LEGAL FRAMEWORK FOR CLEAN AIR IN CITIES

Gaps and potential

Centre for Science and Environment

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Why this study?

India has set ambient air quality standards for several pollutants. According to the rules of the Central Pollution Control Board (CPCB), the annex monitoring agency, the national ambient air quality standards (NAAQS) should be met for at least 98 per cent of the days in a year. They may exceed the limit only for 2 per cent of the time, but not on two consecutive days of monitoring. But air-quality monitoring carried out in at least 263 cities shows that the majority do not meet standards. Further, pollution levels continue to rise in many cities, even smaller ones. According to the World Health Organization (WHO) data, 13 out of 20 of the most polluted cities are in India.

The few cities that have moved forward could do so because of bottom–up pressure catalysed by public campaigns and judicial interventions. This has raised a critical question: Is the legal framework for national air-quality planning in India inadequate and so weak that it does not allow time-bound compliance with the NAAQS? In other words, there no clear operative planning framework to ensure that all regions comply with the ambient standards. Further, when a city/state exceeds norms, the reporting requirement on non-compliance with a plan of action is also absent.

We know from other countries that legal terms are well defined for cities and states to comply with the ambient standards. For instance, in Europe the Air Quality Directive sets limits for the levels of various pollutants and corresponding margins of tolerance and time limits for compliance. Each EU country is required by the Air Quality Directive to define 'zones' and 'agglomerations' to which pollutant limits will apply. Article 13 imposes an absolute obligation on member states to ensure that the limits and margins of tolerance for air pollutants are not exceeded in any zone or agglomeration after the deadline. In USA, it is mandatory to prepare a state implementation plan to achieve NAAQS in non-attainment-status cities. In Australia, the standards are legally binding on each level of government. China is a new entrant to set clean-air targets to refine action plans.

In the developing world, Beijing adopted a framework with an action plan in June 2013. Beijing plans to reduce the concentration of PM 2.5 to 60 micrograms per cubic metre by 2017, down from 89 micrograms per cubic metre in 2014. This seems to have spurred action with results.

In India, judicial intervention over the years in response to public interest litigations (PILs) in different cities catalysed policy action. In 2003–04, the Supreme Court expanded the ambit of the public interest litigation on air pollution in Delhi to include other cities—Bengaluru, Hyderabad, Chennai, Ahmedabad, Kanpur, and Sholapur. Similar cases were initiated in Mumbai and Kolkata by their respective High Courts. The judiciary has consistently invoked the constitutional provision of right to life and precautionary principle to push action. This has started the process of action plans for clean air in these cities that set rolling a common minimum programme. However, these plans have not been designed on an aggressive and urgent scale. Further, some cities that had prepared clean-air action plans to comply with the court orders have not updated them regularly. There has been some follow-up but it has been minimal.

Following the court's intervention, the Union Ministry of Environment and Forests began to coordinate with the state governments to prepare action plans. During the early part of the last decade, about 52 cities were brought within the ambit of this planning. But the initiative lost steam soon. The matter of an action plan to meet clean-air standards was subsequently taken up during the 11th Five Year Plan by the Union government. A provision for city clean-air action plans was made in the 11th Plan document. Both the 11th Plan and the ongoing 12th Plan have asked for compliance with national ambient air quality standards in major cities by the end of the plan period. But the legal mechanism for compliance has not been specified to ensure implementation.

At this stage, there is no practice of setting clean-air targets for compliance. Moreover, our work on vehicular pollution control has also exposed that by convention the State Pollution Control Boards or the Departments of Environment of the state governments, that are responsible for monitoring and managing air quality, do not address vehicular pollution in practice. Their role in cities and regions is restricted to monitoring and managing all fixed pollution sources, such as industry and power plants, and area sources, such as trash burning, but not vehicles.

This has created a serious systemic problem in assessing action for improving the quality of urban air. There is no overall framework in cities that can link a range of actions in the area of in-use vehicles and transportation and mobility management as a part of pollution control measures. Pollution control from vehicles is under transport departments, governed under the Central Motor Vehicles Act and Rule. This only enforces the 'pollution under control' programme for checking tailpipe emissions from in-use vehicles. Transport departments are also responsible for phasing out old vehicles, and promoting alternative clean fuels like CNG or LPG in in-use fleets. But these actions are not linked with the larger legal goal of urban-air-quality management. There is no scope of one pollution monitoring agency to take a holistic view and prepare a comprehensive strategy by including vehicle technology and fuels, transportation and urban planning and design strategies to cut pollution levels in a city.

On the contrary, all the key domain areas—public transport and modal integration, walking and cycling, parking strategies and fiscal programmes—are not even explicitly linked with the pollution control programme in cities.

Only a few cities that are required by the Supreme Court or a High Court to prepare a clean-air action plan list a loose set of actions for all the domain areas of transportation. This limitation surfaced in Delhi a few years ago when the department of environment took the lead to prepare the Clean-Air Action Plan for the city. This comprehensive draft plan has identified a series of actions on public transport, walking and cycling and multi-modal integration. It has now stirred a debate on the territorial jurisdiction of different departments. A new committee therefore had to be set up under the chief secretary to redraw the plan.

To understand what is impeding such a planning framework, the gaps and barriers, Centre for Science and Environment has initiated an evaluation of the existing legal framework for air pollution control in the country. Widespread consultation with legal experts and practitioners has been initiated to get clear answers and examine critical questions. These include:

- What is the existing legal framework at the Central and state level for compliance with the NAAQS in cities? Currently there is a system of compliance for emission standards for pollution sources. But what kind of enabling laws and implementation mechanism will enforce NAAQS in cities?

- How can cities be made liable and accountable for compliance with NAAQS in a time-bound manner? Are our existing laws and policies adequately designed to ensure mandatory compliance with the NAAQS? If not, what are the gaps? What kinds of reforms are needed? What kinds of compliance mechanisms exist? Are punitive action and incentives needed?

- What conditions should be made mandatory in the Central act and policies and acts at the state and city levels?

- What is the special case of vehicular pollution currently governed under the Central Motor Vehicles Act and Rules? How can it be governed under an integrated framework along with all other pollution sources?

- Review global good practices where compliance regime with ambient air quality standards has been implemented.

- Examine existing relevant laws, regulations and policies, capture any precedence that might have been set in this direction.

These questions and points are based on CSE's own evaluation of the legal texts and practice as well as wide-ranging conversations with legal experts, practitioners and regulators. This report captures the key highlights of these assessments of conversations.

On the whole it is clear that the current provisions of the concerned Acts and legislations are adequate to enable action and compliance. But the practice is often not aligned with the intent and purpose of the law. Regulatory agencies responsible for implementation of the laws and rules are not utilizing the full potential of legal provisions.

Section 1: Dissecting the legal framework for air-quality planning

The regulatory mechanism of air quality standards in India as it stands today depends on the states implementing programmes, and controlling and preventing air pollution. The legislative component of this mechanism is primarily the Air (Prevention and Control of Pollution) Act, 1981, hereinafter referred to as the 'Air Act', along with specific Central Acts (Water, Environment Protection Act, Motor Vehicles Act and Public Liabilities Act).

The Air Act seeks to combat air pollution by prohibiting the use of polluting fuels and substances as well as by regulating appliances that give rise to air pollution. The whole issue of pollution prevention and control is dealt with by a combination of command and control methods as well as voluntary regulations, fiscal measures, promotion of awareness and involvement of public.

The nodal agency for implementing various legislations relating to environmental protection at the Centre is the Ministry of Environment, Forest and Climate Change. The Air Act provides for and empowers the Central Pollution Control Board (CPCB) and the SPCBs; the agencies for creation of programmes to control emission levels prescribe regulations for industries and related entities engaged in activities potentially hazardous to the environment. Section 16 of the Air Act sets a mandate on CPCB to maintain the desired air quality in the country and empowers it to take all necessary measures to this end.

The CPCB under the Air Act has the power to issue guidelines and promulgate programmes aimed at monitoring emission levels in India. The CPCB notified the revised National Ambient Air Quality Standards (NAAQS)[1] in November 2009, prescribing the emission levels of 12 identified pollutant categories. The CPCB has established the National Ambient Air Quality Monitoring (NAMP) Network to assess air quality—using NAAQS of regions, and covering more than 248 cities of the country—and collect, compile and disseminate information on air quality.

The CPCB here is only a monitoring agency, working collectively with SPCBs, Pollution Control Committees (PCCs) and the National Environmental Engineering Research Institute (NEERI). The data generated is transmitted to the CPCB for scrutiny, analysis and compilation, with the aim to inform an Action Plan designed to address the needs of a specific region, i.e. to identify the source of pollution and take necessary actions, such as relocation or withdrawal of consent of operation of pollution units.

The remedies or action taken under these sections are civil and penal in nature. The SPCBs are bound by the directives of the CPCB to monitor and undertake necessary action against offenders. Further, under Section 18, CPCB can issue specific directions to SPCBs to perform functions in consonance with the objectives as specified in the Act. Under Section 20 of the Act, the CPCB can give instructions for fixing permissible standards for emission from automobiles and issue restrictions on the use of certain industrial plants. Once the consent to operate is given, the Board is empowered under the Section 31A to issue orders or directions to any person, company, public authority or agency to implement its directives. The Section states that any direction the

Central government or Board gives in exercise of its powers, or any direction it issues in writing, shall be binding and is mandatorily to be complied with. The Act also prescribes penal sanctions in failure to comply with the directions of the CPCB or SPCB under Section 37.

