
Air Pollution reduction action plan for Hyderabad



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Back ground

In the matter of W.P.(C)No.13029 of 1985; M.C. Mehta v/s. UOI & others, the Hon'ble Supreme Court vide order dated: 14th August 2003 directed State Governments of Maharashtra (Sholapur), Andhra Pradesh (Hyderabad), Gujarat (Ahmedabad), Uttar Pradesh (Khanpur, Lucknow), Karnataka (Bangalore) and Tamil Nadu (Chennai) to draw-up action plans for lowering air pollution in the cities and also directed that the plan, once finalised, should be placed before Environment Pollution (Prevention & Control) Authority (EPCA).

Accordingly, the Government of Andhra Pradesh prepared an Action Plan in consultation with all the stake holder departments viz., Transport, APPCB, Civil Supplies, State Oil Co-ordinator, etc. for lowering air pollution in HUDA area. Sri Bhure Lal, Chairman, EPCA has been reviewing the action plan submitted.



Emission norms and automotive fuel quality

- Euro-II norms were already implemented to all new
 - 4-wheeled 3.5 tonnes and below laden weight
 - buses / goods vehicles
 - 3wheelers.
- Regarding reduction of sulphur in fuels, EURO-III norms were implemented in Hyderabad Urban Development Authority (HUDA) since 1.04.05 .
 - 150 ppm of Sulphur in petrol
 - 350 ppm of Sulphur in Diesel.
- Benzene content
 - in petrol was reduced to 0.56% in HUDA area.
- 320 pre-mix oil dispensers were installed in HUDA. 95% of dispensing units do not sell loose 2T oil.
- PUC records are being maintained at PUC centers, fuel wise i.e., diesel and petrol and vehicle category wise.



Alternate mode of fuels

- **Conversion of autos to LPG mode of fuel:**
 - Out of 68,840 auto rickshaws on rolls of Hyderabad district,
 - 29,346 have been converted into LPG mode of fuel leaving a balance vehicles of 39,494.
 - 16 LPG filling stations are presently working in Municipal Corporation of Hyderabad area
 - 11 are under various stages of commissioning
 - Rest of the auto rickshaws can be converted to LPG fuel mode by end of 2007.
- **CNG Programme:**
 - GAIL has submitted the road map for CNG supply in Hyderabad to MoP&NG on 13.10.2006 for onward submission to EPCA.
 - As per guidelines of MoP&NG, GAIL had signed MOU with HPCL on 19.02.2000 for formation of Joint Venture Company
 - The Joint Venture Company (JVC) was incorporated on 22.08.2003 in the name of M/s.Bhagyanagar Gas Ltd. (BGL) along with HPCL for supply of CNG / Piped gas in the state of Andhra Pradesh.



Alternate mode of fuels

- No specific allocation exists for Hyderabad. However, total of 0.1 mmscmd gas has been allocated to BGL for Andhra Pradesh, which is much less than actual requirement.
- GAIL is in discussion with domestic producers like RIL and GSPCL who are expected to produce gas by 2008 end.
- First CNG daughter booster station was commissioned on 01.08.2006 by transporting CNG through mobile cascades, for seeding the market in Hyderabad, from Vijayawada where BGL has already set-up 4 CNG stations, including one mother station.
- Two more CNG stations are being planned with the gas transported through mobile cascades from Vijayawada till the pipeline connectivity is getting ensured for Hyderabad
- The construction of new pipeline shall be as per gas pipeline policy of Govt. of India and any new pipeline shall be decided by MoP&NG / Regulator based on the principle of common – carrier / third party access on non-discriminatory basis.



Alternate mode of fuels

- **Safety of CNG / LPG vehicles:**
 - ❖ Training programme for the personnel involved in retro-fitment of LPG / CNG kits would be taken up on receipt of recommendations of Prof. H.B. Mathur, on safety check list, guidelines and corrective measures.
- APSRTC requested M/s.BGL to give the full details with regard to the quantity of CNG that can be made available and pricing policy to workout the requirement of buses from the year 2008 onwards. M/s.GBL informed that the availability of CNG to transport sector in Hyderabad and the probable time of availability mainly depends upon the allocation by the MoP&NG. M/s.BGL informed that estimated requirements have been communicated to the concerned government departments for allocation.
- On receipt of above information, APSRTC will submit a plan for inducting CNG buses from 2008 onwards along with required budget.



