continuous Process	City Corporation	Kalaburagi City Corporation is taking steps.
21.	Transportation of construction materials and wastes in covered system	Short	Continuous Process	City Corporation	Kalaburagi 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, 2016 of 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	Transport Department	Kalburgi City Corporation
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	There is no air polluting industries existing within Kalaburagi City. However, the air polluting industries existing surrounding the city will be monitored regularly and action will be taken against non complying industries wr to Air Act.

27.	Publishing Air quality	Short	Continuous	KSPCB	Publishing Air quality monitoring data in local news media.
	monitoring data in local		Process		Strengthening of Compliant redressel Mechanism Awareness
	news media.Strengthening				programmes on urban pollution issues- 50 No's at the total
	of Compliant redressel	Short	Sept 2019		cost of Rs 5.00 Laks.
	Mechanism				
	Awareness programmes on				
	urban pollution issues- 50	Short & Mid	March 2020		
	No's at the total cost of Rs				
	5.00 Laks				

The meeting is concluded with vote of thanks to the Chairman and all the members of the Air Quality Monitoring Committee.

Sd/-CHAIRMAN AIR QUALITY MONITORING COMMITTEE AND PRINCIPLE SECRETARY, DEE, GOK

To

1. All the members and special invitees

MEMBER CONVENOR

AIR QUALITY MONITORING COMMITTEE AND MEMBER SECRETARY, KSPCB, BANGALORE

Copy to:

- 1. The Principal Secretary to Government, (Ecology and Environment), Forest, Ecology and Environment Department, GoK 7th Floor, M.S. Building, Bangalore 560001
- 2. The Additional Chief Secretary to Government, Department of Forest, Ecology and Environment, M.S.Building, Bengaluru-56000 for kind information.
- 3. The Member Secretary, CPCB, Parivesh Bhavan, East Arjun Nagar, Delhi -110032 for kind information.
- 4. The Regional, Directorate, South, Nisarga Bhavan, 7th D Main, Shivanagar Bangalore-560079 for information and necessary action

Annexure - V

Ambient air qua	lity data at Kalab	uragi Govt. Hosp	ital for 2012-18
	SO2 μg/m3	NO2 μg/m3	PM10 μg/m3
2012-13	3.0	15.0	113.0
2013-14	3.3	12.6	86.3
2014-15	4.7	12.2	77.0
2015-16	2.2	13.0	76.0
2016-17	0.0	0.0	57.0
2017-18	2.3	24.0	65.6
Standards	20.0	30.0	60.0

ANNUAL AVERAGE OF AMBIENT AIR QUALITY INDEX OF OTHER CITIES OF KARNATAKA FROM APRIL 2012 TO MARCH-2018

SI.	Name of the Monitoring	2012-13	13	201.	2013-14	201	2014-15	2015-16	.16	2016-17	.17	2017-18 AQI	AOI
No.	Station												,
1	Mothi Talkies, Davangere	123	M	131	M	145	Σ	177	M	130	M	143	M
2	RO- Dharwad	80	S	98	S	75	S	S 69	S	76	S	29	S
3	Kalaburagi Govt.Hospital	109	M	98	S	77	S	92	S	*	*	70	S

Note- * data not received.

Breathing discomfort to people on prolonged exposure	Respiratory illness to the people on prolonged exposure	Respiratory effects even on healthy people
Poor (201–300)	Very Poor (301-400)	Severe (>401)
Minimal Impact	Minor breathing discomfort to sensitive people	Breathing discomfort to the people with lung, heart disease, children and older adults
Good (0-50)	Satisfactory (51-100)	Moderate (101–200)