

M.C. MEHTA
v.
UNION OF INDIA AND ORS.

APRIL 5, 2002

[B.N. KIRPAL, V.N. KHARE AND ASHOK BHAN, JJ.]

Constitution of India, 1950:

Articles 39(3), 47 and 48-A—Held, these provisions by themselves and collectively cast a duty on the State to secure the health of the people, improve public health and protect and improve the environment.

Environmental Law:

Air-pollution—City of Delhi—Vehicular pollution—Directions by Supreme Court to control vehicular pollution in the National capital—Directions by Environment pollution (Prevention and Control) Authority to phase out non-CNG buses—Report of Bhure Lal Committee for conversion to CNG mode and direction to phase out non-CNG buses with a time frame—Report accepted by Supreme Court and directions given by it to switch over to CNG fuel within a specified time limit—Time for phasing out diesel buses expired—Government of NCT of Delhi and Union Government again seeking extension of time for conversion of commercial vehicles to CNG—Time again extended upto 31.1.2002—I.A. by Union of India for further extension of time—Suggestion by Union of India also to permit use of LPG fuel—Held, in our constitutional set up orders and directions of Supreme Court cannot be nullified or modified or in any way altered by any administrative decision of Central or State Government—Administrative decision to continue to ply diesel buses is in violation of Supreme Court's order—LPG should be an alternative to CNG fuel—IA of Union of India for extension of time rejected—As owners have continued to ply diesel buses beyond 31.1.2002 contrary to Supreme Court's order, for this disobedience, Director of Transport, Delhi will collect from them the specified amount—Further directions given to Union of India to ensure sufficient allocation of CNG to NCT of Delhi and to prepare a scheme containing time schedule for supply of CNG to other polluted cities of the country.

Parivesh (September, 2001 issue) published by the Central Pollution Control

A Board, referred to.*Environmental Law:*

Sustainable development—'The precautionary principle' and the 'polluter pays principle'—Discussed Doctrines.

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Vellore Citizens' Welfare Forum v. Union of India and Ors., [1996] 5 SCC 647, reiterated.

*Environment (Protection) Act, 1986:***C**

s.3—Vehicular pollution in city of Delhi—Establishment of Bhure Lal Committee as a result of orders of Supreme Court—Committee recommended conversion to CNG mode and directed phasing out of non-CNG commercial vehicles within a time limit—Held, Bhure Lal Committee was established u/s 3—Directions issued by the said Committee are statutory and continue to be in force—It is not open to Union of India to seek variation of the same without any justifiable reason—Environment Pollution (Prevention and Control)

D

Authority is also a statutory authority constituted u/s 3—Authority also directed to phase out non-CNG buses—Its directions are final and binding on all persons and organisations concerned—Environments Law:

E

Sector 14 Residents Welfare Association and Ors. v. State of Delhi and Ors., [1999] 1 SCC 161, relied on.

CIVIL ORIGINAL JURISDICTION : Writ Petition (C) No. 13029 of 1985.

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(Under Article 32 of the Constitution of India.)

G

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H

Anil Kumar Mittal, Prashant Bhushan, Joseph Pookkatt, Presenjit Keswani,

Prashant Kumar, Dhruv Mehta, Ms. Anu Mehta, Bipul Kumar, Ms. A. Subhashini, Ms. Sheil Sethi, Vijay Panjwani, Sri Narain, Sandeep Narain, Ms. Anjali, Ms. Rani Chhabra, V.B. Saharya, Rakesh K. Khanna, Reetesh Singh and Surya Kant for the appearing parites. A

The following Order of the Court was delivered B

Article 39 (e), 47 and 48A by themselves and collectively cast a duty on the State to secure the health of the people, improve public health and protect and improve the environment. It was by reason of the lack of effort on the part of the enforcement agencies, notwithstanding adequate laws being in place, that this Court has been concerned with the state of air pollution in the capital of this country. Lack of concern or effort on the part of various governmental agencies had resulted in spiralling pollution levels. The quality of air was steadily decreasing and no effective steps were being taken by the administration in this behalf. C

It was by reason of the failure to discharge its constitutional obligations, and with a view to protect the health of the present and future generations, that this Court, for the first time, on 23rd September, 1986, directed the Delhi Administration to file an affidavit specifying steps taken by it for controlling pollution emission of smoke, noise, etc. from vehicles plying in Delhi. D

The concern of this Court in passing various orders since 1986 has only been one, namely, to protect the health of the people of Delhi. It is only with this objective in mind that directions had been issued in an effort to persuade the governmental authorities to take such steps as would reduce the air pollution. It is as a result of intervention by this Court that the following measures were taken in controlling pollution to some extent. E

- (a) lowering of sulphur content in diesel, first to 0.50% and then to 0.05%;
- (b) ensuring supply of only lead free petrol;
- (c) requiring the fitting of catalytic converters;
- (d) directing the supply of pre-mix 2T oil for lubrication of engines of two-wheelers and three-wheelers;
- (e) directing the phasing out of grossly polluting old vehicles;
- (f) directing the lowering of the benzene content in petrol; and

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- A (g) ensuring that new vehicles, petrol and diesel, meet Euro-II standards by September, 2000.

