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OCCUPATIONAL SAFETY, HEALTH AND CONDITIONS OF WORK - QUARTERLY NEWSLETTER



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CHILD LABOUR

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C O N T E N T S

Page

MESSAGES

FROM THE DESK

COVER FEATURE - 1

**CONSULTANCY/RESEARCH
FINIDINGS** - 6

EDUCATION - 9

CIS - 11

DATA SHEET - 12

GLIMPSES OF BOOKS AND FILMS - 14

CLIPPINGS - 16

PUBLICATIONS - 17

ANNOUNCEMENTS - 18

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Dated 11/10/1995 (P.T.)

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No.04(91)/LM/95

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Dated October, 1995

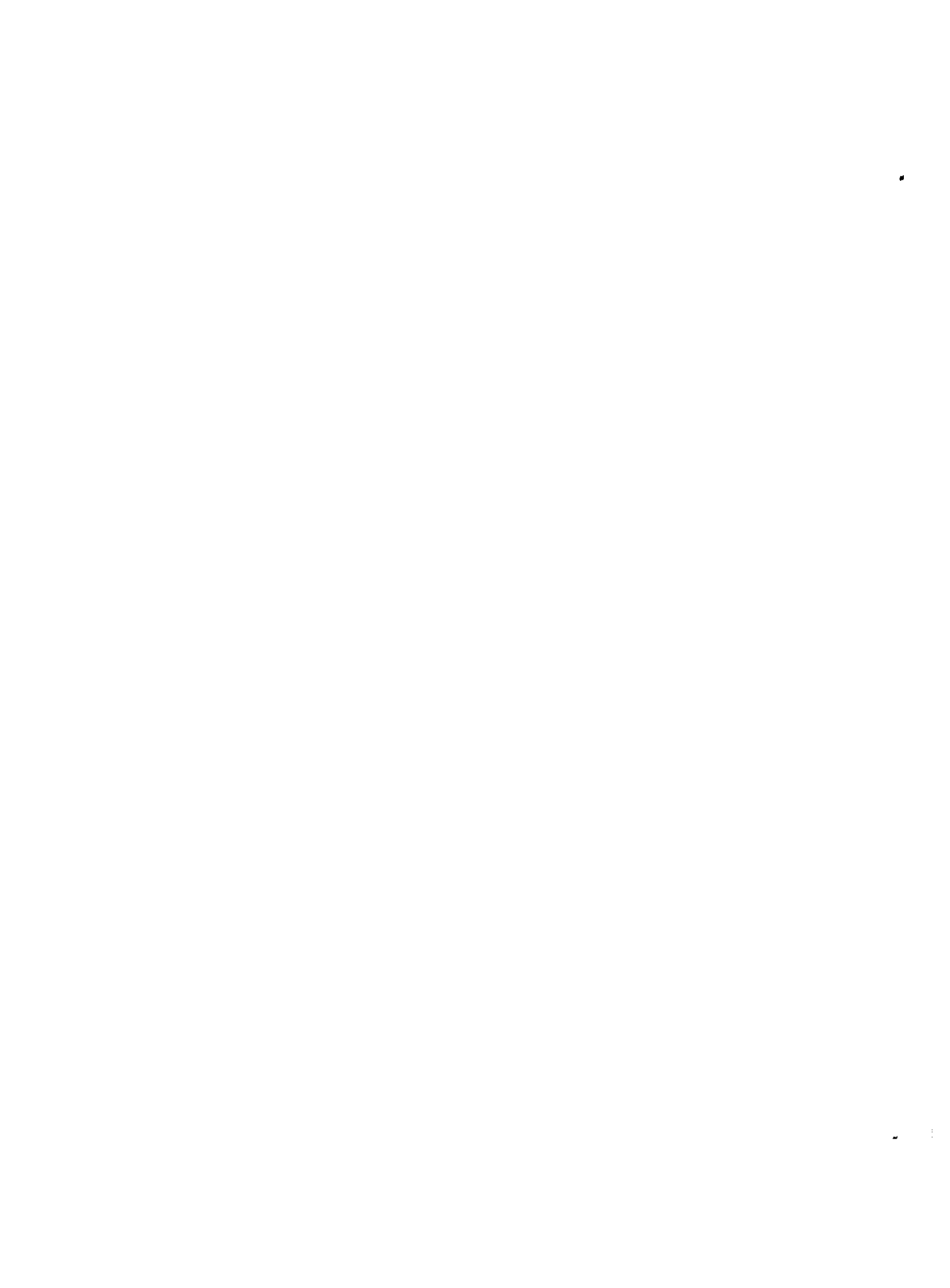
M E S S A G E

I am happy to know that DGFASLI is bringing out a quarterly newsletter on Occupational Safety, Health and Conditions of Work "**INDOSHNEWS**".

This publication is being brought out at a specially relevant time, when hazards at the work place could rise, with the hectic pace of **industrialisation**. Commitment and involvement in creating safe and healthy conditions of work would naturally follow once awareness is created amongst the people. It is my sincere hope that "**INDOSHNEWS**", with its coverage of both national and international news in the areas of education, research, consultancy, success stories, etc., would be a significantly meaningful instrument for promotion of safety and health in work-place environment.

