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OCCUPATIONAL SAFETY, HEALTH AND CONDITION OF WORK - QUARTERLY NEWSLETTER

COVER FEATURE,
PLATINUM JUBILEE
OF
ILO

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FROM TEE DESK

The creation of the International Labour Organization (ILO) on 11 April, 1919 was a historical event in safety movement.The ILO brings together governme nts , employers and workers of its 170 member states in common action to improve social protection and conditions of life and work throughout the world. It is particularly concerned with promoting improved working conditions and the work environment. The ILO utilizes its resources and various means of action, which include, international labour standards (Conventions and Recommendations), research studies , collection and dissemination of information, and technical w-operation.

The year 1994 marked the 75th anniversary of the ILO giving added impetus to the global celebration of an important legacy of international co-operation and progress. India is a founder-member of the JLO and them has been close relationship between India and the ILO since 1919.

The Ministry of Labour, Government of India, responsible for laying down policies on occupational safety, health and welfare of workers in various segments of industry took initiative in 1994 to organise commemorative ceremonies in a betitting manner.

The Directorate General of Factory Advice Service & Labour Institutes, an attached office of the Ministry, as a part of the celebrations, organised a series of five national seminars and national level competitions on various aspects of occupational safety & health in factories and ports and docks in the later part of 1994 and early 1995. It is gratifying to note that a large number of delegates from the factories and major ports participated in these celebrations. These celebrations provided us an occasion to reinforce the collaborative efforts of our Directorate General and the ILO in improving the status of Safety and Health of workers.

This issue of the INDOSHNEWS carries the main article on the various events our Directorate General successfully completed to mark the commemoration of the 75th anniversary of the ILO.

Sudhir Saxena

(S.K. SAXENA)
DIRECTOR GENERAL

THE PLATINUM JUBILEE OF ILO - COMMEMORATION BY DGFASLI

INTRODUCTION

The International Labour Organisation (ILO) was created on 11 April, 1919. It is a tripartite institution at the International level with representatives of governments, employers and workers from over 180 Member-States. The ILO is concerned with, among others, providing improved working conditions and the work environment.India is a founder-member of the ILO. There has been a close interaction between India and the ILO since 1919.

The Directorate General of Factory Advice Service and Labour Institutes (DGFASLI) is the technical arm of the Ministry of Labour, Government of India. The objective of the Ministry is regulation of working conditions and safety in factories, ports and mines. DGFASLI provides technical advice and service to the Central and State governments and industry on matters related to occupational safety and health of workers employed in factories and ports. The Central Labour Institute, Mumbai, the four Regional Labour Institutes one each in Calcutta, Faridabad, Kanpur and Chennai and the ten Inspectorates of Dock Safety at the major ports functioning under the DGFASLI organisation assist it.

The International Labour Organisation did yeoman service during 1919-1994 for 75 years and celebrated the commemoration of its 75th bii anniversary recently. The Ministry of Labour, Government of India on behalf of the country planned a year-long al&rations involving au concerned befitting this important historical event. The DGFASLI which has been closely associated with the various activities of the ILO since its inception in 1945 also commemorated the Platinum Jubilee of the International Labour Organisation in 1994 and 1995 involving au the three interests namely,government, employer and employee, thus keeping in with the spirit of tripartism which is the hallmark of the ILO. As part of the commemoration, DGFASLI organised a series of five seminars, two competitions on relevant themes at the national level and set up five special sections of exhibitions on the DGFASLI-ILO technical co-operation. The details am briefly given below:

SEMINARS

Major Accident Hazards Control System in India - Role of ILO & DGFASLI

The first National Seminar was held at the Regional Labour Institute, Kanpur o n 2 December, 1994. The objective was to find the causes and consequences of major accidents in industry, a v o i d such disasters, develop preparedness to meet emergencies and review the contribution of the ILO, Ministry of Labour and DGFASLI.

Smt. Shashi Jain, IAS, Joint Secretary to the Government of India inagurated the seminar. In her inaugural address, she stressed upon a better system of preventive and maintenance measures to minimise the risk of accidents in major accident hazard installations. SM S.K. Saxena, Deputy Director General & Head of the Department DGFASLI in his presidential address urged the delegates to set up effective accident prevention systems. Shri C.S.Hariharan, Programme Officer, ILO India-Bhutan Area Office, New Delhi was present on the occasion. The Seminar was attended by 155 delegates comprising officials from government departments, executives from industry and senior trade union officials.

After the inaugural function, two technical sessions were held with 11 papers presented by eminent speakers. During the first technical session, the three papers presented were: 'Bhopal - How & Why' wherein the possible causes of the disaster were deliberated, 'Effects of exposure to toxic gases 0" population of Bhopal' and 'Major Accident Hazards Control System in India - Role of DGFASLI & ILO' in Which the activities of the Major Accident Hazards Control Advisory Division established in the Central Labour Institute, Mumbai and its cells et the Regional Labour Institutes were explained.

In the second technical session, eigbt papers were presented. Papers on 'Status of major accident hazards control system' gave a detailed account of the status of MAH installations in the two States of Tamil Nndu und Uttar Pradesh. The rest of the papers deliberated on the organisational views of trade unions on 'MAHC System in India' and laid emphasis on workers' participation in management of occupational safety and health.

An exhibition of personal protective equipment, environmental hazard monitoring devices and display of technical literature on the MARC system was arranged on this occasion. Smt. Jain inaugurated it.

National Seminar on "Emerging Challenges in Safety and Health in Ports - Role of ILO snd DGFASLI"

The second National seminar on "Emerging Challenges in Safety and Health in Ports - Role of ILO & DGFASLI" was held ut Cochin on 10 January, 1995. Tbe objective was to review the contributions and efforts made by the ILO and DGFASLI in improving the status of safety and health of dock workers and to work out the future line of action and possible avenues for collaborated efforts to render the system mom effective and result oriented in meeting tbe emerging challenges due to rapid changes in the maritime trade in the country. Ms.Josephine Karavasil, Director, ILO, India-Bhutan Area Office, New Delhi inaugurated the Seminar. Shri S.K.Saxena, Deputy Director General & Head of Department, DGFASLI Bombay presided over the function. In all, 115 delegates comprising senior executives from tbe Port Trusts and Dock Labour Boards, Representatives of port users and trade unions, and dock safety enforcement officials attended the seminar.

After the inaugural function three technical sessions were held with ten papers presented by eminent speakers. The themes of the three sessions were :(a) Emerging Challenges to safety and Health in Ports, (b) ILO's Contribution in Meeting the Emerging Challenges in Safety and Heultb in Potts, and (c) National Response in Meeting the Emerging Challenges to Safety and Health in Ports.

The Chairmen of the three technical sessions' were specialists in port operations and occupational safety and health in dock work. The topics and tbe speakers of each session were so selected as to uniquely represent the tripartite character of the ILO.

A special exhibition on DGFASLI - ILO Technical Co-operation was alto organised besides u poster competition for all the eleven major ports on "promotion of safety and health in ports". Ms. Josephine Karavasil, Director, ILO, New Delhi inaugurated tbe exhibition and also distributed prizes to the winners of the poster wmpetition. Tbe poster from Bombay Port Trust was awarded the First Prize, while the posters from Agencia Commercial Maritima and Vishakhapatnam Port Trust were awarded the second and third prizes, respectively.

National Seminar on Prevention of Industrial Accidents and Occupational Disorders - Role and Functions of ILO and DGFASLI

The third National Seminar on 'Prevention of Industrial Accidents and Occupational Disorders - Role and Functions of ILO and DGFASLI' was organised in Calcutta by the Regional Labour Institute, Calcutta on 17 January, 1995. The main objective of the seminar was to deal with the various problems in safety and health management at workplace and to review the help and support provided by the ILO and the efforts of DGFASLI, in improving safety, health and environment at workplace.

Shri Shanti Ranjan Ghatak, Hon'ble Minister of Labour, Government of West Bengal inaugurated the seminar. Shri S.K.Saxena, Deputy Director General & Head of Department, DGFASLI presided over the function. The keynote address of the Director, ILO Area Office, New Delhi was read out by Shri T.C.Rao, Programme Executive in the. IL.0 Area Office. The seminar was mended by 210 delegates from Trade Unions, senior executives from industry and senior government officials.

There were two technical sessions, each chaired by Dr.S.M.Chatterjee, Director, Technical Education, Government of West Bengal and Shri S.K.Bhattacharya, Jt. Chief Inspector of Factories, Directorate of Factories, Government of west Bengal. In au, ten papers were presented by eminent persons in their respective fields of specialisation.

Along with the seminar two exhibitions, one on 'DGFASLI-ILO Technical Co-operation' and the other on Monitoring Equipment and Activities of DGFASLI' were also organised.

National Seminar on "Safety, Health & Environment in Industry - Perspectives

The fourth National Seminar on "Safely, Health & Environment in Industry - Perspectives" was held at the Central Labour Institute, Mumbai on 13 February, 1995. The objectives of the seminar were to provide a common platform to the Inspectors of Factories, executives from the industry and representatives of workers to discuss strategies to meet the emerging challenges of various occupational hazards in the wake of economic liberalisation and transfer of technologies, and to help formulate action plans for the prevention of industrial accidents and occupational health disorders.

Shri M.N.Buch, IAS, Additional Secretary to the Government of India, Ministry of Labour, New Delhi inaugurated the seminar. In his inaugural address, Shri Buch emphasised the need fur making concerted efforts on adopting clean and environment-friendly processes and pollution control methods and urged the industry to adopt tbe self-regulatory approach on matters of occupational safely, health and environment. In his presidential address, Shri S.K.Saxena, Deputy Director General & Head of Department, DGFASLI detailed the mle of national policy on occupational safety and health in improving the working conditions. Ms.Leyla Tegmo Reddy, Deputy Director, ILO India-Bhutan Area Office, New Delhi explained the crucial mle being played by the ILO in the past 75 years for the cause of improving the working conditions and occupational safely and health.

In all, 270 delegates comprising Inspectors of Factories from various 'Factory Inspectorates, and senior executives, technical personnel dealing with industrial safely, health and environment, safety officers, medical officers and trade union representative-s from the industry attended the seminar. There were two technical sessions in the Seminar, each chaired by Shri H.N.Mirashi, Director, Industrial Safety and Health, Government of Maharashtra,

Mumbai and Dr.Thomas Mathew, Director,National Institute of Industrial Engineering, Mumbai. A total number of nine papers were presented by eminent persons in their respective fields of specialisation. On this occasion, a permanent exhiiition section on DGFASLI- ILO Technical Co-operation was set up in the Safety, Health & Welfare Centre of the Institute. It was also inaugurated by Shri Buch.