It was during the course of these proceedings that the Bhure Lal Committee was established under Section 3 of the Environment (Protection) Act, 1986.

- B The Environment Pollution (Prevention and Control) Authority is a statutory authority constituted under Section 3 of the Environment (Protection) Act, 1986, and its directions are final and binding on all persons and organisations concerned. This position has been reiterated by this Court in *Sector 14 Residents Welfare Association and Ors. v. State of Delhi and Ors.*, [1999] 1 SCC 161. It is the authority which had directed the phasing out of non-CNG buses. It is the Bhure Lal Committee which had also recommended the conversion to CNG mode and issued directions that the non-CNG buses should be phased out.

- D It is the report of the Bhure Lal Committee which was accepted, and orders were passed by this Court on 28th July, 1998, fixing the time limit within which the switch-over to CNG was to take place. It may be mentioned here that the need for finding an alternative fuel to diesel had been drawing the attention of this Court for quite some time. This is evident from the order dated 21st October, 1994, in which it was observed as follows:-

- E “On an earlier occasion when these matters came up before this Court it was suggested that to begin with of Government vehicles and public undertaking vehicles including public transport vehicles could be equipped with CNG cylinders with necessary modification in the vehicles to avoid pollution which is hazardous to the health of the people living in highly polluted cities like Delhi and the other metros in the country.”

- F Again, in the order dated 28th March, 1995, and 9th February, 1996, long before the receipt of the Bhure Lal Committee report, there is a reference to conversion of government vehicles to CNG, as well as to the installation of CNG stations and kits. It is unfortunate that the efforts of the governmental authorities have not kept pace with the orders passed by this Court. For more than one year, under one pretext or the other, first the NCT of Delhi and then the Union of India have been seeking extension of time for conversion of commercial vehicles to CNG. While the anxiety of the Delhi Government to give it the benefit of doubt, was to see that bus services in this city were not disrupted which was the reason that it had sought extensions of the time limit,

the response of the Union of India in this regard is baffling, to say the least. A

With a view that the disruption in bus services does not take place and unnecessary hardship is not caused, this Court has been extending the time with regard to the conversion of commercial vehicles. Time was first extended to 30th September, 2001, and then to 31st January, 2002. It is during the period January, 2001, to February, 2002, that action has been taken by the Union of India, which leaves us with no doubt that its intention, clearly, is to frustrate the orders passed by this Court with regard to conversion of commercial vehicles to CNG. The manner in which it has sought to achieve this object is to try and dis-credit CNG as the proper fuel and, secondly, to represent to this Court that CNG is in short supply and, thirdly, delay the setting up of adequate dispensing stations. B C

In 2001, the Union of India hurriedly set up a Committee headed by Mr. R.A. Mashelkar to give a report with regard to vehicular pollution. It was surprising that since 1986, the Union of India had not thought of setting up such a Committee until after 31st January, 2001, when an order was passed in which the apathy on the part of the Government in carrying out the orders of this court was taken note of, and the authorities were required to comply with the orders passed. The composition of the Mashelkar Committee was such that none of its members was either a doctor or an expert in public health. The said Committee submitted its report, which does not show any serious concern in protecting the health of the people. The Committee recommended that emission norms should be laid down, and that the choice of the fuel should be left to the users. The Committee seemed to have overlooked the fact that such norms had been in place for a long time with hardly any compliance thereof. For instance, the emission norms with regard to the quality of air and water have been statutorily provided for but despite this, prior to 1996, Delhi was the third most polluted city in the world. It will not be out of place to mention that there are various emission and other norms and regulations which are in place, but are invariably breached. The existence of building regulations have not been able to control rampant unauthorised and illegal construction, just as the existence of norms relating to effluents have not prevented pollution. *Yamuna* is no more a holy river, it has been relegated to a sewage drain. Norms regarding quality of water and the various orders passed by this Court in another case have not been successful in adding any oxygen in the water, the BOD level being zero. Therefore, it is naive of the Mashelkar Committee to expect that merely laying down fresh emission norms will be effective or sufficient to check or control vehicular pollution. D E F G H

A One of the principles underlying environmental law is that of sustainable development. This principle requires such development to take place which is ecologically sustainable. The two essential features of sustainable development are

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- (a) the precautionary principle and
 - (b) the polluter pays principle.