Fiscal policy

- **Fiscal policy to support public transport:**
 - GO Ms.No.68 Tr. R&B (Tr.I) Department, dated: 13.04.2006 as amended vide GO Ms.No.180 Tr. R&B (Tr.I) Department, dated: 21.09.2006 is issued levying taxes on private stage carriages, private contract carriages including taxies, autos, private service vehicles, education institution buses and goods carriages.
 - Third Schedule of AP Motor Vehicles Taxation Act, 1963 prescribes one time tax in respect of two wheelers, 4-wheelers, omni buses and motor cabs, whose cost is more than Rs.3.5 Lakhs. For new vehicles, 9% rate of one time tax is prescribed and for in use vehicles, the rate of tax is reduced proportionately depending upon the age of the vehicle from the date of registration.
 - GO Ms.No.118 Tr. R&B (Tr.I) Department, dated: 07.06.2006 is issued levying motor vehicles tax on gross traffic earnings of fleet owners. APSRTC is the only fleet owner i.e., taxed basing on this GO. 5% of gross traffic earnings is fixed for town services and 7% of gross traffic earnings is fixed in respect of other services as Motor Vehicles Tax.



Fiscal Policy

- As could be seen from the above tax details, public sector is put to advantage vis a vis personal vehicles. The tax levied on vehicles of APSRTC who is the monopoly stage carriage operator, is much lower compared to other categories of personalized vehicles and public service vehicles excepting auto rickshaws. The tax on APSRTC is levied at a lower rate to promote public transport service. APSRTC is also given freedom to fix the rate of tickets at their level.
- In order to promote alternate fuels, the AP Motor Vehicles Taxation Act, 1963 provides for exemption of Motor Vehicles Tax for a period of 5 years from the date of registration on Motor Vehicles using CNG, Battery & Solar Power.



Public transport

a. No. of buses:

- To increase the number of commuters traveling by public transport from 42% to 50%, the following additional number of vehicles is proposed to be added.

Year	No. of buses to be inducted
➤ 2006 – 07	367
➤ 2007 – 08	350
➤ 2008 – 09	350
➤ 2009 – 10	100

- Thus, it is proposed to achieve targeted 50% clearance in the year 2008-09.



Public transport

- As MRTS will be operational from 2009-10 onwards, the additional buses required per year will be 100 only.
- SETWIN has also been given permits to operate another 100 new buses in the twin cities.
- Outer ring road all round the city and radial roads have been planned. Bus Rapid Transit (BRT) is being planned for implementation on these roads.
- Dedicated bus lanes for APSRTC from Moosapet to Punjagutta have also been proposed by MCH & APSRTC jointly. Two dedicated bus lines are expected to be commenced from 01.03.2007.



Public transport

➤ **Multi Model Transport System:**

- Multi Model Transport System (MMTS) services were introduced in the city on two routes consisting of 43 kms. a couple of years ago. This is a joint project of Govt. of A.P. and Indian Railways costing about Rs.200 Crores to introduce urban transportation services by upgrading the spare line capacity of the existing railway lines. The MMTS services are slowly becoming popular and are presently carrying about 50,000 passengers per day.

➤ **Metro Rail / Mass Rapid Transit System (MRTS):**

- To improve the public transportation system and to control the rapid growth of private vehicles, based on the recommendations of a Seven Member Committee of Senior Officers, Govt. of Andhra Pradesh approved development of Metro Rail / Mass Rapid Transit System (MRTS) on 3 of the busiest corridors of Hyderabad in Phase-1.
- Line-I: Miyapur – Punjagutta – M.J. Market – L.B. Nagar (29.87kms.; 27 stations);
- Line-II: Jubilee Bus Station – Secunderabad Railway Station – Sultan Bazar – Falaknama (14.78 km.; 16 stations);
- Line-III: Osmania University (Habsiguda) – Begumpet – Yousufguda – Shilparamam (21.74 kms.; 20 stations).



Public Transport

- Estimated to cost about Rs.8,760 crores, the project is being taken up on BOT basis and 6 consortia have been pre-qualified for this project. DPRs have already been prepared for all the three routes and the Request for Proposal (RFP) documents and Model Concessionaire Agreement have also been got ready.
- Selection of the BOT developer is expected by June 2007 and the construction activity is scheduled to commence by middle of 2007. The project is targeted for completion in a short span of 4 years and a large number of preparatory activities are being undertaken in parallel processing mode.
- After completion of this project, the system is expected to carry 16.5 Lakhs passengers per day in 3 of the busiest corridors of Hyderabad, giving considerable relief to these highly congested routes.



Infrastructure

- Outer Ring road: An estimation of Rs.250 Crores an outer ring road is being taken-up to divert heavy vehicles from the city. Phase-I with 22kms. is started. Phase-II with 147km. is under finalisation.
- The outer ring road is an 8 lane road with the corridor of 150mtr. to be completed within two years.
- Operators of other Inter-State / Inter District buses are also directed to transfer passengers from the city points to be outskirts of the city to relieve congestions in the city and to ensure free movements of vehicles.
- The Hon'ble High Court has been monitoring the action taken by MCH on regular basis.



