

Report Number 37 (July 2010)

EPCA Status and Progress Report: For the information of the Hon'ble Supreme Court

The Environment Pollution (Prevention and Control) Authority (EPCA) has been working to implement the various directions of the Hon'ble Supreme Court, which aim to combat air pollution in Delhi, the National Capital Region and 8 hot spot cities. This report is to inform the Hon'ble Supreme Court of the key actions being taken by EPCA in this regard and the progress made.

1: Ensuring the move towards cleaner fuel and vehicle technology

Under directions from the Hon'ble Supreme Court, the government had issued the Autofuel policy, which mandated a roadmap for the shift to cleaner fuel and technology. As per this schedule, BS III and BS IV fuel and technology would be available by April 1, 2010. Earlier this year, EPCA had to intervene to ensure that this schedule was met, as there was considerable resistance from vehicle manufacturers, who wanted a postponement.

Status: BS IV compliant fuel has been introduced, on schedule, in NCR and 10 mega cities as of April 1, 2010. BS IV emission standards for four-wheeled vehicles and BS III standards for two-and three-wheelers have been implemented in NCR and 10 hot spot cities. BS III fuel is now being introduced in a phased schedule to other parts of the country, with the assurance that the entire country will be covered by October 2010. BS III emission norms will be implemented across the country by October 1, 2010. EPCA has ensured that Delhi, NCR and 8 cities (it is monitoring) have all made the transition to BS IV emission standards.

2: Ensuring the safety of the CNG transition

The Hon'ble Court's directions to shift the city transport to CNG have paid huge clean air dividends. EPCA has been engaged for the past many years to ensure that this transition is smooth and continues to get implemented. The key issue has been to monitor the safety related aspects of the buses to check fires and other hazards. EPCA was extremely concerned by the spate of fires reported in buses during 2008-2009 and then again in 2009 when new low floor buses caught fire.

Status: All bus-burning incidents have been carefully investigated, through the intervention of EPCA, so that remedial steps are taken. Based on these reports and deliberations, bus manufacturers have been directed to correct the defects. For instance, in all DTC buses, Tata Motors was directed to change the complete wiring harness and exhaust manifolds, while Ashok Leyland was directed to change cylinder heads in the entire fleet. In the case of the low-floor bus, Tata Motors has been asked to retest all parts for inflammability and to meet all stipulated standards. EPCA has ensured, through regular monitoring, all necessary actions. In addition, it has worked with the Transport Department of Delhi government to set up an exhaustive and comprehensive system to check for gas leakage and other safety parameters. It is important to note that there is a drop in the fire incidents in the city. However, this programme requires constant monitoring and oversight, which EPCA will continue to do.

3: Upgrade and improve systems for checking pollution under control certificate (PUC) to vehicles on road

It is clear that all efforts to reduce pollution will be negated if there is no check on the gross polluting vehicles on the roads. The enforcement of this measure is however difficult as it involves checking the emissions of millions of on-road vehicles in PUC centres. Currently, there are 500 PUC centres in the city.

Status: EPCA has worked with the Transport Department to introduce a third party audit for the PUC centres, which brings in some measure of scrutiny and improvement in their operations. In addition, it is also monitoring the upgradation of the Burari Centre for emission checks of commercial vehicles. With the introduction of new emission norms (BS IV) as of April 2010, EPCA has written to the Union government for upgraded pollution under control norms. Based on this intervention, the Union government has finalized these norms, which will be issued shortly. This will ensure that the vehicles on road meet better and much more stringent standards for emissions. EPCA will now take up the issue of implementation with governments.

4: Ensuring that the delivery of CNG continues to be improved, particularly for public transport vehicles so that the transition to clean fuels is not compromised.

The distribution and delivery of gas across the city to public transport vehicles is important. In the recent years, there has been a surge of interest in CNG, with a large number of private vehicles moving to this fuel. While this shift is beneficial to air quality, it could compromise the

availability of fuel for public transport vehicles – 3 wheelers and the growing bus fleet.

Status: EPCA continues to monitor this programme closely and to direct IGL to improve the facilities for supply of gas in the city. As of July 2010, there were 220 CNG stations in the city with a dispensing capacity of 34.71 lakh/kg/day. This is a substantial expansion from the previous year. IGL has assured EPCA that another 44 stations will be added by the year-end. In addition, as directed by EPCA and in consultation with the DTC, gas supply has been enhanced in all bus depots. It is expected that this supply will help provide gas to private buses as well and improve distribution, while reducing dead mileage.