I send my greetings and good wishes on the occasion.


(G. VENKAT SWAMY) 1/10/95



FROM THE DESK

It has been a long **felt** need to have constant interaction with the enforcement agencies on one hand and key resource personnel from industries, **institutions** and **NGOs** on the other regarding the training, research and consultancy activities undertaken by this **organisation** for wider exchange of views and feedback. This Directorate under the **Ministry of Labour**, Government of India **is** developing a networking system known as 'INDOSHNET' in the country for sharing of current information on the Occupational Safety & Health **with** a view to pool our Information resource for mutual benefit. The newsletter is aimed at **achieving** this concept of information sharing through conventional paper movement and our effort **will** be to reach policy makers, law enforcing agencies, key industrial resource personnel and safety and health **specialists** so that there **is** continuous exchange of views and ideas furthering efforts for improving working conditions and work environment.

The present **issue** focuses on Child **Labour** elimination in India. Safety and Health aspects of Child **Labour** deserve a greater attention. In the elimination of Child **Labour** as most of the occupational disorders manifest their symptoms after prolonged exposure of the child by leaving child to be a **patient** before entering into **adolescence**. The Government of India is obliged to take all possible steps not only to prevent the exploitation of **children** but also to take necessary and adequate measures for their protection.



(S.K. SAXENA)

DIRECTOR GENERAL

Child Labour - A crying issue

Introduction:

The problem of child labour has been an issue of National importance these days and its roots could be traced to our culture and social values and even in our traditional society. The social beliefs and values which we had inherited has a bearing on child labour. The aforesaid linkage has slowly turned out to be, in most cases, a case of exploitation and thus we have the child labour problem today. However, time has come for taking a fresh look at this issue and to adapt ourselves to the changing need of the society on a war footing. Since the problem of child labour has a linkage with the social values of the society any measure for elimination and protection should be compatible with this linkage.

The children are the assets of any nation and their proper upbringing and orientation may decide the future of the nation. No nation can afford to have a class of children who are deprived of their future and survive with crippled health for no fault of theirs. It is high time we should realise this issue and join hands with the Government in mitigating this perennial problem gripping our society.

Children are exploited and lured/compelled to take up jobs as they need to be paid a low wage and no other benefits. They are also exploited to long working hours, in-human working conditions, lack of health care facilities etc. These exploitations ultimately affect their tender health, growth and

mental capabilities apart from general development. The children are most amenable to discipline, efficient and quick in repetitive jobs. They are also suited for those types of jobs which require their nimble fingers to achieve increased productivity. They are honest and sincere and can easily be humbled and therefore the exploitation continues.

Why children are taken to work

In most cases the probable reasons for child labour are poverty, cheapness, illiteracy, easy availability, economic compulsions, scarce schooling facility, casual nature of employment, social customs etc.

Indian Constitution and child labour

The framers of the Indian constitution had consciously incorporated provisions to secure and protect the tender age of the children in the following articles.

Article 15: prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.

(3) Nothing in this article shall prevent the State from making any special provision for women and children.

Article 23: Prohibition of traffic in human beings and forced labour.

(1) **Traffic** In human beings and begar and other similar forms of forced **labour** are prohibited and any contravention of **this provision** shall be an **offence** punishable in accordance with law.

(2) Nothing in this **article** shall prevent the **State** from imposing compulsory service for public purposes, and in imposing such **service** the State shall not make any **discrimination** on grounds **only** of **religion**, race, caste or **class** or any of them,

Article 24: Prohibition of employment of **children** in factories etc. No child below the age of fourteen years shall be employed to work in any factory or mine or engaged in any other hazardous employment.

Article 39: Certain principles of policy to be followed by the state. The **State** shall, in **particular, direct** its policy towards securing

(e) that the health and strength of workers, men and women, and the tender age of children are not abused and that **citizens** are not forced by economic necessity to enter **vocations unsuited** to their age or strength;

(f) that children are given opportunities and **facilities** to develop in a **healthy** manner and in conditions of freedom and **dignity** and that childhood and youth are protected against exploitation and against moral and material abandonment.

Article 45: Provision for free and compulsory education for **children**. The State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, free and compulsory education for all children until they complete the age of fourteen years. Considering the above provisions, the Government of India is

obliged to take all possible steps not only to prevent the **exploitation** of children but also to take **necessary** and adequate measures for their **protection** and development.