Infrastructure

➤ **Parking policy and pedestrianisation:**

- ❖ Municipal Corporation of Hyderabad (MCH) in consultation with Traffic Police, recently rationalized the parking lots and created 115 intelligent parking lots where the road width / open space permits such parking. In order to optimize the utilization of the space of the parking lots, an intelligent system consisting of CLC mobile card readers, CLC card readers, etc. was introduced. The intelligent card readers automatically note down the check-in and check-out timings of the vehicles at the parking lots and will deduct the charges from the pre-paid cards cash balance for the used time. This is yielding good results and parking discipline has considerably improved.
- ❖ The Revised Building Rules were approved by the Govt. vide GO Ms.No.86MA, dated: 03.03.2006, which is applicable to the Hyderabad Metropolitan Area and would be extended to Visakhapatnam, Vijayawada and other major urban areas. The Revised Building Rules have among other things, have rationalized and revised the parking norms viz.,



Infrastructure-Parking

- The parking requirement in buildings is made as a percentage of the total builtup area (from 20% to 60%). It is higher in the MCH area (core area of the city, and for all non-residential occupancies.
- Allowing parking in cellars or stilts or in upper floors.
- Allowing multiple cellar parking floors in large complexes.
- Encouraging parking lots and common pool parking area in group housing, gated and other multiple housing development.
- Allowing visitors parking spaces in the open space over and above minimum setbacks of 6 mtr.
- Encouraging mechanized car parking facilities in complexes and increasing height of parking floor to 4 mtr. to facilitate 2-level parking stack.
- Common and continuous cellar parking floors between adjoining buildings would be allowed depending up on structural safety aspects, mutual agreement between owners, etc.



Infrastructure-Parking

- Allowing basement / cellar parking floor to extent beyond the setbacks but maintaining atleast 1.5 mtr. distance from the property line.
- No fees and the other charges shall be charged by the Sanction Authority for the area / floors developed as parking complex / parking lot.
- In an existing area / locality where an owner or two or more owners come together and developed combined or common parking complex, pedestrian plaza / sub-way, or into / facilitate additional access by linking with surrender roads, etc. for public usage additional bonus built-up area / TDR would be considered by the sanctioning authority.
- 10% rebate in property tax to those who provide additional parking place of 25% and above.
- Obtaining Occupancy Certificate made mandatory which has a specific parameter w.r.t. compliance of parking requirements before the building is allowed to be occupied.



Infrastructure - Parking

- To encourage owners to develop parking complexes, parking lots, the following incentives are given in the revised building rules:
- Equivalent built up area of such parking complex / or area of parking lot as the case may be would be considered as Transferable Development right by the sanctioning authority.
- The setbacks (excepting the front setback) for parking complexes are 50% of the requirement of buildings.
- No fees and other charges shall be charged for parking complex / parking lot.
- A moratorium on property tax for 5 years would be considered; and for the next 5 years – property tax shall be levied on the lowest slab of residential category.



Vehicle inspection program

- a. Status of implementation of new PUC norms:
 - Out of 164 pollution testing stations, 40 stations have been upgraded.
- b. Report on defaulters:
 - Out of 16.36 Lakh vehicles registered in Hyderabad city, vehicles i.e., 84.73% of vehicles i.e., 10.98 lakh vehicles covered by Pollution Under Control Certificates. Transport Department has booked 35931 cases and realized Rs. 1.35 crores towards compounding fee from April to November 2006.
- c. Audits:
 - After networking the pollution testing stations, the results of pollution testing by the pollution testing stations will be audited on fortnightly basis.



Vehicle Inspection Programme

➤ d. Networking of PUC Centres:

- ❖ Out of 164 pollution testing centers in Hyderabad city, 26 centres have already been networked. Networking of the centers is scheduled to be completed by May, 2007 as per the programme given below:

Month	Centres
Jan. to Apr., 07	120 (30 / month)
May, 07	44

➤ e. Integration of vehicle registration data:

- ❖ Database of Transport Dept. has already been integrated with Cybrabad Police and plans are afoot to provide access to Police Department for integration on department to department basis by March, 2007.

➤ f. Lambda measurement:

- ❖ The department would take up Lambda measurements on receipt of the decision of Hon'ble Supreme Court in this regard.



Application of the study results

- It is unambiguous that vehicles are major contributors.
 - Hence public transport need to be given more impetus to shift from personalised transport.
- Re-suspended dust from paved and unpaved roads due to movement of vehicles is around 30%.
 - Construction of the pavements, giving away conventional sweeping activities with mechanised vacuum cleaners.
- Restaurants using the coal and firewood as fuel have to switch over to LPG.
- Open burning of garbage needs to be stopped
- Industries using coal and other biomass as fuel need to regulate there emissions.