5: Greatly augmenting public transport by adding bus numbers; reforming bus management; integrating all multimodal systems like buses, taxis and metro; providing for pedestrians and cyclists etc.

EPCA is clear that this is the most important agenda for Delhi. The city already has more than four million registered vehicles. Currently, the city adds 1000 new personal vehicles each day on its roads. This is double what was added in the city in pre-CNG days. Recent analysis also shows that clean technology gains will be lost if the numbers of vehicles increase in the city. Between 2000 and 2007, the number of personal cars in Delhi increased by 1.47 times and their exhaust emissions have increased by 1.16 times. This is despite the fact that emissions of petrol and diesel new generation vehicles have improved by over 50-60 per cent of the pre-2000 levels. But the sheer growth in numbers negates all improvement in the fuel and technology of individual vehicles. It is critical that the city makes a leapfrog transition to convenient and modern public transport facilities, which will in turn restrain the use of private vehicles. EPCA is working with the Delhi government and its agencies to implement the following key actions:

5.1: *Greatly augmenting and modernizing the current bus fleet:* After considerable delays in delivery by the bus manufacturers, by August 2010, a total of 3750 buses will be added to the DTC fleet. This constitutes a doubling of the fleet in just two years and is an important first step in this action agenda.

5.2: *Reform of the existing private bus operations of the blueline operators to ensure a well-managed public transport system:* The Delhi government has decided to change the current system of individual bus owners operating on single routes. It has adopted a system used widely in other parts of the world to divide the city into clusters, where single operators will be given agreements to run public

transport buses. The quality and performance of the buses will be centrally managed. EPCA is monitoring progress of implementation of this scheme. By July it expects the agreement for 4 clusters to be finalized (Cluster 1 has already been done) and hopes that all 17 clusters will be done by year-end.

5.3: Introduction of GPRS in all buses to ensure quality of service and timeliness: The rollout of the system has started and by December all DTC buses will be fitted with GPRS and will have real time data on operations. All passengers will also have information about bus timing and arrivals. The new entrants (buses being introduced through the cluster scheme) will all be fitted with GPRS.

5.4: Introducing bus rapid transit (BRT) corridors so that buses get priority of access. There are ongoing efforts to improve the first BRT corridor in the city. The problem with the BRT is partly the result of sheer numbers of private vehicles on Delhi's roads. We know that the number of private vehicles has increased exponentially and therefore, the introduction of this priority lane for buses has meant considerable conflict with car owners. However, it is also clear that the city has no other option but to restrain the growth of cars as it is already running out of road space.

According to recent estimates only 14 per cent of Delhi commutes by private cars, which occupies 90 per cent of the road space. In this situation, the city does not have the road space to expand to meet the needs of all. The only option is to resort to drastic measures to augment public transport fleets and modes, of which BRT is the cheapest.

In the current BRT, buses have doubled to 3000 per day – they now commute roughly 200,000 people on this stretch. Most importantly, speeds have increased; 17 km in the middle lane in peak hours, as against 7 km in the rest of the corridor where the bus fights against the car for space. EPCA is now working with the Delhi government to implement other BRT corridors in the city, after careful consideration and planning. It will keep the Hon'ble Court informed of progress in this matter.

5.5 Integration of metro and buses through common ticketing and location of bus stops: This is important as only when the commuters have last-mile-connectivity will the transition to public transport succeed. EPCA is continuing to pursue action on this with Delhi metro and other agencies.

5.6 Integration of pedestrian facilities for metro and bus systems and ensuring the right to walk in the city.

It must be noted that between 21 to 30 per cent of Delhi commuters walk to work (as against the 14 per cent who commute by car). But the city has discounted all facilities for pedestrians and has only planned for the expansion of roads for the convenience of the minority of private vehicle owners. EPCA has been working to change this situation and has issued a number of directions in this respect. Now the UTTIPEC, an agency of DDA has issued guidelines, which mandates the provision of pedestrian facilities in all road design. EPCA is now working with Delhi metro and road owning agencies like PWD and MCD to ensure that pedestrian facilities are provided to stations. It is important to note that good public transport cannot work without this 'right to walk'.