Safety, Health and Child Labour

Safety and Health aspects of child **labour** deserve a greater attention in the **elimination** of **child labour** than any other **single social** aspect. A **child** is expected to get the necessary care from the parents, necessary education from schools, **recreation** from play and a healthy environment to live in so that the process of development of physical and mental health takes place in the **right** proportion **and** in the **right** direction at the **right** time. The period in which this development should take place. **If** instead, is not allowed, the growth will be affected, mental **faculty** cannot take shape, health may get crippled and so on. A good life is thereby retarded and is made **inactive** prematurely and the resulting **sick** persons become a **liability** to the **society**. A child turns out to be a **patient** before entering into adolescence and a good and prime **life** is thereby deprived. In **this** connection **it** is worth mentioning that the Government has already **identified certain** hazardous **occupations** and processes prohibiting the employment of the child **labour** especially considering the many occupational hazards involved in such occupations and processes. As most of the occupational disorders **manifest** into symptoms after an exposure of about **8-10** years, a **child** exposed to these hazards start showing up symptoms when he enters his adulthood. The remaining part of the **life**, which is supposed to be **his** **productive** and prime life, is deteriorated, crippled and sometimes shortened. No country can dream of a better tomorrow where today's children struggle for their **survival**

Cover feature

because of exposure to **occupational** hazards during their childhood. In the case of a factory worker, on the contrary, the **occupational** exposures show up symptoms normally at the fag end of productive life, in most cases, after superannuation. As such the **issue** of child **labour** is not **only** to be looked up on as a social evil but to be more of a safety and health problem of the **nation**. Therefore, it is **imperative** that all efforts should be aimed at **saving** the life of thousands of children engaged in various occupations and to ensure their **life** span from getting shortened. At the same time, the **legitimate** right of such children are to be protected as these children form the building blocks of tomorrow's nation.

The Child **Labour** Act and the **Children** at **work**.

The Child **Labour** Act was enacted by the Parliament in the year 1986 to prohibit the engagement of children in certain employment and to regulate the conditions of work in certain other occupations. The act defines 'child' and lays down requirements on **health** and safety, hours and period of work, weekly holidays, mechanism to settle disputes on **age** and includes a schedule incorporating lists of occupations and processes where **child labour** is prohibited. Although the Act came into existence in 1986, the enforcement has been far below the expectations.

Statistics and child **labour**

From the available statistics on **children** published by Ministry of **Labour**, Government of India, it may be seen that all children employed in among industrial category in rural and urban

concentrations, about **80%** of the child **labour** are working in rural area and around **20% only** are working in the urban area.

Further, it may be seen that a large proportion of the child **labour** are working in **cultivation** sector and also as **agricultural** labourers. The child workers employed in household sector are more in urban areas than in rural areas. **Similar** is the case of child **labour** employed in trade and commerce, transport, storage and communication sectors. From the above, it reveals that the problem of child **labour** has, to be looked at from a different angle so far as the measures for elimination/protection are concerned, As per the **statistics**, this being a problem more of a rural concentration, needs to be tackled through suitable agencies who have access to the rural child **labour** population. With regard to an estimate of child **labour** in selected cottage and small scale industries, it is seen that **concentration** of child **labour** is in occupations like carpet weaving, **silk/zari** embroidery, match and fire works, quarries, glass, bldi and handicrafts etc. From the above, it is clear that the children engaged in the aforesaid occupations may be exposed to various health hazards prevalent there. It is needless to say that most of the occupational diseases are 'irreversible' in nature and the tender age is more **susceptible** to these diseases than the **adult** age. The picture which **arises** from the above **analysis** further emphasise the urgent need for elimination of child **labour** in view of **their** exposures to safety and health problems.

The child labour and efforts by the **government**

The Government of India announced the

Cover feature

National Policy of Child Labour in the year 1987 and action plan envisaged under this policy comprises,

- a legislation action plan.

Focusing of development programmes for benefitting children wherever possible.

* Project based action plans in areas of high concentration of child labour engaged in wage/quasi-wage employment.

Under the above policy, a number of projects were launched by the Government of India to tackle the problem of child labour. Some of the important projects so far sanctioned for the benefit of child labours are in the following industries:-

- 1) Match Industry in Sivakasi, TamilNadu.
- 2) Precious stone polishing industry in Jaipur, Rajasthan.
- 3) Glass Industry in Ferozabad, U.P.
- 4) Brassware Industry in Moradabad, U.P.
- 5) Handmade Carpet Industry in Mirzapur-Bhadohi, U.P.
- 6) Lock-making Industry in Aligarh, U.P.
- 7) Tile Industry in Jaggaipet, A.P.
- 8) Slate Industry in Markapur, A.P.
- 9) Slate Industry in Mandasour, M.P.

In addition to the above, many other projects are also initiated by the Government in this regard. Many steps have been taken so that the provisions of the Child Labour Act are complied with in respect of children employed in dangerous occupations and processes. Another important area where action has been initiated is in creating awareness with regard to prohibition and abolition of child labour. In the recent past, Government of India had organised an workshop for elimination of child labour in hazardous occupations from 13-14

September, 1995 at New Delh. The workshop deliberated on various issues involving elimination of child labour and drew 'up action plans in each suggested area. The important recommendations that emerged from the workshop through different working groups are being considered by the government in its effort in tackling the problem on priority. So far as the international cooperation is concerned, the Government of India has adopted the recommendations made by International Labour Organisation under its various child labour elimination schemes and projects. The government has also set up necessary mechanisms for continuous monitoring and evaluation of its projects, programmes and schemes.