The “precautionary principle” was elucidated thus by this court in *Vellore Citizens Welfare Forum v. Union of India and Ors.*, [1996] 5 SCC 647, *inter alia* as follows:

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- (1) the State Government and the statutory authorities must *anticipate, prevent and attack* the causes of environmental degradation.
 - (2) Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
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- (3) The “onus of proof” is on the actor or the developer to show that his action is environmentally benign.
 - (4) It cannot be gainsaid that permission to use automobiles has environmental implications, and thus any “auto policy” framed by the Government must, therefore, of necessity conform to the Constitutional principles as well as overriding statutory duties cast upon the Government under the EPA.
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- (5) The “auto policy” must, therefore,
- F
- (a) focus upon measures to “...*Anticipate, prevent and attack...*” the cause of environmental degradation in this field.
 - (b) In the absence of adequate information, lean in favour of environmental protection by refusing rather than permitting activities likely to be detrimental.
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- (c) Adopt the “precautionary principle” and thereby ensure that unless an activity is proved to be environmentally benign in real and practical terms. It is to be presumed to be environmentally harmful.
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- (d) Make informed recommendations which balance the needs of transportation with the need to protect the environment and

reverse the large scale degradation that has resulted over the years, priority being given to the environment over economic issues.

Norms for emission and norms for the fuel have existed for over the last two decades—and the state of the environment is dismal despite the existence of these norms. The emission norms stipulated by the Government have failed to check air pollution, which has grown to dangerous levels across the country. Therefore, to recommend that the role of the Government be limited to specifying norms is a clear abdication of the constitutional and statutory duty cast upon the Government to protect and preserve the environment, and is in the teeth of the “precautionary principle”.

The recommendations made by the Bhure Lal Committee and the directions issued in 1998 have not been challenged by the Union of India. The directions issued by the Bhure Lal Committee are statutory and continue to be in force. It is not, therefore, open to the Union of India to seek variation of the same without any justifiable reason. Prior to the filing of its affidavit of 26th April, 2001, the Union of India never opposed change over to CNG. Its application being I.A. No. 116 for variation was dismissed on 27th April, 2001. In the order dated 17th September, 2001, this court observed, while dealing with another application being I.A. No. 142 in which prayer (d) was that the bus operators should have an option of using either CNG or diesel with 0.05 sulphur content, that “we do not see any justification to grant prayer (d) at this stage”. Mr. Rohtagi, Addl. Solicitor General submitted that the use of the expression “at this stage” meant that such a request could be met or made at a subsequent point of time and that is why the present application filed on 5th February, 2002 for modification had been filed by the Union of India. The said plea of Mr. Rohtagi cannot be accepted and is not in accordance with the orders passed by this Court. As already noticed, a prayer to this effect was first made by the Union of India in I.A. No. 116. In the order of 27th April, 2001, it was observed that the Court did not think that any modification of its order dated 26th March, 2001 was required. The application was disposed of and the request for modification was not accepted. While disposing of the application I.A. No. 142 it was first observed in the order as follows:-

“Our order dated 28.7.1998 with regard to conversion of entire city bus fleet (DTC and private) to single fuel mode of CNG (direction ‘G’) does not require any modification or change. That direction stands.”

A When in this order, it was observed that there was no justification to grant prayer (d) "at the stage" it only meant that the question of considering such a request did not arise specially when similar plea for modification had been rejected earlier. The expression "at the stage" only meant at this late stage. The use of the expression "at the stage" cannot be interpreted as permitting the Union of India to once again ask for modification of the Court's order with regard to conversion of the city bus fleet to CNG mode.

B The plea of the Government that CNG is in short supply, and that it is unable to supply adequate quantity is incorrect, and this is clearly a deliberate attempt to frustrate the orders passed by this Court. Particulars filed in Court show that as of today no CNG is being imported. The indigenous produce is far in excess of what is supplied to the transport sector. It is only a small fraction of the CNG produced in India which is earmarked for non-industrial use. Overwhelming quantity is allocated to industries, including the power sector.

C That there is no shortage of CNG is also evident from the fact that even during the pendency of these proceedings, while on the one hand it was being represented to this Court and the Mashelkar Committee that CNG was in short supply, there was an increase in the allocation of the CNG to industries. Even when CNG was not being supplied to the Pragati Power Station in Delhi, as the same has not been commissioned, the CNG earmarked for the power unit instead of being allocated to the transport sector, was diverted to the industries in the neighbourhood of Delhi.

