Chapter 6

LEGAL FRAMEWORK OF ENVIRONMENTAL PROTECTION

The awareness of risk posed to the society and environment from operation of major industries such as the fertiliser manufacturing, have resulted in a number of initiatives aimed at maintaining and continually improving safety and environment culture in the industry. Pollution prevention through enforcement of the stipulations of the various control legislations and related rules and regulations is an important part of Environmental Management. The basic premises of such legislation are prevention of major accident hazards and limiting the consequences of such accidents not only for mankind but also for the environment. It place more emphasis on the socio-technical aspects of control policy and attempt to bring more transparency and openness into the process by allowing for public consultation and by strengthening the role of statutory authorities through information exchange (Duffield. J.S, 2001). In this chapter, the various enactments of the Government of India on the environmental front that have a direct bearing on the operation of fertiliser plants are examined.

Constitutional Provisions

The Directive Principles of State Policy in the Constitution of India provide for the Protection and improvement of environment and safeguarding of forests and wild life. The State shall endeavor to protect and improve the environment and to safeguard the forests and wild life of the country. The Constitution also declare that it shall be the duty of every citizen in the country to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for
living creatures. The language of the Directive Principles of State Policy (Article 47) requires not only a protectionist stance by the state but also compels the state to seek the improvement of polluted environments. This allows the government to impose restrictions on potentially harmful entities such as polluting industries.

India was among the first group of countries to insert an amendment into its Constitution allowing the State to protect and improve the environment for safeguarding public health, forests and wild life. The 42nd Amendment of the Constitution of India, enshrining the importance of environmental protection was adopted in 1976 and came to effect January 3, 1977. The Indian Penal Code, passed in 1860, penalises person(s) responsible for causing defilement of water of a public spring or reservoir with imprisonment or fines (Shamad D, 1996).

The Indian Forest Act was a product of British rule in 1927. It reflected the British policy of exploitation of natural resources rather than the desire to preserve and protect the forest environment. It conferred vast rights on Governments to exploit the forest resources. The British looked upon the forest as a source of supply of timber for manufacturing railway sleepers. Even at this early stage, awareness of man’s destructive tendencies was emerging.

The Factory Act also addressed public safety and health issues. Section 12 of the Act empowered each state government to legislate its own rules and throughout the 1950’s and 1960’s individual states framed their own rules under the Act. The legislation has indeed addressed the question concerning the discharge of water and effluents by factories and called for effective arrangements for disposal at the plant-level. Non-compliance of these provisions is liable to invite punishments. Though we have a number of legislation fostering environmental protection the basic issue still
remain as indiscriminate exploitation of nature and thoughtless introduction of high technology ignoring the need for environmental protection. (Diwan P. and Diwan P, 1998).

The Water (Prevention and Control of Pollution) Act, 1974

The Water (Prevention and Control of Pollution) Act was passed in 1974. Creation of a regulatory agency for controlling water pollution marked the beginning of a number of environmental legislations by the Indian Parliament. The Water Act also established the Central Pollution Control Board (CPCB) at central government level and State Pollution Control Board (SPCB) at the state government levels.

Some of the main responsibilities of the Central Board in promoting pollution abatement included coordinating activities of state boards and resolving disputes among them; providing technical assistance; conducting investigations; opening laboratories for analysis of samples; establishing fees for different types of sample testing; researching issues and problems; training personnel; conducting media and public awareness campaigns; collecting and disseminating data on water pollution; and working with state boards to set standards.

The state boards undertake plant-level inspections and monitoring, and advising the Central Board of problems and trends at the local level. Plants can be required to provide the state with information on their pollution control technologies.

The Central Pollution Control Board (CPCB) has instituted the Minimal National Standards (MINAS) for major industry sectors including fertilisers. An instrument of 'Consent' is used by the PCBs for control of pollution through legal provisions. Fertiliser units are required to obtain a consent, which is granted after
verifying that the conditions stipulated are fully complied with. The consent regulates the quality and quantity of effluents that can be discharged over a period of time.

Subsequent amendments to the Act were made to overcome difficulties in implementations of rules, siting of industries, empower the Board to order regulation or closure of excessively polluting units and give right to citizens to initiate legal action against polluting industry.

The Water (Prevention and Control of Pollution) Cess Act promulgated in 1977 provided the Central and state boards with the authority to levy and collect a tax on industries using water (FAI, 2000).

**Air (Prevention and Control of Pollution) Act, 1981**

The Air (Prevention and Control of Pollution) Act was passed in 1981 for the prevention, and control of air pollution and preservation of air quality. Under the provisions of this Act, the CPCB is authorized to develop national standards for quality of air and devise means to prevent, control and abate pollution. The State Pollution Control Board will advise the State Government with regard to the suitability of location for establishing any industry that is likely to cause pollution. Noise is also included in the list of air pollutants and provisions of the Act are made applicable for its control.

**Environment (Protection) Act, 1986**

In 1986, the Parliament passed the Environment (Protection) Act, designed to act as umbrella legislation on the environment. The responsibility entrusted to administer the new legislation also fell to the central and state pollution control boards.
In 1993, the Ministry of Environment and Forests (MoEF) of the Government of India completed its Environmental Action Plan to integrate environmental considerations into developmental strategies, which, among other priorities, included industrial pollution reduction.