Child Labour - DGFASLI Experiences

DGFASLI had conducted a few studies involving child labour engaged in hazardous operations viz., match factories in Sivakasi, Slate pencil factories in Markapur (A.P) & Mandasaur (M.P), glass bangle factories in Firozabad (U.P). Details of the studies conducted at Sivakasi are given here as an example of the hazardous working conditions to which the children are exposed.

The studies indicate that the children are very often huddled into small rooms. The study team witnessed certain undesirable and unsafe practices such as closing the doors & windows in the work room where a fire could develop. The stated reason for the inhuman practice of keeping the doors and windows of the workshed closed was to prevent the children from getting distracted from their work. Since the waxed match sticks were being gathered, in the event of any fire, it's

Cover feature

spread will be very rapid as the whole work place was found strewn with match sticks. The closing of windows and doors would also prevent the escape of children exposing them to serious dangers. The work postures of the children were not conducive. They were constantly squatting and bending on the floor to gather the matches for boxing them. The medical opinion indicates that the girl children might face problems during child birth when they grow up owing to the constant strain on the pelvic region.

Child Labour - DGFASLI's Action Proposals

DGFASLI being a pioneer organisation working in the field of Safety & Health, has been aware of the problem of child labour and has a number of proposals in this regard. DGFASLI considers the child labour more of a Safety & Health problem and has identified agencies whose services could be profitably utilized in the above proposals. The experience of DGFASLI in propagating the concept of Safety & Health through its Mobile Safety Exhibition has been a successful venture in creating awareness amongst factory workers. This concept can be used by the district authorities and DGFASLI will be able to provide the necessary guidelines in setting up the exhibition. This mobile exhibition can be taken to the rural areas and may also be used for organising rural based awareness programmes through suitably designed publicity material.

To create awareness, especially on Safety & Health aspects, the immediate agency available at the rural areas are the medical professionals at the primary health centres. A module for the trainers,

preferably for the district level medical officers, can be developed by DGFASLI so that the medical professionals in PHCs may be in turn given suitable exposures. These awareness programmes can be organised by PHCs for the benefit of parents, employers and for the general public in the locality. Similar or separate modules could be developed for district level officers for giving exposure to other non-medical personnel having access to child labour pockets. DGFASLI has plans to include separate modules on child labour units in the routine training programmes targeted at Factory inspectors, Safety Officers, Trade Union /opinion leaders. These programmes are conducted at Labour Institutes and these modules are suitably dovetailed into the main programmes with the objective of providing exposure to the child labour problem.

With regard to developing publicity material and training aids, DGFASLI has the Mastructural facility including a well equipped studio at Bombay. Films & video cassettes on child labour could be produced for use in the above programmes.

Conclusion:

The child labour problem being a rural area oriented issue, all the efforts in its elimination/prohibition need to be made through measures which can reach these areas and also to the concerned directly. Through the agencies identified, DGFASLI will be able to contribute its might in tackling this cancerous problem and thereby help building up a nation of strong and healthy citizens.

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Consultancy/Research Findings

ENVIRONMENTAL STUDY IN A TYRE & TUBE MANUFACTURING PLANT IN UTTAR PRADESH.

An environmental study in a tyre and tube plant in Uttar Pradesh was conducted by the Regional Labour Institute, Kanpur in the month of June, 1995. The study was conducted with the objective to assess the level of airborne contaminants in different work areas of the plant and to suggest the remedial measures wherever necessary to improve the environmental conditions. Noise levels were also measured in all the noisy areas of the plant.

Findings & Recommendations:

The concentrations of carbon dust in carbon feeding areas, zinc oxide dust, stearic acid dust and sulphur dust in chemical compounding area and talc dust near banbury and tube booking areas were found exceeding their respective Permissible level of exposures (PLE). However, concentration of other contaminants were found within limits. Noise levels in some of the areas, e.g. compressor house, tyre curing press areas, etc. were also found to exceed the PLE.

Thirteen recommendations had been made for improvement in environmental conditions, e.g. efficiency of dust control devices should be improved by regular maintenance, providing and ensuring use of proper personal protective equipments, e.g. respirators, ear plugs, etc. by workers for their protection, periodical medical examinations, training etc.

ENVIRONMENTAL STUDY IN A FOUNDRY - FORGE PLANT IN UTTAR PRADESH:

An environmental study in a foundry forge plant in Uttar Pradesh was conducted by the Regional Labour Institute in August, 1995. The objective of the study were to assess the level of airborne contaminants in different work areas, to measure the sound levels at all noisy locations and to suggest remedial control measures wherever necessary to improve the environmental conditions.

Findings & Recommendations:

The concentration of some of the airborne contaminants, e.g. grinding dust, welding fumes, silica dust, wood dust, in some of the areas were found exceeding their respective PLES. However concentration of phenol formaldehyde vapour and smoke were found within limits. Noise levels at certain areas, e.g. steel melting shop, steel foundry, forge shop, light foundry and in compressor house were found exceeding the PLE for 8-hours exposure.

