

Chapter-2

Institutional framework for prevention of air pollution

Legal framework for prevention of pollution

Environment protection falls under the central list and as such under the purview of the Union Government. The Union Government can delegate powers and functions to the State through the enactment of laws. The 42nd Constitutional Amendment, 1976 included protection and improvement of the environment under the Directive Principles of State Policy. The Government of India (GoI) enacted the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, and the Environment Protection Act, 1986 with the objectives of controlling water and air pollution and environmental degradation. To control the emissions from motor vehicles, the GoI notified (February 2004) vehicular emission standards and authorized the Central Government and State Governments to regulate and enforce them under the Motor Vehicles Act (MVA), 1988 and Motor Vehicles Rules, 1989 (Rule 115).

2.1 Departments responsible for prevention of air pollution

The overall policy intervention is the subject matter of the Ministry of Environment, Forests and Climate Change (Ministry) and CPCB. At the State level, the Forests & Environment Department (FED) is responsible for the protection of the environment. At the apex level, the Environment wing of the FED implements environment related policies. It is assisted by the Gujarat Pollution Control Board (GPCB) in discharging functions related to pollution control and protection of the environment by effective implementation of pollution laws. GPCB is a regulatory body responsible for bringing about all-round improvement in the quality of the environment and control of air pollution.

Other Departments/ offices responsible for controlling air pollution emanating from the activities they are administering over are mentioned in **Table-3** below:

Table-3: Departments/offices administering polluting emanating activities

Department/offices	Activities
Commissioner of Transport	Regulating and monitoring vehicular emissions
Roads and Buildings Department	Operation of Hot Mix Plants and stone crushers for construction of roads
Energy and Petrochemicals Department	Thermal Power Plants, Issue of power connections
Commissioner of Geology and Mining	Mining
Urban Development and Urban Housing Department	Disposal of municipal solid waste and regulation of demolition and construction of buildings including infrastructure developments in urban areas
Directorate of Civil Supplies	Monitoring quality of auto fuel
Principal Chief Conservator of Forests and Head of Forest Force	Greening the highways and issue of licenses to saw mills and wood processing units

2.2 Functions of Gujarat Pollution Control Board

GPCB was set up (October 1974) by the Government of Gujarat (GoG) under Section 4 of the Water (Prevention and Control of Pollution) Act, 1974, with the objective of prevention and control of water pollution (effluents) and abatement of air pollution (emissions). The GPCB performs following key functions: -

- Enforcing the provisions of (i) The Water (Prevention and Control of Pollution) Act, 1974 (ii) The Air (Prevention and Control of Pollution) Act, 1981, and (iii) the Hazardous and Other Wastes (Management and trans-boundary Movement) Rules, 2016 (iv) 15 other rules/ notifications notified by the GOI under the Environment (Protection Act), 1986.
- Issuing Consent to Establish (CTE) and Consolidated Consent and Authorization (CCA) to the activities and ensuring compliance with the conditions of the CCA.
- Monitoring ambient air quality, including noise, at different locations in the State.
- Implementing the orders of the NGT, Gujarat High Court and Supreme Court of India.

2.3 Role of Commissioner of Transport in regulating vehicular emission

The Ministry of Road Transport and Highways (MoRTH) had notified (February 2004¹) of idling emission standards for Carbon Monoxide and Hydro Carbon. Every vehicle is required to comply with these standards. Section 20 of the Air Act authorizes the State Transport Department to control vehicular pollution. The Commissioner of Transport (CoT) must ensure compliance with vehicular emission standards through enforcing six-monthly testing of emission of every motor vehicle and issue of Pollution under Control (PUC) Certificates to the vehicle owner. If the measured value of emission of any vehicle is not found within the prescribed standard, CoT imposes a penalty under section 190(2) of MVA, 1988.

2.4 Good practices

The GPCB while performing regulatory functions for control of pollution, also promoted good practices and new initiatives which can help in controlling air pollution. Some of the good practices/initiatives as observed are discussed below:

- A boiler is an integral part of any industrial process where combustion of fossil fuels takes place. It is a major source of air pollution due to emission of flue gases. As per Journal of Emerging Technologies and Innovative

¹ Central Motor Vehicles (First Amendment) Rules, 2004.

Research (JETIR)², common boiler helps in reduction of air pollution by 65 to 70 per cent in Particulate Matter. GPCB launched (2015) a pilot project in Surat for promoting the use of common boiler for reducing the cost of air pollution control measures, maintenance of equipment and enhancing the level of monitoring of air pollution. Thereafter, common boilers were installed in Vapi, Ankleshwar, Sarigam, Nandesari and Panoli during 2017-2021.

- On the directions (March 2019) of National Green Tribunal, GPCB promoted the use of eco-friendly natural gas instead of coal and lignite, especially in ceramic industries in Morbi. All units of ceramic industries in Morbi have migrated to natural gas for their operations by September 2019.
- Implementation of Air Action Plan in Ahmedabad and Surat involving the promotion of electrically operated vehicles in public transport and disposal of legacy municipal solid waste by converting them into organic manure.
- The GPCB took prompt action on matters pointed out by audit in various instances, such as:
 - i. Revision of the CCA of seven operating units in ESZ of Thol Wildlife Sanctuary.
 - ii. Undertaking air sampling at seven different locations near Ahmedabad and Gandhinagar cities where infrastructure activities were in progress. Issuance of show-cause notice to the implementing agencies for poor ambient air quality.
 - iii. Directing the brick manufacturers to adopt cleaner technology.
 - iv. Inspection of fly ash dumping sites and issue of Show Cause Notice for unauthorised disposal of fly ash.
 - v. Directing the bulk pet coke consumers (cement industries) to upload consumption data of pet coke on CPCB website.

Conclusion

The overall policy intervention at the national domain is the subject matter of the Ministry of Environment, Forests and Climate Change and CPCB. At the State level, the Forests & Environment Department (FED) is responsible for the protection of the environment. At the apex level, the Environment wing of the FED implements environment-related policies with the assistance of the Gujarat Pollution Control Board (GPCB) in discharging functions related to pollution control and protection of the environment by effective implementation of pollution laws. GPCB is a regulatory body responsible for bringing about all-around improvement in the quality of environment and control of air pollution. With resource constraints GPCB has been able to implement some good practices.

² Journal of Emerging Technologies and Innovative Research (JETIR) is a UGC approved International Scholarly Open Access, Peer-reviewed, Multidisciplinary Monthly Journal which is approved by University Grants Commission (UGC). It has an Impact factor of 7.95 (Calculate by Google Scholar and Semantic Scholar).