However, time and again it has been felt that the Air Act by itself has failed to address the gap between enforcement and implementation. Despite having a wide range of legislations covering various environmental issues, laws providing judicial bodies with technical expertise and comprehensive laws supplemented with administrative guidelines, the objectives of the Air Act are not being implemented. Dr D.D Basu, former CPCB scientist and Advisor CSE, is of the opinion that the shortage of resources is a crippling factor with which the CPCB and SPCBs have to work. In a time when the government's primary policy thrust seems to be towards aggressive industrialization, undertaking inspection drives has become a mammoth task. The government is accountable for conducting inspections and monitoring pollution levels. It is, however, a whole different question whether the government can be held liable for not undertaking more pro-active policies to bring down emission levels and make the ambient air more suitable for habitation. 'You cannot punish the police for the crimes of the robbers.'

While the Act is observed to be vague in identifying the implementing agency and scope of directions that the CPCB can issue, the judicial precedents of the Supreme Court and National Green Tribunal have lent clarity and often directives to the government where needed.

The intent of the Act is focused on penalizing point-source pollution. The Act has specific provisions for industrial emission, vehicular and other pollution sources. We have to push for more proactive programmes to restore the quality of ambient air and introduce stringent measures to abate pollution in dense urban areas. These however require massive monitoring effort on the part of the state authorities, which so far has been lackadaisical.

The regulations have fallen short on the question of implementation in this respect. It is often felt that without the guidelines itself setting a target, the SPCBs cannot be held liable for failure in compliance. There are no time-bound targets to reduce pollution levels. Certain Action Plans, however, do have the stipulation of set-time targets, as in phasing out certain categories of vehicles and ban on the use of certain categories of fuels. They prescribe a median level of permissible emission levels and take action against such violators or polluters found in breach of these levels. The state government through these Action Plans takes action according to its discretion, with the most preferable method being relocating polluting units and recommending alternative fuel initiatives.

All in all, the control measures are ad hoc in nature, although monitoring systems are not. While standards have been laid down for ambient air quality, actual enforcement relates mostly to source standards laid down for individual polluters, factories, transport vehicles and so on. Further, the ambient and source standards are laid down independently, unrelated in terms of the volume of pollution-generating activities. Hence, it is quite conceivable that the quality of the environment could continue to deteriorate despite high degree of compliance among individual polluters.

While both these programmes are primarily monitoring programmes and the

function it imposes on the PCBS are those of a monitoring and supervening agency, the guidelines remain silent about what is to become of this voluminous data. It prescribes permissible levels of pollutants in the ambient areas and its monitoring parameter, but it is crucial to understand that it by itself doesn't put the liability of achieving any ambient air standards on the state governments or Pollution Control Boards. Further, the NAMP and NAAQS are guidelines, which by their very nature are prescriptive and open-ended and do not imply attraction of penal provision in case of failure to achieve air-quality standards without express provisions for the same.

Issues with implementation and enforcement

Nature of the ambient air standards: The Court in Damodaran Nair v. State of Kerala[2] had accepted the position that, 'ambient air quality standards are not standards which are to be enforced. They are only the objective or goal of pollution control. The standard which is to be enforced for Air Pollution Control is the emission standards which have already been set'. There has been a marked shift in this stance, with more mandatory connotations being given to the CPCB guidelines and directives. In its 2007 order,[3] the Karnataka High Court had stated that even if the State Board has not independently fixed the standards under the Clause (g) of (1) of Section 17 of the Air Act, the State Board is bound by the standards laid down by the Central Board. Under Section 18(1)(b) of the Air Act, every State Board shall be bound by the directions in writing as the central board may give to it. Thus, even if no separate notification is issued by the State Board laying down the standards for emission of air pollutants, the notification issued by the Central Pollution Control Board is deemed to be the notification issued by the State Board for all practical purposes in as much as the State Board shall have to follow the guidelines laid down by the Central Control Board.

The Court[4] has held that the primary responsibility of controlling air pollution is on the State Board. Section 17(g) of the Air Act has entrusted the responsibility of framing emission standards on the State Board, which needs to be formulated considering the prevailing air quality as compared to the ambient air quality standards specified by the CPCB. The Act further empowers the Board under Section 22A to approach the Court in case of apprehension of pollution and for filing of a complaint under Section 37. All these provisions provide sufficient legal powers that enable the State Board to effectively tackle the problem of air pollution.

How to identify the responsible Authority, ensure that directives are complied with and enforcement directives are carried out with maximum efficacy?
It is the duty of the government to provide for and ensure that the environment remains sustainable for its citizen. Such duty is covered under the Directive Principles[5] as provided in the Constitution. The Ministry of Environment, Forest and Climate Change is the primary authority for planning, promotion, co-ordination and overseeing the implementation of the country's environmental and forestry policies and programmes.[6] The Central government is the chief administrating authority. The Central Pollution Control Board has overall responsibility to improve the air quality and abate air pollution. The State Pollution Control Boards are constituted and funded by the government and are hence accountable to the Central government; these authorities have been entrusted to improve the quality of air and to prevent, control and abate air pollution in the country.

The CPCB and the SPCBs also have the mandate to set standards for air quality and permissible emission levels for industrial units and vehicular emissions. They can under Section 31A of the Air Act issue directions and instructions to ensure implementation of emission standards. The state governments herein are responsible to give effect to the provisions and Rules made under the Act for their respective states. Thus stands the operating structure.

The provisions for accountability within the Air Act can be culled out by an implied reading of the provisions and with substantial support of judicial precedents in form of NGT orders and a plethora of Supreme Court judgements. The writ jurisdiction of the Supreme Court so far has been the most favoured medium for most litigants to seek action against inaction or serious lapses on the part of the government. Advocate Nawneet Vibhav, an environmental law expert, concurs that 'the writ jurisdiction has proven to be the preferred route for environmental litigation, thanks to the countless judicial precedents and a receptive disposition of the court. However this is not to mean that the same cannot be pursued under the Air Act'.

The Act contains provisions wherein the government can be made accountable if it fails to fulfil its duties. Mostly in cases of consent grant or withdrawal, or lapse in due process, all grounds for action under the Act, the government is made the necessary party. The Air Act contains specific sections[7] under which penal action can be instituted against any person or company or authority found to be in non-compliance with the directives of the CPCB or SPCB. While these are the express penal provisions, the implied reading of the statutory provisions along with the judicial precedents is required to understand how to create a framework of accountability. For the purpose of this paper we shall look solely at the available avenues for citizen action or accountability measures that can be taken against the government within the statute.

Citizen suit: The US Clean Air Act, 1963, following an amendment in 1970, had added the provision of citizen suit,[8] whereby citizens can bring a legal suit against violators or government agencies to enforce environmental laws and ensure compliance with environmental laws. The section provides that such an action can lie against the government in case of injury to a legally protected interest, be it concrete or particularized, actual or imminent, and must have a causal connection between the injury and the conduct.

In the Air Act, while there are no express provisions for citizen suits, an action can lie against the government under Section 43 wherein any person, after giving a notice of 60 days, can initiate a complaint to the Board or Metropolitan Judge. Though the grounds for such action are limited to point-source pollution activity or blatant contempt of the directives so issued, the question of a legal action against the government for inaction or lapse in meeting its broader mandate, which may entail duties which are not specified in black and white, is left unanswered under the Air Act. Such an action though can be pursued in the National Green Tribunal, when we read the Air Act concurrently with the NGT Act. This will be explained in the later section.

Action against public authority: Section 41 of the Act empowers a citizen to file a suit against the Municipal Authority or any polluting government authority if it is held to be guilty of polluting the environment. In Paryavaran Mirta v. GPCB,[9] a case was filed in the NGT by a civil society organization to take action against the Municipal Corporation for the water pollution caused by the untreated solid waste leaking into the drinking water supply of the village. In the said case, the

GPCB had directed the Municipal Corporation to set up and operate the waste processing/disposal facility, which had been spilling waste onto the grazing land used by villagers. Despite repeated issuance of notice to the parties, the Municipal Corporation had failed to ensure the compliance or adaptation of adequate methods to control air pollution. The Court subsequently ordered the GPCB to take legal action against the Municipal Corporation and awarded the applicants the cost of the petition. It was held that 'every municipal authority within its territory is responsible for implementation of the provisions of these Rules. Every State Board or the committee is responsible for monitoring compliance of the standards regarding groundwater, ambient air quality and other standards as specified in the Schedule.'[10]

Whenever the CPCB has attempted to minimize its role in the matter of compliance, the tribunal has reiterated that the Central government has delegated powers of issuance of directions under Section 5 of the Environment (Protection) Act, 1986 to the Chairman of CPCB to issue directions to industry or any local authority. The CPCB cannot abdicate or be oblivious to its role and responsibility in such issues, though we agree that the primary role is the SPCBs'.

Where it is apparent that any polluting activity of an industry has continued due to lapse in monitoring or enforcement on the part of the SPCB or any other monitoring agency, action can be instituted against them in the Court, as was the case in SPCB, Odisha v. Swastik Ispat Pvt. Ltd.[11]

Suo motu action by the NGT: The state government and SPCBs are necessary parties to any action to be taken towards addressing environmental issues; suing the government for damages due to pollution is in the nature of torts. This is more or less through judicial redressal,[12] hence the phenomenon of judicial hyperactivity through the writ jurisdiction of Supreme Court in environmental issues.

