Industrial Hygiene in India
Dr. Harsh Malhotra
Govt. G.D. College for Women, Alwar

1. Introduction: 1.1. Constitutional and Statutory Setup

The Constitution of India has specific provisions for ensuring hygiene and health care for workers in the form the three Articles 39 (c) and 42. The statutes relating to occupational hygiene are broadly divided into three categories for health and safety at workplaces (e.g. Factories Act, 1948 and Mines Act, 1952), statutes for safety of substances (e.g. Indian Explosives Act, 1884) and statutes for safety of activities (e.g. Radiation Protection rules under the Atomic Energy Act). The terms of reference for the present project covers occupational health aspects related to health and hygiene at workplace.

The Mines Act, 1952 and Rules and Regulations framed thereunder, Factories Act, 1948 and Rules framed thereunder, Dock Workers (Safety, Health and Welfare) Act, 1986 and Regulations framed thereunder, Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and Rules framed thereunder. At present, comprehensive safety and health statutes for regulating occupational safety and health of persons at work exists only in respect of the four sectors namely, mining, factories, ports, and construction. Astonishingly very few cases have been reported in factories regarding occupational diseases. This can be attributed to the fact that a major percentage of total work force is engaged in the unorganized sectors, like, agriculture, construction, shops and establishments, eating places and waste management, etc. excepting a few pilot surveys in some of these segments of the unorganized sector, no authentic statistics at the national level are available on accidents and occupational diseases.

The occupational safety and health is one of the subjects allotted to Ministry of Labour under the Government of India allocation of Business Rules. The Ministry of Labour, Government of India and Labour Departments of the State and Union Territories are responsible for the safety and health of workers.

Directorate General of Mines Safety (DGMS) and Directorate General Factory Advice Services & Labour Institutes (DGFASLI) assist the Ministry in the technical aspects of occupational safety and health in mines and factories & ports sectors, respectively. DGFASLI as an attached office to the Ministry of Labour, liaises with the State Factory Inspectorates and advises them on the administration of the Factories Act, 1948. Besides, provides training to Inspectors of Factories and technical personnel from the industries. DGFASLI also conducts multidisciplinary surveys in industries and ports. The Director General, FASLI is also the Chief Inspector of Dock Safety under the Dock Workers (Safety, Health and Welfare) Act, 1986 in respect of major ports and enforces the provisions of statute related to dock safety through Inspectorates Dock Safety at the major ports. There are comprehensive safety and health statutes for regulating safety and health of persons at work exists only in respect of four sectors – namely, factories, docks, mines and construction sectors, however, these legislations are highly sector-specific. The approach in the statutes is to lay down specific and detailed requirements to prevent risk of injuries in specific operations or circumstances. This lack uniformity and a well-coordinated approach to safety and health in all sectors of the economy. There is a strong need for a general (umbrella) legislation covering safety and health aspects of workers employed in all sectors of economy irrespective of the number of employees employed in those units. There is a trend all over the world to enact legislation on the subject, which has general applicability to all work-sites. This legislation should be applicable to factories, mines, plantation, ports, construction, unorganized sectors and also to such categories of workplaces or work activities as may be notified by Central Government.

1.2. International Labour Organisation Conventions

While framing and amending the legislations concerning occupational safety and health, the Government of India, as one of the founding members of the International Labour Organisation (ILO) derives conclusive guidelines from the conventions, recommendations and codes of practices framed by ILO in this regard. The ILO has so far adopted 182 conventions and 190 recommendations encompassing subjects such as worker's fundamental rights, worker's protection, social security, labour welfare,
occupational safety and health, women and child labour, migrant labour, indigenous and tribal population, etc. The Government of India till 2004 had ratified 39 conventions, and the recommendations relating to these 39 conventions have also been implemented to the extent possible. In the field of occupational safety, health and working environment, ILO has framed 13 conventions and equal number of recommendations so far. Out of these, Government of India has ratified 2 conventions namely Radiation Protection Convention (No.115), 1960 and Benzene Convention (No.136), 1971. Some of the recent conventions and recommendations have a strong bearing on emerging occupational health and safety laws in the country. These conventions are discussed in brief in the following paragraphs.

1.2.1. **Convention on National Policy Framework**

Convention 155 requires every Member State to formulate, implement and periodically review a coherent National Policy in consultation with representatives of employers and workers. The policy should aim at prevention of accidents and injury at work places by minimizing the causes of hazards inherent in working environment. The convention also identifies action at National and unit levels in relation to appropriate control measures for against exposure to harmful substances, provision of measures to deal with emergencies, seek cooperation and inform the workers in matters connected with safety and health.

1.2.1.1. **CONVENTION ON NATIONAL POLICY ON OCCUPATIONAL HEALTH SERVICES**

Convention 161 encompasses occupational health services. This convention requires that a National policy be framed on Occupational Health Services with particular reference to prevention of occupational diseases and health surveillance. The policy is to be finalized on tripartite consensus. These services should have functions such as identification and assessment of the risk for the health hazards in the work places and of the monitoring of health of workers. The provisions require that workmen be provided with information, education, training on the relevant aspects of the work and advised on first aid treatment and health programmes.

