(G) Revised Action Plan for Air Quality Management in Srinagar city:-

a) Background :-

Srinagar city is the largest city and the summer capital of the state of Jammu and Kashmir with population of **11,92,792** having population density of **4057** persons/sq.km. It lies in Kashmir valley on the banks of Jhelum river along with world famous Dal and Anchar lakes, at an elevation of **1585 msl** having an area of **294 Sq.km** with an average annual precipitation of **635 mm**. The city is known for its natural environment, gardens, lakes, water fronts and house boats and experiences temperature variations from extreme cold in winters to maximum temperature of **35°C** in summers. District Baramulla occupies the northern and western boundary, whereas, Budgam district forms the western and south-western limits of Srinagar city.

Air quality in Srinagar city has deteriorated mainly due to vehicular emission, road dust and dust emitted from other developmental activities like construction and demolition of buildings, construction of flyovers, bridges and repairing of roads. The SPCB is also carrying out monitoring of PM 2.5 in Srinagar since July 2017. At present, there are five permanent Ambient Air Quality Monitoring Stations to monitor PM 2.5 at different locations within Srinagar city. These sites are located at Rajbagh, Hyderpora (Paraypora), Boulevard near Dalgate, Jahingir Chowk near Civil Sectt. and Soura near SKIMS. The higher levels of PM 10 and PM 2.5 are mainly due to the following reasons:-

b) Causes of Air Pollution in Srinagar City :-

The main activities / causes of air pollution in Srinagar city, in order of pollution load are:-

i. Vehicular emission from traffic load – major concern.
ii. Construction activities like flyovers, widening of roads etc within the city, and the traffic diversions resulting in massive traffic jams due to construction of flyovers etc.
iii. Bad condition of roads and road dust.
iv. Burning of biomass waste and municipal solid waste.
v. Other activities i.e. D.G. sets, adulterated fuel etc.

On the basis of monitoring conducted under NAMP / SAMP and analysis of the data generated, the level of main air pollutant (RSPM / PM10) has been evaluated
towards higher side, violating the standard permissible limits consecutively for five years, thereby resulting in the non-attainment status for Srinagar city. Similar trend has been observed in air pollutants during last five years period 2013-14 to 2017-18.

None of the agencies including SPCB has made any separate emission inventory with respect to different emission sources, except for the existing network of ambient air quality monitoring under NAMP, the data for last five years for the same is annexed.

The monthly variation of particulate matter (RSPM/PM10) level at two regular NAMP monitoring locations in Srinagar city, evaluated in last two years is given graphically as below :-

![Monthly Variation of Particulate Matter(PM10) at Khonmoh](image)

![Monthly Variation of Particulate Matter(PM10) at Rajbagh Srinagar](image)
Revised Action Plan for Control of Air Pollution and Air Quality Management in Srinagar City is given as below:

<table>
<thead>
<tr>
<th></th>
<th>Name of City</th>
<th>Srinagar</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Air Pollution Concerns</td>
<td>PM$<em>{10}$, PM$</em>{2.5}$,</td>
</tr>
</tbody>
</table>

Data on Air Pollution levels: (Range of 24-hourly average concentration values of PM$_{10}$ at two monitoring locations for past five years i.e. 2013-14 to 2017-18 and annual average.

Annexed as
Annexure – A1 for 2013-14
Annexure – B1 for 2014-15
Annexure – C1 for 2015-16
Annexure – D1 for 2016-17
Annexure – E1 for 2017-18
Annexure – F1 for annual average for concentration values of different air Pollutants.

4. Months with High Air Pollution levels in Srinagar city for the last four years
   i) 2014-15 (Nov. to Jan.).
   ii) 2015-16 (Nov. to Jan.).
   iii) 2016-17 (Nov. to Jan.).
   iv) 2017-18 (Nov. to Jan.).
Annexed as Annexure- G1.

5. Action Plan to Mitigate the Air Pollution Problem of Srinagar City in required Time Frame by the Responsible Implementation Agencies to bring standards of air quality within the prescribed norms.