5.7 Creating a public transport fund to pay for the transition. EPCA has brought to the attention of the government the need to build systems for sustaining a viable public transport facility in the city. It has also looked at the current fiscal systems, which disproportionately incentivise private transport. It will work on these aspects and bring progress to the attention of the Hon'ble Court.

6: Introducing a parking policy for the city, which regulates parking, substantially improves enforcement and planning and taxation for congestion.

It is well understood across the world that a parking policy can play an important role in restraining the usage of vehicles and combating pollution. The issue is getting critical in Delhi, because of the growth of car numbers and the lack of space for parking. The city needs to rethink its policy in this situation.

Status: Based on the Hon'ble Court directions on this matter, EPCA is working with city agencies, including the Delhi police, to finalize an appropriate policy for parking in the city. It has made considerable progress in this matter. EPCA will keep the Hon'ble Court informed of progress and of the need for directions on this matter.

7: Planning for inter-city and intra-city public transport and introduction of CNG in the NCR region

There is massive growth of traffic between the city of Delhi and its neighbouring areas. As per the latest census of vehicle, as many as 1.2 million vehicles leave and enter Delhi each day for travel to neighbouring towns. The highest number of vehicles is in the Ghaziabad-Delhi stretch – over 0.35 million vehicles daily. The NH 8 border between Delhi-Gurgaon

sees as many as 0.2 million vehicles daily. And the annual growth rate is phenomenal – touching 30 per cent in the Delhi-Gurgaon stretch and over 33 per cent on the DND flyover and 30 per cent at the Loni Border between Delhi and Ghaziabad. This growth rate is pushing the system towards complete breakdown on these roads – where all flyovers and new roads are choked, even as they are commissioned for use. It is also leading to very high pollution – particularly in the cities of NCR.

EPCA was shocked to find that there was no agreement between the states of the NCR, which would allow the movement of public transport vehicles in the region. As a result, no public transport vehicle – auto-rickshaw, taxi or bus – was allowed to enter the territories of the states – Delhi, Haryana, Rajasthan and Uttar Pradesh – which lead to enormous inconvenience to people living in these adjoining and connected areas. In this situation people had no alternative but to commute using private vehicles. This, in turn, added to traffic, congestion and enormous and deadly pollution in the region. It was also brought to EPCA's notice that the National Capital Region Planning Board had prepared a draft Reciprocal Common Transport Agreement among the states for unrestricted movement of vehicles in the region, which had not yet been finalized.

Since then EPCA has been working with the representatives of different state governments and the NCR Planning Board to finalise the agreement. EPCA has also been concerned that any future growth of vehicular traffic in the region must be on clean fuel, namely compressed natural gas (CNG) so that the deadly pollution can be mitigated.

Status: EPCA is pleased to report that after many months of meetings and deliberations, the Reciprocal Common Transport Agreement between the different states of NCR has been signed. Now the movement of taxis between these states has been opened. The notification for stage carriage, which will allow many buses to ply in the region, will be issued within July 2010 and has already been signed.

EPCA is now working to make sure that CNG is available in the region so that these cities can also work on the twin agenda – augmenting public transport, which is run on clean fuel – to combat air pollution. In its last review (held on July 10, 2010), IGL informed EPCA that it had received authorization from the Ministry of Petroleum and Natural Gas for the distribution of CNG in Ghaziabad. EPCA also reviewed plans for Noida, Greater Noida, Faridabad and Gurgaon. It expects to see substantial progress on this matter in the coming months.

8: Implementation of air pollution action plans in 8 hot spot cities – Lucknow, Kanpur, Ahmedabad, Sholapur, Bangalore, Hyderabad, Bangalore and Chennai.

EPCA has identified four key areas that have the potential to engineer a fundamental transition. These include gaseous fuels programme (CNG and LPG), public transport and transport demand management, vehicle inspection and management of transit traffic and phasing out of old vehicles. EPCA has worked with the state governments to develop deadlines for implementation in each city.

Status: EPCA's intervention in Ahmedabad has resulted in transition to CNG in the city. There is visible and substantial difference in the air quality of the city, since this introduction. EPCA is now working with all other cities to implement the action plans. In particular it is focusing on Hyderabad, where gas is now available. EPCA hopes to work with the state government to implement an aggressive and effective programme for clean fuel and public transport in the city.