Remedial measures had been suggested for improvement for dust control in work environment, periodical medical examination of workers, use of personal protective equipments by workers, etc.

Consultancy/Research Findings

STUDY OF THE POLLUTANTS IN THE WORK ENVIRONMENT IN A FERTILIZER FACTORY IN ORISSA.

A study on pollutants in the work environment in a **fertilizer unit** in Orissa was taken up by Regional **Labour Institute**, Calcutta with the following **objectives**:

a) To evaluate the airborne concentration of the pollutants in the working atmosphere.

b) To suggest improvement wherever necessary.

Findings & Recommendations:

In the Di-ammonium phosphate manufacturing plant the concentration of ammonia was found higher than the **permissible** exposure level in some of the working locations. Concentration of ammonia for personal exposure was found within **its** permissible level. The area concentration as well as personal exposure of DAP dust in the bagging plant were found **within its** permissible level,

In other location the levels of pollutants were found **within** their **respective** limits.

To improve the working **conditions** various control measures **which** include mechanisation of the process, proper maintenance, ventilation, stoppage of leakage, regular **monitoring** of air-borne pollutants and education of workers were emphasised.

PREVALENCE OF ASBESTOSIS AND RELATED DISORDERS IN AN ASBESTOS FIBRE PROCESSING UNIT

In the year 1987 an occupational health **study** of **200** asbestos workers was conducted by the Regional **Labour Institute**, Calcutta. The **report** of the study was sent to the employer for **implementation** of control measures suggested. Necessary technical and medical measures were also enforced through the Chief Inspector of **Factories**, Government of West Bengal where the Asbestos Unit was located. The enforced measures were complied with by the employer.

Subsequently the workers were subjected to medical examination under Occupational **Health** Clinic at **RLI**, Calcutta In the year 1994-95 and the results of the same were **utilised** for comparison of their present health status **with** that of the earlier one.

Findings & Recommendations:

It was seen that the prevalence of overall **morbidity** of asbestos workers over a period of 7 years had not **materially** changed. 2.2% prevalence of definite asbestosis was observed in non-smoking group only, whereas parenchymal and pleural abnormalities were more prevalent in non-smoking group (10.6% & 2.3% respectively) than the smoking group (6.8% & 0.7% respectively). **Possible** asbestosis was more prevalent in

Consultancy/Research Findings

smokers (7.5%) than in non-smokers (6.1%). These observations were **indicative** of the fact that the radiological changes were present **irrespective** of **smoking habits**.

Though lung **function** (criteria of **restrictive disorders**) showed **significant** improvement rather than deterioration, when the prevalence of **definite** asbestosis was compared **it** was found to be **significantly** high in the year 1995. This is possible as the **clinical** and **radiological** signs of asbestosis may not be parallel.

2.2% cases of definite asbestosis could be **established** among asbestos workers in the year 1995 **indicating** the progressive nature of the **radiological** lesions due to **asbestos**.

The most affected workmen belonged to the exposure group above **30 years** among the non-smoking group. This was consistent with the earlier findings too.

Recommendations were made for immediate **isolation** of 22 affected workers from **dusty** areas and suitable pre-placement examination. **Notification** to the **State** Factory Inspectorate was also done for **suitable** enforcement. Stress was made for improvement of **existing** dust control measures and o-monthly medical supervision of exposed workers.

INDUSTRIAL MEDICINE

Postgraduate Certificate Course in Industrial Health

The Post-graduate Certificate Course in Industrial Health is a very intensive and **detailed** programme consisting of lecture sessions, field **visits**, tutorials, panel discussions, laboratory exercises etc. and **extensively** practical oriented. This **programme** is exclusively designed for medical **officers** from the hazardous industries to enable them to establish and **maintain** the occupational health **service** centres in their factories and **effectively** provide medical surveillance to the workers and thereby control the incidence of work related diseases. This is mainly intended to **fulfil** the statutory requirements under the Indian **Factories** (Amendment) Act, 1987. On completion of the curriculum an examination is held and **successful** candidates are awarded a certificate of 'ASSOCIATE FELLOW OF INDUSTRIAL HEALTH.'

Contents:

Occupational **health** disorders & occupational diseases - **diagnosis** and management; occupational health service at workplace; medical aspects of **factories** legislation; epidemiology; medical surveillance; toxicology; other related topics including accident prevention. **ergonomics**, industrial hygiene, etc.

Eligibility:

Degree in Medicine (M.B.B.S. degree or equivalent). Sponsored candidates with experience in industry are preferred.

Duration: 3 months (annual)

INDUSTRIAL SAFETY

Diploma Course in Industrial Safety

Ensuring the safety and health of the Industrial worker is the statutory responsibility of the **occupier**, it is also **good** business sense, since preventing accidents and health hazards reduces losses and improves **productivity**. The services of **qualified** safety professionals are essential to advise the management on these matters. Recognising the need for the appointment of **qualified** safety professionals, as safety officers, a statutory **provision** has been made in the safety **legislations** applicable to the **factories** and ports.