<table>
<thead>
<tr>
<th>Source group</th>
<th>Action</th>
<th>Implementation period (Short / Mid/ Long-term)</th>
<th>Time target for Implementation</th>
<th>a) Responsible agency (ies)</th>
<th>b) Any other information</th>
</tr>
</thead>
</table>
STEPS TO CONTROL EMISSIONS FROM VEHICULAR POLLUTION

1) Restriction on plying and phasing out of 15 years old commercial Diesel driven vehicles.

<table>
<thead>
<tr>
<th>Mid Term</th>
<th>Within six months</th>
</tr>
</thead>
</table>

a) :-Transport Department

b(i):- At present, in compliance to Order passed by Hon’ble High Court of J&K in PIL, OWP No. 458/2003 & 1280 /2004 and Cabinet Decision No. 53/6, Dated; 09-03-2007, there is a ban of Commercial/Passenger Vehicles from plying on road in the state of J&K on attainment of 25 years of age w.e.f 01-04-2007. Further making it compulsory for the vehicles between 15 to 25 years of age to have a fitness test after every six (06) months, vide Govt. order No. 20 TR of 2007 dt. 20.03.2007, issued following the said cabinet decision.

b (ii):- In the state of J&K, out of a total of 16,57,433 vehicles registered as on March 2018, 6,60,627 vehicles are registered for Kashmir province, and the Srinagar district with 3,15,797 vehicles, is the second district after Jammu having maximum vehicles registered.

As per the data from Motor Vehicle department, the category-wise number of vehicles registered in Kashmir province along with number of vehicles registered having attained the age of 15 years and less than 25 years is enclosed as Annexure-H1.

b(iii) :- On recommendations of the SPCB vide No. SPCB/LSK/358/17/6074-77 dt. 18.01.2019, the Transport Commissioner J&K has vide No. TC/JK/legal/2019/1997 dt. 11.03.2019 initiated the process and submitted the proposal to the Govt of J&K for banning of commercial vehicles above 15 years of age in the state, which is under active consideration of the State Govt.

b (iv):- The Govt. of J&K has also proposed to phase out 500 diesel driven commercial vehicles (Buses) above to the age of 15 years to 25 years for which a budget of Rs. 25.00 Crores has also been approved for financial assistance as soft loan of Rs. 5.00 lac to each such transporter in compliance to Hon’ble High Court directions.

b(v):- State Transport Authority, has also issued a circular vide No.TC/JK/MV/2019/144-68 dated 03-01-2019, banning Re-registration of BS-III Vehicles, under the pollution emission norms, which are being purchased from outside J&K and re-registered in the State, with immediate effects.

All such efforts referred above shall definitely mitigate the air pollution load in Srinagar city near future.
### 2) Introduction of cleaner fuels (CNG/LPG) for vehicles.

**Mid Term**

Within three years

- a(i):- Department of Food, Civil Supplies and Consumer Affairs, J&K
- a(ii):- Oil Companies (Indian Oil/HP etc.)

**b(i):-** Regarding the introduction of cleaner fuel (CNG/LPG) along with Diesel/Petrol, the matter was taken up with Chairman/MD, Gas Authority of India Limited (GAIL) by the Transport Department vide communication dated **02.06.2017** and Central Institute of Road Transport (CIRT), Pune. The GAIL has informed that the CNG can be provided normally through pipe-line and as a temporary measure for transportation, it can also be transported in considerably lesser quantity in compressed form filled in the mobile cascade to any location by road. However, the transportation through the road is highly costly affair which adversely impacts the viability of the ‘change-over’. The laying down of the pipe-line as and when done, will lead to cost-effective and bulk availability of CNG to facilitate large scale up-gradation effort.

Further, there is a project proposal for GSPL, **Bhatinda-Jammu-Srinagar Gas pipe line project**, initiated way back in 2011, to make possible round the clock LPG supply in J&K, to be completed under two phases i.e. **Phase-I**, Gas pipeline from Chak Deviyan (Kathua district) to Smailpur (Samba district), **Phase-II**, Langath (Samba District) Jammu to Srinagar. The operation of pipeline is under controlled by SCADA systems that allows continuous monitoring and immediate closure of valves in case of emergency. The project work has been delayed due to some legal issues regarding acquisition of underground land for pipe laying.