D If there is a short supply of an essential commodity, then the priority must be of public health, as opposed to the health of the balance sheet of a private company. To enable industries to cut their losses, or make more profit at the cost of public health, is not a sign of good governance, and this is contrary to the constitutional mandate of Article 39(e), 47 and 48A.

E While the industries get natural gas at the rate of about Rs. 3.55 per KG, a commercial vehicle owner in Delhi has to pay about Rs. 13.11 per KG which is four times more than what the industry pays. It was contended by Mr. Rohtagi that natural gas is supplied to the IGL at the same price at which it is supplied to the industries. This argument conveniently overlooks the fact that IGL is a government company and, therefore, the sale price which the Government and its company gets on sale of CNG in the transport sector is at least four times more than what it gets from the industries.

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It is indeed surprising that, ostensibly, with a view to provide more CNG to the transport sector in Delhi, the allotment of CNG to Maruti Udyog Limited (MUL) has been sought to be cancelled. Normally, it would have been surprising that if there is shortage of an essential commodity, then the supply or the sale to the public sector undertaking would be cut, but here, not only is the supply to the PSU being cut, but also at the same time, supply to at least two big business houses has been increased.

It would, under the circumstances, not be incorrect to presume that the proposal to cut supply of CNG to MUL was for some oblique purpose. Why should the Government, which is proposing to dis-invest its share in MUL, take the action of cutting supply of CNG, which would result in increasing its expenses and decreasing its value? It is not as if there has been a *prorata cut* of all the industrial units in and around Delhi, including MUL, with a view to increase supply to the transport sector. The proposed cut appears to be nothing more than an attempt to punish MUL because its Managing Director is a member of the Bhure Lal Committee, which had recommended CNG and, therefore, the Managing Director and this company must suffer. It is clear that there is a desire to benefit private industries at the cost of public health and the public exchequer. A major portion of the CNG goes to industries, and the government and its undertakings get less than what it would realise from supplying CNG to the transport sector. Such economics is baffling, to say the least.

Not only is there no shortage of CNG as far as the transport sector is concerned, but even if there be such a shortage, if crude oil can be imported and supplied to the refineries for manufacture of petrol and diesel, there is no reason why CNG, if need be, cannot be imported as it ensures less pollution.

During the course of arguments, literature was filed in Court giving data from cities all over the world which co-relates increased air pollution with increase in cardiovascular and respiratory diseases and also shows the carcinogenic nature of Respirable Particulate Matter (RSPM)—PM10 (i.e. matter less than 10 microns in size). The scientific studies indicate that air pollution leads to considerable levels of mortality and morbidity. Fine particulate matter, or respirable particulate matter (RSPM)—PM10 (i.e. matter less than 10 microns in size)—is particularly dangerous. The *Journal of American Medical Association (JAMA)* has published in its recent issue the findings of a study involving over 500,000 people, conducted over 16 years, in different cities of the US. The researchers find that fine particle related pollution leads

A to lung cancer and cardiopulmonary mortality. Their research indicates that with an increase of every 10 microgramme per cum ($\mu\text{g}/\text{cum}$) of fine particles, the risk of lung cancer increases by 8 per cent.

B The USEPA has mandated that annual average levels of PM 2.5 particles in the air should not exceed 15 $\mu\text{g}/\text{cum}$. The Indian annual national average standard for PM 10 is 60 $\mu\text{g}/\text{cum}$, but most cities, including Delhi register PM 10 levels above 150-200 $\mu\text{g}/\text{cum}$ on an annual basis.

C A study conducted with regard to children in Bangalore show that the incident of asthma in percentage of children rose from 9% in 1979 to 29.5% in 1999, thereby corresponding increase in vehicles from 1.46 lacs in 1979 to 12.23 lacs in 1999. Similarly, a study by the Chittaranjan Cancer Institute and Environmental Biology Laboratory of the Department of Zoology of Kolkata University done between November, 1997 and May 1999, found that about 43% of the children in Kolkata are suffering from respiratory disorders compared to 14% among the rural children. Alarminglly 94-96% of the children D were found producing sputum which would usually be reflective of habitual smokers though only 5.5% of the children were found to be smoking and that too occasional. As per the study reflected in the Indian Journal of Medical Research July, 2000, the culprit for the aforesaid was pollution in the ambient air.

E According to an estimate by the World Bank study using 1992 data, the annual health cost to India was up to about Rs. 5,550 crores due to ambient air pollution. Out of this, the health cost of air pollution in Delhi alone was found to be about Rs. 1000 crores.