Since 2010, however, the National Green Tribunal assumed the primary jurisdiction in all matters relating to environmental issues. The Tribunal was given powers and jurisdiction in nature similar to the High Court, meaning that it has the power of a writ court, which includes suo moto jurisdiction to take up issues directly against the violating party.

The NGT, established under the NGT Act, 2010, has under Section 14 of the Act, jurisdiction on all civil matters where substantial questions relating to environment arising out of the Scheduled Act can be brought under it. Any violation pertaining only to these laws, or any grievance rising out any order or directions of the government under these laws, can be challenged before the NGT. The NGT is not bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice. While passing orders/decisions/awards, the NGT will apply the principles of sustainable development, precautionary principle and polluter-pays principle.

The NGT has time and again pulled up government agencies for their recalcitrant attitude towards environmental issues. In Dileep Nevatia v. Union of India & Ors, the NGT, on a petition contending that the present regulatory framework is not being effectively implemented by the Ministry, Central government and state authorities with regard to standards specified for noise limits for automobiles at the manufacturing stage, the Tribunal raised inter alia a very pertinent issue: Does the present enforcement of noise-related standards

require specific directions from the Tribunal? While the standards were issued in 2002, the MoEF has still to issue guidelines for enforcing such standards; they have not delegated any powers for enforcement of these standards to any local authority either.

In cases such as these, the competent authority for prescribing the standards under the relevant section of Air Act was to be the enforcer of the standards too. Section 20 of the Act provides power to give instruction for ensuring standards for emission. The provision clearly implies that once the standard is prescribed by the State Board, under the Act the state government is required to give such instructions on recommendation of SPCBs as may be deemed necessary, and such authority shall be bound to comply with such instructions. The NGT reprimanded the CPCB and the state government for passing the buck, and directed them to issue directions under Section 20 of the Air Act to the concerned authorities of such standards for enforcement within a stipulated time period.

In the case of Vinesh M Kalwal v. State of Maharashtra,[13] the NGT emphasized on the urgent need for the MPCB to revisit its enforcement policy. 'The enforcement strategy of MPCB seems to be restricted to a rounded and cyclic approach involving inspection, monitoring, directions and forfeiture of bank guarantees, which is invoked in the event of each observed non-compliance. It has been held by the Hon'ble High Courts and also this Tribunal in several cases that forfeiture of bank guarantee cannot be construed as penal action and can be done for specific purposes as elaborated in Judgements in Appeal No.43/2012 and Appeal No.10/2011 of this Tribunal.' The Tribunal while setting time-bound directions for compliance was apprehensive about the effective implementation of the proposed directions intending to form monitoring committee of experts, comprising both government officials and independent experts, for a particular duration, so that the directions of the Tribunal are implemented within a time frame and in an effective manner. There are several instances where the apex court and also various High Courts have formed such monitoring committees for effective implementation of directions.[14]

Thus the Air Act has been given a liberal interpretation by the courts and NGT, reinforcing its powers beyond the black and white of the Statute:

This was elucidated in SPCB, Odisha v. Swastik Ispat (2014):[15]

'it is clear that the Board has preventive, punitive and curative powers. While reading the object and reasons in conjunction with Sections 16 to 18 and Section 31A of the Air Act, it is clear that the powers of the Board to issue directions are to be exercised with the primary object of prevention, control and abatement of air pollution. The most fundamental aspect of environmental law is prevention and control of pollution and to provide clean and healthy environment and wholesome water to the society at large. As already noticed, the provisions of Section 17(1)(a) casts upon the Board an obligation to do things and perform such acts as may be necessary for the proper discharge of its functions and generally for the purpose of carrying out the purposes of the Air Act. Upon analysis of the language of these provisions, it is evident that besides performing the specific acts and functions, the Board is entitled to do things or perform acts which may be in aid thereto and for carrying out effectively the purposes of the Air Act. Once it prepares a comprehensive programme for prevention, control and abatement of air pollution, and emission standards are prescribed, the Board

then is required to issue the order of consent to various applicant-units to establish and operate their activities.

The matter is not put to rest at that stage but the Board is required to ensure implementation of the terms and conditions of the consent order. It may then do such acts and deeds as may be necessary to ensure effective implementation of the entire environmental programme. The powers vested in the Board are thus of a very generic nature and not restricted in their scope and implementation. These powers have to be construed liberally, and not so narrowly to the extent that it would defeat the very purpose of the Air Act. It will be appropriate to construe them in a manner that amplifies their scope to the fullest to the extent in line with the object of the Act.'

Thus, where the Act has remained vague in defining the implementing and enforcement agencies, and streamlining the implementing procedure, the Courts have become the guiding force, lending clarity to regulating system and directing the government at all levels to move towards a more organized structure. The Court in most cases ends up setting up committees to see to the enforcement and compliance of such directives.

Measures such as these cannot be sustained for long. A more systematic approach has to be adopted. It is apparent from the cases taken up in the Tribunal, however, that the SPCBs should take more stringent measures in the form of penal action and power to arrest offenders as clearly the paltry fine amounts and revocation of consent to operate have not been enough of a deterrent. This can be done through the requisite amendment to the Air Act. Also, the new enforcement policy of using bank guarantees as a measure against non-compliance has proved to be very effective. Maharashtra State PCB was among the first ones to enforce it. Similar exercises should be introduced in other states.

Section 2: Vehicular pollution falls through legal loophole

According to the established convention and under the current legal framework, emission standards for both new and in-use vehicles are regulated under the Central Motor Vehicles Act administered by the Ministry of Road Transport and Highways. The objective of this Act is to '*take into account changes in the road transport technology, pattern of passenger and freight movements, development of road network in the country, and particularly the improved techniques in the motor vehicle management.*' It is further required to '*take care of the need for encouraging adoption of higher technology in automotive sector*'. (The Motor Vehicles Act 1988 pp. 9–10).

This stated objective of the Motor Vehicle Act is not supportive of the objectives of improving air quality to protect public health and environment. As vehicular emissions have strong bearing on air quality, its regulation needs to be aligned and made consistent with the objective of air quality regulations.

Air quality is governed under the Air (Prevention and Control) Act 1981 that is administered by the Ministry of Environment and Forests. This is an Act to 'provide for the prevention, control, and abatement of air pollution'.

The Central Motor Vehicle Act predates the Air Act. The Central Motor Vehicle Act of 1939 was amended in 1988 to regulate vehicular emission. Currently, vehicular emissions are regulated under the Central Motor Vehicles Act, not the Air Act.

The critical questions that requires legal assessment and answer are:

- How can air quality objectives be met if vehicular emissions are not regulated consistent with the objectives of the Air Act?

- Can vehicular emissions be regulated under the Air Act? What needs to be done to enable this?

Provisions of the Air Act, 1981 that empowers and enables the Ministry of Environment and Forests to regulate and legislate on vehicular emissions:

- **Section 17 of 'Functions of the Board'** states, 'lay down . . . standards for emission of air pollutants into the atmosphere from industrial plants and automobiles'. And, this is to be done in consultation with the Central Board and having regard to the standards for the quality of air laid down by the Central Board. **Clause (g) of Subsection (1) of Section 17** refers to standard to be set for automobiles and industrial units both.

- **Section 20** has provision of **'Power to give instructions for ensuring standards for emission from automobiles'** It states, '*with a view to ensuring that the standards for emission of air pollutants from automobiles . . . are complied with, the State Government shall, in consultation with the State Board, give such instructions . . . to the concerned authority in charge of registration of motor vehicles under the Motor Vehicles Act, 1939 (Act 4 of 1939).*' It adds, that '*such authority shall, notwithstanding anything contained in that Act*

or the rules made there under, be bound to comply with such instructions'.

Despite these explicitly stated powers under the Air Act, the Ministry of Environment and Forests does not regulate vehicular pollution.

Environment Protection Act 1986 and control of vehicular pollution

In the past, emissions standards for vehicles and fuels have been notified by the Ministry of Environment and Forests under yet another powerful environmental act—the Environment Protection Act 1986. Section 5 of this Act on power to give directions states that: '*Notwithstanding anything contained in any other law but subject to the provisions of this Act, the Central Government may, in the exercise of its powers and performance of its functions under this Act, issue directions in writing to any person, officer or any authority and such person, officer or authority shall be bound to comply with such directions*.' This gives overriding powers over all else.