### 3) Regular Checking of vehicular emission and issue of pollution under Control Certificate (PUC)

**Short Term**

Within Six months

- a):- Transport Department and Traffic Police
  - b (i):- Regular checking of vehicular emissions jointly by traffic police and the SPCB, as per order of Hon’ble Court whereby regular court order dt. **23/11/2005** in WP (Other) No. **458/2003** is in place.
  - Two vehicular emission monitoring laboratories, for Jammu and Kashmir region are regularly carrying out monitoring randomly since then.

  - b (ii):- There are **153 Pollution Checking Centres (PCC)** in the state (**79 in Jammu, 74 in Kashmir**). These PCCs issue PUCs to the vehicle users and are regularly cross checked by joint teams of Traffic Police and SPCB.
b (iii): - Also a common format for issuance of PUC certificate by all the centres needs to be adopted urgently with prescribed standards duly printed therein.

b (iv): - Random monitoring of compliance needs to be increased imposing heavy penalties on defaulters so that it may act as deterrent to the careless / negligent automobile drivers / owners.

4) Launching Extensive drive against polluting vehicles for ensuring strict compliance.

<table>
<thead>
<tr>
<th>Short term</th>
<th>As a regular activity</th>
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</table>

5) Good traffic management including redirection of traffic movement to avoid congestion.

<table>
<thead>
<tr>
<th>Mid Term</th>
<th>Within six months</th>
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<tbody>
<tr>
<td>a): - Traffic Police</td>
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<tr>
<td>b (i): - Frequent and regular Traffic congestion and jam density are two most important reasons for air pollution load in the city. Traffic density and carrying capacity of roads are required to be looked into with optimal transport network with effective movement of traffic and minimal traffic congestion with the taming and training of commercial vehicles / matadors (Public Transportation) drivers, who have no concern for specified mini bus stoppages, and use already congested and narrow roads for stopping their vehicles as and when required on “I Stop My Bus Stop” thinking, forcing traffic movement at a snail pace, road blocking, thereby, resulting emissions in large quantity. Besides this, unauthorized parking adds on the traffic congestion which further results in deterioration of air quality in city. The traffic police to ensure good traffic management and enforcement of rules.</td>
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</table>

6) To bring Srinagar city under Mass Rapid Transportation System (MRTS), for Urban mobility

<table>
<thead>
<tr>
<th>Long Term</th>
<th>Within Five years</th>
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<tbody>
<tr>
<td>The State Administrative Council (SAC) has also approved the proposal for creation of two corporations in the state, in Feb 2019, a) “Jammu Mass Rapid Transit Corporation Pvt. Ltd. and b) Srinagar Mass Rapid Transit Corporation Pvt. Ltd. , to introduce the Urban mobility in two capital cities of the State. The Two Corporations will have association with Economic Reconstruction Agency, Metro Politian Authorities and Experts from Ministry of Housing and Urban Affairs, for Multi Model Transport System (MMTS) and Mass Rapid Transit System (MRPS).</td>
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</table>
These two corporations shall also undertake bus operations likewise in Delhi/Mumbai to address the problems of congestion in two capital cities of the state by inducting 300/400 buses in each city, all these efforts will have a definite impact on the improvement of Ambient Air Quality to bring the level of air pollutants upto the permissible levels in Srinagar city.

| 7) Ban on registration of Diesel driven auto-rickshaw / Tempo. | Mid Term | Within two years | a):- Transport Department  
b):- As Per Draft Transport Policy of State Transport Deptt., there is a proposal of switching over to CNG based fuelling auto–rickshaws in near future subject to the availability of CNG facility in the State. 

The AQMC is considering recommendation to the concerned department to ban the registration of fresh diesel driven auto rickshaws / tempos within next one to two years. |

| 8) Promotion and operationalization of E-rickshaw and steps for promoting battery operated vehicles including establishment of charging stations. | Mid Term | Within One year | a(i):-Srinagar Municipal Corporation  
a(ii):-Transport Department  
b(i):- E-Rickshaws :- The procurement and operation of E-Rickshaws / E-Carts in the State of Jammu and Kashmir for few select routes of the two capital cities of Jammu and Kashmir State on pilot basis w.e.f. 31.12.2018 has been approved, and shall be introduced within six months.  
b(ii):- E-Buses:- State Govt. has processed for procuring 20 electric buses for Srinagar city by 31st March 2019 with the object of pollution free mobility system within the state capital cities. The procurement of E-Buses is under FAME-India Scheme of GoI. |