The Central **Labour** institute in Bombay and the three **Regional Labour Institutes** in Calcutta, Kanpur and Madras have been conducting the one-year Diploma Course in Industrial Safety since 1974 and 1982 respectively. The course provides comprehensive **education with** an emphasis on **academic** as well as practical aspects of industrial safety and health.

The course is presented through lectures supplemented by discussions, case studies, laboratory exercises and study **visits** to **factories** and related **institutes**. The students also carry out project works.

Contents

The course designed in 1974 was redesigned in 1990 to **suit** the emerging needs of the factories undergoing both technological and management advancements. The course now offered provides **indepth** knowledge on industrial safety and health covering the areas of :

January - March 1996 ❖ Indoshnews

Education

Safety Management; Safety Engineering; Appraisal, **Analysis**, Inspection and Control Procedures related to industrial accidents; Safety and the Law; **Occupational Hygiene** and Health; Safety in Chemical Industry

In **addition** to the above areas the course offers the following **five** elective subjects :

Safety in **Engineering** Industry: Safety in **Textile** Industry; Safety in Construction Industry; Dock Safety; Advanced Safety Management and Engineering **Techniques**.

Diploma **certificates** to the successful candidates are awarded by the Board of Technical **Examinations** of the State concerned.

Eligibility :

The prescribed minimum **qualification** and experience for admission to the course are : a Diploma/Degree in Engineering **with** two years of experience or degree in Science (**with** Physics or Chemistry) **with** two years of experience. The experience on the shop floor, **training**, safety etc. In industry and docks are **considered**.

Duration : 1 year.

International Occupational Safety & health Information Centre (CIS)

CIS (from the French name, Centre international d'information de securite et d'hygiene du travail) Le. 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 can 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 **field** of occupational safety and health. The work of **CIS** is supported by a worldwide safety and health information exchange network which includes over **86 affiliated** 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 5-year Indexes
- The **CIS** Thesaurus
- The **list** of periodicals abstracted by **CIS**,
- Microfiches on **original** documents abstracted in **CIS DOC (CISILO)**

Excerpt from **CIS** Doe

TITLE: History of occupational health in Osaka in relation to phosphorus poisoning,

CIS accession number:
CIS 90-542

Abstract:

A high incidence of phosphorus poisoning was reported in Japan in **1883 among** children making **lucifer** matches in Osaka and Tokushima Twenty-two cases of phosphorus necrosis (**phossy jaw**) treated in the Osaka Red Cross Hospital were reported in 1919. The **Japanese** Government prohibited the use of yellow phosphorus in match **manufacturing** in **1921. However,** cases of **phossy jaw** still occurred in phosphoric acid, phosphoric acid **fertiliser** and yellow phosphorus plants. These cases seem to have been due to exposure suffered before 1974: a survey at a **phosphoric** acid plant in 1954 found **concentrations** of phosphorus in the air of 0.82 and **0.58mg/m(3)** at the measuring **points**. Seven cases of **phossy jaw** were found at the plant during 1963-1966. The ages of the victims at diagnosis ranged from 28 to 53 years and the duration of work before the **diagnosis** ranged from 1 year and 11 months to 10 years.

For details **write** to **CIS** National Centre for India, Central **Labour Institute**, **Slon, Mumbai** • 22

January - March 1996 ❖ Indoshnews

MATERIAL SAFETY DATA SHEET (MSDS)

Important Informations:

Product Name : Potassium Chlorate
Common Synonyms: **Chloric Acid**,
Potassium Salt, **Berthollet** Salt, Chlorate of
Potash.
Chemical Family: Potassium Compounds.
Formula: KClO₃

Danger:

Causes irritation, strong oxidizer, contact **with** combustible materials, flammable materials, or powdered metals can cause fire or explosion. May cause **shock-sensitive** mixtures. Clothing contaminated with chlorate or its solutions **is** dangerously flammable. Remove clothing and keep wet until washed thoroughly **with** water. Keep **away** from **fire**. Spillage may cause fire. Do not get on floor. Keep from contact with clothing and other combustible **materials**. Do not store near combustible materials. Avoid contact with eyes, skin, clothing. Keep in tightly closed container. Wash thoroughly after handling. In case of fire, soak with water. In case of spill, sweep up and remove. Flush spill area with water.

Special fire-fighting procedures

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in **positive** pressure mode. Move exposed containers from fire **area** if it can be done

without risk. Use water to keep **fire-exposed** containers cool.

unusual fire & explosion hazards

Strong oxidiser. Contact **with** combustible materials, flammable materials or powdered **metals** can cause **fire** or explosion. When exposed to heat, closed containers may explode; may also give off highly toxic or irritating fumes.

Emergency and first aid procedures

Ingestion: If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

Inhalation: Call a physician. If inhaled, remove to fresh air. If not breathing, give **artificial** respiration. If breathing is **difficult**, give oxygen.

Skin contact: In case of contact, flush skin **with** water.

Eye contact: In case of eyecontact. **Immediately**, flush with plenty of water for at least 15 minutes.