F The increase in respiratory diseases specially amongst the children should normally be a cause of concern for any responsible government. The precautionary principle enshrined in the concept of sustainable development would have expected the government and the health authorities to take appropriate action and arrest the air pollution. However, children do not agitate or hold rallies and, therefore, their sound is not heard and the only concern G of the Government now appears to be is to protect the financial health of the polluters, including the oil companies who by present international desirable standards produce low quality petrol and diesel at the cost of public health.

H The statistics show that the continuing air pollution is having a more devastating effect on the people, than what was caused by the Bhopal gas tragedy. In that case, the nation, including the Union of India, was rightly

agitated and sought action and compensation from the multinational company, who was held to be responsible for the same. Here, in the case of CNG, the shoe is on the other foot because the government is not facilitating measures for clean air and water including the supply to CNG or any other clean unadulterated fuel. It is due to the lack of proper concern on the part of the governmental authorities that people are suffering from respiratory and other diseases. The Bhopal gas tragedy was a one time event which, hopefully, will not be repeated, but here, with not enough concern or action being undertaken by the Union of India, far greater tragedies in the form of degradation of public health are taking place every day.

Under these circumstances, it becomes the duty of this Court to direct such steps being taken are necessary for cleaning the air so that the future generations do not suffer from ill-health.

As in the past, it is imperative, while reiterating the order of 28th July, 1998, to issue further directions in an attempt to improve public health by decreasing air pollution. We are conscious of the fact that vehicular pollution is only one of the causes of air pollution, but statistics show that, at least in the metropolitan towns, this is the major source of pollution. In the September, 2001 issue of 'Parivesh' a magazine published by the Central Pollution Control Board relating to air pollution and human health, dealing with diesel exhaust particles and its health effects, it was stated at page 34 of the said issue as follows:

"The popularity of the diesel engine in heavy duty application in trucking, rail road, marine transport. DG sets and construction industry is due to both its fuel efficiency and long service relative to the gasoline engine. Compared with gasoline engine, diesel emissions are lower in carbon monoxide (CO), hydrocarbon (HC) and carbon dioxide (CO₂), but higher in oxides of nitrogen (NO_x) and particulate matter (PM). Diesel exhaust is a complex mixture of both particulate and gaseous phase. Diesel exhaust has particulate with mass median diameter of 0.05 to 1.00 micrometer, a size rendering them easily respirable and capable of depositing in the airways and alveoli. The particles consist of a carbonaceous core with a large surface area to which various hydrocarbons are absorbed, including carcinogenic polycyclic aromatic hydrocarbons (PAH_s) and Nitro-PAH_s that have elicited the most concern with respect to human health. The gaseous phase contains various products of combustion and hydrocarbons including some of

A the PAH_s present in the particle phase. Once emitted components of diesel exhaust undergo atmospheric transformation in ways that may be relevant to human health. For example, nitro-PAHS, created by the reaction of directly emitted PAHs with hydroxyl radicals in the atmosphere can be more potent mutagens and carcinogens and more bio-available than their precursors. A study undertaken by a Swedish Consultancy, Ecotrafic (Peter Anlvik and Ake Branberg, 1999) shows that the cancer potency of diesel vehicles is more than two times than that of petrol vehicles in India. But if only the most harmful of the exhaust emissions, that is particulate emission is considered the carcinogenic effect of one new diesel car is equivalent to 24 petrol cars and 84 new CNG cars on the road.”

In the same issue, particulars are given with regard to major air pollution related diseases in India which are as follows:-

“(1) Acute Respiratory disease:

D 12% of Deaths; 13% of NBD. Largest fraction in the world Indian ARI in children alone under 5 is responsible for more than 2% of entire GBD.

(2) Chronic Obstructive Pulmonary Disease (COPD):
1.5% of Deaths; 0.9% of NBD

E (3) Lung Cancer
0.4% of Deaths; 0.1% NBD

(4) Asthma:
0.2% of Deaths; 0.5% of NBD

F (5) Tuberculosis;
8% of Deaths; 5% of NBD; Largest in the world

(6) Perinatal:
6% of Deaths; 7.5% of NBD; Largest in the world

(7) Cardio Vascular Disease:
17% of Deaths; 5% of NBD

G (8) Blindness:
0% of Deaths; 1% of NBD; Largest in the world NBD/GBD:
National/Global Burden of Disease”

H From the aforesaid extracts from the publication of the Central Pollution Control Board, it is evident that there was need to control air pollution, and

one of the measures was to reduce the use of diesel. It was with this object in view that the Bhure Lal Committee recommended the use of CNG which was accepted by all the parties including the Union of India when orders were passed to that effect in July, 1998. **A**

It was submitted on behalf of the Union of India that diesel and CNG are not materially different in the matter of air pollution and instead of 100% switchover to CNG if there was a mix of CNG and diesel buses of equal proportion the difference would only be of 2% in the pollution levels. **B**

We do not find any valid basis for the aforesaid submission. Data from the Automotive Research Association of India, Pune shows that the pollution potential of emissions from CNG is far less than even the Euro-IV standards. This is evident from the following table compiled on the basis of the said data. **C**

Comparison of CNG certified test data from Automotive Research Association of India (ARAI) with emissions norms for buses.