| 9) Development of Multi-layer parking. | Long Term | Within five years | a(i):-Srinagar Municipal Corporation  
a(ii):- Housing and Urban Development Department  
b(i):- The KMD yard in the city centre Srinagar has recently been developed as a multilayer parking for 288 cars, constructed last year.  
b(ii):- Two multilayer parking slots at Sheikh Bagh and erstwhile State Motor Garages to accommodate 800 vehicles at a time in the heart of city, as per the Atal Mission for Rejuvenation and Urban Transformation |
(AMRUT) of Govt. of India shall be ready by 2020.

b(iii) Under Srinagar Smart City Action Plan, some more parking locations have been approved under the control of SMC.

*On developing the multilayer car parking facilities in Srinagar city shall have a definite impact on the improvement of traffic management / congestion with the ultimate goal of improving the Ambient Air Quality of the city to the level of prescribed limits in near future.*

<table>
<thead>
<tr>
<th>10) Retrofittings of particulate filters in Diesel driven vehicles</th>
<th>Mid Term</th>
<th>Within one to two years</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) :- Transport Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b):- Only those new vehicles in Srinagar city to be registered which are having retrofitting of particulate filter feature, as envisaged under BS (VI) Norms, under ARAI, by 2020. The AQMC is considering recommendation to the concerned department for compulsorily retrofitting of particulate filters in all diesel driven vehicles within next one to two years.</td>
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<tr>
<th>11) Action Plan to check fuel adulteration.</th>
<th>Short Term</th>
<th>Within three months on regular basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>a(i):-Department of Consumer Affairs and Public Distribution (Legal Metrology), J&amp;K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a(ii):- Oil Companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) :-Department of legal Metrology conducts checks on fuel quality and adulteration in the state including Srinagar city. As per details provided for the years 2015 to 2017, no case of adulteration has been detected in this period. The samples collected and analysed and have been reported to be within prescribed limits.</td>
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<tr>
<th>12) Monitoring of vehicle fitness.</th>
<th>Mid Term</th>
<th>Within Six months to two year</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) :- Transport Department and Traffic Police</td>
<td></td>
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</tr>
<tr>
<td>b):- At Present, as per existing policy of Transport Deptt., Motor Vehicle fitness is being carried out on visual inspection done by inspecting team. Further, transport deptt. is establishing an Inspection and Certification Centre (ICC), in near future at Samba with the estimated project cost of Rs.14.40 Crore (Rs. Fourteen Crore and forty lac only), for conducting the fitness of vehicles with an automatic process for evaluation of fitness features. Proposal for similar ICC facility for Srinagar has also been submitted to MoRTH, GoI for the same facility.</td>
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</table>
### 13) Periodic calibration test of vehicular emission monitoring instrument.

**Short Term**  
Immedicat e implem entation (one to six months)

**a)**: Transport Department and State Pollution Control Board.  
**b (i)**: The mechanism for periodic calibration of the PUC machines / instrument with Annual maintenance contact has to be **three times** i.e. after every four months rather than six months in a year as is the practice presently adopted by majority of these centres in J&amp;K State.  
**b (ii)**: Introduction of automatic online network for transmission of PUC data to the central server to minimize manual interference and allow proper analysis of data for remote auditing of Pollution Checking Centers.  
**b (iii)**: Though there exists a system of vehicular pollution checking in the state of J & K, number of pollution checking centers is not adequate, which obviously cannot cater to the huge vehicle population of the state. As such the number of Pollution Checking Centers should be increased across all possible points of regular contact points of a vehicle owner to go for auto-emission checking the number of times his vehicle is required to go for it in a year.

Since fuel stations are existing in every nook and corner of the state, putting in place a pollution checking centre at every fuel station is a good step and suitable/feasible from traffic point of view, which needs to be taken on priority for an integrated approach towards control of vehicular pollution.