There is precedence of setting emissions standards for vehicles and fuel quality under the Environment Protection Act, 1986. The standards set under EPA Act are as follows:

MOTOR VEHICLES: ENVIRONMENTAL STANDARDS 23.1 Vehicular Exhaust Emission Standards (effective for 1990–1996) Standards for emission of smoke, vapour etc. from motor vehicles Source: EPA Notification [GSR 55(E), 5 February 1990]

Diesel Fuel: Specifications for Emission Related Parameters, Source: EPA Notification [GSR No. 176(E), 2 April 1996]

Motor Gasoline: Specifications for Emission Related Parameters, Source: EPA Notification [GSR No. 176(E), 2 April 1996]

It may also be noted that during the same time simultaneous legislative procedure under the Central Motor Vehicle Act and Central Motor Vehicle Rules were also at work. Some earliest examples of mass emission norms notified are as follows:

Diesel Vehicles: Mass Emission Standards (effective from 1 April 1996), Source: (GSR 609[E] ,15 September 1993, Ministry of Surface Transport under Motor Vehicle Rules, 1989)

Petrol Driven Vehicles: Mass Emission Standards effective from 1 April 1996 to 2000 (Source G.S.R. 609[E], 15 September 1993, Ministry of Surface Transport under Motor Vehicles Rules, 1989)

Mass Emission Standards for Petrol Driven Vehicles (for vehicles fitted with Catalytic Converter) effective for 1998 to 2000, Source: Central Motor Vehicle Rules, 1989 GSR 461(E), 21 January 1990

Thus, precedence shows that the overriding authority of the Environment Protection Act 1986 has been exercised to notify standards for vehicles. This has superior authority to override the Central Motor Vehicles Act.

However, the provisions and powers of the Air Act of 1988 have not been exercised to notify norms for vehicular emissions.

Legal assessment

Centre for Science and Environment has taken legal advice from Senior Advocate of the Supreme Court, Rajeev Dhawan, on bringing vehicles more explicitly within the framework of the urban air quality planning (see *Box: Legal opinion*). This has brought out important dimensions.

i. The powers under Section 20 of the Air Act are very clear. It explicitly gives 'power to give instructions for ensuring standards for emission from automobiles'. But the form and particularity of this provision need to be defined.

ii. Motor vehicle is under List 3, related to the concurrent powers of legislation under the Constitution. The power under Air Act and Environment Protection Act are under Entries 13 and 14 in List I, related to treaty making and implementation of treaties, etc. that are subjects of Union Legislation. (The UN Conference on Human Environment in Stockholm in 1972 had placed the issue of protection of biosphere in the official agenda of international policy and law. After the Stockholm Declaration, 42nd Amendment Act 1976 on improvement and protection, provision of environment was made). If the Union has powers under Entries 13 and 14, no state authority can obstruct such powers. To that extent, the Union can override state powers.

iii. Consistent with these objectives, rules and standards can be laid down under Clause (g) of Sub-section (1) of Section 17 and direction under Section 20 of the Air Act and implemented notwithstanding the Central Motor Vehicle Act.

iv. Everything depends on the nature of direction being given under the Air Act (broadly or minutely defined). Depending on the nature of direction, no transport authority can refuse to obey these instructions that are constitutional and statutory.

v. Any instruction under Sub-clause (g) of Subsection (1) of Section 17 and Section 20 will override the Central Motor Vehicle Act.

vi. It would be impractical for the Union to enforce the standard directly. The instruction would have to be given to the Ministry of Petroleum and Natural Gas, Ministry of Road Transport and Highways and State Pollution Control Boards. The real problem is therefore how to draft instructions. If loosely drafted—as no more than an objective—it would be left to the Ministry of Road Transport and Highways and other agencies to devise their own methods of acting out these objectives. If these instructions contain details—including how they are to be enforced—the answer would be in the letter and spirit of instruction.

vii. Nothing in the Central Motor Vehicles Act prevents the Environment Protection Act and Air Act from creating an oversight body or from giving detailed instructions to any authority or agency. In such cases no state can protest.

viii. The next step is therefore to understand how this should function. How should rules, processes and regulations be put in place that are consistent with the objectives and powers of the EP Act and Air Act?

Box: Legal opinion

Centre for Science and Environment has consulted Rajeev Dhawan, Senior Advocate, Supreme Court. Here is the preliminary legal opinion.

A. **QUERY**

1. I have been asked my view on the steps that can be taken under Environment Protection Act, 1986 (EPA), Air Pollution Act, 1981 and Motor Vehicles Act, 1988

B. **POWER OF UNION**

2. The EPA 1986 was enacted under the Union's List-I Entry 13 and 14 read with Article 253 of the Constitution. This is self-evident from the Statement of Objects and Reasons (SOR) to the Act. This is equally true of the Air (Prevention and Control of Pollution) Act,1981. The significance of this that the powers of the Union Parliament and Union government are exclusive and overriding. The Motor Vehicles Act 1988 is enacted under the concurrent list. (List III, E 35) to give the Union's Act priority.

3. Superimpose on these the well-known principles of precautionary principle inter-generational equity and polluter pays (Vellore Citizens' Welfare Forum v. Union of India ***(1996) 5 SCC 647***.

4. Sections 3 and 5 of the EPA 1986 provisions are wide and empower the Central government to empower inter alia,
'*3(2)(i) coordination of actions by the State Governments, officers and other authorities—*
(a) Under this Act, or rules made there under: or
(b) Under any other law for the time being in force which is reliable to the objects of this Act;'

Likewise Section 5 of the EPA has power to give directions.

Section 5

*5. **Power to Give Directions**—Notwithstanding anything contained in any other law but subject to the provisions of this Act, the Central Government may in exercise of its powers and performance of its functions under this Act issue directions in writing to any person officer or any such person, officer or authority shall be bound to comply with such direction.*

Explanation: For the avoidance of doubts it is hereby declared that the power to issue directions under the section includes the power to direct—
(a) the closer prohibition or regulation of any industry, operation or process; or
(b) stoppage or regulation of the supply of electricity or water or any other service.

This has been widely interpreted.

5. For the purposes of our case, Section 6 may be noticed:

Section 6 (2)(a)(b)

*6. **Rules to Regulate Environmental Pollution**—*
(2) In particular and without per-justice to the generality of the foregoing power, such rule may provide for all or any of the following matters, namely:
(a) the standards of quality of air, water or soil for various areas and purposes;
(b) the maximum allowable limits of the concentration of various environmental pollutants and safeguards for the handling of hazardous substances;

This has been variously used for a vast array of subjects.

6. Section 25 has a general rule-making power, including for air pollution.

7. Finally the EPA 1986 has overriding effect over Section 24(1).

Section 24 (1)
*24. **Effect of Other Laws**. –(1) Subject to provision of Subsection (2), the provision of this Act and the rules or orders made therein shall have effect not withstanding anything inconsistent therewith contained in any enactment other than this Act.*

8. The Air Act 1981 was also enacted under Article 253 read with Seventh Schedule List I, Entry 13-14 of the Constitution. It is clear in its definition.

Sections 2(a) and (b) state:

Section 2(a)(b)
*2. **Definitions**—In this Act, unless the context otherwise requires,*

Serial number	Powers laid under the act for air pollution control	Execution status of the powers	Remarks
1	Formation of CPCB at central level and SPCB level	Complied	
2	CPCB to plan and execute nationwide programme to prevent, control or abate air pollution in the country Section 16(2)(a)	CPCB issued NAAQS in 1982, 1995 and 2009. CPCB monitors the air quality of 248 cities and towns by establishing 591 stations out of which 54 million plus population cities have 189 stations Comprehensive air-quality monitoring is not done in all cities with a million-plus population. The number of stations in each city and parameters is grossly inadequate to capture, identify and quantify the local sources of air pollution. CPCB has issued directions under Section 18(1)(b) to SPCBs for improvement of air quality in the NCR region. However, concerned SPCBs have not implemented the directions and CPCB has also not taken any further action on it.	Only PM 10, SO_2 and NO_2 are monitored through SPCBs in almost all cities, except Delhi. Parameters are inadequate to form a plan. However, 43 CAAQMS (automatic stations) have been set up in different cities.
3	CPCB to provide SPCBs technical assistance and guidance (Section 16[2][b])	Technical assistance and guidance were given when the SPCBs were in the formation stage. Once the SPCBs became mature they got engrossed in the business of consent management, which is more or less administrative in nature. The inspection and the monitoring of pollution control facilities are done as a routine job devoid of any investigative or research purpose.	

4	CPCB to carry out and sponsor investigations or research, plan (Section 16 2][d])	CPCB has carried out several studies, including source-apportionment studies for six cities and action plan for 17 cities to achieve air-quality goals, Comprehensive Environment Performance Index (CEPI) for industrial areas, and sampling and analysis protocol for ambient air quality monitoring	
5	CPCB to organize training of persons (Section 16[2] [e])	In order to execute action plans for air quality improvement in cities with population of million-plus, an integrated modelling approach using comprehensive understanding of air quality model, health-effect model and economic model is required	
6	CPCB has the power to delegate any of its functions generally or specifically to any of the Committees appointed by it (Section 16 [4][a])	CPCB delegated the regulatory powers to UTs by forming state committees or boards. No other committees were formed by CPCB under this section of the Act.	Under this section CPCB could form a separate committee in each million-plus city and delegate specific functions of air-quality improvement in the city area.
7	CPCB has the power to do any other things and perform such other acts it may think necessary for the proper discharge of its functions (Section 16 [4] [b])	CPCB did a source-apportionment study in Delhi to identify and quantify the contribution of air pollution from various sources in Delhi by involving several institutions. However, local grids were was not prepared to capture local air-pollution sources and monitoring of all grids was not done.	The study did not consider the contribution of pollution from neighbouring cities and towns. The study did not consider seasonal variations, growth in population, vehicles and industry
8	It is the duty of SPCB to plan a comprehensive programme for the prevention, control or abatement of air pollution and to secure the execution thereof (Section 17 [1][a]).	SPCBs did not prepare any plan for the prevention, control or abatement of air pollution in any million-plus population cities that is suitable and adequate to secure its execution except for 17 cities as directed by the honourable Supreme Court.	
9	SPCB can prohibit the use of any fuel in any part in its territorial jurisdiction, other than approved fuel (Section 19 [3]).	SPCB never exercised the power (except in Delhi and to some extent in Gujarat).	
10	SPCBs can prohibit burning of any material that may cause or is likely to cause pollution within its territorial jurisdiction (Section 19[5]).	SPCB never exercised the power (except in Delhi, where burning of street litters/garbage collected by sweeping is prohibited by law and punitive action exists)	The power can be used by the SPCB to prohibit burning of agricultural residue, garbage etc.
11	SPCB can advise the state government to notify the prohibition of use of any appliance other than approved appliance in any part of its territorial jurisdiction (Section 19[4]).	SPCB never exercised the power (except in Delhi, where new furnaces, boilers, stone crushers, hot mix plants, etc. are not permitted) as per the Honourable Supreme Court order.	