Improvement of Safety Management System in Engineering Industry - Role & Functions of ILO & DGFASLI

The fifth National Seminar on "Improvement of safety Management System in Engineering Industry - Role and Functions of ILO & DGFASLI" was organised by the Regional Labour Institute. Madras on 11 March, 1995. The objective was to assess the present status of safety and health system in the engineering industry, the work done by ILO and DGFASLI and future expectations of the industry.

Shri P . Shankar, IAS, Secretary to the Government of Tamil Nadu, Department of Labour & Employment inaugurated the seminar. Shri S.K.Saxena, Deputy Dir General & Head of Department, DGPASLI, presided over the function. Shri T.C.Rao, Programme Executive, ILO India-Bhutan Area Office, New Delhi read out the message from the Director, ILO New Delhi. In all, 204 delegates comprising executives from industry, officials from the Inspectorates of Factories, Senior officials from Government and Trade Unions attended the seminar.

There were two technical sessions. The themes of the sessions were "Contribution by ILO & DGFASLI in improvement of safety management system in engineering industry" and "Benefits derived and expectations from ILO/DGFASLI in improvement of safety and health system in engineering industry".An exhibition was organised on safety equipment like machine guarding, safety standards, testing standards, etc. for the benefit of the delegates. A special exhibition was set up in the safety health and welfare centre to highlight various activities of ILO & DGFASLI.

PHOTOGRAPHY COMPETITION

A national level photography competition on the theme of "Safety and Health in Working" was organised for factories and major ports separately. In all 105 entries were received from both the factories and the 11 major ports. The group of factories included: cement, engineering, pharmaceutical, food and fertilizers, textiles. petrochemicals, newsprint, and paper, etc. Two separate juries of five eminent persons in the field of occupational safety and health and an expert in photography were constituted under the Chairmanship of the Director General, FASLI to judge the best entries. Five entries from five factories and four from the major ports were adjudged as winners.

Shri P.A.Sangma, the then Hon'ble Minister for Labour, Government of India distributed the prizes to the winners in a function held in the Central Labour Institute, Mumbai on 13 May 1995. Ms.Leyla Tegmo Reddy, Deputy Director, ILO, New Delhi presided over the function. Shri Sanat Mehta, Chairman, Central Board of Workers Education, Nagpur was the Guest of Honour. He inaugurated the national photography exhibition set up on this occasion.

POSTER COMPETITION

Safety posters play an important role in creating safety awareness among the workers. As a part of the celebrations a safety poster competion was organised for all the 11 major ports on

"Promotion of safety and health in ports". Ms. Josephine Karavasil, Director, JLO, New Delhi distributed the prizes to the five winners of the poster competition at Cochin on 10 January, 1995.

SPECIAL SECTION OF EXHIBITION ON "ILO-DGFASLI TECHNICAL CO-OPERATION"

On tbe occasion of celebrating the commemoration of the 75th Anniversary of ILO, a special section of exhibition on the theme of "ILO-DGFASLI Co-operation" was set up in the safety, health and welfare centres of the Central and the Regional Labour Institutes and at the Inspectorate of Dock Safety, Cochin. T b e exhibits consisted of display panels on structure and objectives of ILO, a list of important ILO Conventions dating to occupational safety and health, fields of activities, major areas of technical w-operation, and ILO/DGFASLI inter-country training programmes. T h e exhibitions now form a part of the permanent exhibitions of the safety, health and welfare centres.

CHILD LABOUR - A CRYING ISSUE

LEGISLATION

The Employment of Children Act, 1938, which was the first enactment on child labour was repealed by the Child Labour (Prohibition & Regulation) Act, 1986. The earlier Act prohibited the employment of children under 15 years in occupations scheduled as dangerous or unhealthy by the competent authority. The 1986 Act prohibits the employment of any person who has not completed his fourteenth year of age in certain occupations and processes in accordance with Article 24 of the Constitution concerning the employment of children. Recently, the Government of India have by a notification included all classes of establishments within the ambit of part - III of the Act excepting those which are covered under Paras A & B of the Schedule of the Ad. This is a very significant improvement as it now categorises all establishments in two categories : (a) those in which employment of child labour is prohibited; and (b) those in which the working conditions of child labour shall be regulated. While the Employment of Children Act, 1938 deals with the prohibition of children who have not attained the age of 15, the 1986 Act, in consideration of the deep-rooted and difficult to solve socio economic problems responsible for the employment of children, has attempted to incorporate appropriate provisions to prohibit the employment of children who have not attained the age of 14 and to regulate the employment of children rather more appropriately termed as "young persons" in the age groups of 14 to 18, besides enabling the constitution of a Technical Advisory Committee. Thus the rationale of combining the Prohibition and Regulation could be appreciated.

The salient features of both the above Acts are detailed below :

Employment of Children Act, 1938

To prevent children in hazardous employments and those injurious to health, the Employment of Children Act, 1938 prohibits their employmeot in certain occupations. Thus no child who has not completed 15 years of age can be employed in any occupation connected with the transport of passengers, goods or mail by railways; or a port authority within the limits of a port There are certain restrictions even for employment of children who are above 15 years and below 17 years of age. They are to be given at least 12 consecutive hours of rest which shall include 7 hours between 10 p.m. and 7 a.m. as may be prescribed. Relaxation is permitted in favour of those children who are working either as apprentices or receiving vocational training subject to such conditions as may be prescribed. The Act does not cover children employed in occupations connected with the transport like motor vehicles, ships. boats, aeroplanes.

Under the Act, no child who is below 14 years of age can be employed in any workshop wherein the work is carried on in the process of beedi-making, carpet waving, cement manufacture, cloth printing, dyeing and weaving, manufacture of matches, explosives and fire works, mica cutting and splitting, shellac manufacture, soap manufacture, canning, etc. The State Government may add any other manufacturing process to which this prohibition is to apply. For contravention of the provisions of the Act, the employer is punishable with simple

imprisonment extending to one month or tine up to Rs. 500/- or both.

Child Labour (Prohibition and Regulation) Act, 1986

There was an attempt to enact a new child labour legislation for prohibiting child work in certain specific areas of work and regulating it in many other occupations with provisions for better working conditions and opportunities for child workers. Thus the Child Labour (Prohibition and Regulation) Act of 1986 was passed on 23rd December, 1986 creating a new hope in the minds of all concerned, to make up for the inadequacies of implementation of the earlier Act. The present Act prohibits the engagement of children under 14 in certain occupations and processes as detailed in Part-A and Part-B of the Schedule of the Act. These include: transport of passengers, goods and mails, cinder picking and other hazardous works in railways and ports and processes like beedi making, carpet weaving, fire works, cloth printing, dyeing and weaving, cement manufacture, manufacturing of matches and explosives, mica cutting and splitting, soap manufacture, tanning, wool cleaning and building & construction industries.

Part-III of the Act provides for regulations of conditions of work of children. It providesthat:

(i) no child shall be required or permitted to work In excess of prescribed number of hours of work;

(ii) period of work shall be so fixed that no period shall exceed three hours and no child shall work for more than three hours before he has had an interval of rest for at least one hour;

(iii) the period of work shall he inclusive of his interval for rest;

(iv) no child shall be permitted to work between 7.00 p.m. and 8.00 a.m.;

(v) no child shall be permitted to work overtime;

(vi) no child shall be allowed to work in an establishment if he has already worked in another establishment on the same day;

(vii)every working child shall be allowed a weekly holiday.

The Act also makes for easy cognizance of and stringent punishment for violation of the provisions of the Act. Whoever employs any child or permits any child to work on certain prohibited occupations and processes set forth in Part A and Part B is punishable to the extent of minimum of three months imprisomnent extending to one year and/or with fine not less than Rs. 10,000/- and extending to Rs. 20,000/-. For continued offences, the term of imprisonment shall not be leas than six months but may extend to two years.

Under this Act any person concerned about the exploitation of child Moorers can lodge a complaint before the Judicial Magistrate. which is rather a unique feature in regard to this Enactment concerning employment of child labour.

In addition to the above, the Child Labour (Prohibition & Regulation) Act has enabled the constitution of a Child Labour Technical Advisory Committee by virtue of the provisions contained under Section 5 to advise the Central Government for the purpose of addition of occupations and processes to the Schedule. This will enable the Government to add to the list of hazardous occupations which will be injurious to the health of the children employed. The

manner of function of the Techincal Advisory Committee is to be regulated by a set of rules and the Committee is also empowered to constitute one or mom sub-committees as envisaged under sub-section (4) of this section of the Act.

The Act applies to an establishment which is defined under Section 2(iv), which includes shops, commercial establishments, workshops. farms, residential hotels, restaurants, eating houses, theatres, etc. Since the Acts relevant to the above establishment may not have adequate provisions relating to safety and health, section 13 of the Child Labour (Prohibition & Regulation) Act empowers the appropriate Government to frame Rules covering the various aspects envisaged under Sub-section (2) of Section 13. Thus it could be seen that health and safety of tbe children employed is adequately ensured in all the workplaces where children are likely to be employed.

The Child Labour (Prohibition and Regulation) Act, 1986 has thus tried to rationalise earlier legislation on child labour and contains provisions for the progressive elimination of child labour in hazardous industries and regulation of the working conditions of child labour innon-hazardous industries.,

MAGNITUDE OF THE PROBLEM

The child labour is rampant in most of the developing countries around the globe. In our country, being the second most populous nation, the problem assumes great dimensions and casually related to a host of very complex socio-economic issues. The child labour is characteristically associated with certain types of labour oriented economic activities sector such as agriculture, plantation, construction, quarrying & mining, match & fire works, glass and bangle making, sevice sector, carpet weaving, handloom/textiles, lock making, etc., spread over various states in the country. The evil is likely to assume gigantic proportions unless timely remedial measures are instituted on a warfooting.

Accurate figures about the children involved in various economic activities are not available. It is estimated that there would be around 13.59 million (1981 census) child workers .in our country. The number is likely to rise further to 20.25 million by the year 2000. (Source: 'Child Labour in India', NLI. NOIDA.).

CHILD LABOUR AND HEALTH ASPECTS

Truely, them is no economic activity which is not attendant with risks to health or bodily injuries. The health hazards to an adult worker are present in the form of physical, chemical, mechanical, biological and psychological factors in the work environment. The risk that child workers run in this respect is heightened in that their bodies are not so strong as those of adult workers. The self-employed child who has an accident (mom likely doe to lack of the required training or maturity) or contract a disease of occupational origin, obviously benefits from no form of social protection. If the child is a wage earner, he is usually not protected, either, since in the vast majority of cases he is working illegally. The official statistics reveal only very small, if at all, proportion of occupational accidents end diseases that effect young people.