### 14) Construction of peripheral / ring roads around the city to avoid congestion.

**Long Term**  
One year to two years

**a)**: National Highway Authority of India  
NHAI has started working on construction of **60.94 KM ring road** project worth **Rs. 939 crore** around Srinagar city as a bye-pass from Galander village to crossing of the Sumbal road to Wayul junction on Jammu - Srinagar highway. It will have **flyovers**, connecting major commercial / traffic points along the ring road project, which will definitely decongest the traffic load in Srinagar city, thereby resulting in the improvement of ambient air quality status.

### 15) Installation of Remote sensor based PUC system.

**Long Term**  
One year to two years

**a)**: J&amp;K Traffic Police
<table>
<thead>
<tr>
<th>(ii) CONTROL FOR AIR POLLUTION FROM ROAD DUST</th>
</tr>
</thead>
</table>
| 1) Regular Cleaning of road dust. | Short Term | Within six months | a): Srinagar Municipal Corporation  
|                                     |           |                  | b(i) :- Road dust is mainly due to traffic load, worst condition of roads especially without black-topping, absence of water spraying, construction of fly overs etc. Besides this, sweeping is a major cause of increasing levels of PM 10 in this area.  
|                                     |           |                  | b(ii):- Control measures for road dust including sweeping, water spraying on roads, black topping, plantation, etc. to prevent re-suspension of dust.  
|                                     |           |                  | b(iii):- Regular cleaning / sweeping of city roads is being done twice in a day on daily basis for 95% of roads and left over areas are being cleared alternately thrice a week. Besides that the SMC is also using the road sweeping vacuum cleaning machine on regular basis.  |
| 2) Water Spraying on road through tankers. | Short Term | Within six months | a):- Srinagar Municipal Corporation  
|                                               |           |                  | b):- In the areas, where there is road dust, water sprinkling is being done regularly.  |
| 3) Widening of roads and Construction of Pucca pavement along the roads. | Mid Term | Six months of one year | a(i):-Srinagar Municipal Corporation, and (ii) Roads and Building Deptt.  
|                                               |           |                  | b(i):- Both organizations to take up the issue of road widening and development of Pucca pavement along roads where ever possible.  
|                                               |           |                  | b(ii) :- The occupation of the roads and footpaths by street vendors and road foot movement by the public also hamper the traffic movement. All such hindrances to be removed by the SMC and traffic police immediately.  |
| 4) Tree Plantation along the roads and development of Green belt in open areas, gardens, parks/ community places Schools & housing societies. | Mid Term | Within one to two years | a):-Urban / Social Forestry, Srinagar Development Authority, Srinagar Municipal Corporation and department of Floriculture  
|                                               |           |                  | b(i):- All the departments are responsible for developing tree plantation and greening of the city, as and where space is available which is part of regular plantation activity of these departments.  
|                                               |           |                  | b(ii):- SMC has developed 29 green spaces as parks in the city and has also proposed for 116 spaces to be developed into small parks.  |
5) Introduction of water fountains at major traffic intersections / circles.

<table>
<thead>
<tr>
<th>Short Term</th>
<th>Within six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>a):- Srinagar Municipal Corporation</td>
<td></td>
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<tr>
<td>b):- The SMC has established many fountains in the Srinagar city at various locations as a part of air quality management as well as for beautification purpose which are regularly operated and maintained by SMC. Presently, <strong>12 fountains</strong> at eight locations within Srinagar city have been installed and are working properly at locations :- Bishember Nagar (01 No.), Along MA Road (05), Fateh Kadal (01), Khanyar near Gousia Hospital (01), Rainawari (01), Bulbul Shah Sahib Chowk (01), Baghe-Ali-Mardan Zadibal (01), and Opposite Mughal Darbar, Residency Road (01).</td>
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</table>

### (iii) CONTROL OF AIR POLLUTION FROM CONSTRUCTION AND DEMOLITION ACTIVITIES

<table>
<thead>
<tr>
<th>1) Covering of construction site.</th>
<th>Short Term</th>
<th>With immediate effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>a):- Srinagar Municipal Corporation and Roads and Buildings department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b(i):- SMC to issue directions to the concerned while granting building permissions.</td>
<td></td>
<td></td>
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<tr>
<td>b(ii):- Roads and Buildings department to enforce the same.</td>
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<table>
<thead>
<tr>
<th>2) Ensure Carriage/Transportation of construction materials like sand, soil, stone, chips etc. in a covered system.</th>
<th>Short Term</th>
<th>With immediate effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>a):- J &amp; K SPCB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b):- Srinagar Municipal Corporation :</td>
<td></td>
<td></td>
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<tr>
<td>c):- The J&amp;K SPCB has imposed ban on the un-covered transportation of building material like sand, construction/demolition material, MSW etc. vide J&amp;K SPCB order No. 26 of 2019 dt. 30.01.2019.</td>
<td></td>
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<tr>
<td>The Traffic police/SMC has to enforce and implement the ban.</td>
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</table>