	Sulphur level in diesel	Hydro-carbon	Carbon monoxide	Nitrogen oxide	Particulate matter	D
1992 standards ¹		3.5.	14.4	18	No standard	
1996 standards ¹		2.4.	11.2	14.4	No standard	E
Bharat Stage I, April 2000 ¹		1.23	49	9	0.40	
Bharat Stage II (Euro 2 standards) October 2001 ²	500 ppm (0.05 per cent)	1.1	4.0	7	0.15	F
Euro 3 Standards ³	350 ppm (0.035 per cent)	0.66	2.1	5	0.10	
Euro 4 Standards ³	50-10 ppm (0.005-0.001 per cent)	0.46	1.5	3.5	0.02	G
Ashok Leyland CNG bus ⁴	Nil	0.04*	2.92	2.91	0.01**	
Telco CNG bus ⁵	Nil	0.25*	1.68	3.42	0.03	H

A Note: *Non-Methane Hydrocarbon are a small fraction of total hydrocarbon in CNG vehicles.

**Certificate from ARAI says: particulates negligible.

References:

- B
1. CPCB 2000, Environmental Standards for Ambient Air Automobiles Fuels and Noise, July PCLS/4/2000-2001, p20, p29, p37, New Delhi.
 2. Ministry of Road Transport and High ways. The Gazette of India Notification, April 24, 2001, GSR 286 (E), New Delhi, mimeo.
- C
3. JS McArragher et al 1999, Fuel quality, vehicle technology and their interactions, CONCAWE, Brussels, p7.
 4. Ashok Leyland 2001, Emissions certification data of ARAI, mimeo. (Annexure 1)
- D
5. TELCO 2001, Emissions certification data of ARAI, mimeo.

E With the emissions from the CNG vehicles being more than comparable with the EURO-IV standards, the contention of the Union of India that a mix of diesel buses and CNG buses would make a difference of only 2% in the pollution levels is patently untenable. In the case of particulates, current CNG vehicles are 15 times better than Euro-II diesel vehicles (with 500 ppm sulphur) and only Euro IV diesel vehicles are comparable to CNG vehicles. In fact, the certificate issued by the Automotive Research Association of India (ARAI) to the bus manufactures says that particulate emissions were negligible and could not be measured. The aforesaid analysis emphasize the need for change to non-liquid fuel like CNG or LPG so as to improve the air quality in this country and not merely of Delhi. Such change over may perhaps obviate the need to manufacture vehicles meeting Euro III or Euro IV standards.

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G It was as a result of the various orders passed by this Court that the air pollution level in the city has been stabilised. In 2000, the levels of annual average levels of RSPM declined to 186 $\mu\text{g}/\text{cum}$ from 222 $\mu\text{g}/\text{cum}$. This is no small achievement as the city continues to add over 2,00,000 vehicles each year and its total vehicular fleet is larger than that of Kolkata, Mumbai and Chennai put together. But even with these efforts, its RSPM pollution remains roughly 3 times above the national standard for annual average concentration

H of RSPM mandated under the Air Act, 1981.

It was repeatedly contended on behalf of the Union of India that no other city in the world had introduced CNG buses at the scale directed by this Court: Both the State Government and the Union of India had urged that the CNG technology was still evolving and experimental. It is no doubt true that most of the cities of the industrialised world do not have large numbers of CNG buses, but the share of natural gas buses, needed to meet the stringent norms in the future, are growing. The data filed indicates that in the United States CNG buses account for 18 per cent of the current bus orders and 28 per cent of the potential orders. Under pressure to clean up the air because of the approaching Olympic Games in 2004, Beijing has resorted to an alternative fuel strategy. Latest figures from Beijing indicates that there will be 18,000 buses fuelled by CNG, LPG and electricity in that city. By 1999, Beijing had 1300 CNG buses and the numbers are growing rapidly to meet the Olympic deadline. Similarly, the Ministry of Environment in South Korea—partly to meet the targets in time for 2002 World Cup Soccer aims to induct 20,000 natural gas buses in its fleet and already 3000 such buses are plying. [Source Moon—soo Ahn 2000, Korean CNG bus programme. The Environmental Benefits, Ministry of Environment, Korea, Automotive Pollution Control Division, Mimeo.]