The Ministry also decided to shift from concentration to load-based standards. This would add to a polluter's costs and remove incentives to dilute effluents by adding water, and strengthen incentives for adoption of cleaner technologies. It also issued water consumption standards for different industries and proposed additional penalty for excessive water use.

Targeting small-scale industries has been an important task as well since these facilities greatly add to the pollution load. The Ministry provides technical assistance and limited grants to promote central effluent treatment plants. It has also created industrial zones to encourage clusters of similar industries in order to help reduce the cost of providing utilities and environmental services.

Under this measure, the Central Government has responsibility for deciding standards, restricting industrial sites, laying down procedures and safeguards for accident prevention and handling of hazardous waste, overseeing of investigations and research on pollution issues, on-site inspections, establishment of laboratories, and collection and dissemination of information. The bill also sets standards on specific pollutants in specific industrial sectors including fertiliser industries.

The measure provides guidelines for location of industries and mining areas, for permitting and restricting industries in environmentally sensitive areas, coastal zone regulations and environmental impact assessments of development projects. Committees convened to conduct Environment Impact Assessments must have
disciplines in eco-system and water resource management, air and water pollution control, flora and fauna conservation, land use planning, social sciences, ecology and environmental health. Public hearings are also pre-requisite for project clearance.

The law also promulgates rules on hazardous waste management and handling. The act defines the responsibilities of handlers, circumstances for granting authorization, conditions of disposal sites, rules for importing hazardous wastes, reporting of accidents, packaging and labeling requirements and an appeal process for potential handlers who have been denied authorization.

Rules were also promulgated on the manufacture, storage and import of hazardous or toxic chemicals, micro-organisms, genetically engineered organisms, or cells. For the first time, private citizens were given the right to file cases against non-complying factories.

**Hazardous Wastes (Management and Handling) Rules, 1989**

The purpose of these rules is to regulate the handling of hazardous substances and establish a control mechanism for the management of hazardous wastes. Under the rules it shall be the responsibility of the facility operator to properly collect receive, treat, store and dispose these materials safely at locations intended for the same under the authority granted to them by the State Pollution Control Boards. Some of the hazardous wastes associated with fertiliser industry as regulated above are materials containing chromium, arsenic, sludge from water treatment plants, acid, alkali and slurry wastes, spent catalysts etc.
Manufacture, Storage and Import of Hazardous Chemical Rules, 1989

These rules prescribe procedures and safeguards for the prevention of accidents arising out of the use of hazardous and toxic chemicals in industries. The list of such chemicals include ammonia, arsenic trioxide, hydrogen, oxides of nitrogen, sulphur, vanadium and its compounds, chromium and its compounds etc., that are extensively used in the fertiliser industry. It has been made the responsibility of the occupier of the facility to identify major hazards and take adequate preventive steps, provide information, training and equipment to the personnel at work to ensure their safety, provide information to all who are likely to be affected by a major accident, develop material safety data sheets for such chemicals and prepare safety reports and on-site emergency plans.

Consequent to the amendments in 1994, it has become obligatory for plants to carry out safety audits every year and submit the report to the authorities. Mock drills were also made mandatory.

Noise Pollution (Regulation and Control) Rules, 2000

Whereas the increasing ambient noise levels in public places from various sources, including industrial activity have deleterious effects on human health and the psychological well being of the people, it is considered necessary to regulate and control noise producing and generating sources with the objective of maintaining the ambient air quality standards in respect of noise.

The State Government may categorise the areas into industrial, commercial, residential or silence areas/zones and specify ambient air quality standards in respect
of noise for different areas/zones for the purpose of implementation of noise standards for different areas.

The State Government shall take measures for abatement of noise and ensure that the existing noise levels do not exceed the ambient air quality standards specified under these rules. All development authorities, local bodies and other concerned authorities shall take into consideration all aspects of noise pollution as a parameter of quality of life to avoid noise menace and to achieve the objective of maintaining the ambient air quality standards in respect of noise.

The Public Liability Insurance Act, 1991

The Act is intended to provide immediate relief to persons affected by accidents while handling hazardous materials. The owner is made liable to give relief for injury or death of any person or damage to any property resulting from an accident. It is also mandatory for the owner to have insurance cover for such potential liability. An Environmental Relief Fund was established and is maintained by industry operators.

The Government enacted the National Environmental Tribunal Act, 1995 to provide for strict liability for damages arising out of accidents from handling of hazardous substances. The tribunal ensures speedy relief and compensation to the affected.

Conclusions

The complexity of the process technologies being adopted in fertiliser plants makes it difficult, if not impossible, for anybody other than the owner and operator to carry out detailed inspection on the systems, practices and control methodologies so
often responsible for the prevention of environmental damages. Therefore, adequate regulations, which could be enforced on facility owners and operators through the authority of the Government and local administration, are necessary to take care of public safety and environmental protection. The requirements of such regulations also need to be updated in unison with the developments in technology of the process employed for production.
REFERENCES


FAI Website, Fertiliser Association of India, New Delhi, 2000.