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<thead>
<tr>
<th>3) Restriction on Storage/dumping of construction materials along the road.</th>
<th>Short Term</th>
<th>Within six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>a):- Srinagar Municipal Corporation</td>
<td></td>
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<tr>
<td>b):- The menace of storage of construction material along the road is apparent but it is not rampant. Persons who are undertaking construction have been directed by the SMC to clear the spot immediately and it is ensured that no storage of construction material is allowed along the roads.</td>
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<tr>
<th>4) Enforcement of Construction and Demolition Waste Management Rules, 2016.</th>
<th>Short Term</th>
<th>With immediate effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>a):- Srinagar Municipal Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b):- Srinagar Development Authorities (SDA).</td>
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<tr>
<td>Strict enforcement of C &amp; D Rules, penalty to be imposed on defaulters.</td>
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</tbody>
</table>
| 5) Control Measures for fugitive emissions | Short Term | With immediate effect | a):- Srinagar Municipal Corporation  
b):- Urban Local Bodies, Srinagar Development Authorities (SDA).  
   |   |   | The above agencies are responsible to take Control Measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.  
| 6) Builders should leave 33% area for green belt in residential colonies to be made mandatory. | Mid Term | One year to two years | a(i) :- Srinagar Municipal Corporation  
a (ii) :- Srinagar Development Authority  
   |   |   | The agencies responsible must ensure that building permissions for the residential colonies be issued with the mandatory condition of 33% area to be covered under green belt.  
| 1) Regular check and control on open burning of municipal solid waste, biomass, plastic, horticulture waste etc. | Short Term | Within six Months | a):-Srinagar Municipal Corporation  
b):- The SMC has imposed blanket ban on open burning of any kind of waste. Notifications have been issued from time to time in local Dailies and newspapers and it is being ensured that open burning of waste is not done. Also, the SMC has imposed ban on open burning of shed and dry leaves during autumn in various gardens in Srinagar. The dry fallen leaves on the roadside are collected by SMC for further disposal. Further, agricultural biomass burning is also negligible in Srinagar city.  
| 2) Immediate lifting of solid wastes generated from de-silting and cleaning of municipal drains for its disposal. | Short Term | Within six months | a):-Srinagar Municipal corporation  
j):- The main reason for burning of MSW is lack of timely collection of waste. It is as such suggested to strengthen the collection network of such waste immediately followed by its scientific disposal in the designated landfill.  
| 3) Ensuring promotion & use of cleaner fuel for commercial purposes like locals Dhaba/eateries. | Short Term | Within two months | a):- Srinagar Municipal corporation  
b(i):- The J&K SPCB has imposed ban on use of fire wood and coal in the Dhabas, Restaurants, Eateries with the directions to make the use of clean fuel like LPG, Brickets etc. vide J&K SPCB order No. 22 of 2019 dt. 11.03.2019.  
b(ii):-The circular instructions to all the Dhabas/eateries, restaurants, etc. within the city to be issued, to switch over to LPG as fuel and stop using coal and firewood with immediate effects.  

| 4) Implementation of Pradhan Ujjwala Yojana (PMUY) in J&K State. | Short Term | Within six month | The State Govt. has achieved 75% implementation target under **PMUY** by providing free LPG gas connections to **3.70 lac** below poverty line households out of target of **4.90 lac**, out of which **77,499** LPG connections have been distributed among the BPL households in Srinagar district as on **February 2019**. These households are now using cleaner fuel instead of fire wood, cow dung etc. and shall be contributing in improving the ambient air quality status of Srinagar city. |