12	SPCB can give instructions for ensuring standards for emissions from automobiles within its territorial jurisdiction (Section 20).	SPCBs have no control over the vehicular pollution emission monitoring and certification system (type approval) and PUC (in-use vehicle exhaust emissions testing) issued by independent agencies. SPCBs have never used its power to fix vehicle exhaust emission standards.	New vehicular emission standards are notified by the Ministry of Road Transport and Highways/Surface Transport
13	SPCB can restrict use of certain industrial plants within its territorial jurisdiction (Section 21).	SPCB never exercised the power (except in Delhi, where new furnaces, boilers, stone crushers, hot mix plants, etc. are not permitted).	
14	It is the duty of SPCBs to perform such other functions entrusted to it by the CPCB or state governments (Section 17 [1][i]).		
15	It is the duty of SPCB to do such other things and to perform such other acts as it may think necessary for the proper discharge of its function (Section 17[1][j])	SPCBs never prepared and executed plan for air quality improvement in cities except in 17 cities and in Delhi, where IIT Kanpur was entrusted to carry out an emission inventory and source-apportionment study.	Local grid was not prepared to capture local air pollution sources and monitoring of all grids not done. Emission from neighbouring cities was not considered. Also, changes in the scenario after progressive execution of plans were not considered.
16	The Central government can give CPCB directions, and CPCB is bound by it (Section 18 [a]).	The Central government never issued the CPCB or SPCBs directions to prepare and execute plan for improvement in air quality in cities.	
17	CPCB can give SPCBs directions, and SPCBs are bound by it (Section 18[1] [b]).	CPCB has issued SPCBs directions under Section 18 (1)(b) in December 2015 to control air pollution to achieve ambient air quality standards.	
18	The MOEF has the power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing, controlling and abating environment pollution (Section 3 [1]). Such measures may include coordination of actions by the state governments, officers and other authorities (Section 3[2][i]); and planning and execution of a nationwide programme for the prevention, control and abatement of environmental pollution (Section 3[2][ii]).	MOEF did not implement the following: planning and execution of a city-wise programme for the prevention, control and abatement of environmental pollution, and coordinating actions by the state governments, officers and other authorities.	

19	It is the duty of the MOEF to lay down standards for the quality of environment (Section 3[2][iii]), lay down standards for emissions or discharge of environmental pollutants from various sources (Section 3[2][iv]), restrict areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out subject to certain safeguards (Section 3[2][v]).	Compiled As on date emission discharge standards for all sectors and category of industrial activity is available. Location of industries in sensitive areas and non sensitive areas is regulated through sensitive-area notification and EIA notification Hazardous waste, biomedical waste, municipal solid waste, battery waste, plastic waste and electronic waste are also regulated through various notifications and rules.	
20	It is the duty of MOEF to carry out and sponsor investigations and research relating to problems of environmental pollution (Section 3[2)(ix)].		
21	MOEF has the power to establish and recognize laboratories or institutions to carry out the functions entrusted to such labs and institutes under the Act (Section 3[xi].	MOEF did not establish any institute or recognize any institute as centres for excellence to plan a city-wise programme for the prevention, control and abatement of environmental pollution. The plan could have been executed by the state government/SPCB in consultation with CPCB.	A separate institute could be recognized to investigate, research and prepare plans for improvement in air quality in Indian cities. MOEF could direct the CPCB and SPCB to create a separate department for air quality planning and development of standards.
22	MOEF has the power to give directions under Section 5 of the Act and to make rules to regulate pollution.		
23	MOEF has the power to take cognizance of offence by government departments under Section 17 of the Act.	No government authority of government departments has been prosecuted by MOEF for failure to plan and execute plans for improvement of air quality in towns and cities.	
24	MOEF has the power to delegate such of its power and function specified under the Act to any officer, state government or other authority (Section 23).	MOEF did not delegate power to any officer, state government or other authority for planning and execution of a city-wise programme for the prevention, control or abatement of environmental pollution in towns or cities.	MOEF could have delegated power to municipal authorities, town and county planning departments or industrial development authorities to prepare and execute plans for improving air quality in cities and nearby industrial areas.

(a) *'air pollutant' means any solid, liquid or gaseous substance 4 (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment;*

(b) 'air pollution' means the presence in the atmosphere of any air pollutant

The role of the Central Pollution Board in relation to the Central government is advisory (Section 16[2][a][b]) and includes to plan and cause to be executed nationwide programmes.

Section 16(2)(a)(b)
*16. **Functions of Central Board—**(2) In particular and without prejudice to the generality of the foregoing functions, the Central Board may*
(b) plan and cause to be executed a nation-wide programme for the prevention, control or abatement of air pollution

Similar provisions exist for the State Governments (Section 17(1)(a)(b). The Central and State Government may give directions to the Central and State Board respectively.

Section 12(1)
*12. **Temporary association of persons with Board for particular purposes**. – (1) A Board may associate, with itself in such manner, and for such purposes, as may be prescribed, any person whose assistance or advice it may desire to obtain in performing any of its functions under this Act.*

9. Likewise, Section 217 of the Motor Vehicles Act 1988 repeals all Union and state statutes (Section 217).

10. This is the broad description of the statutory layout.

11. In our discussion, we did not go into the rules, processes and directions under the various legislations. The Union has abundant powers to examine and implement enforcement in respect of air pollution. This power has to be moulded.

Section 3: The critical enabler and gaps in the Air Act

Centre for Science and Environment has carried out more consultation with legal experts and practitioners to get an insight into enablers and gaps in our laws. Dr B. Sengupta, former member secretary of CPCB, assessed for CSE some of these dimensions. He concluded that the analysis of various provisions of the Air Act 1981 and EP Act 1986 reveals that there are enough powers given to CPCB/SPCB/MOEF to prevent, abate and control air pollution in the country, including preparation and execution of plans to improve air quality to achieve air quality targets or standards.

As such it seems that no additional power or amendments in rules/acts are required; the SPCB/CPCB can achieve the desired air quality standards in various parts of the country, including cities and industrial areas with population of 54 million-plus, just by strict implementation of scientifically prepared action plans.

Table 1: Gap analysis in implementation of the Air Act to prevent and control air pollution in cities

Serial number	Powers laid under the act for air pollution control	Execution status of the powers	Remarks
1	Formation of CPCB at central level and SPCB level	Complied	
2	CPCB to plan and execute nationwide programme to prevent, control or abate air pollution in the country Section 16(2)(a)	CPCB issued NAAQS in 1982, 1995 and 2009. CPCB monitors the air quality of 248 cities and towns by establishing 591 stations out of which 54 million plus population cities have 189 stations Comprehensive air-quality monitoring is not done in all cities with a million-plus population. The number of stations in each city and parameters is grossly inadequate to capture, identify and quantify the local sources of air pollution. CPCB has issued directions under Section 18(1)(b) to SPCBs for improvement of air quality in the NCR region. However, concerned SPCBs have not implemented the directions and CPCB has also not taken any further action on it.	Only PM 10, SO_2 and NO_2 are monitored through SPCB in almost all cities, except Delhi. Parameters are inadequate to form a plan. However, 43 CAAQMS (automatic stations) have been set up in different cities.
3	CPCB to provide technical assistance and guidance to SPCB [Section 16 (2) (b)]	Technical assistance and guidance were given when the SPCBs were in the formation stage. Once the SPCBs became mature they got engrossed in the business of consent management, which is more or less administrative in nature. The inspection and the monitoring of pollution control facilities are done as a routine job devoid of any investigative or research purpose.	