In industry, the unhealthy conditions have a greater impact on the safety and health of child workers than on that of adults, because of their want of experience in handling tools, lack of concentration which is quite natural for their tender age, and shortage of personal protective

equipment such as masks and special gloves suitable to their body measurements. The machinery, tools and work places are generally designed for use by adults rather than by children and thus constitute a potential source of more or less serious accidents in view of their body measurements not compatiable for effective operation o f controls. Accordingly, it necessitates increased effort by the child, causing numerous problems of adaptation. The child worker, at the glowing age, has a relatively more delicate musculo-skeletal system than that of an adult, which is more easily prone to deformities resulting from abuse or overuse. The higher metabolic rate of a growing child is likely to be associated with potentation of health risks from toxic chemicals, fibrogenic dusts, etc. It is reported that the female child workers squatting and doing the work of collecting matchsticks continuously f o r a number of years In Sivakasi match industry, when grown into adulthood, are prone to difficult child births due tc pelvic deformities resulting from their postures at their growing 'age.

Health is a State subject, and the programmes of medical inspection of children have been assigned to the States. The progress among the various States is uneven. A few States have good programmes but many other States do not. In those States where there exists a school health service programme, many, aod in some States even all. primary school-going children in the rural areas have been covered under the scheme for regular examinations. But those children whc do not join school because of being at work would obviously not be covered by such school health programmes (where they exist). As envisaged in the National Policy on Child Labour, 1987. the Ministry of Health and Family Welfare will address the State Governments, recommending that intensive medical inspection of children be taken up in those areas where child labour is prevalent. The State Governments will have to be persuaded to extend the coverage of the school health services programme to child labour. Since this is an area essentially under the state sector, continued dialogue, effort and persuasion with the State Governments will have to be maintained so that all children, irrespective of whether they are in primary school, or at work, are covered by regular health inspection and treatment/referral services. It should be possible to arrange for some health screening at Non-Formal Education (NFE) centres for child labour.

Reliable statistics as to the exact number of child workers industry-wise are difficult to get for obvious masons. No data from any reliable source is also available on the incidence of work- related disorders among the working children. The lack of authentic data is due to the fact that whenever any person from any Government agency visits the factory or any establishment, the children employed are sent out. However, on a very conservative estimate, at least 30% of the total child workers in India will be afflicted by dermatoses, musculo-skeletal disorders, malnutrition and tuberculosis and other manifestations due to toxic chemicals used in the work enviroment.

The annex gives the overview of industry-wise hazard potentials to which the working children are generally exposed to indicating adverse health effects (occupational diseases), which constitutes only the tip of ice-berg. Them is thus a need for setting up of special facilities for the diagnosis and treatment of occupational diseases amongst the working children. The sordid story of exploitation of helpless children has to end in the interest of the nation's development.

PROPOSED STRATEGY AND METHODOLOGY FOR THE REHABILITATION O F THE CHILD LABOUR ; PSYCHO-SOCIAL. ASPECTS

Ministry of Labour, Govt. of India, in a circular on "Identification, Release and Rehabilitation of Child Labour" proposed certain well defined measures for the rehabilitation of child labour in India. To address the problem of child labour in totality, in the proposal of rehabilitation of child labour, a two-pronged approach has been adopted. It is considered that while the efforts should be directed towards rehabilitation of the child labour by providing access to opportunities for the total growth, systematic measures for the development of such children should also he adopted in order to bringing them into the main stream, at the same time taking care to protect the economic rehabilitation of the family of the child labour. Thus the child labour rehabilitation has two important components: (a) rehabilitation of child labour, and (b) economic rehabilitation of the family of child labour.

Rehabilitation of Child labour

Child labour being the outcome of a dire socio-economic necessity, " 0 rehabilitation programme can be successful without ensuring that the child is not an economic burden on the family. Therefore, for the purpose of rehabilitation afcldld labour, instead of day-care schools, residential schools have been recommended. It is considered that by providing food, shelter, clothing, medical care and books, the residential schools would be better suited for imparting formal education and vocational skills to the children to help them grow as persons with self-respect and compassion for others. To meet these requirements, the existing resources available through Central and State sector programmes such as the National Child Labour Project, Functional Education, Social Welfare, Hostel, Ashram School, etc. should be geared up and/or integrated.

To mitigate the need for such educational and psychological rehabilitation of child labour special support will be provided by the Ministry of Labour in the districts having concentration of child labour by extending their activities under the programme of the National Child Labour Pmject.

Economic Rehabilitation of the family of Cbttd **labour**

In India, families to which the child labour belongs to, are invariably the poorer sections of the society. The most effective way of eliminating child labour would be to provide opportunities for sustained livelihood to such families through the programmes generated by the Ministry of Rural Development. The Ministry concerned agreed to provide, on priority basis, the following benefits :

(a) To provide employment for two adult members of the family for 100 days each in an year under the Jawahar Rozgar Yojana (JRY); Intensive Jawahar Rozgar Yojana (IJRY) or Employment Assurance Scheme (EAS);

(b) In the matter of allottment of house sites and allottment o f Indira Awas Yojana (IAY) houses, the child labourers' family will be accorded very high priority alongwith SCs/STs and families of free bonded labourers.

In addition to the above mentioned benefits, the families will be provided assistance under Integrated Rural Development Programme (IRDP) for self-employment ventures in land-based or related traditional occupations. The investment under IRDP a n d selection o f occupation should be such as to enable the families to earn minimum incremental income of Rs. 5,000/- to 7,000/- per annum. Necessary linkages, training, skill improvement, supply of raw materials and marketing facilities for products shall be made available to all these beneficiaries under IRDP by DRDA.

Over and above the aforementioned efforts, attempts will be made to integrate all the government programmes in the social sector ministries/departments of Women and Child development; Health and Family Welfare; Social Welfare and Education which have relations to the rehabilitation of the child labour and prevention or recurrence of the child labour.

ANNEXURE

OCCUPATIONAL DISEASES/HEALTH EFFECTS

Industry	Health hazard	Health effect
Beedi industry	Inhalation of tobacco fumes	Chronic bmncbitis, and other elated occupational lung disorders
Glass Industry	Free silica, heat stress	Chronic bronchitis, cataract, silicosis, bums.

OCCUPA TIONAL DISEASES/HEAL TH EFFECTS (ANNEX-CONTD.)

Industry	Health hazard	Health effect
Handloom industry/ Carpet weaving	Inhalation of cotton or wool fibre	Occupational asthma, eye sight disorders
Zari & Embroidary	constant close attention	chronic eye disorders
Gem cutting & diamond cutting	Constant close attention	Dermatitis, Injuries, eye strain, joint pain, backache.
Construction	Extraction & processing of rock, sand gravel	Stunted growth of child
Rag picking	Micro organism & noxous gases	Tetanus, skin diseases
Pottery	Exposure to free silica	Asthma, bronchitis, silicosis
stone quarries/ slate quarries	-do-	Silicosis
Slate & pencil m a n - g	Extraction of quartz	Chronic bronchitis and Emphysema, silicosis
Carpet weaving	Inhalation of fibre dust	Chronic conjuctivitis asthma, musculo-skeletal disorders.
Cement manufact- wing including bagging of cement	Exposure to free silica	Silicosis
Manufacture of matches, explo- sives & fire work	Fires, phosphorus , manganese, etc.	Burns, musculo-skeletal dis- orders, chronic eye disorders neurological defects,derma- titis, asthma
Mica cutting & splitting	Exposure to mica dust	Irritation of respiratory tract, silicosis

OCCUPATIONAL DISEASES/HEALTH EFFECTS (ANNEX-CONTD.)

Industry	Health hazard	Health effect
Shellac bangle manufacture	Heat, dyes, fumes	Heat stresses, dermatitis, chronic respiratory disorders
Soap manufacture (as a cottage industry)	Oils& resins	Dermatitis
Tanning	Handling, transferring hides & skin of animals	Anthrax
Wool cleaning	Inhalation of wool fibre	Bronchitis, asthma
Building & construction	Extraction & processing of rock gravel & sand	Acute form of skin disease, respiratory and digestive system disorders, silicosis or pneumoconiosis
Agarbathi making	Dust, Biological organism	Occupational dermatoisis
Sericulure	Hot steaming, water allergens	Asthma, scalds,dermatitis
Hotel industry	Burns, cats	Infection and skin-nail affliction
Petrol pumps, garages	Oil & mist, CO gas	Boils, skin disorders due to irritants, solvents gas, poisoning
Tailoring & garment manufacture	Eye strain, postural problem	Headache, bodyaches, joint defects
Agriculture/plantation work	Agro product & handling of hazardous insecticides & pesticides	Tanning, seasonal natur-e's vagaries,fever, neurol-ogicaldisorders

OCCUPATIONAL ***DISEASES/HEALTH*** EFFECTS ***(ANNEX-CONTD.)***

Industry	Health hazard	Health effect
Electronic industry	Printed circuit board handling, lead fumes, non-ionising radiation.	Chromium, nickel end cadmimnpoimningby epoxy compounds, eye strain, skin pigmentation
Book binding	Posture & cuts by sharp shearing machine	Body ache, skin diseases
Cashew processing	Natural alkaloids	Skin and nails affliction, cbmnic bmnchitis
Brassware manufacturing	Heat, fumes, noise	Injuries, burns, chronic bmnchitis, musculo-skeletal disorders, eye disorders, bearing loss.
Lock making	Heat, fumes, noise	Injuries, burns, eye disordem backache, heat stress, hearing loss, dermatitis, respiratory disorders

ENVIRONMENTAL-CUM-MEDICAL STUDY AT THE CONTRACEPTIVE PILLS SECTION OF A PHARMACEUTICAL FACTORY.

A pharmaceutical industry requested the Regional Labour Institute, Madras to conduct a study on the effect of various steroids. used in the manufacture of contraceptive pills, on the workers engaged in the process, with a view to take control measures.A study was, therefore, carried out In June 1995 :

1. To evaluate the working environment by determining the concentration of steroids i.e. Norgestrel and Ethinyl Estradiol which are the active ingredients of the oral contraceptive in the work room air at different locations/operations in the plant.

2. To determine the concentration of steroidal bearing dust in work room air, at different locations/ operations in the plant.