| 1) Ensuring installation and operation of air pollution control devices in industries. | Mid Term | Within one year | a):- J and K State Pollution Control Board.  
b):- There is no industrial unit of Red and Orange category within Srinagar Municipal limits. All Industries especially the highly polluting industries like cement factories etc. around Srinagar city have been equipped with online monitoring system as per guidelines of CPCB which ensures the monitoring of real time data. Similarly all industries causing air pollution shall be made compliant for installation of PCDs as per guidelines of CPCB. |

| 2) Ensuring emission standards in industries. | Short Term | Within six months | a):- J and K State Pollution Control Board.  
b):- All industries causing Air, Water and Noise pollution shall be made compliant w.r.t causing emission levels with the standard as are issued by SPCB. |

| 3) Adoption of cleaner technology in industries. | Mid Term | Within one year | a):- J and K State Pollution Control Board.  
b):- Industries shall be encouraged to adopt cleaner technologies as per guide lines of CPCB. |

| 4) Shifting of polluting industries. | Mid Term | Within one year | a):- J and K State Pollution Control Board.  
b):- Many polluting industries like Stone crushers / Brick kilns have been closed and shifted in the past due to pollution load. Further, all the brick kilns nearby and around Srinagar city shall be converted to zig zag technology within stipulated period of time. |

| 5) Ban on Polluting industries. | Mid Term | Within one year | a):- J and K State Pollution Control Board.  
b):- Many polluting and non compliant industries have been closed down. Presently, no stone crusher or brick kiln exists within the municipal limits of Srinagar city. |
1) Installation of additional NAMP monitoring stations at Srinagar.  

Mid Term  
Within one year  

a):- J and K State Pollution Control Board.  
b):- Presently, there are four (04) NAMP sanctioned stations at identified locations (i) Srinagar (ii) Khonmoh (iii) Lasjan and (iv) Khrew. All the stations are operational for the evaluation of PM10. Besides this, there are five stations under SAMP, operational at major traffic cross-section locations in the area. Out of these, two new stations have been sanctioned during May 2018 at Jahangir Chowk and SKIMS, which shall be made operational shortly.

c):- As per Hon’ble NGT directions and the video conference meeting discussions with CPCB, a comprehensive project proposal with financial budget requirement of an estimated cost of Rs.75.93 Crore covering all the districts of State to strengthen the monitoring network on establishing manual and real-time monitoring stations have been submitted to CPCB vide No. SPCB/LSK/402/2018/7065-67 dated 06-02-2019, to strengthen the ambient air quality monitoring in the state.

2) Establishment of CAAQMS  

Mid Term  
Within two years  

a):- J and K State Pollution Control Board.  
b):- CPCB has sanctioned two CAAQMS stations, one for Jammu and another for Srinagar city. The procurement of same for Srinagar city is under process and e-tender stands floated afresh. Besides this, the proposal for two additional real-time monitoring stations for Srinagar City have been submitted to CPCB to strengthen the monitoring network vide above para reference.

3) Source apportionment study  

Short Term  
Within six months to one year  

a):- J&K State Pollution Control Board  
b):- Board conducts such studies as Rapid Pollution Assessment and Appraisal studies as and when required to know the pollution status of the particular area. It has been observed that the main sources causing air pollution in Srinagar city which have deteriorated the quality of air to the level of non-attainment, are:-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Source identified for causing pollution</th>
<th>Estimated source proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Pollution from vehicular emissions</td>
<td>65-75%</td>
</tr>
<tr>
<td>(ii)</td>
<td>Pollution from road dust due to bad road conditions</td>
<td>10-15%</td>
</tr>
<tr>
<td>(iii)</td>
<td>Emissions from Bio-mass and garbage burning</td>
<td>10-20%</td>
</tr>
<tr>
<td>(iv)</td>
<td>Emissions from constructions and demolition activities etc.</td>
<td>5-8%</td>
</tr>
<tr>
<td>(v)</td>
<td>Emissions from minor industrial activities in and around Srinagar city.</td>
<td>7-8%</td>
</tr>
<tr>
<td>(vi)</td>
<td>Others Sources like DG Sets etc.</td>
<td>3%</td>
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</tbody>
</table>

Besides this, so far no source apportionment study has been conducted for this city by the Board as well as any other agency (state / central) involved in R & D activities in Jammu and Kashmir State.