4	CPCB to carry out and sponsor investigations or research, plan (Section 16 [2][d])	CPCB has carried out several studies, including source-apportionment studies for six cities and action plan for 17 cities to achieve air quality goals, Comprehensive Environment Performance Index (CEPI) for industrial areas, sampling and analysis protocol for ambient air quality monitoring.	
5	CPCB to organize training of persons [Section 16 (2) (e)]	In order to execute action plans for improving air quality in cities with population of million-plus, an integrated modelling approach using comprehensive understanding of air quality model, health-effect model and economic model is required	
6	CPCB has the power to delegate any of its functions generally or specifically to any of the Committees appointed by it (Section 16[4][a])	CPCB delegated the regulatory powers to UTs by forming state committees or boards. No other committees were formed by CPCB under this section of the Act.	Under this section CPCB could form a separate committee in each million-plus city and delegate specific functions of air-quality improvement in the city area.
7	CPCB has the power to do any other things and perform such other acts it may think necessary for the proper discharge of its functions (Section 16[4] [b])	CPCB did a source-apportionment study in Delhi to identify and quantify the contribution of air pollution from various sources by involving several institutions. However, local grids were was not prepared to capture local air-pollution sources and monitoring of all grids was not done.	The study did not consider the contribution of pollution from neighbouring cities and towns. The study did not consider seasonal variations, growth in population, vehicles and industry
8	It is the duty of SPCB to plan a comprehensive programme for the prevention, control or abatement of air pollution and to secure the execution thereof (Section 17 [1][a])	SPCBs did not prepare any plan for the prevention, control or abatement of air pollution in any million-plus population city that is suitable and adequate to secure its execution except for 17 cities as directed by the Honourable Supreme Court.	
9	SPCB can prohibit the use of any fuel in any part in its territorial jurisdiction, other than approved fuel [Section 19 (3)].	SPCB never exercised the power (except in Delhi and to some extent in Gujarat).	
10	SPCB can prohibit burning of any material that may cause or is likely to cause pollution within its territorial jurisdiction (Section 19[5]).	SPCB never exercised the power (except in Delhi, where burning of street litters/garbage collected by sweeping is prohibited by law and punitive action exists)	The power can be used by the SPCB to prohibit burning of agricultural residue, garbage etc.
11	SPCB can advise the state government to notify the prohibition of use of any appliance other than approved appliance in any part of its territorial jurisdiction (Section 19[4])	SPCB never exercised the power (except in Delhi, where new furnaces, boilers, stone crushers, hot mix plants, etc. are not permitted) as per the Honourable Supreme Court order.	

12	SPCB can give instructions for ensuring standards for emissions from automobiles within its territorial jurisdiction (Section 20).	SPCBs have no control over the vehicular pollution emission monitoring and certification system (type approval) and PUC (in-use vehicle exhaust emissions testing) issued by independent agencies. SPCBs have never used their power to fix vehicle exhaust emission standards.	New vehicular emission standards are notified by the Ministry of Road Transport and Highways/Surface Transport
13	SPCB can restrict use of certain industrial plants within its territorial jurisdiction [Section 21].	SPCB never exercised the power [except in Delhi, where new furnaces, boilers, stone crushers, hot mix plants, etc. are not permitted].	
14	It is the duty of SPCBs to perform such other functions entrusted to it by the CPCB or state governments [Section 17 (1) (i)].		
15	It is the duty of SPCB to do such other things and to perform such other acts as it may think necessary for the proper discharge of its function (Section 17[1][j])	SPCBs never prepared and executed plan for air quality improvement in cities except 17 cities and in Delhi, where IIT Kanpur was entrusted to carry out an emission inventory and source-apportionment study.	Local grid was not prepared to capture local air pollution sources and monitoring of all grids not done. Emission from neighbouring cities was not considered. Also, changes in the scenario after progressive execution of plans was not considered.
16	Central government can give directions to CPCB and CPCB is bound by it (Section 18[a]).	Central government never issued direction to the CPCB or SPCBs to prepare and execute plan for air-quality improvement in cities.	
17	CPCB can give directions to SPCBs and SPCBs are bound by it (Section 18 [1] [b]).	CPCB has issued directions under [Section 18 (1) (b)] to SPCBs in December 2015 to control air pollution to achieve ambient air quality standards.	
18	The MOEF have the power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing, controlling and abating environment pollution (Section 3 [1]). Such measures may include: coordination of actions by the state governments, officers and other authorities (Section 3[2][i]); and planning and execution of a nationwide programme for the prevention, control and abatement of environmental pollution (Section 3[2][ii]).	MOEF did not implement the following: planning and execution of a city-wise programme for the prevention, control and abatement of environmental pollution, and coordinating actions by the state governments, officers and other authorities.	

19	It is the duty of the MOEF to lay down standards for the quality of environment (Section 3[2][iii]), lay down standards for emissions or discharge of environmental pollutants from various sources whatsoever (Section 3[2][iv]), restrict areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out subject to certain safeguards (Section 3[2][v]).	Compiled As on date emission discharge standards for all sectors and category of industrial activity is available. Location of industries in sensitive areas and non-sensitive areas is regulated through sensitive-area notification and EIA notification Hazardous waste, biomedical waste, municipal solid waste, battery waste, plastic waste and electronic waste are also regulated through various notifications and rules.	
20	It is the duty of MOEF to carry out and sponsor investigations and research relating to problems of environmental pollution (Section 3[2][ix]).		
21	MOEF has the power to establish and recognize laboratories or institutions to carry out the functions entrusted to such labs and institutes under the Act (Section 3[xi]).	MOEF did not establish any institute or recognize any institute as centres for excellence to plan a city-wise programme for the prevention, control and abatement of environmental pollution. The plan could have been executed by the state government/SPCB in consultation with CPCB.	A separate institute could be recognized to investigate, research, and prepare plans for air quality improvement in Indian cities. MOEF could direct the CPCB and SPCB to create a separate department for air quality planning and development of standards.
22	MOEF has the power to give directions under Section 5 of the Act and to make rules to regulate pollution.		
23	MOEF has the power to take cognizance of offence by government departments under Section 17 of the Act.	No government authority of government departments has been prosecuted by MOEF for failure to plan and execute plans for improvement of air quality in towns and cities.	
24	MOEF has the power to delegate such of its power and function specified under the Act to any officer, state government or other authority (Section 23).	MOEF did not delegate power to any officer, state government or other authority for planning and execution of a city-wise programme for the prevention, control or abatement of environmental pollution in towns or cities.	MOEF could have delegated power to municipal authorities, town and county planning departments or industrial development authorities to prepare and execute plans for air-quality improvement in cities and its nearby industrial areas.

Review of global best practices to achieve air quality goals/standards
Cities where compliance regimes with ambient air quality standard have been implemented include New York and Beijing.

Air-quality policies of major economies are compared in Table 2.

Table 2: Air-quality policies of major economies

Air quality policy target	Europe	USA	China	India
Deadline for meeting NAAQS	2015	2012 The areas that do not meet the US National ambient air quality standards or the area violating the US Clean air act requirements are implementing State Implementation Plan (SIP)	2030 Interim target for key cities 2017	No target time frame set to achieve the NAAQS
Coverage of measures	Clean air for Europe action plan available	National air quality targets/plans approved at federal level and executed at state level	Action plan based with five-year measurable targets	No measurable targets set
Online monitoring of air quality	1000 stations in 400 cities/towns	770 stations in 540 cities/towns	1500 stations in 900 towns	450 stations in 70 towns
Flue gas desulphurization system in thermal power plants	75 per cent of TPP have FGD	60 per cent of TPP have FGD	95 per cent of TPP have FGD	10 per cent of TPP have FGD
Consequences for missing targets	Legal action against cities/ country	States must adopt emission reduction measures into law that are demonstrated to enable meeting targets	Promotion of province governors depends on meeting targets	None

Public health objectives of the Clean Air Act

Clean Air Act Sec 101 says, 'The Congress finds that the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare, including injury to agricultural crops and livestock, damage to and the deterioration of property, and hazards to air and ground transportation'[16]

Standards to protect public health: EPA is directed to set primary standards that are requisite to protect public health, including the health of sensitive subpopulations, with an adequate margin of safety.

Standards to be science based not on the basis of cost incurred to meet the standard: The air quality standards must be set based on science without regard to costs of implementing pollution controls to achieve the standards. Costs are considered during implementation of the standards.

Implementation of standards: Implementing the air quality standards is a joint responsibility of states and EPA. In this partnership, states are responsible for developing enforceable state implementation plans to meet and maintain air quality that meets national standards. Each state plan also must prohibit emissions that significantly contribute to air-quality problems in a downwind state.

Citizens can sue if standards are not met or in case of non-compliance: Any person can sue the EPA to compel the agency to perform mandatory duties under the Act or to seek judicial review of final agency actions, and also can file lawsuits to compel compliance by facilities that may be violating CAA requirements. Courts are authorized to impose civil penalties in lawsuits brought under the citizen suit provisions, and can direct up to $100,000 to be used for mitigation projects that enhance public health and the environment.

Conduct health impact studies: Section 103 says, 'The [EPA] Administrator, in consultation with the Secretary of Health and Human Services, shall conduct a research program on the short-term and long-term effects of air pollutants . . . on human health . . . conduct studies, including epidemiological, clinical, and laboratory and field studies, as necessary to identify and evaluate exposure to and effects of air pollutants on human health; . . . develop methods and techniques necessary to identify and assess the risks to human health from both routine and accidental exposures to individual air pollutants and combinations thereof.

. . . examination, summary, and evaluation of available toxicological and epidemiological information for the pollutant to ascertain the levels of human exposure which pose a significant threat to human health and the associated acute, sub-acute, and chronic adverse health effects

. . . establish a national research and development program for the prevention and control of air pollution and as part of such program shall . . . conduct, and promote the coordination and acceleration of, research, investigations, experiments, demonstrations, surveys, and studies relating to the causes, effects (including health and welfare effects), extent, prevention, and control of air pollution;

Conduct a comprehensive analysis of the impact of Act on the public health, economy, and environment of the United States . . .