3. To assess the health status of workers exposed to the Steroids viz. Ethinyl estndiol and norgestrel..

4. To recommend suitable control measures wherever necessary to improve the working condition and working envimnment.

Findings and Rocommandations.
The levels of norgestrel and ethinyl oestradiol and the,dust. containing the above steroids were far above than the prescribed dose for the contraception i.e. Norgestrel with a minimum airborne level of 1.35 mg/m3 to a maximum level of 8.9 mg/m3 and the ethinyl oestradiol with a minimum level of 1.87 mg/m3 to a maximum level of 8.25 mg/m3. The normal dose prescribed for contraception is 0.3 mg norgestrel and 0.03 mg of ehtlnyl oestradiol per day (for women only). The present study showed suppression of endogenous hormones in the workers exposed to norgestrel and ehtinyl oestradiol. All the workers exposed to the sex steroids. showed the various steroid Induced manifestations attributable to exposure to high levels of airborne steroids in the working atmosphere.Some of the important recommendations were :

(i) It is desirable to provide full body protection to the workers with shoes, socks, rubber gloves, head cover, trousers. full apron, full face mask with dust filter etc. They should be changed and cleaned daily. Worker should also be advised to strictly adhere to hiih standards of personal hygiene during and after the work. It is recommended to provide a space suit with supplied air hose pipe connection to workers to avoid exposure to steroid dust. These measures would substantially reduce the exposure of the workers to the pollutants.

(II) Environmental monitoring should be done to check the levels of other chemicals also such as Iso-Propyl Alcohol. Chloroform and Carbon-tetrachlodde. They also have adverse efffect on the health of the workers.

(iii) It may be considered to rotate the workers once in 15 days, particularly those who are engaged In steroid areas to minimise the cumulative exposure.

(iv) Workers should undergo pre-placement medical examinationincluding

appropriate investigations by a qualified occupational health specialist.

(v) The workers employed in steroidal area should be medically examined regularly, at periodical intervals for signs of any adverse health effects, both acute or chronic. The affected workers should be removed from further exposure and permitted to work in the areas only afler complete returning to normalcy.

MULTIDISCIPLINARY STUDY IN GLASS BANGLE AND OTHER GLASS INDUSTRIES

A multidisciplinary study was carded out in a few glass bangle and other glass units in 1994. Findings of the report made by concerned disciplines, namely Industrial Safety, Industrial Hygiene, Industrial Medicine and Industrial Physiology reveal that the working conditions and the environment in glass bangle and other glass industries at Firozabad are severe, giving rise to the conditions which lead to discomfort and impairement of health of the workers.

Findings and Recommendations.

It was observed that, in few of the factories, instead of an efficient exhaust arrangement which is essential for the mixing process. a few exhaust fans were found to be installed above open windows creating a short circuit end not constituting the efficient exhaust arrangement as envisaged in the statutory requirements relating to glass industries. It is necessary, that those factories also provide the "efficient exhaust" arrangement as required statutorily.

The study relating to the Industrial hygiene aspects revealed that there is high concentration of free silica In the work environment Le. considerably more than the permissible level of exposure in the work environment specified in the Second Schedule of the Faotories (Amendment) Au. This needs to be effectively controlled by installing efficient 'exhaust draft' and maintaining it appropriately.

The medical examination Of the workers in the mixing area also revealed that six cases of workers working in the mixing area as well as engaged in coal feeding work, face early evidence of silicosis. Also the medical examination revealed that the chest X-ray in case of two workers had evidence off pulmonary tuberculosis. It was recommended that - (i) The workers from the mixing section may be subjected to medical monitoring by a Certifying Surgeon, including lung function tests and chest radiographs as required under the Statute. These diagnostic tests are also to be carried out by the Occupational Health Centre when they are set up as per Section 41.C. (ii) The workers identified as early cases of silicosis may be subjected to regular intensive medical examination for monltoring the progress of the condition and render assistance wherever necessary, in view of the fact that siliwsis is a progressive disease and that no known curs is available.

The heat stress study Indicated that the pot furnace area had the maximum heat stress level. The WSGT readings was as high as 43.7oC. The Belain and Sekal Furnace areas had average WBGT Levels in the order of 37.0oC and 38.0oC respectively.

These values indicate the severity of heat stress In the working environment which is corroborated by the medical findings of manifestations of prickly heat due to heat stress in many cases, medically examined. In view of this, it is essential that all the units make efforts of preventing the process heat by insulating the outside surface of the furnace in an effective manner. incldentaliy, this would also help conservation of energy.

ASSESSMENT OF ENVIRONMENTAL CONDITIONS IN A MAJOR PORT.

As a part of the national study, assessment of environmental' conditions in a major port was carried out In 1994 with a view to - (a) to assess the levels of airborne dust to which the workers are exposed. (b) to assess the extent of wmpilance of various provisions contained under the Factories Ad, 1948 and the Dock Workers (Safety, Health and Welfare) Act, 1986, and (c) to suggest Improvement and control measures wherever needed.

Findings and Recommendations.

The study was carded out in the mechanical ore handling plant (MOHP) and on the berths where loading and unloading of Calcined Alumina and Coke in and from the ship was carried out.

in MOHP, due to normal operation of the plant and movement of belts, the spillage of iron ore was observed to be quite wmmon in a number of. places such as barges, chutes, conveyor skies, drive houses, stack yards and site of reclaims and ship loaders. The spilled ore was found to be at the rate of 250 tonnes/day approximately which was not cleared from any one place till a full truck load was accumulated at a particular place. Spillage of ore, collected and its transportation; lead to tremendous amount of dust. The dock workers were provided PPE but found to be not habitual of wearing dust mask, whereas the casual labourers were not provided any PPE. The samples collected had shown the average level of airborne total dust ranging from 16.40 to 40.67 mg/m3 in the conveyor systems, 12.11 mg/m3 in the road side, 18.0 mg/m3 in the stack yard and 91.50 mg/m3 in the drive houses against the recommended PEL of 10.0 mg/m3.

On the general berth wherein loading of Calcined Alumina was under progress, it was observed that many of the bags were damaged and the contents were spilled to give a look of dazzling white in the whole area. The samples collected revealed concentration of dust ranged from 50.0 to 85.0 mg/m3 against the PEL of 10 mg/m3.

On the general berth, wherein unloading of coke was under progress. it was observed that in every sequence of the opemtlons, coke dust was generated and ail the categories of workers were exposed to it. The samples collected revealed the level of airborne dust ranging from 10 to 30 mg/m3 against PEL of 10 mg/m3.

Following recommendations were made:

In MOHP it was suggested to provide water sprinkler system in appropriate places starting from barge unloading to ship loading; The drive houses and tranfer point need to be suitably enclosed; Iron ore spillage Is required to be disposed of without waiting for collection of spillage to be more

than one truck load; PPE to be provided to casual labourers also; selected species of tall and leafy trees should be raised in sufficient number at appropriate places; defective alumina bags should be sorted out before stacking In the transit sheds.

STUDY IN NEWSPAPER PRINTING INDUSTRIES TO ASSESS CHEMICAL HAZARDS AND CHEMICAL-RELATED INJURIES.

As a part of the national study, a pilot study was conducted by the Safety Division in four newspaper printing organisations (two big and two small) during December 1991 . The objectives of the study were to : (I) identify the chemicals used in the newspaper printing industry, and the chemical hazards during newspaper printing process, and (ii) obtain data relating to the chemical-related injuries.

Findings and recommendations.

The study identified 42 proprietary chemical products that are used In the printing industry. The constituents of the chemicals were not known to the management nor do they have the relevant material safety data sheets for the chemical used. Most of the proprietary chemicals were found packed in plastic bottles and cans having capacities ranging from 100 gm to 20 litres. Printing inks were found handled in 20 kga. steel drums. The sizes of the packings were found suitable for safe handling. There is no practice of disclosing the chemical names/constituents of these chemicals and the labels on their packings did not mention hazards of the products and precautions to be taken while handling them. The managements were not monitoring the airborne contaminents in the work environment. in most of the cases, personal protective equipment like hand gloves and eye protectors were not found provided to workers handling wash up solvents In the printing sections. Houwkeeping in the printing department needed improvement.

Some of the recommendations made were as follows:

Management should obtain/develop material data sheets for each chemical product used by them; Safety awareness shouki be created amongst the workers and supervisors handling chemicals by provlding information and training; The work environment should b e periodically monitored to check the levels of airborne contaminants; and Provision and uw of PPE for workers working In the printing section (while handling wash up solvents) should be ensured.

INDUSTRIAL MEDICINE DIVN.

ADVANCED TRAINING PROGRAMME ON OCCUPATIONAL HEALTH & ENVIRONMENTAL MEDICINE.

The course is designed for medical officers from the Factories, Ports and Docks, Mines Plantations, Employees state Insurance Corporation, Medical Inspectors of Factories, Certifying Surgeons, General Practitioners and those connected with teaching of Occupational health. It provides knowledge on different facets of Occupational health problems arising out of exposure of the workers to Industrial hazards and helps in identifying the occupational diseases and taking preventive measures. It is useful to the Medical Professionals engaged in providing health care to the industrial workers in identification, prevention and management of occupational health disorders and in organising occupational health services at the work place effectively.

CONTENTS:

- Occupational diseases due to physical chemical and biological agents.
- Occupational lung diseases.
- Cardiac cases in industry.
- Epidemiology in occupational and environmental health.
- Sickness absenteeism.
- Medico legal aspects in occupational health.
- Women at work.
- Medical emergency response planning
- Organisation of occupational health services.
- Recent advances in occupational medicine.

PARTICIPANTS:
Factory Medical Officers,
E.S.I. doctors.
Medical Inspectors of Factories and Certifying Surgeons.
DURATION: 2 weeks

INDUSTRIAL HYGIENE DIVN.

INDL. HYGIENE TECHNIQUES

Evaluation and control of harmful exposures of the workers are essential to ensure their optimum productivity and reduce the risk to their health. This requires specially trained personnel so that effective measures are taken. The course equips the participants in industrial hygiene techniques so that they caa take the necessary measures to atain the objectives.

CONTENTS:

- Concept of Industrial Hygiene
- Techniques of Environmental Monitoring.
- Principle, Use and Application of Analytical Instrumentation.
- Factories Act and Rules
- safety, Health and Control

PARTICIPANTS:
Persons with Degree in Science or Diploma/ Degree in Engineering.

DURATION: 1 week

INDUSTRIAL SAFETY DIVN.

COMPETENCE BUILDING FOR ENFORCEMENT OFFICIALS

There has been a shift from the routine and conventional inspection, objectives and procedures to a **specialised inspection** aiming **not** only at **compliance** with **rules** but **also** at **specialised** knowledge and skills amongst **the** well **qualified but** fresh **professionals** engaged in **the line.**

The **four-week** Basic **Course** for **Inspectors** of Factories provides **necessary** Inputs **to enhance** the capability and competence of the enforcement o&i&.