On the basis of regular monitoring conducted by the Board, the level of air pollutants as cumulative emissions have been evaluated, the results of which exceeding level against the standard limits.

The Board has only emission inventory on cumulative emissions from all the sources, conducted at four sanctioned locations, out of which two are regularly operated stations (NAMP) in Srinagar city, whereas no separate emission inventory for sources identified has been made as on date.

The SPCB contemplates to complete emission inventory on the basis of estimated sources apportionment study within one year.

<table>
<thead>
<tr>
<th>(vii) PUBLIC AWARENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Issue of advisory to public for prevention and control of air pollution.</strong> Short Term on regular basis Within three months</td>
</tr>
<tr>
<td><strong>2) Involvement of school and other academic institution in awareness program.</strong> Short Term on regular basis Within six months</td>
</tr>
</tbody>
</table>
### (viii) OTHER STEPS TO CONTROL AIR POLLUTION

<p>| | | | |</p>
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</table>
| 3) | **Air Quality status / AQI to be calculated and disseminated to the people through SPCB website and other media** | **Short Term on regular basis** | **Within six months** | **a):- J and K State Pollution Control Board.**  
**b):-** The AQ status is regularly calculated by the Board and being uploaded on SPCB website. |
| 1) | **Compliance of guidelines on :-**  
**a) D.G. Sets,**  
**b) Fire Crackers** | **Short Term** | **Within six months** | **a):- J and K State Pollution Control Board**  
**b (i):-** Board conducts the monitoring/inspection of DG sets/similar installations as and when required, as a DG set with canopy (acoustic enclosure) and requisite stack height on meeting emission norms as per EP standard be allowed to function, failing which strict action including seizure and penalty be imposed.  
**b (ii):-** Use of fire crackers as per Hon’ble Supreme Court order dt. **23/10/2018** and directions there under to be strictly enforced. The police department has been issued advisory for strict enforcement at the level of the SHOs. |
| 2) | **Help line to oversee non compliances on aforesaid issues.** | **Short Term** | **Within six months** | **a):- J and K State Pollution Control Board**  
**b):-** State Pollution Control Board has established separate sections to oversee the compliances on aforesaid issues as per requirement. |
| 3) | **Establish an Air Quality Management Division at SPCB (HQ) Jammu/ Srinagar to oversee the air quality management activities in the state and to interact with CPCB.** | **Short Term** | **Within six months** | **a):- J and K State Pollution Control Board**  
Air Quality Management Division headed by I/c Scientist Air Laboratory SPCB shall be established in SPCB headquarter immediately. |
4) Steps to Publicize helpline in city as well as in SPCB (HQ) for complaints against reported non-compliance issues related to cause of air pollution.

<table>
<thead>
<tr>
<th>Short Term</th>
<th>Within six months</th>
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</thead>
<tbody>
<tr>
<td>a):- J and K State Pollution Control Board</td>
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<tr>
<td>b):-District Administration.</td>
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</tbody>
</table>

5) Involvement of Industrial associations, NGOs, Transport union associations in awareness program based on ambient air quality status, present prevailing trends.

<table>
<thead>
<tr>
<th>Short Term</th>
<th>Within six months</th>
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<tbody>
<tr>
<td>a):- J and K State Pollution Control Board &amp; allied associations.</td>
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<tr>
<td>Regular awareness programme shall be conducted on regular basis involving NGOs, transport unions and other allied agencies.</td>
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</tbody>
</table>

**Commissioner**
Jammu Municipal Corporation  
Co-opted Member

**Commissioner**
Srinagar Municipal Corporation  
Co-opted Member

**Member Secretary**
J&K SPCB  
(AQMC Member)

**Director**
Agriculture, Jammu  
(AQMC Member)

**Director**
Agriculture, Kashmir  
(AQMC Member)

**Director**
Urban Development/Local Bodies  
Jammu  
(AQMC Member)

**Director**
Urban Development/Local Bodies  
Kashmir  
(AQMC Member)

**Director**
Industries and Commerce  
Kashmir  
(AQMC Member)

**Director**
Industries and Commerce  
Jammu  
(AQMC Member)

**Director**
Transport/Transport Commissioner  
J&K  
(AQMC Member)

**Director**
Environment, Ecology & Remote Sensing  
J&K  
(AQMC Member)