1.2.2. **Convention related to health and safety of workers**

Convention 176 projects a new philosophy of prevention. The convention through stronger union of workers’ representatives adopts a refreshing new approach to health & safety which firmly places responsibility on employers. The employers should control the risk at source or minimize it by designing a safe system of work. The convention gives workers several important rights, to report accidents, dangerous occurrences and hazards to employer and inspectorate, to ask for inspection & investigation by the employer and inspectorate, to get information about the hazards they face, to obtain relevant information from their employer and the inspectorate, to refuse dangerous work and to elect safety representatives.

The convention imposes three key tasks upon Governments:

1. to develop or coherent policy on safety & health in mines. The policy is to be finalised on tripartism consensus, To pass laws to implement the convention's provisions, to create an inspectorate to enforce the laws.


2.1 Judicial Responses: Labour Welfare

P.D. Jambhekar v. State of Gujarat

In the above case, Supreme Court of India emphasized upon the legal provisions of factories act requiring occupier to maintain minimum safety standards and hygiene standards as envisaged in Factories Act, 1948. Every dangerous part of any other machinery shall be securely fenced by safeguard of substantial construction which shall be kept in a position while the parts of the machinery they are fencing are in motion or in use and that is to be done unless they are in such position or of such construction as to be safe to every person employed in the factory as they would be if they were securely fenced.
Chinubhai Haridas v. State of Bombay

Apex court in Chinubhai Haridas v. State of Bombay, observed that Section 36(3) of Factories Act, 1948 prohibited worker from entering the pit etc., while other sections, for example, Section 8, 51, 52, 54, 60, 64, 67, 68 and 71 of the Act have no prohibition against the worker and cast the entire duty on the employer. It therefore must be construed in the context of the words used therein.

Parimal Chandra Raha & Ors. v. Life Insurance Corporation of India

In this case, Apex court enhanced the jurisdiction of Factories Act, 1948 as it observed that if the canteen is a statutory canteen envisaged by section 46 of the Act, then the canteen becomes the part of the establishment and the workers become workers of the factory/mill. This step was taken so as to implement the provisions of the said act, like Chapter III in canteen premises which were not regulated by any act.

Model Mills v. Labour Court, Nagpur

In Model Mills case, court interpreted provision of work time and overtime provided in the act, as it observed that section 51 only puts a maximum limit on the hours of work for which the adult worker shall be or allowed to work in a factory that being 48 hours in any week, and section 54 requires that the daily work shall not exceed 9 hours in a day. Both of these provision permit employer to substitute for the day or for the week such hours of work which would fall within the maximum limits provided.

2.2 Occupational Health & Welfare Issues in Small Factories and Mines

Occupational health and welfare issues related to small scale factories and mines have been discussed and debated in various forums. Different agencies concerned with the health and welfare of workers have expressed their helplessness in doing anything significant due to complexities of issues involved and multiplicity of State and Central government agencies. Some of the important occupational health and welfare issues are:

Comprehensive data on number of factories and mines, their location, ownership etc., is not available.

Because of resource constraints and inadequate number of inspecting officers it is beyond means of enforcement agencies to ensure regular inspection of small factories and mines for compliance with the statutory provisions.

The wages of most workers in small mines and factories are linked to production of material hence the concepts of fixed hours of work, overtime wages, weekly days of rest, leaves, and other benefits are difficult to implement.

The workers are mostly illiterate, unorganised, migratory and change their employer frequently. Therefore, it is difficult to ensure records of work history.

The working of small mines being mostly seasonal the continuity of work records is not maintained.

A majority of small factories and mines are located in remote and inaccessible areas where medical facilities are practically non-existent.

Since there are no facilities for medical examinations, the Initial and Periodical Medical Examination of workers are difficult to conduct.

Majority of small factories are owned by small entrepreneurs who do not have ways and means for conducting surveys for health hazards such as dust, noise etc. in premises.

Majority of factories lack basic facilities for drinking water, first-aid and sanitation.

There are no government or private agencies to provide occupational health and hygiene services for small scale factories.

2.3 Need For General Legislation

Increasingly, there is a trend all over the world to enact legislation on the subject which has general applicability to all work-sites. The legislation deals with matters of principles and empowers the government to make detailed regulations, codes of practice and standards for specific work-sites or work activities. The advantage in dealing with technical matters through regulations is that these can be revised or updated from time to time without delay and the procedural formalities involved in statutory amendment. Important examples of such general enabling legislation are the Occupational Safety and Health Act, 1970 of the USA and the Health and Safety at Work etc. Act 1974 of the U.K.