CONTENTS:

* **Issues** related to Health and Safety such as **legislations, accident** prevention, **health,** hygiene, etc.
* Special **discussion** on **Major Accident Hazards Control, Manufacture and** storage **of Chemicals,** Fire **Prevention** and **Protection.**
* **HAZOP & HAZAN**
* Safety Audit and Emergency
* Planning **Inspection** Techniques
* **Advisory and persecution** procedure.
* Accident investigation Techniques
* **Other issues related** to **Occupational Health and Safety**

PARTICIPANTS:
Inspectors of Factories with less than **five years experience.**

DURATION: 4 weeks

INDUSTRIAL PSYCHOLOGY **DIVN.**

HANDLING PROBLEM **BEHAVIOUR** OF EMPLOYEES

A critical **challenge to** the **supervisor's** or the **manager's productivity effort lies in the area of uncooperative subordinate behaviour.**
Employee behavioural problems if ignored **or inappropriately** handled by the **supervisors** or the **managers, may result** in **various organisational problems. Productivity** declines, **absenteeism** increases, quality of product **or services** deteriorates, **safety guidelines are ignored,** mmpany policies, **procedures, rules are disobeyed and ultimately entire work culture gets contaminated. Before these signs become apparent, intervention is usually indicated as a** preventive measure. The **programme** is designed to equip **participants** with tbe latest **approaches and skills** to **correct** ficooperativerativ subordinate **behaviour to enhance productivity,** safety **and** sense **of well-being** at the place of **work.**

CONTENTS:

The content of the programme will be a blend of Behaviour Modification and **Counselling** Techniques. The topics **will** be:

* **Identification** of problem **behaviour.**
* **Counselling Skills (Carkhuff** Model)
* **Behaviour modification** approach **and techniques.**
* **Handling addiction behaviour.**
* **Employee assistance programme.**
* Practical tips for handling employee **behavioural problems.**

PARTICIPANTS:
The **participation** is open **to** the **supervisors** and managers **from** any **functional** area.

DURATION: S-days

International Occupational Safety & Health Information, Centre (CIS)

CIS (from the French name, Centre International d'Information de securite et d'hygiene du travail) i.e. International Occupational safety and Health Information Centre, is a part of the International Labour Office, Geneva, Switzerland. The mission of CIS is to collect world literature that cau contribute to the prevention of occupational hazards and to disseminate this information at an international level. CIS imparts to its users the most comprehensive and up-to-date information in the held of occupational safety andhealth. The work of CIS is supported by a worldwide safety and health information exchange network which includes over 86 affilliated National Centres and 23 CIS collaborating Centres. Central Labour Institute, Mumbai has been designated as the CIS National Centre for India.

CIS can offer you rapid access to comprehensive information on occupational safety and health through:

ILO CIS Bulletin "Safety and Health at Work"
Annual and S-year indexes

The CIS Thesaurus

The list of periodicals abstracted by CIS
Microfiches on original documents abstracted in CIS DOC (CISILO)

EXCERPT FROM CIS DOC

TITLE : Asbestos bodies in bronchoalveolar lavage fluids of brake lining and asbestos cement workers.
CIS accession number: CIS 90-826

ABSTRACT:

Asbestos body (AB) concentrations in bronchoalveolar lavage (BAL) samples of 15 brake lining workers exposed only to chrysatile have been determined and compared with those from 44 asbestos cement workers extensively exposed to amphiboles. Examination of repeated bronchoalveolar lavage samples showed that the mechanisms of clearance of chrysotile fibres do not affect AB concentration for at least 10 mouths after cessation of exposure. If thus appears,that routine counting of Abs in BAL allows the assessment of current or recent occupational exposure to asbestos. Exposures to chrysotile load to AB concentrations comparable with those encountered in exposures to amphiboles.

Note: For details write to CIS National Centre for India, Central Labour Institute, Sion, Mumbai.400022.

MATERIAL SAFETY DATA SHEET

CHEMICAL NAME : **p-Xylene**

SYNONYMS :
- *1,4-Dimethylbenzene
- * p-Dimethylbenzene
- * 4-Methyltoluene SYNONYMS :
- * 1,4-Dimethylbenzene
- * P-Methyltoluene
- • 1,4-Xylene
- * 4-Xylene
- * p-Xylol
- * Xylem (non-specific name)

DESCRIPTION

APPEARANCE AND **ODOUR** :
Clear, **colourless liquid** with a chamcteristic **aromatic odour; colourless crystalline** solid **below 13 deg C**.

ODOUR THRESHOLD:
2.1 ppm (detection). Temporary odour fatigue mav occur.

WARNING PROPERTIES :
GOOD - TLV is more than 10 times the odour threshold.

COMPOSITION/PURITY :
p-Xylene is one of the three chemical forms **(isomers)** of **xylene (ortho-xylene, meta-xylene** and **para-xylene). p-Xylene** is available **commercially** at about 99% purity. The **information presented** in **this CHEMINFO record** is **given for p-xylene** where available. **Otherwise,** information **for** the other isomers **or** the **mixtures of isomers** is given.

USES AND OCCURRENCES :
Xylene and the, individual isomers **are** primarily **man-made chemicals.Commercial xylene** is **produced from petroleum** and **coal** tar. The **mixture** of **xylene** isomers also **occurs naturally in small quantities in petroleum stocks, coal tar and natural gas, and is formed during forest** firm. **The individual isomers are separated from** the mixed **xylenes** by various separation techniques. **p-Xylene** is **used** as a chemical intermediate for the synthesis **of terephthalic** acid for polyester **resins** aod **fibres** (Dacron", **"Mylar", "Terylene");** as a chemical **intermediate** in the **manufacture** of plastics, vitamin and **pharmaceutical synthesis** and **insecticides;** and as a solvent for **adhesives** and **coating.**

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Clear, **colourless liquid with** a chamcteristic aromatic **odour. FLAMMABLE** LIQUID AND **VAPOUR.** Liquid **can accumulate** static charge by flow or **agitation. Vapour** is heavier than air and may spread to **long** distances. **Distant** ignition and **flashback** am possible. Liquid **can** float on water and may **travel** to **distant locations and/or** spread **fire.Can decompose** at high **temperatures forming toxic gases.** Closed **containers** may rupture aod explode in heat of fire. **Central nervous system depressant.** High **vapour** concentrations may cause headache, nausea, **dizziness, drowsiness, confusion and incoordination. Causes** skin irritation. Aspiration hazard. **Swallowing** or vomiting of the **liquid** may **result in** aspiration into **the lungs.**

POTENTIAL HEALTH EFFECTS

EFFECTS OF SHORT-TERM (ACUTE) EXPOSURE :

INHALATION :

The main effect of inhaling p-xylene vapour is depression of the central nervous system (CNS), with symptoms such as headache, dizziness, nausea and vomiting. Irritation of the nom and throat can occur at approximately 100 ppm. Extremely high concentrations (approximately 10000 ppm) could cause incoordination, loss of consciousness, respiratory failure and death. However, these effects are rarely seen since p-xylene is irritating and identifiable by odour at much lower concentrationsThe only reported death resulted from the accumulation of xylenes (unspecified isomer composition) in a confined space. Reversible liver and kidney damage has been reported in cases of severe xylene exposure. Results of short-term studies on human volunteers indicate that xylenes can cause neurobehavioural effects such as impaired short-term memory and reaction time (300 ppm mixed xylenes, with exercise) and alterations in body balance (65 to 400 ppm m-xylene).Exposure to 300 or 400 ppm mixed xylenes with exercise or 65 to 150 ppm p-xylene have not had similar effects. This variation in results is probably due to differences in the effects being studied,exposure conditions, development of tolerance and total xylene uptake (which increases during exercise).

SKIN CONTACT :

In one study, application of 0.015 mL p-xylene for 5 to 10 minutes, under e covering, caused redness and itching 30 seconds after application. It took 4 to 5 hours for the reaction to disappear. In this study, p-xylene was considered to be the most irritating of the 3 xylene isomers. Studies with xylene isomers have shown that irritation, redness and a burning sensation can result from contact. These effects are reversible shortly (1 hour) after the contact stops. Repeated or prolonged exposure to p-xylene can defat the skin resulting in dermatitis (red, dry, itchy akin).. p-xykne can be absorbed through the skin, but not as readily as when inhaled or ingested. Significant toxic effects are not expected by this route of exposure.

EYE CONTACT :

There is no specific information for p-xylene. Eye irritation has been reported at vapour levels of mixed xylene isomers as low as 200 ppm. Corneal vacuoles have also been reported (undefined vapour concentrations) which were reversible within 8 to 11 days for 7 of 8 workers. Based on animal information, the liquid is probably mildly irritating.

INGESTION :

Eased on animal information, p-xylene is only slightly toxic by ingestion. Ingestion of large amounts is likely to cause CNS effects such as dizziness, nausea and vomiting. Ingestion is not a common route of occupational exposure. In one case, ingestion of food probably contaminated with xylene(unspecified composition) caused pulmonary edema, liver impairment and coma. The man recovered within 2 hours after treatment.. Although there are no case reports of aspiration, based on the physical properties (viscosity and surface tension) arid the fact that p-xylene is a petroleum distillate, p-xylene may be aspirated Aspiration is the inhalation of a material into the lungs during ingestion or vomiting: severe lung irritation, damage to the lung tissues and death may result.

EFFECTS OF LONG-TERM (CHRONIC) EXPOSURE :

SKIN: Repeated contact am produce dermatitis (dryness and cracking) due to degreasing action. Despite widespread use, there have been no reports of sensitization 2nd sensitization was not produced in any of 24 volunteers. There is one recent case report of a person developing contact urticaria (an allergic skin reaction) from exposure to xylene vapour (unspecified composition).

NEUROLOGICAL EFFECTS: Symptoms such as headaches, irritability, depression, insomnia, agitation, extreme tiredness, tremor% and impaired concentration and short-term memory have been reported. Unfortunately, there is very little information available which

isolates xylene from other solvent exposures in the examination of these chronic neurological effects. Other study deficiencies include inadequate reporting on the duration of exposure and exposure levels, and poor matching of controls. It is. therefore, not yet possible to draw any conclusions about the possible effects of long-term xylene exposure on the nervous system.