In describing the benefits of a standard . . . consider all of the economic, public health, and environmental benefits of efforts to comply with such standard . . . assess how benefits are measured in order to assure that damage to human health and the environment is more accurately measured and taken into account . . .

Authority to set mobile source standards:
The Act gives EPA authority to set and revise standards for all types of new vehicles and their engines, commonly called 'mobile sources'. These include on-road vehicles such as cars, trucks, and buses; non-road engines and equipment such as farm and construction equipment, off-road motorcycles, recreational equipment, lawn and garden equipment, locomotives,

and marine vessels; and aircraft. EPA rules under these provisions often help states attain and maintain air quality standards for common pollutants, as well as reduce toxic emissions. Recently, the EPA has also used this authority to limit greenhouse gas pollution from motor vehicles. The Clean Air Act generally preempts state authority to adopt or enforce emissions standards for new motor vehicles.

Health based targets

EPA has classified six criteria pollutants (ozone, nitrogen oxide, particulate matter, carbon monoxide, sulphur dioxide and lead) and, based on the latest research and threats that these pollutants pose, laid down national ambient air quality standards (NAAQS). The states are required to follow these standards and comply with them by adopting stringent enforceable plans. The states also need to take action to prevent and control pollution that drifts across state lines.

The CAA requires EPA to establish health-based air quality index for common pollutants. The EPA sets primary standards for pollutants based on their health impacts. CAA also requires EPA to look into the standards and revise them every five years based on advice and information provided by an independent scientific advisory committee. These standards are set based on science, not costs. Costs are only taken into account while implementing the standards.

CAA also provides for controlling hazardous air pollutants, protecting visibility in national parks, controlling acid rains, protecting stratospheric ozone layer, reducing pollution that causes climate change and enforcement of stringent standards.

Implementation plans

The US EPA and states work together to ensure that national ambient air quality standards (NAAQS) are met and complied with. Every state is required by the CAA to maintain and develop general plans to follow NAAQS and specific plans are needed for specific designated areas. These plans are called State Implementation Plans (SIP) that are developed and formulated by local and state air-quality management agencies and submitted to EPA.

The EPA designates areas as 'meeting/attainment' or 'non meeting/non-attainment' areas based on their compliance with SIPs. Non-attainment areas are areas that fail to meet air- quality standards. An area may be attainment for one pollutant but non-attainment for another pollutant. State plans for these non-attainment areas are due within three years once a new or revised air-quality standard comes up. States need to match the standards and attain them within five years of designation. In some cases it can go up to 10 years if the EPA determines additional time is needed based on severity of pollution.

SIPs take into account pollution emissions and compliance from stationary sources such as factories and industries. But based on the type of pollutant, SIPs may also include measures for a state to reduce emissions from existing vehicles to tune up their emissions and control the pollution. The states are also required to go through a 'non-attainment new-source review' to ensure that their stationary sources do not degrade their air quality any further.

As per the amendment in 1990, there are additional requirements from non-attainment areas especially those exceeding ozone levels, particulate matter (PM 10) and carbon monoxide. Areas with higher levels of pollution are granted more time but they are also required to include more congressionally specified control measures in their pollution control plans.

There are also provisions in the act to ensure that a state implements a plan and submits it on time. In case an agency figures that a state has failed to carry out an adequate SIP or EPA rejects a submitted plan, the state is required to overcome this deficiency with 18 months of this disapproval. If this deficiency is not overcome in two years of EPA's finding or disapproval, restrictions are applied on the use of highway funds by states. In case of failure to meet the state implementation plans, EPA issues a federal implementation plan to the state.[17]

Enforcement of CAA and ensuring compliance-

Congress gives EPA the authority to take legal actions in case of noncompliance with CAA. In case a state finds a violator, it has the authority to take action against the violator. If the EPA decides to take an action, it informs the state so as to avoid duplication of effort. If EPA finds a violation, it can take administrative compliance order, administration penalty order or criminal/ civil enforcement action. The administrative penalties may go as high as $37,500 per day of violation or maximum of $290,000. The amount may be set higher depending on the decision of administrator and attorney general. There are separate provisions for motor and mobile sources similar in nature to non mobile sources.

Dr Sengupta has pointed out the steps that are possible under the current legal framework to have city-specific air quality improvement plan (CSAQIP). The SPCBs can do the following and have these functions under Section 17(1)(a) of the Air (Prevention and Control of Pollution) Act, 1981, which is enacted by the Parliament: To plan a comprehensive programme for prevention, control or abatement of air pollution and to secure the execution thereof.

One of the functions of the CPCB under Section 16(1) of Air Act 1981 is to improve the quality of air and to prevent, control, or abate air pollution in the country.

Further, under Section 16 and 17 of the Air Act 1981, there are enough powers and responsibilities given to SPCBs and the CPCB to prevent, abate and control air pollution by preparing city-specific, state-specific, industrial area-specific action plans and implementing the same to achieve desired air-quality targets/ standards.

It is therefore recommended that SPCBs and pollution-control committees under the guidance of the CPCB prepare for all 54 million-plus cities, city-specific air-quality improvement plans. These plans should be verified by CPCB and MOEF after public consultation.

The main components of the clean-air action plan should include the following:
1) The target date/year to achieve air-quality standard goals to be clearly specified in the plan document.

2) Phase-wise progress of implementation plan with target date of achievement should also be given.

3) The clean-air action plan should be based on scientific study and inventory of polluting sources, air quality monitoring specially at breathing level, source apportionment study, chemical characterization of PM 2.5, meteorological data analysis (mixing height, wind speed, direction), long-range transport of air pollutants etc. should be an integral part of the clean-air action plan.

- The power and responsibilities given under the Air Act 1981 and EP Act 1986 to the CPCB, SPCBs and MOEF are more than adequate to plan and execute air quality improvement plan by authorities to meet the national ambient air quality standards.[18]

- Presently, SPCBs and PCCs are regulating the emission standards for industries' point-sources by giving consent to establish (CTE) and consent to operate (CTO) to industries. The other action required to meet ambient air quality standards, such as vehicular-pollution control, non-point-source emission control, air pollution due to construction activities etc. are not given adequate attention by the SPCBs or PCC. No scientific action plan prepared by the SPCBs/PCCs (other than 17 cities which were required by the Supreme Court order to prepare clean-air action plans) to meet ambient air quality standards in their respective cities/industrial areas in their state.

- It is seen that SPCBs/state governments do not consider the directions given by the CPCB under Section 18(1)(b) to improve the air quality with adequate seriousness. On the contrary, CPCB and MOEF do not use their powers vested under the Acts and Rules to initiate punitive actions against the non-compliance of directions issued to SPCB/state governments.

- The existing mechanism or framework of governance of air pollution does not consider any punitive action for failures or provides incentive to those achieving the targets. This has made the implementation system counterproductive.[19]

- Global good practices where compliance regime with NAAQS has been implemented or is being implemented were reviewed in this study. It is possible to achieve NAAQS in all the Indian cities, provided there is a will and determination to do so. However there is no procedure to demonstrate compliance with NAAQS in any Indian city or industrial areas.

- Action plans prepared for 17 Indian cities under the honourable Supreme Court's directions are under implementation. Action plan prepared for the 70-odd industrial regions in India under CEPI are under implementation. No time frame with punitive actions/incentives has been fixed. The targets achieved, or not achieved, are not measured or quantified with respect to ambient air quality improvement, human health benefit etc.

- As a reform mechanism city-specific air-quality-improvement plan or clean-air action plan has been recommended in this study. The main components of the clean-air action plan are provided in the report. Framing the clean-air action plan is covered by the existing act, laws and policy.[20] A review mechanism has been provided through a high-power committee of experts and citizens.

- To begin with, the respective SPCBs for all cities with 54 million-plus population must prepare clean-air action plans within the stipulated time frame. Thereafter, clean-air action plans for all cities should be prepared on a time-bound manner. Each clean-air action plan should be vetted and approved by CPCB/MOEF after public consultation done through appropriate notice in various media.

- The institutional and funding mechanism needs to be devised by MOEF in consultation with CPCB and SPCBs. Clean energy fund, diesel cess fund and water cess fund available could be utilized to fund the project. CPCB and SPCBs have the required legal power to enforce the clean-air action plans to achieve the NAAQS in time-bound manner.

More legal opinion on the adequacy of law on compliance with clean-air targets

Centre for Science and Environment has carried out more consultation with Nawneet Vibhav of Luthra & Luthra to get an insight into the scope of the legal mandate and compliance regime and to get answers to some of the common legal questions and doubts.

Looking at the Air Act, 1981, what are the avenues through which a citizen suit can be pursued to hold the government accountable for inaction/lapse in its effort to control environmental pollution?

Section 43(1)(b) of the Air (Prevention and Control of Pollution) Act, 1981 provides that 'No court shall take cognizance of any offence under this Act except on a complaint made by any person who has given notice of not less than sixty days, in the manner prescribed, of the alleged offence and of his intention to make a complaint to the Board or officer authorized as aforesaid, and no

court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence punishable under this Act.'

Apart from such person the complaint could be made by either the Board or any officer authorized in its behalf. So, while there may not be any provision for citizen suit as such, there is definitely a provision to protect the interests of people affected by any act of pollution.

Further, for the implementation of the enactments mentioned in Schedule I of the NGT Act, 2010, which includes the Air Act of 1981 besides six other legislations, NGT under Section 14 of the NGT Act, 2010 could look into a case if it involves a substantial question relating to environment. Such an application can be filed by any aggrieved person as per Section 18 of the NGT Act, 2010.

