

IN THE SUPREME COURT OF INDIA

CIVIL ORIGINAL JURISDICTION

I.A. NO. OF 2017

IN

WRIT PETITION NO. 13029 of 1985

IN THE MATTER OF:

M.C.MehtaPetitioner

Versus

Union Of IndiaRespondent

APPLICATION FOR DIRECTION BY THE AMICUS CURIAE

To,
The Hon'ble the Chief Justice of India
and his Companion Judges of the
Supreme Court of India.

The Applicant abovenamed

MOST RESPECTFULLY SHOWETH

1. The present Application is to draw the attention of this Hon'ble Court to the critical need for improvement in the quality of fuel used for combustion which would be the most beneficial long-term measure to improve air quality in the NCR region. Fifteen years ago, Delhi saw huge benefits of bringing in CNG for its vehicles. Today, as large parts of North India, reel under a severe air pollution crisis and as health costs of breathing toxic materials rises exponentially, one cannot depend on small incremental steps to bring changes as the scale of the problem is massive.

2. Today, this region, which can be easily classified as the most toxic hell on earth, needs a cleanest fuel-revolution and at scale and with speed. We need to ensure that all combustion – in power plants, vehicles or in industries – uses natural gas or electricity. Therefore, natural gas must be used for combustion and in addition, electricity – from gas plants, renewables or from much cleaner coal plants must be the only source of power for industrial and home consumers and ultimately also vehicles. The objective is make a massive switch to cleaner source of combustion so that the deadly menace of pollution can be combatted.

3. It is important to recognize that pollution today has huge health costs. In November 2017, the Indian Council of Medical Research (ICMR), Ministry of Health and Family Welfare released the first ever systematic assessment of burden of disease at both the national and state level in India. The medical experts have documented the main causes of death and disability over the last quarter century, noting that some causes such as diarrhea and other communicable diseases have declined, but others, especially heart disease—which is closely linked to air pollution and smoking—has increased significantly in the country. When they examined the greatest risk factors for these diseases, especially for their ability to cause loss of healthy years, they found outdoor and indoor air pollution to be the number two risk factor nationwide, surpassed only by continuing impacts of maternal and child nutrition.

4. Simultaneously, the report of the Lancet Commission on Health and Pollution has looked at the full range of environmental health risks reporting, based on the systematic Global Burden of Disease estimate. This shows that globally, some 9 million deaths occur each year due to air, water and chemical exposures. Air pollution is at the top of the list, with outdoor and indoor air pollution

contributing the lion's share: some 6 million deaths. India remains one of the worst affected where 1.9 million premature deaths occur due to outdoor and indoor air pollution.

5. A study on children released in the Journal of Indian Pediatrics, done by Prof SK Chhabra, former Director-Professor at Vallabhbhai Patel Chest Institute and now Head of Department of Pulmonary Medicine, Primus Hospital in New Delhi provides powerful evidences of children growing up in polluted environments of Delhi. The study highlights that air quality and childhood infections influence lung growth besides genetic factors. It finds air pollution has retarded lung growth in Delhi children. Even Indian adults have smaller lungs than their US counterparts. Smaller lungs mean poorer exercise capacity and greater vulnerability to respiratory symptoms and diseases. This is scary knowing that 40 per cent of urban children live in cities. This strong evidence makes it clear that comprehensive and long-term strategies for reducing air pollution are critical to protect public health.
6. Ironically, even as the country is reeling under a public health emergency caused by toxic air, we continue to expand our use of dirtier sources of energy. Therefore, the preferred source of energy today in order of priority is petcoke, furnace oil and its variants like CBFS, tyre oil etc or coal. Worse, the coal that is used in power plants does not even have pollution control devices. In this scenario, it is inconceivable to attain air quality of any breathable standard. In fact, it is a race to the bottom.
7. This is when India is today a power surplus nation, we have the installed capacity to generate power but not to supply the power. This is partly because distribution companies are in the red – they do not want to supply because they cannot pay for power that they will have to buy. They are in the red because they cannot charge for

power and when they do charge, the costs are so high that their customers look for cheap and dirty options to burn – from diesel generator sets to using polluting furnace oil and pet coke and anything else that is available cheaply and can be burnt. The other part of the problem is that because of the lack of funds/customers, there is poor distribution networks for power supply and huge inefficiency, which again drives up the price of supplied energy.

8. The NCR (roughly a radius of 100 km from Delhi, which is a common airshed) has some 10,000 MW of installed capacity of coal and gas power plants. This is enough to power its industries and homes. The fact is in winter, these power plants work at some 25-30 per cent of their installed capacity and in summer at about 50 per cent. Technically there is enough installed power capacity in the region, that it should have no electricity failure and certainly no need to use dirty fuels like pet coke or furnace oil.