BLOOD EFFECTS: Historical reports sometimes associate xylene exposure with certain blood effects, including leukemia, which are now known to be caused by benzene. Uncontaminated xylene is not known to cause these effects. Reduced blood platelet counts were observed in 12 of the 27 men exposed to mixed xylenes (unspecified composition) at a level up to 200 ppm. When exposure stopped, platelet counts returned to normal. There is insufficient information to draw any conclusions from this study and most of the absorbed material is rapidly excreted in the mine as breakdown pmducts. Smaller amounts am eliminated unchanged in the exhaled air. There is low potential for accumulation.

FIRST AID MEASURES

INHALATION :
This product is flammable. Take proper precautions (e.g. remove any sources of ignition). Remove source of contamination or move victim to fresh air. Obtain medical advice.

SKIN CONTACT :
As quickly as possible, remove contaminated clothing, shoes, and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Wash gently and thoroughly with water and non-abrasive soap for at least 20 minutes or until chemical is removed. Obtain medical advice immediately. Completely decontaminate clothing, shoes and leather goods before re-use or discard.

EYE CONTACT :
Quickly and gently blot or brush away excess chemical. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the chemical is removed, while holding the eyelid(s) open. Obtain medical advice immediately.

INGESTION :
NEVER give anything by mouth if victim is rapidly losing consciousness, is unconscious or is convulsing. DO NOT INDUCE VOMITING. Have victim drink 240 to 300 mL (8 to 10 oz.) of water to dilute material in stomach. If vomiting occurs naturally, have victim lean forward to reduce. risk of aspiration. Repeat administration of water. Obtaiń medical attention immediately.

FIRST AID COMMENTS :
Provide general supportive measures (comfort, warmth, rest). Consult a doctor and/or the nearest Poison Control Centre for all exposures except minor instances of inhalation or shin contact. All first aid procedures should be periodically reviewed by a doctor familiar with the material and its conditions of use in the workplace.

LIVER AND KIDNEY EFFECTS: A number of case reports and occupational studies have suggested that liver and kidney damage may result from long-term occupational exposure to mixtures of xylene isomers. However, it is not possible to attribute these effects to xylene exposure because generally there was concurrent exposure to other chemicals, particularly other solvents, and there was no information provided on the exposure levels or duration of exposure.

CARCINOGENICITY : Them are two case-control studies investigating the relationship between cancer and xylene exposure. however, in both studies there was exposure to other chemicals and the number of cases was limited..

IARC EVALUATION: Inadequate evidence for carcinogenicity in humans.. OVERALL IARC EVALUATION: Xyiene is not classifiable as to its carcinogenicity to humans (Group 3).

TERATOGENICITYAND

EMBRYOTOXICITY :
Several epidemiological studies have suggested a link between exposure to organic solvents (including xylene) and increased occurrence of spontaneous abortions or congenital problems in children. However, in the majority of cases, there was concurrent exposure to a variety of solvents, exposures were ill-defined, and the number of cases was small.Overall, no conclusions can be made on the effects of exposure to xylenes on reproduction in humans because of the inadequacy of the available information. Animal information suggests that p-xylene is not teratogenic or embryotoxic at exposure levels that are not harmful to the mother.

REPRODUCTIVE TOXICITY :
An increase in menstrual disorders has been reported in women exposed to organic solvents such as benzene, toluene and xylenes. It is not possible to attribute these effects to xylenes in particular. The limited animal information available suggests that p-xylene does not cause reproductive effects.

MUTAGENICITY :
There have been a few studies investigating the mutagenic potential of xylenes in man. The results of these in vivo studies have largely been negative. However, no conclusions can be drawn because of limitations such as small study population and concurrent exposure to other chemicals. p-Xylene (by injection) gave negative results in an in vivo test on animals.

TOXICOLOGICALLY SYNERGISTIC **MATERIALS :**
Exposure to related solvents, such as benzene, toluene and ethanol (alcohol) slows the rate of clearance of xylenes from the body, thus enhancing its toxic effects.

POTENTIAL FOR ACCUMULATION :
p-Xylene is readily absorbed by inhalation and ingestion and is widely distributed throughout the body. A small amount may be absorbed through the skin. It is largely broken down by the liver

ACCIDENTAL RELEASE MEASURES

PRECAUTIONS :
Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. wear adequate personal protective equipment. Ventilate area. Extinguish or remove all ignition sources. Notify government occupational health and safety and environmental authorities.

CLEAN-UP :
Do not touch spilled material. Prevent the material from entering sewers, confined spaces or waterways. Stop or reduce leak if safe to do so. Contain the spill with earth, sand, or similar, non- combustible material.
Small spills: Soak up the spill with absorbent material which does not react with the spilled chemical. Put the material in suitable, covered. labelled containers. Plush the area with water. Contaminated absorbent material may pose the same hazards as the spilled product.
Large spills: Contact fire and emergency services and supplier for advice.

NOTE: The above details constitute part information of MSDS taken from Canadian Centre for Occupational Health and Safety. For complete MSDS write to MIS Division , Central Labour Institute, Son, Mumbai -400022. MSDS on about, 90,000 chemicals / materials are available with Central Labour Institute Computer print-out will be supplied on nominal charge basis.

LIBRARY-CUM-INFORMATION CENTRE

The Library-cum-Information Centre of Central Labour Institute has unique and rare collection of different kind of publications in the fleid of Occupational Safety, Health and Management. It also has a good collection of different standards, codes, regulations and publications on allied subjects. In the current year the centre is subscribing to 34 Indian & foriegn journals, besides receiving complimentary copies of different periodicals from all over the' world. The centre provides facilities for study and research and at the same time supplies 'authentic and up-to-date information on Occupational Safety, Health and Management. It also extends reading facilities to students & scholars attending different training programmes & courses conducted by CU. Fmm April 1996 till date a number of publications in the fleid of OS&H have been added to Library. Some of them are :

ENVIRONMENTAL AWARENESS AND URBAN DEVELOPMENT BY I. MOHAN.

Publisher: Ashish Pubilshing House, New Delhi.

The book critically examines the various environmental degradation aspects and suggests remedies for them in the form of either restoration or conservation. me global study Mentifies several ecological tragedies which have occured in the various countries the world over. The ocean pollution by which several beautiful beaches have been spoiled, have exclusively been studied. Aiso the detailed studies of pollutions of Air, Noise and water and topics like wastes and population have been taken-u&in the habitat part of the book the topics pavement steeping, illegal settlements,slums and squatters, rehabilitated colonies, villages, low cost housing, housing for the old and walled city settlements, have been studied and practical solutions have been suggested.

The environment in context of the city life has been widely disucssed in the chapters on • Development Controls, Bulk Services, Building Bye-laws, Fire Controls, Copying Environment, Concentrating Civic Services and role of professionals for improvement of city life.

POLLUTION CONTROL IN DISTILLERIES BY S.N. KAUL, T. NANDY & R.K. TRIVEDY.

Publisher : Enviro Media, Karad.

This book Is an attempt to cover the whole ambit of distillery waste problem. The book authored by most eminent scientists of the field is first such attempt anywhere in the world. Broad topics include Nature of the problem, sources, volume and characteristics of distillery wastewater, Chamcterization of lndlan wastewaters, recycling and muse of distillery waste including that for ferti irrigation composing and for production of biomass. Various methods of distillery waste treatment (physlw-chemical and biological) have

been discussed at great bngth. Anaerobic process has been discussed in detail wvedng its all aspects. Economics and cost considerations have also been discussed. Choice of reactor and use of biogas also find a place In this book. A separate chapter has been devoted to the topic of water pollution control in general.

Additionally, the book provides names and full addresses of 'all distilleries in India, detailed water quality criteria for irrigation, a bibliography on research on distillery Industry, important organizations names for distillery industry, snvimnmental standards and much more relevant information.

The book will be highly useful to the distilleries, pollution wntml boards, environmental engineering students and research scientists of this fiekt.

STUDY **GUIDE** : FUNDAMENTALS OF INDUSTRIAL **HYGIENE.3rd EDITION.** BY J. THOMAS PIERCE.

Publishers : Oxford & I.B.H. Publishing Co. Pvt. Ltd., New Delhi.

This Study Gukte to the Fundamentals of **Industrial Hygiene** enables us to focus in on the most **important** concepts of **industrial** hygiene. The **third** edition of the Fundamentals Is organized with ewe of comprehension in mind. **It** Is **divided** into parts; each chapter contents page **lists** the main topics. **Using** the **all** new Study **Guide,** readers of the Fundamentals of Industrial **Hygiene can** quickly assess which areas need mom work. **This Guide** offers creatively **designed** case studies, problems, and questions, which give **its** users *a* chance to apply the **principles** they have learned from the text. These exercises lead to an improved wmmand of the subject; and **will** assist persons In **acquiring skills** in the geld, **setting** up and **running** an **industrial** hygiene program, and **successfully integrating** an **industrial hygiene** program into other **areas** of Occupational safety and health.

FILMS

Two video films **produced** b y Communication **Division** o f Central **Labour** Instnute, **Mumbai,titled:**

(i) **"MAHC** System in India"

(**ii**) "Container Handling • Do it Safe Way"

were selected by an International July and were screened et the **3rd** International Film and **Video** festival **during** XIV World Conference on Owupattonal Safety, 22 - **26 April, 1996** in Madrid.

"Higher **Productivity** and Better **Place** to **Work" is** the tnle of 25 • **Minutes video** film, nearing completion in the **Communication** division. The **film** draws upon the areas of wncem relating to owner/managers of small scale units and **depicts** the **systematic** process of evolving low **cost** Innovations to solve day-to-day **work** related problems by way of owner/managers training based upon **ILO** methodology.

SC IMPOSES FINE ON 7 INDUSTRIES

The Supreme Court today imposed fines on seven industries of Wast Delhi which were found employing children in their units. The court imposed a fine of Rs. 50,000 for employing a child below the age of 13 years and about Rs. 20,000 par child for those above 13 years.

The direction was given by a division bench comprising Mr. Justice Kuldip Singh and Mr. Justice Faizan Uddin during the resumed hearing of a public Interest petition by Mr. MC. Mahta. The court directed that tha money to be paid by these industries should be deposited with the Director. Social Welfare of the Delhi Government and would be held as a fixed deposit in a bank. The interest from the amounts would be made payable to the children, the Judges said in their order.

The court had on Feb. 14 directed that the Deputy Commissioner of Police (West), Mr. Deepak Mishra and the Labour Commissioner, Mr. Ashok Kumar to investigate a newspaper report stating that electroplating industries in Subhash Nagar area of Wast Delhi were employing child labour on meagre daily wages batwaen Rs. 8 to Rs. IO. The judges, while imposing the fine on these industries, observed that due to delay in taking action only a faw children were found to have bean employed by these industries.