Since the State Pollution Control Boards are constituted and funded by the government and these state boards and the Central board have been entrusted to prevent and control air pollution, there is no reason as to why the government cannot curb air pollution and hence there is a clear accountability on the part of the government. This is precisely why in most cases we have the boards and the government being made parties and held liable for failing in their duty to curb pollution.

What can we borrow from the US legislations which provide for citizen suits within the Act? Potential for the same to be emulated in the Indian system:
There is no need to borrow anything from the US as our statutory framework is good enough to prevent, control and abate air pollution. In the US, citizen suits in environmental cases are usually filed against violating individual(s), companies and government bodies that fail to discharge their statutory duties. Such provisions exist in India too.

If at all there is anything to be emulated from the US, it would be adding more teeth to the pollution control boards in India where the boards could impose more civil penalties on their own. This would also help the boards in generating revenue on their own and not relying on the government for funding as they do at present.

What is the accountability structure in the Air Act?
Be it due to the appointment of the members or the funding, the boards are in clear control of the government, which delegates its powers to prevent, control and abate air pollution in the country to the Central and state boards. The Air Act clearly provides that wherever the government feels that a given board is not discharging its duties properly to achieve the objectives of the statute it can always step into its shoes. There are specific provisions such as Section 47 of the Air Act, 1981 which provide for it. The state governments also have the power to declare air pollution control areas to check air pollution. So there are ample provisions that provide for an accountability structure.

Can pragmatic infrastructural impediments (shortage of manpower or resources to conduct effective inspection) be used as a reason to justify or excuse noncompliance on the part of the government machinery?
While that is indeed the reason cited for the inefficiency on the part of the pollution control boards and their failure in curbing pollution or excusing non-compliance, this is just not justifiable and there is actually no reason for the boards to cite such excuses and indicate helplessness. While the Central government is meant to provide the boards' funds, depending on the need

shown by each board, the boards are free to generate funds on their own and even borrow funds to discharge their duties. The statute clearly provides for it.

What is the nature of the guidelines and notification issued by the CPCB? Are they recommendatory or mandatory? For standards of ambient air quality as notified by the CPCB, under the mandate of the Air Act, 1981, which does not entail a set target, how do we hold the government accountable? The discretion given to the state authorities to formulate its own Action Plan is without specific concurrent provisions for enforcement or monitoring of compliance. How do we ensure through legal means that action plans are followed through with? (The Air Act is silent on ambient air standards itself.)

While the guidelines are recommendatory, the notifications are clearly mandatory. As for the air quality standards, one of the functions of the CPCB is to advise the Central government in laying down the standards for the quality of air. Clearly, the purpose of laying down such standards is to improve the quality of air. The reason there are no set targets is that it is for the technical experts at the CPCB to advise the Central government from time to time in this regard based on which the Government is expected to make certain standards mandatory that are in the best interest of environment and public health. If the government consciously chooses to dilute the standards for whatever reasons it should be held accountable. When a law is made, not everything is written in black and white as standards change from time to time and have to be updated. Hence certain powers are granted to the government or certain statutory authorities to ensure that the standards are in consonance with the times and requirements of environment and public health. Therefore, there is no excuse that can be cited on behalf of the boards or the government if they falter in discharging their duties and functions.

What is the scope of 'directions' that can be issued under the Section 31A of the Air Act?
Section 31A, unlike many provisions, has an explanation where it clearly provides that the Board has the power to issue closure orders and even cut off electricity and water supply to polluting industries. With such powers at one's discretion, it is difficult to imagine that the authority can fail in discharging its statutory responsibilities.

Why is the CPCB/SPCB dependent on the NGT and Supreme Court for ensuring compliance? Doesn't it point to a lack of penal powers in the Air Act itself that the principles of separation of powers are overstepped time and again by Supreme Court to fill in the enforcement vacuum?
If anyone aggrieved is by any order of the state, the board may appeal against it to the appellate authority. Further, one may appeal to the NGT if aggrieved by the order of the appellate authority. The orders of the NGT are appealable in the Supreme Court. So, it is anybody's guess as to how much time would be required till a final decision is arrived at. Even if we leave aside the issue of separation of power, knowing the pendency and the time taken by our judicial system it would defeat the entire purpose of initiating any action. This is probably why it is often felt that the boards have no teeth or claim to be helpless.

So, yes there is a clear flaw and, yes, there is a need to cut short this entire process of appeals by giving more powers to the regulatory agencies to impose penalties and act against the violators speedily.

Mandate of the Law—How to bind the government:

> 'Apart from formulation of policies related to environment and forest conservation and implementation of the provisions of various related legislations, the ministry releases funds to the state governments, NGOs and private institutions under the various central sectors and centrally sponsored schemes being implemented by the ministry. The success of utilization of funds earmarked for various schemes and completion of physical targets depends on the action completed by the agencies concerned as per the time lines fixed by the ministry. Many times because of non-receipt of utilization certificated and physical progress reports in time for the funds released previously, the ministry is not able to achieve the targets in full.
>
> As far as environment is concerned, the ambient quality of air and water depends upon the actions of all the diverse players in the society. The pace of development, industrial growth and urbanization, together with the changing lifestyles of the people, make it impossible for any agency to set quantifiable targets for a short time frame of a year.'

When the government itself in its mandate refuse to set a quantifiable target, what are the ways to hold the government accountable in absence of quantifiable targets as is the case with national ambient air standards?
These are mere excuses and justifications for inaction. It is my personal view and I strongly feel that if the government wants to lay down stringent standards and ensure that they are implemented, it can very well do so. It will require resources and sincere effort but then the law empowers the government to take such steps and there is no reason why the government is not capable to do so. Development, industrial growth, urbanization and changing lifestyles will continue but at the same time we need to take care of our environment and health to enjoy the fruits of so-called 'development'.

We have seen the effectiveness of PILs in India in environmental cases. Even in the statutes, whether it is the Air Act of 1981, Environment Act of 1986 and the NGT Act of 2010, there are ample provisions to ensure accountability on behalf of the government. It is a different issue that we are hesitant to bell the cat. I can see the government on its own taking strong measures once public health starts deteriorating rapidly. May be only then they will realize the need for strong medicines for such strong ailments.

Can the government be held liable for any action outside of this statutorily demanded action? Like failure of the government to take pro active steps to reduce the emissions levels.
Let us not forget the Directive Principles of State Policy and the manner in which the courts have held that be it fundamental rights, Directive Principles of State Policy or even fundamental duties, they all go hand in hand. Hence, the government is to be held accountable for deterioration of public health and environment.

Suggestion on how to strengthen the act in terms of ensuring accountability and compliance:
We have excellent laws in this country. We have law-making skills and at the same time hopeless about its implementation. The solution is very simple—add teeth to the regulatory agencies by giving them powers to impose civil penalties on the spot, cut short the process of appeals against such decisions, ensure financial independence and improve technical capabilities of such regulatory agencies. Of course the quantum of these civil penalties should be such that it actually hurts the violators unlike right now where it makes more sense to pay

fines (if at all imposed) and get away with it as the quantum of the fines has not been revised in ages. We need to simply disincentivize violations and we are sorted!

Explain the power of the NGT to issue directives to the public authority, to promulgate directive and follow through with compliance, under the Section 31A of the Air Act. It is in the nature of mandamus, but this would again allow the judiciary to encroach into the policy space. Are there instances of such nature?

It is not at all the job of NGT to make policies but yes wherever the so-called public authority fails to discharge its statutory duties the NGT can take them to task.

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2 V.S. Damodaran Nair v. State of Kerala. 7 April 1995. Available at: https://indiankanoon.org/doc/350523/

3 Nitin Majumdar v. State of Karnataka (ILR 2007 KAR 2969)

4 Vinesh Madanyya Kalwal v. State of Maharastra Ors. NGT. 16 May 2014.

5 Article 48-A of our Constitution, which reads as follows: 'The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country'. Available at : http://lawmin.nic.in/olwing/coi/coi-english/coi-4March2016.pdf

6 Dileep B. Nevatia v. Union of India, 2014. Available at: https://indiankanoon.org/doc/76058059/ (accessed on 24 June 2016)

7 Sections 37 and 41 of the Air (Prevention and Control of Pollution) Act, 1980.

8 US Code Title 42, Chapter 85, Sub-chapter III: 7604-Citizen Suits:

(a) Authority to bring civil action; jurisdiction except as provided in subsection (b) of this section, any person may commence a civil action on his own behalf—

'(2) Against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator'

9 Prayavaram Mitra (Janvikas) & Ors v. GSPCB,NGT, December 2013.

10 Rayons-Enlighting Humanity, Through its Secretary & Anr v. Ministry of Environment & Forests (MoEF) & Ors, 18 July 2013.

11 SPCB, Odisha v. M/s Swastik Ispat Pvt Ltd & Ors, NGT. 9 January 2014

12 Subhas Kumar v. State of Bihar (AIR 1991 SC 420): 'right to environment is a fundamental right of every citizen of India and is included in the 'right to life' guaranteed under Article 21 of the Constitution of India. A Public Interest Litigation (PIL) is maintainable in the High Court or Supreme Court at the instance of affected persons or even by a group of social workers or journalists for prevention of pollution.'

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