The question of enactment of a similar piece of legislation in India has been under consideration of the Central Government for long time. A Working Group was constituted in the Ministry of Labour in 1983 for the purpose, comprising representatives of the relevant Ministries of the Government. The working Group considered various forms of general legislation and
enforcement systems in different countries. It was felt that the U.K. model of having a central autonomous body, namely, the Health and Safety Commission and the unified enforcement agency, namely, the Health and Safety Executive would not be appropriate in view of our federal structure and the tradition of enforcement of safety provisions of law in different sectors of activities by different inspectorates. The Group favoured the course of framing a general law but leaving the administration to existing departments of Government concerned. In order to ensure effective administration and coordination of various functions under the new law, it, however, recommended the setting up of a Safety and Health Advisory Board. At present, comprehensive safety and health statutes for regulating safety and health of persons at work exists only in respect of four sectors – namely, factories, docks, mines and construction sectors.

In addition, there are number of other statutes for regulating safety in particular activities, operations, sectors such as transport, storage and handling of explosives, petroleum, insecticides, radio-active materials, installations, use and maintenance of boilers and unfired pressure vessels and operations of Railways, Shipping and Aviation. Thus, the approach in the existing statutes for regulating safety at work is to lay down specific and detailed requirements to prevent risk of injuries in specific operations or circumstances. This approach lacks uniformity and well-coordinated approach to safety and health in all sectors of the economy. In addition, software development units, hotels, unregistered manufacturing facilities, isolated storages of hazardous chemicals employing less than 10 workers are also outside the scope of application of safety and health legislations.

There are also problems regarding the procedures involved in amending these statutes. The administrative procedure to effect amendments to these statutes is so long drawn that quite often there is a time lag between the notification of the amendment and existence of the situation requiring such amendments. Further, these amendments cater only to particular problems.

2.4 Need For Apex Body
Planning commission in its 2000 study noted the need of an apex organisation to regulate occupational safety and health in industry. At present, there is no agency or department of the Government of India exclusively dealing with matters of occupational safety and health. DGFASTE is dealing with safety and health of workers employed in factories and ports, whereas, DGMS deals with safety and health of miners. There are other departments under the Ministry of Labour which deal with safety and health issues in different sectors such as CLC for construction sector, etc. Also, there is no agency which covers safety and health of workers in unorganized sectors. Thus, there is a need for an apex body at national level to deal with matters connected to safety and health of workers employed in all sectors of economy.

3. Conclusion
India is a vast country with a surface area of about 3.3 million square kms. The total population of India according to 2011 census was 1.2 billion. About 72% of its population lives in the rural area. Emerging occupational health problems are to be tackled along with the existing public health problems like communicable diseases, malnutrition, poor environmental sanitation, and inadequate medical care. Globalization and rapid industrial growth (about 8% annual economic growth) in the past few years have added further to complexities of occupational health related issues. In India, occupational health is not integrated with primary health care. Occupational Safety and Health till date remains under the mandate of the Ministry of Labour and not the Ministry of Health. Enforcement is carried out through the Directorate of Industrial Safety and Health at state levels that operate through factory inspecting engineers and medical inspectors of factories. Many large industries / public sector enterprises provide medical services but concentrate on curative set-up neglecting occupational health. The Occupational Health Physician, where employed, also takes up mostly curative work and liaison work giving insufficient attention to occupational health. The physician very likely might not even be trained on Occupational Health. As a result there is underdiagnosis and under-reporting of occupational diseases. Moreover, the occupational hygiene activities, if undertaken, are carried out under safety, not under OHS.

The directive principles of Indian constitution provide for, among others, securing the health and safety of workers (men and women), just and humane
conditions of work, protection of tender age of children against abuse and empowering the Government to take suitable measures or resort to such means as may be deemed fit through the participation of workers and employers. The fundamental purpose of this National Policy on Safety, Health and Environment at workplace, is not only to eliminate the incidence of work related injuries, diseases, fatalities, disaster and loss of national assets and ensuring achievement of a high level of occupational safety, health and environment performance through proactive approaches but also to enhance the well-being of the employee and society, at large. The necessary changes in this area will be based on a coordinated national effort focused on clear national goals and objectives.

Some of the suggestions provided in Chapter 4 of the project are based on Planning Commission's report, have not been implemented. Experience from developed countries teaches us that a common legislation can be very much effective, which might even provide for nodal agency to regulate the industrial hygiene. Such agency can be accorded power in the legislation which should extend beyond Factories Act, 1948 and should even cover small scale industries.

India is a vast country with a diverse population. As in many parts of the world, 'health' is synonymous with curative services. The majority of the working population belongs to the unorganized sector, which is not in the purview of current legislation in occupational health. Further, the working population being largely illiterate is unaware of the hazards associated with their occupation. Thus, awareness and health education programme should be carried out for the workers, supervisors and owners/ management of the factories/mines engaged in hazardous process. Health education programmes should include advice on smoking, avoidance of drinking, eating and smoking at workplace etc. Possible economic benefits resulting from prevention programmes must be ascertained before the management, trade unions and policy makers.

Bibliography:

Books


Statutes

- The Factories Act, 1948.
- Beedi and Cigar Workers Act, 1966 (Conditions of Employment and Health).
- Indian Explosives Act, 1884.
- Radiation Protection rules under the Atomic Energy Act.
- Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996

International Conventions

- Safety and Health in Mines Convention, 1995.

Case Laws