Tha court in this connection issued notices to the Labour Commissioner to explain his conduct. The Court issued notice to him on being told by the petitioner-in-person, Mr. MC. Mahta that West Delhi Deputy Commissioner of Police had not been able to contact the Labour Commissioner on that day till 1800 hrs. daapita his many efforts. Mr. Mahta stated that the Labour Commissioner was at fault.

(Source: Hindustan Times, Date. 11-04-1996.)

ILO DOCUMENT FOR BETTERING LABOUR CONDITIONS

The International Labour Organization (ILO) has prepared a document detailing the Country objectives for India aimed at minimising the social cost of economic mform.

Disclosing this here today, Mm Layla Tagmo Raddy, Deputy Director, ILO Area Office for Bhutan and India, said the document presently at the stage of tripartite discussion involving the Government and representatives of labour and employers, was likely to be finalised by April and would pmvida a framework for bettering labour conditions over a five-year period.

The document has been prepared in consultation with the Union Ministry of Labour and mprasantatives of employers and labour. The Country Objectives elaborated in the document include means of generating sustainable employment and developing skills in the organised and unorganisad sectors, promoting the elimination of child labour and impmving safety, health and working conditions in selected sectors in the small-scale industry. inaugurating a workshop on 'international

Labour Standards', organised by the ILO and the Employers' Federation of Southern India (EFSI). Mrs Tegmo-Reddy sald the ILO had embarked upon 'Active Partnership Policy', to take the organisation closer to its constituents. Consequently, the ILO Area Offices were strengthened and 14 multi-disciplinary teams comprising specialists had been established the world over.

The South Asla Multi-disciplinary Team, based In New Delhi, provided technical advisory services in international labour standards, employers' and workers' activities, employment strategies, labour market policies, small enterprises and management development, industrial relations, vocational training, working conditions end occupational safety and social protection.

The ongoing global economic changes had "distinct implications" for Indian industry such es the need for increasing productivity and placing higher premium on a skilled, dedicated and motivated workforce, Mrs. Tegmo-Reddy said. Mr.Joachim Grlmsmann, Senior Specialist on International Labour Standards, East Asia Multi-disciplinery Advisory Team (ILO/EASTMAT), said the structuring and working of the ILO gave scope for adequate representation and discussion of the various conventions and recommendations before they were adopted.

The effectiveness of the ILO's prescriptions for the improvement of conditions in the global labour force was apparent from the 2,000 cases of progress reported the world over since 1964, he said.The standards were set by the ILO after a considerable debate and had an in-built scope for flexibility and adaptability. While there were 'no police and no blue-helmets' to keep surveillance over the the adherence to the conventions, "Intensive publicity" by a vigilant press ensured against vloiatlons, he said. The ILO for its pad, adopted methods of persuasion and follow-up to ensure that the conventlons were adhered to.

Regarding child labour, Mr. Grimsmann pointed out that most of the Asian countries,, including India, had not yet ratified the Important ILO conventions which would pave the way for abolition of child labour.

Two CD-ROM publications, ILOLEX and NATLEK, were available to provide comprehenisve information on ILO conventions and national legislations respectively, he said.

Mr. MM. Venkatachalam, 'President, EFSL. Mr. M.A. Hakeem, Secretary-General, Standing Conference of Public Enterprises (SCOPE), Mr. Raphael' F Crowe. Senior specialist on Employers'. Activities, ILO, based In New Delhi, Dr. K.M. Tripathi, former ILO Regional Advisor on International Labour Standards for Asia and the Pacific and Mr. S.K. Nanda, Secretary-General, Employers Federation of India highlighted the importante of the ILO conventions in facilitating an equitable society.

(Source: The Hindu, Date. M-02-1996.)

HANDBOOK FOR PROGRAMME ON FIRE SAFETY MANAGEMENT FOR MANAGERS AND SUPERVISORS FROM INDUSTRY.

As part of the celebration of the Fire Services Week, a speciaiised training programme on 'Fire Safety Management was organised by CLI. in cooperation with Loss Prevention Association of India. The objective of the programme was to familiarise the participants with the various types of fire hazards,prevention and control system in industry. The main topics covered were Principles of fire loss preventlon. important statutory provisions and standards for fire prevention and protection In factories. safe storage and transportation of chemicals, permit to, work systems & procedures in petroleum refineries and guidelines for hazard evaluation. This handbook had been compiled as a background reading material for the participants.

HANDBOOK ON TRAINING COURSE ON INDUSTRIAL SAFETY FOR POLYTECHNIC FACULTY.

A S-day specialised training programme on Industrial safety for polytechnic faculty had been designed wtth the objective of exposing the faculty to the basic concepts of industrial safety. The handbook contains selected background reading material for the benefit of the faculty. The principal topics covered in the training programme wem the statutory requirements under Factories AU - concerning safety, health & welfare accident prevention, accident-repotting & Investigation, fire protection, personal protective equipment, Plant housekeeping, safety In arc welding & gas cutting operations, noise pollution & Its control, lighting in factories, Industrial ventilation eto.

GUIDELINES ON INSPECTION OF MAJOR ACCIDENT HAZARD INSTALLTIONS.

This manual aims at providing technical guidance to inspectors of factories in carrying out inspection of major accident hazard factories. The scope of this guidance manual is limited to the major accident hazard installations. The guidelines given in the manual emphasise on the methods and the techniques of identifying & maintaining the items of plants, which in the event of a failure either singly or in a combination may give rise to a serious accident and to consequential risk of the safety of personnel both on-site and/or off - site. This manual is the flrst written document providing technical guidance and will be most useful to the inspectors of factories.

THIRD ASIA AND PACIFIC SOCIAL SCIENCES AND MEDICINE CONFERENCE 1996

The Third Asia and Pacific Social Sciences and Medicine Conference 1996 was organised in Fremantle, Perth, Western Australia from 11 - 16 February 1996. The steering committee of the Conference invited Shri S.K. Saxena, Director General, DGFASLI, to present one of the two thematic papers for the topic "Partnerships in Heaith and Social Sciences : Research and Planning for the Advancement of Health in the Workplace". As such, he presented a thematic paper on "Strategic Planning for the Advancement of Occupational Safety and Heaith in Developing Countries".

The involvement of Occupational Safety and Health professional in the Social Sciences and Medicine Conference brought out very clearly the necessity of collaborative studies and surveys between Safety and Health professionals and social scientists. It also brought out very dearly the need for such collaborative efforts for the training and education of professionals. The organisers were given feed back that Occupational Safety and Health forms a very important component of general Saafety and Heaith of the people and hence should form a regular forum to discuss such important issues in their Conference.

After the closing of the conference, a visit was made to the faculty of Health and Human Sciences, Edith Cowan University Perth, Western Australia. The discusston brought out areas of common interest where collaborative ventures between the University and DGFASLI could be taken up. A visit was also made to Worksafe. Western Australia to know about their activities. Activities of DGFASLI were also explained to them and areas of mutual wncem were discussed.

WORKSHOP ON SAFETY HEALTH AND ENVIRONMENT AT WORK PLACE - CHALLENGES OF 2000.

Shrl S.K. Saxena, Director General, Directorate General Factory Advice Service and Labour Institutes, Mumbai, welcomed the delegates participating in the Workshop on Safety, Health and Environment at Work place - Challenges of 2000' which was held to celebrate the Central Labour Institute Day on Friday, the 9th February 1996 at Mumbai. He appraised the delegates regarding the objective for holding the two separate concurrent sessions viz. one for Industrial Sector and the other for Construction Sector during this workshop. He was of the opinion that these were very important sectors which were more concerned with Safety, Health and Environment at Work place. He was confident that with the vast experience of the speakers and the delegates this particular workshop would provide new directions for future policies and strategies in the specialised areas of Safety, Health and Environment at work place. He wished the deliberation a grand success. He requested Shri M.K. Malhotm. Dy. Director General, Central Labour Institute, Mumbai, to chair the technical sessions for Industrial Sector and conduct the proceedings. Shri Malhotm, once again appraised the delegates regarding the need and objective

of this workshop to know the latest developments in the specialised areas of Safety, Health and Environment at work place so that Directorate General Factory Advii Service and Labour Institutes, Mumbai is well equipped in the years to come to meet those challenges for competence building at national, state and local level.

It was oonduded fmm the five presentations that the emphasis in future would be on training of all, levels of employees; formulation of national level code of practices, guidelines and setting up of industry need based performance indicators; extensive use of latest information technology and sharing of information on OSH at unit, state, national and international level; and participative approach to solve OSH related problems at all levels and co-ordinated efforts by both management and contractors.

WORLD CONGRESS ON OCCUPATIONAL SAFETY AND HEALTH

Shri G. Vakfyanathan. Dy. Director General, DGFASLI was deputed to attend the XIVth World Congress on Occupational Safety and Health held at Madrid in Spain from 22nd April to 26th April 1996. An abstract of the paper on 'Safety and Competitiveness' prepared for presentation in the above World Congress is given below:

Globallsation of economy and easing of trade barriers have brought about a see change in the World order. All these developments portend survival of the fittest in the emerging fierce competitive environment. Manufacturing industries contributing to the bulk of international trade have to face stiff competition. Countries which do not have a relatively sound industrial base and not geared fully to export, have to compete with developed countries which have been the market leaden all along. Survival through this competition means coping with shrunken profit margins. Such industries, therefore. will have to increase their volumes of production, improve their productivity and curtail avoidable losses due to lack of safety, health and envlmnment. Increasing volumes of production and improving productivity in all fronts such as capital, labour and machinery would be, in fact has been, successfully attempted by many of the countries. What remains to be done, rather a critical effort in that, Is to explore the untapped avenues of productivity improvement through curtailment of avoilable losses for increasing profit margins. Focussing on this aspect is the dire need of the hour.

The paper highlights the above aspect. Accordingly. It deals with issues relating to safety, health and envlronment and establishes its relevance to the efforts of an organisation to sustain in the competitive environment.

XIX ANNUAL CONFERENCE OF INSPECTORS OF DOCK SAFETY.

Major Ports of India; namely Mumbai, Madras, Calcutta, New Mangalore, Kandla. Cochin, Mormugao, Tuticorin, Vishakhapatnam, Paradip and Jawaharlal Nehru Port Trust, employ large number of

workers for dock work. Ministry of Labour, Government of India has enacted Dock Workers (Safety, Health and Welfare) Act, 1986 to provide for the Safety, Health and Welfare of the dock workers employed In these ports. The regulations framed under the Act are enforced by the Director General. FASLI, Sion, Mumbai who is also the Chief Inspector of Dock Safety, thmugh the Dock Safety Inspectorates set-up in the major ports except JNPT, where it is yet to be set-up. In addition, provisions under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 framed under Environment (Protection) Act, 1986 are also enforced;

The XIX Conference In series was held fmm 28th Feb. to 1st March 1996 at Central Labour Institute. Mumbai. Shri S.K. Saxena, Director General and Chief Inspector of Dock Safety in his inaugural address gave emphasis on updating technical knowtadge and skill of the Inspedors to keep pace with the changing technology in the field of cargo handling due to liberalisation and privatisation policy of the Government.