From the aforesaid, it is clear that the alternative fuel of CNG, LPG and electricity is a preferred technology which critically polluted cities like Delhi need as a leapfrogging technological option.

This court has shown concern about the reports relating to adulteration of petroleum products in Delhi. A report was called for from the Bhure Lal Committee. The said report confirms that adulteration is taking place. The sample failure rate in the study which has been carried out was 26 per cent. The report also indicates that the existing fuel specification standards and the tests specified are inadequate for detecting adulteration. Two dummy samples—one with 10 per cent and the other with 20 per cent Kerosene were sent to the Fuel Testing Laboratory, Noida. The result of the test report of the test laboratory showed that the product met the specification of HSD. However, a third sample with 15 per cent contamination was declared as not meeting the HSD specification. This shows that reliance cannot be placed on such laboratories which puts in great doubt the entire mechanism for detection of adulteration. Considering the quantity of Kerosene which is supplied to Delhi it is not improbable that this is one of the ingredients used, along with naphtha etc. for adulterating the fuel supplied to the customer. Under the circumstances, merely lowering the sulphur, and the benzene content in diesel and petrol

A respectively will have a little effect unless and until the oil companies can guaranty that the fuel which was sold from the dispensing stations is pure and unadulterated. In fact, there is one public sector undertaking which advertises its petroleum products as "*pure for sure*". It guarantees that the fuel which can be obtained from its dispensing stations is unadulterated. This by itself clearly indicates acknowledgement by the petroleum industry that adulteration in not a small measure is taking place and, therefore, the need to advertise the purity of the products sold by the Bharat Petroleum. It has been alleged, and there is strong basis for this, that as a result of adulteration, large amounts of illegal gains and profits are being made. There are various players in this racket. It is not surprising, therefore, that there is stiff resistance to the implementation of the orders of this Court for switch-over to gas which cannot be adulterated and will undoubtedly cause financial loss to the members of the unholy alliance of adulterators.

D As per the available information there seems to be no apparent shortage of gas. The supply of gas from the South Bassein gas fields has increased over the past some years, from 38 mmscmd to 41 mmscmd. Major investment has already been sanctioned for expansion of infrastructure to supply natural gas as well as regassified LNG to northern India.

E The Union of India has argued that breakdown in the pipeline would lead to disruption in supply to the city and could paralyse the transport system which would be solely dependent on CNG. However, available information suggests that the possibility of the pipeline breaking down is remote. Furthermore, the pipeline itself stores up to 3 months of gas supply needed for Delhi.

F The Union Government has to allocate more gas to Delhi to implement the order of this Court. In January, 2002, the Union Government has roughly doubled its earlier allocation to Delhi's vehicular fleet. But even this increased allocation—by diverting gas from a single user, Maruti Udyog Limited—will be inadequate for implementing the Court's order.

G To meet the needs of current and projected vehicles in the city—the city requires a mere 4.8 per cent of the current supply of gas by the HBJ pipeline. The production of gas in the South Bassein gas fields has also increased over the last 2-3 years. But the increased production has been allocated to industries, instead of meeting the needs of vehicles arising out of this Court's orders.

H According to available information:

- Reliance Industries got an additional 0.7 mmscmd; A
- Essar got an additional 0.4 mmscmd;
- Gujarat State Fertilizer Corporation got an additional 0.4 mmscmd;
- GIPCL (power generating company in Baroda) got 0.5 mmscmd (this gas is being reported by supplied without any allocation by the government and as a “matter of favour”) B
- IPCL—Dahej got an additional 0.85 mmscmd.

As per the latest figures available, there are 3,727 CNG buses on the road. The additional number of buses, which have to be phased out are 6, 338. Once this is done, the total number of CNG buses on the road will be 10,065. C

In the I.A. filed on behalf of the bus manufacturers, it is stated that 1500 chassis which had been ordered are ready for delivery but the persons who placed orders have not taken the delivery. Therefore, at least 1500 buses can be replaced immediately. As per the affidavit filed by the manufacturers, between Ashok Leyland and TELCO, they have an installed capacity of 1,100 buses per month. Assuming production of around 70 per cent of the installed capacity, it would be safe to proceed on the footing that between the two of them they can provide 800 buses a month. If all the buses operators chose to buy new buses then @ 800 buses per month, the entire fleet of remaining 4838 buses, in addition to the 1500 chassis ready for delivery, can be phased out in not more than 7 or 8 months. D E

