

Short-term and long-term measures needed to combat air pollution in Delhi and NCR airshed

Centre for Science and Environment

Sno	Pollution source	Action taken/status	Directions sought
	Short-term measures: for immediate relief		
1	Vehicles: Contribute 20% of PM 2.5; 40% of NOx in Delhi		
1.1	Trucks: 30% of vehicular emissions: Implementation of SC order October 9, 2015 on imposition of ECC to bring down pollution load immediately	EPCA report 55 filed on status of trucks, December 9, 2015	Delhi/MCD to continue to implement order
1.2	Diesel Cars: BS IV (current vehicles) are allowed by emission standards to emit 3 times more NOx and 7 times more PM as compared to same generation petrol cars	EPCA report 3, 5, 35 and Note by Amicus, dated November 2012	Ban registration of diesel light duty vehicles across NCR till Euro VI is implemented
1.3	BS IV fuel/emissions: is not available across the country. Between BS III to BS IV there will be 80% improvement in PM from every vehicle. This is critical for trucks as even with reduction in numbers coming into Delhi, there are large numbers traversing through and also pollution is across region. Clean fuel and vehicle technology will improve situation.	EPCA report 50 on priority measures to reduce air pollution, 2014	Introduce BS IV fuel/emission norms by January 2016 across country other than small parts of J&K, Northeastern States and small part of South India where pipeline/refinery will be upgraded by April 2017
2	Power plants		
2.1	Badarpur/Rajghat coal power plant: responsible for 15% of PM load and 30% of NOx from industries in NCR region; Delhi gas plants which are clean are working at much below capacity – PragatiBawana, which is one of country's most efficient and clean plants is operating at 13% efficiency	Annexure 3:	Immediately close down Badarpur and supply additional gas to Pragati and Indraprastha power station
	Long-term measures for combating pollution		
1.	Vehicles		
1.1	BS VI implementation across India will drastically improve fuel quality and vehicle technology for PM and NOX	EPCA report 50 February 2014 had recommended move by 2020; December 2014 Union affidavit to EPCA report and January 2015 EPCA response	Move to BS VI by 2020 and leapfrog over BS V
1.2	CNG for taxi, bus and 3-wheelers across NCR – Delhi has extensive network of CNG	EPCA reports 2, 6, 16, 17, 23, 40	Set up enhanced infrastructure for supply

	and price has been kept lower than diesel, through exemption on VAT. However, this network does not exist in NCR and in these fast growing cities only diesel is the alternative for public transport		of CNG to all public transport vehicles in NCR, including taxi. No diesel taxi should be allowed in NCR. Tax reform is required to keep cleaner CNG below polluting diesel
1.3	Two-wheelers: major contributor of PM emissions from vehicles: BS-IV standards to be implemented from April 2017	EPCA report	To implement standards without delay
1.3	NCR connectivity for public transport: currently some 10 lakh private vehicles – 2 wheelers; cars; SUV travel to Delhi and from Delhi every day. This greatly adds to pollution load.	EPCA report No 50 of February 2014	Provide greatly augmented public transport connectivity in NCR. Submit plan to SC with deadlines
1.4	Improvement of public transport and last mile connectivity: In 1998, Hon'ble SC directed for 10,000 buses by 2000. But this has not happened and there is reduction of ridership today. Currently some 5400 buses operate in Delhi, which are inadequate. We need metro/LRT and bus and then last mile connectivity.	EPCA report No 50 of February 2014	Immediately implement 1998 SC order to bring 10,000 buses to Delhi. Augment all other modes of public transport and provide last mile connectivity. Submit plan to SC with deadlines
1.5	Improvement of walk and cycle on all roads across NCR and Delhi: In Delhi 40% of daily commuters walk or cycle but there is no provision on roads for their movement and safety	EPCA report No 50 of February 2014	Implement measures to improve walking and cycling infrastructure across NCR
1.6	Parking charges and annual vehicle registration: Private vehicles need to pay for usage of road and parking.	EPCA report No 9,19, 50	Uniform annual registration tax on private vehicles linked to insurance for NCR and uniform parking policy for NCR
2.	Power Plants		
2.1	Move coal power plants in NCR to gas: There are a number of power plants in NCR that use coal and emit large amounts of pollution. Moving these to natural gas will reduce emissions substantially in the airshed		Move all coal power plants in NCR to natural gas. Provide schedule to SC
3.	Industry		
	Air polluting industry, which was previously operating in Delhi has been shifted to neighbouring states and is adding to pollution in NCR airshed. The information on industrial air pollution in Delhi is also		Prepare status report on air polluting industry in NCR with remedial actions that can be taken and submit to SC for directions

	unavailable but could be a major contributor to pollution		
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