9. Worse, the gas plants in the region, which are much cleaner than the coal plants are lying idle – or working much below capacity. Bawana gas power plant, built in 2013, is arguably country's cleanest and most efficient power plant. It has a station heat rate (SHR) – a measure of efficiency as lower the heat rate means less amount of fuel consumed to get the same amount of energy – of 1,845 kCal/KWh. This is against, Badarpur power plant's 2750 or NTPC Aravalli (a newer coal plant's) SHR of 2363. Yet the Bawana plant is working below 20 per cent of its installed capacity. This is because gas is not incentivized – in fact, through fiscal policies it is put at a disadvantage – and so its cost remains higher. This is when even in terms of emission standards, gas plants have much lower pollution—no particulates; negligible sulphur oxides (SO_x) and low nitrogen oxides (NO_x) as seen from the table below:

Table 1: Coal and gas emission standards and specific emissions

	PM (mg/Nm ³)	PM (kg/mwh r)	SOx (mg/Nm ³)	SOx (kg/mwh r)	Nox (mg/Nm ³)	Nox (kg/mwh r)	Ash (t.mw h)	CO2 (t/mw h)
Coal power plant	50-350 ¹	0.175- 1.225	600- 2400 ²	8.4	300- 1400 ³	2.8-4.9	0.3	1.08
Natur al gas power plant	negligibl e	negligibl e	negligibl e	negligibl e	50	0.3	nil	0.3- 0.6

1. December 2015 standards require power plants built from 2017 to emit 30 mg/Nm³. This has not been implemented.
2. No standard was prescribed till December 2015. But the December 2015 standard has not been implemented.
3. No standard prescribed, but this is what is found in plants using Indian coal with 0.4-0.6 sulphur. New standards require NOx emissions to be 300. Standard not implemented.
4. No standard prescribed

10. Today, coal is under GST, with a tax bracket of 5 per cent. Industry can avail of input credit for the use of coal. Similarly, furnace oil or pet coke is under GST with a tax bracket of 18 per cent. Industry can avail of input credit for the use of furnace oil or pet coke. Pet coke is also under OGL and imports are not taxed. It has no coal cess charged to it. In this way, the dirtiest fuel is kept the cheapest. As against this, natural gas is not under GST. It has to pay VAT; Gujarat charges –15% VAT on all gas that is distributed from its ports to other states; then states charge VAT, between 6-26%. Worse there is no input credit to customers. In this way, the tax component in natural gas ranges from 15% to 30% in different states.

11. The merit order dispatch, which defines the scheduling order for power sale, is based on the variable cost of power. In this way, cheapest and dirtiest coal, is given an incentive.

12. The MoEF&CC on 7thDecember 2015 had issued new emission standards for power plants. These set, for the first time, limits on SOx and NOx and tightened standards for PM. The standards were to be implemented as of December 2017. However, even after 2 years, little progress has been made. Power companies want extension for up to 5 years to implement the cleaner norms. This

again incentivizes dirty over clean. All in all, current policies add to promoting dirty fuels over cleaner fuels. The cost of bad health is not accounted for.

13. It is critical that there is a massive shift to cleaner fuels for combustion. To do this the following needs to be considered by the Union of India urgently:
 - a) Immediately shift generation of power to cleaner gas plants in the region and fully operationalise Bawana.
 - b) Bring natural gas under GST/remove the fiscal distortions that are making gas uncompetitive with other fuels.
 - c) Bring natural gas power plants into the 'must run' category, a status given to wind, solar, nuclear and hydel. This allows for power generated from these cleaner sources to be prioritised in scheduling and sale.
 - d) Ban the import of pet coke into India. Last year imports increased to over 14 million tonnes as this fuel, which is being dumped in global markets is leading to the race to the bottom.
 - e) Regulate the use of domestic pet coke (between 12-13 million tonnes annually) so that it is only used as feed stock and not for combustion. This is because India must be responsible nation and not export its waste product.
 - f) Implement the 2015 emission standards for power plants as per schedule. These standards will drastically bring down SO_x, NO_x and particulate emissions from coal based power plants.
 - g) Review status of the oldest coal power plants (34 GW) to switch from coal to gas. As even after implementation of the 2015 emission standards, gas power will be much cleaner.

14. In the circumstances, it is respectfully prayed that this Hon'ble Court may be pleased to :

- a) Direct that sufficient gas supply be made available so that all power generation in the NCR region is from power plants using gas as their principal fuel;
- b) Direct a ban on import of pet coke and furnace oil and confine the use of domestic pet coke for the sole purpose of feedstock;
- c) Direct the implementation of the 2015 emission standards for power plants as per schedule i.e. by December 2017;
- d) Direct the review of the status of existing coal based power plants and a timebound switch over to natural gas;
- e) Direct the Union to oversee measures to strengthen the distribution of electricity in the NCR region to ensure that there is no shortfall in availability of electricity on 24/7 basis;
- f) Pass such other orders, as this Hon'ble Court may deem appropriate.

AND FOR THIS ACT OF KINDNESS AND JUSTICE THE PETITIONERS AS IN DUTY BOUND SHALL EVER PRAY.

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AMICUS CURIAE