The request of the government for phasing out 200 buses a month appears to be based on some imaginary shortage in the availability of gas. There is no credible material placed before the Court to show that the distribution of gas is consistent with the principle of sustainable development. Conferring economic advantage upon industry by making available cheap gas in preference to the need for supplying gas for environmental reason is inconsistent with the settled Constitutional position. F

Even though the time for phasing out diesel buses had expired but in view of the situation created by the Government of not cooperating or complying with the Courts order, a different formula has to be worked out so as to cause as little inconvenience to the travelling public as possible, while at the same time punishing the wrong doer. Directions are, therefore, to be issued regarding the lifting of 1500 buses plus phasing out of 800 buses per month. The permits to be given are to be time bound and the continued H

A operation of the diesel buses till they are replaced would require them to pay Rs. 500 per bus per day for 30 days of operation and thereafter Rs. 1,000 per day and the same is to be deposited with the Director of Transport, Delhi.

B Before concluding on this aspect, we may notice that on a query raised by the Court, the Union of India has informed the LPG has also been permitted to be used as fuel by the transport sector. This can and should be an alternate fuel to CNG available to the users as LPG is, at present, environmentally acceptable. It is for the Government to take steps so as to increase its supply. We may here note that there are, as per CPCB data, at least nine other polluted cities in India where the air quality is critical. These cities are Agra, Lucknow, **C** Jharia, Kanpur, Varanasi, Faridabad, Patna, Jodhpur and Pune. But there appears to be no effective action plan to address the problem of these cities and the Mashelkar Report ensures their suffering for quite some time. If no immediate action is taken then it may become necessary for some orders being passed so as to bring relief to the residents of those cities.

D Lack of adequate supply of CNG has been a cause of concern and has been referred to in the various orders passed by this Court from time to time. In the absence of proper response from the governmental authorities, there is no alternative but to issue the following directions:

E 1. The Union of India will give priority to transport sector including private vehicles all over India with regard to the allocation of CNG. This means that first the transport sector in Delhi, and in the other air polluted cities of India, CNG will be allocated and made available and it is only thereafter if any CNG is available, that the same can be allocated to the industries, preference being shown to **F** public sector undertakings and power projects.

G 2. I.A. of the Union of India for extension of time to run diesel buses is dismissed with costs of Rs. 20,000 (Twenty Thousand only). It is made clear, and it is obvious in our constitutional setup, that orders and directions of this Court cannot be nullified or modified or in any way altered by any administrative decision of the Central or the State Governments. The administrative decision to continue to ply diesel buses is, therefore, clearly in violation of this Court's orders.

H 3. Those persons who have placed orders with the bus manufactures, and have not taken delivery of the same shall do so within two

weeks from today, failing which their permits shall stand automatically cancelled. A

4. As owners of diesel buses have continued to ply diesel buses beyond 31st January, 2002, contrary to this Court's orders, for the disobedience of the said orders, the Director of Transport, Delhi, will collect from them costs at the rate of Rs 500 per bus per day increasing to Rs. 1, 000 per day after 30 days of operation of the diesel buses with effect from tomorrow and the same shall be deposited in this Court by the Director of Transport by the 10th day of every month. B
5. The NCT of Delhi shall phase out 800 diesel buses per month starting from 1st May, 2002. Till all the diesel buses are replaced the bus owners who continue to ply the diesel buses shall pay as per direction No. 4 hereinabove. C
6. For implementing these directions, the Union of India and all governmental authorities, including IGL shall:- D
 - (a) Allocate and make available 16.1 lakh Kg per day (2 mmscmd) of CNG in the NCT of Delhi by 30th June, 2002 for use by the transport sector,
 - (b) Increase the above supply of CNG whenever the need arises E
 - (c) Prepare a scheme containing a time schedule for supply of CNG to the other polluted cities of India and furnish the same to this Court by 9th May, 2002 for it's consideration;
 - (d) It will be open to the Union of India to supply LPG in addition to CNG as an alternate fuel or to supply any other clean non-adulterable fuel as the Bhure Lal Committee may recommend. F
7. The NCT of Delhi had announced a scheme for financing CNG vans, to be run as taxis, for SC/ST. We direct a similar financing scheme be framed by the Union of India jointly with the NCT of Delhi whereby those of the permits of owners of diesel buses are cancelled due to non-conversion to CNG the same should, in the first instance, be allotted to SC/ST and to the other weaker sections of the society. Such a scheme should be prepared and implemented and a compliance report be filed within four weeks. The costs H

A deposited under direction (4) above can be utilised in implementing the proposed scheme.

To come up on 9th May, 2002 for further orders by which date the Union of India and the N.C.T. of Delhi will file a further report.

B R.P.

Matter is pending.