hydrocarbon or mixture of hydrocarbon and any inflammable mixture (liquid, viscous or solid) containing any liquid hydrocarbon. The Act classifies the compound in three classes, viz. A, B, and C depending on flash point. The Petroleum rules were made under the Act and came into force in the year 2002 to deal with refining, storage, import and transportation of petroleum. This also specifies codes for mixing of tetraethyl lead mixture, coloration of petroleum etc. With the objective of ensuring implementation of Act the Department of Explosives as a statutory authority is entrusted with the administration of this Act. Any person coming under criteria is required to observe all the stated provisions and obtain necessary permissions from the concerned authority where necessary.

**M.P. Factories (Control of Industrial Major Accident Hazard) Rules, 1996.**
- These were framed under Factories Act 1948. Directorate of Industrial Health & Safety is administratively looking after implementation of these rules as part of management of hazardous chemicals in industries that are using and storing hazardous substances and are prone to major hazard. This determines the concern and set priority for a comprehensive approach in ensuring safety in work environment and thereby preventing accidents.

**Static and Mobile Pressure Vessels Rules, 1983**
- These are framed under Indian Explosives Act 1884. The principal authority enforcing these rules is chief controller of explosives. This basically deals with permanent gases, liquefiable gases or gas dissolved in liquid under pressure or gas mixture which in a closed pressure exercise a pressure exceeding two atmosphere at a maximum working temperature. The rules specify the code for pressure vessels, filling, storage and transportation of compressed gases and vessels. Any person dealing with static and mobile pressure vessels and compressed gases are required to obtain license from the competent authority.

**Atomic Energy Act 1962.**
- This deals with radio active chemical substances, viz. uranium, plutonium, thorium, beryllium, deuterium etc. or any mineral/material containing these substances and provides for the development, control and use of atomic energy for the welfare of people. This is administratively controlled by Atomic Energy Regulation Board.

**Calcium Carbide Rules, 1987**
- These were framed under Petroleum Act 1934 to regulate the storage, transportation, import, manufacture, use and disposal of calcium carbide. Any person coming under stated criteria is required to apply to the concerned authority for grant, amend, renewal, transfer of licenses.

**Prevention of Terrorism Act, 2002**
- This was enacted on March 2002. The Ministry of Home Affairs, Govt administratively governs its implementations. This principally provides for prevention of, and dealing with, terrorist activities and for matters connected therewith. This also covers and put a check on unauthorized possession of chemical substances, hazardous explosive substances and biological substances capable of mass destruction.

**Gas Cylinder Rules, 2004**
- These are framed under Indian Explosives Act 1884 and deal with filling, possession, store, import and transport of gas cylinders used for dissolved acetylene gases, compressed gases and CNG. The manufacturer is required to obtain test and inspection certificates to ensure approved design and specification. The rules clearly specify the types and standards for cylinder and valves used for holding the gases. Department of Explosives is the enforcing agency.

**Insecticides Act, 1968**
- Insecticides are basically chemicals and this Act provides for the regulation of import, manufacture, sale, transport, distribution and use of insecticide with a view to prevent risk to human beings or animals, and for matters connected therewith. The Act has specified names of pesticides covered under the Act. Any person coming under purview of this Act is required to take necessary licenses from the competent authority. The Ministry of Agriculture governs its implementation. The Insecticide Rules came into force in 1971 under this Act.

**The Motor Vehicle Act, 1988**
- It is the principal instrument for regulation of motor vehicle traffic throughout India. The implementation of various provisions of this Act in the States rests with the Transport Department of State Government. The Motor Vehicle Rules were framed under this Act in the year 1989. This, besides other aspects, deals with the transportation of hazardous chemicals and dangerous goods also. The rules have specified the names of hazardous chemicals, their classes depending on their potential hazard, manner and condition of transportation etc. It is mandatory for any person, transporting hazardous goods, to comply with the stated provisions and handle the goods strictly in accordance with the set norms.

**More Statutes**
- There are more rules, viz. Denaturing of Spirit Rules 1972, Spirituous Preparations (Inter-State Trade & Commerce) Act 1955, Merchant Shipping (Carriage & Cargo) Rules, 1995, Dock Workers (Safety, Health and Regulation) Regulation 1990 etc. which also regulate chemicals and hazardous substances for minimizing risk to the environment and mankind.
Preamble

Chemicals are inseparable part of life and play a vital role in the present time. Though they serve useful but, owing to their hazardous characteristics, the management of chemicals is under the microscope internationally. The need has been felt to counter the emerging challenges for minimizing the risk to the environment and mankind. The Government of India (GoI) has shown the concern to this and has brought out various legislations to deal with hazardous chemicals. An overview of the relevant Acts and Rules enforced by GoI, governing the chemicals, besides other aspects, is given below as part of awareness and information.


