

**For the first time in India organized by Maharashtra Pollution Control Board, NEERI and Mumbai First one day Workshop on**

**Eco-friendly Mobility for Clean Air**

**Concept / Background**

Maharashtra Pollution Control Board prepared analytical study report for air quality study of sources of air pollution in the selected cities of Maharashtra through NEERI. Similarly, according to various study reports of air pollution from Central Pollution Control Board, vehicular pollution is one of the main sources of air pollution. According to the National Clean Air Program of the Central Government, work on preparation and implementation of suitable action plans has been started. According to various study reports, approximately thirty percent of air pollution in the urban areas is due to vehicles. Also, the particles in the exhaust of the vehicle are nanoparticles (25 nanometers to 500 nanometers), which are very small, as compared to the other dust found in the environment, and hence can cause human health problems such as respiratory disorders, cancer etc.

Public - private transport buses, trucks (garbage and other), light commercial vehicles and passenger cars are the major sources of vehicular pollution. Although the BS 6 emission norms are to be implemented in India since 2020, the implementation of new rules and subsequent reduction in the air pollution level, can actually take the next few years after 2020. The main

reason behind is the use of older vehicles. Therefore, it will not be easy to reduce the amount of Particulate Matter (PM) emissions by changing the new emission norms.

Currently the population Mumbai Metropolitan Region (MMR) in the year 2017 is estimated to be 2.5 crores. Out of which, around 1.03 crore people are commuting every day for employment. The approximate total distance of this travel is 1.45 crore kilometres per day, which is huge. If you think of the future, the population will be 3.2 million in 2041 and the eligible population for employment will be 1.5 crores. According to one estimate, the number of two-wheeler and four-wheeler vehicles in the MMR will increase from 48 lakhs in 2017 to about 90 lakhs in 2031. Therefore, the transportation of citizens of the MMR is currently a major challenge for the government and it will further aggravate in the future. Due to this increase, the city's air pollution level will be severely affected. Therefore, in the current situation, proper planning of the transportation is essential. This will in turn ensure clean and pure environment for the common people.

Continuous extension of population (population and area) in especially in urban areas is inevitable. This is increasing the extent of urban travel that is passenger number and average daily travel distance. This daily commute is done by personal or private vehicles or by public transport (buses, trains, etc.). The travel option is chosen by the convenience and economical affordability for the users.

In today's situation, because of the lack of public transport in terms of comfort and last mile connectivity, many travellers choose individual / private vehicles. Due to continuously ongoing developmental work of the city's infrastructure (roads, bridges, metro etc.), traffic congestion in some places in the city is unavoidable. This has limited the ability to handle the speed of the traffic system. The result is that in the traffic jam, due to the development work, some of the damaged roads in the emergency situation, hence the absence of the planning system, etc., add to this dilemma. Naturally, this is a steep increase in vehicle pollution. According to a NEERI Air (WAYU) study, the emissions of PM 2.5, NOx and CO in the traffic trunk is the highest due to idling emission of the vehicles. Not only this, the possibility of shortages of public transport system in future due to increasing urbanisation can not be ruled out.

Because air pollution is a multi-faceted problem, this workshop will discuss various issues related to the problem and its solutions. The measures needed to reduce traffic congestion and reduce pollution levels are as follows:

1. According to the current Government policy in Mumbai, government vehicles are scrapped after 10 years or two lakh thirty thousand kilometres of running. (Maharashtra Government Decision No. VIAP-991/12/12, Regulation, 1st October, 1991). Also, the Government of India is considering implementing a scrappage policy for vehicles above 20 years of age. However, considering the rising pollution, such

a strategy is needed to be implemented quickly. Scrapping of vehicles above 15 years may reduce air pollution to 7 per cent. The details of this study will be discussed in this one-day workshop.

2. For congested areas such as BKC, Lower Parel etc. in Mumbai city, the Maharashtra Government is considering measures to reduce the level of air pollution and traffic congestion and air pollution levels. The following measures are under consideration: -

- ✓ Today, more than 20 percent of Mumbai's traffic is being transported through private vehicles. Therefore, by widening of roads and constructing bridges, the issue of transport will not solve. To increase the use of public transport system from the citizens, it is required to discuss various options for the transportation, so that traffic congestion and air pollution will be reduced.
- ✓ It is need of the time that the entrepreneurs / businessmen should take responsibility for the daily travel of their employees, arranging public transport for employees, decreasing the number of private vehicles on the road, traffic congestion and air pollution.
- ✓ It is important to make appropriate changes in office hours (staggering of work hours). So that only a limited number of vehicles will come out on the road during the crowd and traffic congestion and air pollution will be controlled.

- ✓ If passengers traveling in one office or at one place, travel by personal vehicles and if three to four people come together, this can reduce the number of private and personal vehicles on the road and hence will reduce the pollution due to vehicles. This will encourage car-pooling.

In order to implement such recommendations, a detailed discussion on the challenges of improving the status of air pollution and the proper solution will be made in this day-long workshop by applying the opinion of many experts in this field. Maharashtra Pollution Control Board has organized this workshop in collaboration with NEERI and Mumbai First.

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