Steps to be taken in the event of a spill or discharge

Wear self-contained breathing apparatus and full protective clothing. Keep combustibles (wood, paper oil, etc.) away from spilled material. **With** clean shovel, carefully place **material into clean, dry** container and cover; remove from area. Flush spill area **with** water

Disposal procedure

Dispose In accordance **with** all applicable federal, state and local **environmental regulations.**

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, Sion,** Mumbai-22. MSDS on about **90,000 chemicals/materials** are **available** with Central **Labour Institute.** Computer print **outs 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 field of Occupational **Safety, Health & 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 & foreign 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 & Management**. It also extends reading facilities to students, **scholars** attending **different** training programmes & courses conducted by CU. From January '95 till date a number of publications in the field of OSH have been added to Library. Some of them are:

1. PATTY'S INDUSTRIAL HYGIENE AND TOXICOLOGY VOL III PART A: THEORY AND RATIONALE OF INDUSTRIAL HYGIENE PRACTICE : THE WORK ENVIRONMENT B Y ROBERT L HARRIS, LEWIS J CRAILEY & L E S T E R V. CRAILEY.

Publishers: John Wiley & Sons. Inc.

While reflecting on the changing face of Industrial hygiene in the 90's this

volume examines the foundations of Industrial hygiene. The articles are **contributed** by the world's **leading specialists** in Industrial hygiene. This edition **contains** entirely new chapters on the occupational hazards of archaeology, professional **liability** and risk **analysis** in Industrial hygiene.

2 . EFFECTIVE HUMAN RELATION IN ORGANIZATIONS B Y REECE/BRANDT, FOURTH EDITION.

Publisher : Houghton Mifflin Company. Boston.

The book reviews **major** trends in human **relations** that developed in the past decade. **me** material is presented in a non-technical, **interesting** and readable style. It **provides** valuable **insights regarding** ways that **organizations** can maintain proper balance between concern for production and people throughout the decade ahead. It includes a large number of real world examples obtained from a wide range of government agencies, **non-profit institutions** and progressive **companies**.

3. YOUR GUIDE TO HEALTH BY CLIFFORD R. ANDERSON

Publisher: Orient Watchman Publishing House

Glimpses of books & films

Today there is a mass of health industries and ports, The studio has been information available on how to maintain set up with a view of producing these films good health. In this book the author has depicting Indian conditions since these presented it in a simple readable style films are not available in the market.

that a layman would easily follow. It discusses about health condmons and medicines available in our country. The book discusses body, mind and soul as a unit and highlights the fact that physical health depends to a very great degree upon mental and spiritual health.

The five films as given below have been produced till now:

4. OCCUPATIONAL THERAPY TREATMENT GOALS FOR THE PHYSICALLY AND COGNITIVELY DISABLED

BY 2. CLAUDIA KAY ALLEN, CATHERINE A EARHART AND T. INABLU.

1. 'DGFASU In me service of the Natlon'.

This film is of 10 mln. duration and prospective audience are personnel engaged in industries and ports for promoting safety & health.

2. 'Container Handlgh: Do it safe way (Motivational)'.

This film is of 9 mln. duration and prospective audience are dock workers engaged in loading and unloading of containers.

Publishers: The American Occupational Therapy Assocatlon Inc.

3. 'Safe use of Chlorine'.

This book is designed to help therapists predict me rehabilitation potential for patients who have a cognitive disability. Case studies written by therapists working in a variety of treatment settings with various patient populations are discussed, Case studies have been used to illustrate the application of knowledge in a variety of age groups, diagnostic categories, socio-economic condmon and cultures. Some relationships with the social and health care services are identified alongwith needs for further research.

This film is of 14 min. duration. This is an educational film to be used by the trainers for workers as well as supervisor

4. 'Major Accident Hazard Control System in India'

This film is of 15 min. duration and prosepctive audience are managers and supervisory personnel of MAHCA Installations.

FILMS

An Audio Visual Studio under the communication division has been set up to produce video films on Safety & Health concerning Industrial workers working in

5. 'Safety In container handling' (Loading & Unloading) (Instructional)

This film is of 13 min. duration. It is meant for dock workers engaged in loading and unloading.

Clippings

1. GINNING FACTORIES ACT REPEALED

The Union Government has **repealed** the Ginning and Pressing **Factories** Act, 1928 on the ground that it **is** no longer relevant after the reforms.

With this, another obstacle hampering the interest of the Cotton and Ginning units has been removed.

The units **will no longer** have to go in for compulsory **registration**. Moreover, they **will** be able to bargain and obtain better **prices** for cotton **supplied** to **Textile mills**. Under its liberal Industrial **policy**, the Government dispensed with the need for a **licence** under the Industries (Development and **Regulation**) Act, 1951 for **ail textile and powerloom units**. It has, however, retained locational **restrictions**.