• These rules, framed under Environment (Protection) Act 1986, are aimed at prevent and control the chemical accidents and assist the Government in managing chemical accidents and also suggest measures to reduce risks in industrial pockets. The rules deal with 684 notified hazardous chemicals and 20 industrial processes which are likely to involve hazardous chemicals. The rules have provision for the constitution of Central Crisis Group Alert System, headed by Secretary, Ministry of Environment & Forests (MoEF), GoI. There is also provision for constitution of State Crisis Group in all the States headed by Chief Secretary. District Crisis Group in each district headed by district collector and Local Crisis Group in industrial pocket headed by Sub-divisional Magistrate to enforce the provisions stated under the rules. The member of crisis groups are empowered to enter and inspect any place for performing any of the functions of Government entrusted to them. Provision of rendering financial and infrastructural help, in the event of chemical accident, is also there under the rules. Review of off-site emergency plan, deliberate on planning, monitor the accident situation and provide requisite technical guidance for handling chemical accidents are the important duties of members. Department of labour is the nodal agency in the respective States for implementation of these rules.

Manufacture, storage and Import of Hazardous Chemicals Rules, 1989

• These rules, framed under E.P. Act 1986, deals with 684 hazardous Chemicals and 20 industrial processes which are likely to involve one or more hazardous chemicals. These apply to industrial activities which satisfy the criteria stated under the rules. There is provision for preparation of on-site and off-site emergency plan.

notification of sites, preparation of safety reports, import or hazardous chemicals, reporting of accidents etc. The rules clearly specify the responsibilities of persons dealing with hazardous chemicals and duties of authorities. It is mandatory for a person to seek permission from the competent authority for dealing with the listed chemicals. The MoEF is the apex agency governing these rules. In States and UTs the State Pollution Control Boards and Committees have been entrusted the responsibility to enforce the statutes.

Ozone Depleting Substances (Regulation and Control) Rules, 2000

• These rules, governed by MoEF, were framed under E.P. Act 1986 and came into force in October 2000. In States and UTs the respective State Pollution Control Boards and Committees have been entrusted responsibility to enforce the norms under the rules. These rules apply to all the manufacturers and users of Ozone Depleting Substances (ODS) and are basically aimed to regulate and control the chemical substances which can have adverse impact on the ozone layer. The regulation includes sale, use, purchase, consumption, export and imports of ODS and also new investments on the same. This also regulates import, export and sale of products made with or containing ODS. Reclamation and destruction of ODS by any person is also regulated under these rules. The rules have listed the names of ozone depleting chemicals under seven groups, their substitutes and phase-out schedule. It is mandatory for all the concerned to observe the provisions mentioned in the rules.

Factories Act, 1948

• This deals with industries, including those that are engaged in hazardous processes and are using hazardous chemicals. The Act has prescribed upper permissible levels of over 100 chemicals and toxic substances for exposure on TWA and STEL basis. The Act has also defined 29 types of industries, including chemical industries, which involve hazardous processes. The Act suggests for observing effective measures while handling hazardous chemicals or working in area where hazardous chemicals are being used. Any person coming under purview of this Act is required to obtain necessary permissions from the Chief Inspector of Factories or the State Government for specified tasks. The Act is governed by Ministry of Labour, GoI. Department of labour and Directorate of Industrial Health & Safety may be contacted in the respective States for matters related therewith.

Public liability Insurance Act, 1991

• This was enacted in 1991. The Act provides for the public liability Insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling any notified hazardous chemical and matters connected therewith. All the establishments handling hazardous chemicals, and coming under purview of Act, are required to obtain PLI Policy. The district collectors have been conferred powers for disbursement of relief amount. The Act also has provision for establishment of Environment Relief Fund by the Central Government.

• The Act has specified a list of 17 hazardous chemicals under four groups, viz., reactive, toxic and explosives. The flammable chemicals are classified separately under group 5. The MoEF is enforcing and ensuring the implementation of various provisions stated under the Act. The State Pollution Control Boards/Committees and the district Collectors may be contacted in the matters related therewith.

The Explosive Substances Act, 1908

• This regulates the manufacture, keeping, use, possession sale, conveyance and importation of explosives. The Act has notified the authorized explosives which have been classified under 8 classes and, according to the risks posed by them, they have been divided into four categories. Any person desirous of including an explosive in the list of authorized explosives or renew or amend license under the rules, need to apply to the competent authority. The breach of provisions of rules attract penalty including forfeitures, fines and imprisonment as punishment.

• The Ministry of Commerce and Industry governs this Act. Department of Explosives has been entrusted the responsibility to enforce it. The Chief Controller of Explosives, having HQ at Nagpur, has jurisdiction throughout the country. The Central region, including Madhya Pradesh, comes under jurisdiction of Dy. Chief Controller of Explosives, Bhopal.

Inflammable Substances Act, 1952

• This is an act to declare certain substances to be dangerously inflammable and to provide for the regulation of their import, transport, storage and production. The Act has specified seven chemical substances as dangerously inflammable. The Department of Explosives has been entrusted with the responsibility to ensure implementation of this Act. The Department is headed by Chief Controller of Explosives with HQ at Nagpur, five circle offices at Kolkata, Agra, Faridabad, Mumbai and Chennai and 18 Sub Circle Offices at various locations apart from a testing station at Gondkhedi, Nagpur.

Petroleum Act, 1934

• This Act deals with import, transport, storage, production, refining and blending of any liquid