In the Conference, a number of decisions pertaining to lifting appliances, loose gear and wire ropes, handling of containers and dangerous goods, use of personal protective equipment, medical examlnation of dock workers and setting-up of Occupational Health Services In the Ports, appointing of safety officers, affective functioning of Safety Committees etc. were taken. Accordingly, a common approach in implementing the decision was evolved. The administrative difficulties faced by the inspectors were also discussed.

TRAINING PROGRAMMES

JULY - SEPTEMBER 1997

CENTRAL LABOUR INSTITUTE, SION, MUMBAI - 400 022

Course Title	Date	Venue
Construction Safety	2nd July - 4th July, 1997	C.L.I., Mumbai (Const. Safety Division)
Wage & Salary Administration	7th July - 11th July, 1997	C.L.I, Mumbai (Productivity Division)
Safety in the use of chemicals at work place	7th July - 11th July, 1997	C.L.I., Mumbai (Ind.Hygiene Division)
1-Day Workshop on Safety Audit	11th July, 1997	C.L.I., Mumbai (Ind. Safety Division)
Diploma course in Industrial Safety 1997-98	21st July - 31st July, 1997	C.L.I., Mumbai (Ind. Safety Division)
Selection & Criteria of Industrial Workers	22nd July - 25th July, 1997	C.L.I., Mumbai (Ind. Phy. Division)
Training of Trainers	21st July - 25th July, 1997	C.L.I., Mumbai (Staff Trg. Division)
Occupational Health practice for Medical Officers from Ports & Docks	14th July - 25th July, 1997	C.L.I.. Mumbai (Ind.Med. Division)
Diploma Course in Industrial safety 1997-98	1st Aug. - 31st Aug., 1997	C.L.I., Mumbai (Ind. Safety Division)

Course Title	Date	Venue
Specialised Post-Graduate Course on Occupational & Environmental Medicine for students of Diploma in Environmental Tuberculosis & Respiratory Diseases	1st Aug. - 31st Aug., 1997	C.L.I., Mumbai (Ind.Med. Division)
Training Programme on Industrial Safety	4th Aug. - 6th Aug., 1997	C.L.I., Mumbai (Ind.Safety Division)
TQM & Business Process Reengineering	4th Aug. - 8th Aug., 1997	C.L.I., Mumbai (Productivity Division)
PGGD(Hindi)	1 1th Aug. - 22nd Aug., 1997	C.L.I.. Mumbai (Staff Trg. Division)
Handling Problem Behaviour of Employees	18th Aug. - 22nd Aug., 1997	C.L.I., Mumbai (Ind.Psy. Division)
Industrial Ergonomics	18th Aug. - 22nd Aug., 1997	C.L.I., Mumbai (Ind. Ply. Division)
1-Day Seminar on Successful stories of Safety Committees	29th August, 1997	C.L.I., Mumbai (Staff Trg. Division)
Evaluation & Control of Health Hazards in Drugs & Pharmaceutical Industry	1st Sept. - 5th Sept., 1997	C.L.I., Mumbai (Ind. Hygiene Division)
Diploma Course in Industrial Safety 1997-98	1st Sept. - 30th Sept., 1997	C.L.I., Mumbai (Ind. Safety Division)

Course Title	Date	Venue
Construction Safety	**10th** Sept. - 12th **Sept.,** 1997	C.L.I., Mumabi **(Const.Safety** Division)
Identification of Hazards / Stresses in **Industries,** their Evaluation **&** Management	15th Sept. - 19th Sept., 1997	C.L.I., **Mumbai (Ind.Phy.** Division)
Evaluation **& Control of Health Hazards** in **Thermal Power Plant**	17th Sept. - 19th Sept., 1997	**C.L.I, Mumabi (Ind.Hygiene** Division)
Motivation for Safety **& Health**	15th Sept. - 19th Sept., 1997	C.L.I., **Mumbai (Ind.** Psy. Division)
Productivity Techniques for **Effective** Employee **Participation**	**22nd** *Sept.* - *26th* Sept., 1997	C.L.I., **Mumbai (Productivity** Division)
Training of Trainers	**22nd** *Sept.* - *26th* Sept., 1997	C.L.I., Mumbai **(Staff Trg.** Division)
1-Day National Seminar on Risk Management for Safety Officers	**26th** September,, 1997	C.L.I., Mumbai **(Ind.Safety** Diision)
occupationalHealth Practice for Nurses	1st **Sept.** - 12th Sept., 1997	C.L.I., Mumbai **(Ind.** Med Division)

TRAINING PROGRAMMES
JULY - SEPTEMBER , 1997

REGIONAL **LABOUR INSTITUTE, SARVODAYA NAGAR,** KANPUR - **208 005**

Course Title	Date	Venue
Training Programme on Industrial Safety & Hygiene	7th July - 11th July, 1997	R.L.I., Kanpur
Training Programme on Chemical Safety	21st July - 25th July, 1997	R.L.I, Kanpur
Training Programme on Personal Growth & Group Dynamics	4th Aug. - 8th Aug., 1997	R.L.I., Kanpur
Training Programme on Motivation for safety&Health	10th Sept. - 12th Sept., 1997	R.L.I., Kanpur

REGIONAL **LABOUR INSTITUTE, SARDAR PATEL** ROAD, **CHENNAI-600** 113

Safety & Health in Chemical Industry for Trainers	7th July - 1 lth July, 1997	R.L.I., Chennai
Testing & Examination of Pressure Vessels	20th Aug. - 22nd Aug., 1997	R.L.I., Chennai
Management of Occupational Stressess for increased productivity	8th Sept. - 12th Sept., 1997	R.L.I., Chennai
Safety Audit	24th Sept. - 26th Sept., 1997	R.L.I., Chennai

TRAINING PROGRAMMES
JULY - SEPTEMBER, 1997

REGIONAL LABOUR INSTITUTE, LAKE TOWN, CALCUTTA - 700 089

Course Title	Data	Venue
Safety, Health & Environment at workplace	2nd Week of July, 1997 (5 Days)	R.L.I, Calcutta
Advanced Action Oriented Programme on safety, Productivity &a better place to work	3rd week of July, 1997 (5 Days)	R.L.I.. Calcutta
Appreciation Course in Industrial Hygiene	4th week of July, 1997 (5 Days)	R.L.I. Calcutta
Safety & Health at work for workers	2nd week of August, 1997 (5 Days)	R.L.I, Calcutta
Techniques of Hazard Identification & Assessment	1st week of Sept., 1997 (3 Days)	R.L.I., Calcutta
15th Refresher Course on occupational Health	3rd & 4th week of Sept., 1997	R.L.I, Calcutta

INDOSHNET

Government of India, Ministry of Labour is developing a national network on occupational safety and health information system known as INDOSHNET. Directorate General Factory Advice Service & Labour Institute (DGFASLI), an attached office of the Ministry of Labour, will act as facilitator of the network system. The objective of the network is reinforcement and sharing of national occupational safety & health (OS&H) information on no-profit and no-loss basis with a view to pool our information resources for mutual benefit. The sharing of information will not confine to the national level but also include international sources. The commanicatioo of information will be through E-mail (NICNET) as well as postal/courier service. We invite industrial organisation, institutes, industries association, trade unions, professional bodies and non-governmental organisation having informtion oo OS&H and willing to share the same with others at the national aod international level to participate as member in the network. Interested agencies may please write for proforma of organisational profile to Shri S.K. Saxena, Director General, Directorate General Factory Advice Service & Labour Institute, N.S. Mankikar Marg, Sion, Mumbai 400 022.

Note: Those who responded to our earlier communication have been enrolled and need not write again.

GOVERNMENT OF INDIA, MINISTRY OF I&OUR
DIRECTORATE GENERAL FACTORY ADVICE SERVICE & LABOUR INSTITUTES

The Directorate General Factory Advice Service & Labour Institutes (DGFASLI) is an attached office of the Ministry of Labour, Govt. of India. DGFASLI organisation was set up in 1945 under the Ministry of Labour, Govt. of India to serve as a technical arm to assist the Ministry in formulating national policies on occupational safety and health in factories and docks and to advise State Governments and factories on matters concerning safety, health, efficiency and well-being of the persons at work place. It also enforces safety and health statutes in major ports of the country.

The Diite General Factory Advice. Service & Labour Institutes (DGFASLI) comprises:

* Headquarters situated in Mumbai
* Central Labour Institute, Mumbai
* Regional Labour Institutes at Chennai, Kanpur, Calcutta and Faridabad

The Central Labour Institute at Mumbai functions as a socio-economic laboratory and is a national institute dealing with the scientific study of all aspects of industrial development relating to the human factors.

Over the past 25 years the Central Labour Institute has constantly grown not only in size but also in statute and has earned national and international recognition. It has been reconised by the International Labour Organisation as a Centre of excellence in training on Occupational Safety and Health in the Asian and Pacific regions. It also functions as a National Centre for C.C.S. Qntemational Occupational Safety and Health Information Centre) and the Centre for National Safety and Health Hazard Alert System. At the national level, apart from providing research and training support to the government and functioning as a technical arm of the Ministry of Labour, the institute provides comprehensive and multi-disciplinary servcies to the Industrial Port sector through shtdies, technical advice, training and dissemination of information. It also runs National Referral Diagnostic Centre for early detection of occupational disorders and thereby controls and prevents them. It has a modem Audio Visual Studio fully equipped with sophisticated video production equipment to produce quality U-matic video on Safety and Health. The Regional Labour Institutes are a scaled-down version of Central Labour Institute and cater to the needs of their respective regions.

The organisation is poised to grow further, and meet the increased demands on it. In a developing country with a large number of industries having diverse and complex nature, the tasks of protecting safety and health of employ- is an uphill task. Armed with the technology, good-will of the industrial society and the strength of the dedicated staff, the organisation is well prepared to meet the challenges of tomorrow. It is committed to the goal of making the workplace safer.

कारखाना सलाह सेवा और श्रम संस्थान महानिदेशालय के अधिष्ठान

ESTABLISHMENTS OF DIRECTORATE GENERAL FACTORY ADVICE SERVICE & LABOUR INSTITUTES