Recently, a committee constituted ten years ago to ensure that nylon yarn **prices (NYP)** did not pierce the ceiling, was **abolished**. The **decision** was taken **since** the **NFY prices** had been **ruling** below the ceiling. The Ginning and **Pressing** Factories Act has been abrogated on the basis of the **recommendations** of a high powered working group. The report said a ginning or a pressing unit which made the **qualifications** of a small scale **unit** and wanted to be **registered** as such, should be allowed to do so. Further, market forces should be allowed to determine ginning and **pressing** rates once the Act was revoked. The report said quality standards for cotton **ginning** and pressing should be prescribed by a technical **committee comprising** representatives of the textile commission, Northern **India** Textile Research **Asscoiation**, Ahmedabad Textile Research Asscolation and 7 East India Cotton **Association**.

(Source B.S
dt. 27.9.1995)

2. CHILD LABOUR ERADICATION SCHEME

The Unlon Government has selected seven revenue **districts** In Andhra Pradesh, **Bihar, Karnataka, Orissa** and **Tamil Nadu** to **implement** the **Special Child Labour Eradication** Programme, under the **National Child Labour** Programme. The Tiruchirapalli **District Collector**, Mr. **Rajeev Ranjan**, told newsmen here on **tuesday** that the seven districts are **Tiruchirapalli (Tamil Nadu)**, **Warangal (Andhra Pradesh)**, **Dumka (Bihar)**, **Gulbarga (Karnataka)** and **Sonepur . Jharsuguda** and **Nuapada** In **Orissa**.

He **said** the **Centre** had approved a **Rs. 53.40 lakhs** to implement the project in **Tiruchirapalli District**. The **administrations** would set up **30 special** schools **with** a intake of **50 children** rescued from **various** industrial units. **Mr. Ranjan said** an estimated **4334 child labourers** were engaged in **textile, tannery, gemcutting, leather, stone crashing** and **beedi industries** in **various** parts of the district.

(Source * Indian Express
dt. 11.10.1995)

January - March 1996 * Indoshucore

1. MANUAL ON MANAGEMENT OF CHEMICALS AT WORK ENVIRONMENT

Industrial activities involving hazardous chemicals have the potential to cause occupational **diseases**, injuries and pollution of the environment. If effective measures in the use of these chemicals at work place **are** not observed. This manual has been designed in such a way that it would **be** of **value** to all those engaged in promoting or practising the safe use of chemicals at work. The **practical** guidance on the safety precautions to be followed when using and handling chemicals at workplace **is emphasised** throughout the manual. The manual covers topics such as **safety & health** provisions in the Factories Act **amended** in 1987 and ILO Convention on Chemical **Safety, Health** hazards due to chemical exposure, **classification, labelling** and packaging of hazardous chemicals, **monitoring** in the workplace, personal protective equipment, management of chemical **safety**, a guide to safe use of benzene and teaching techniques.

2. TRAINING MANUAL ON BASIC COURSE FOR INSPECTORS OF FACTORIES

The advancement in technology and **increased use** of hazardous **chemicals** in

industries have made it necessary for OSH **institution** to formulate training module for the safety personnel, which **will** help them to combat the **safety** problems in **industries**. In **this** manual, the topics covered are accident prevention, Factories Act, 1948, Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 • An overview, techniques of hazard analysis motivation for safety, health hazards in industry and their control, bulk storage of hazardous chemicals, safety audit, machine guarding, noise **pollution & control**, industrial **ventilation**, ergonomics, **accident reporting & investigation**, training in safety and health and personal **protective** equipment.

3. PARTICIPATIVE APPROACH FOR SAFETY AND HEALTH

This booklet comprises write-ups for the training programme. The topics covered **are** : participative management • a conceptual framework. safety **committee** : a **participative** approach, **organising** for safety & health at work, **effective** communication in a **participative** forum for health and safety, **participative** safety forum. • how to make it more **effective**.

Announcements

TRAINING PROGRAMMES

JANUARY • JUNE 1996

CENTRAL LABOUR INSTITUTE, SION, MUMBAI-400 022.

Course Title	Date	Level	Venue
Three Months Post Graduate Certificate Course in Industrial Health (AFIH) for Med. Officers.	1st Jan - 31st Mar. 1996.	Medical Doctor	C.L.I., Mumbai. (Indl. Medicine Divn.)
Spl. Post Graduate Course on Occupational & Environ- mental Medicine for students of Diploma in Environmental, T.B. & Respiratory Diseases (DETRD) , College of Physicians & Surgeons , Bombay,	22nd Jan - 2nd Feb. 1996.	Medical Doctor	C.L.I., Mumbai. (Indl. Medicine Divn.)
Management of Occupational Stress.	15 th Jan. - 19th Jan. 1996.		C.L.I., Mumbai. (Indl. Psy. Divn.)
Evaluation & Control of Hazards In Fertilizer Industry.	8th Jan - 12th Jan. 1996		C.L.I., Mumbai. (Indl. Hygiene Divn.)
Development of on-the-job counselling skills.	12th Feb - 16th Feb. 1996	Executives	C.L.I., Mumbai. (Indl. Psy. Divn.)
Ergonomics - A tool for impro- vement Safety, Health & Produc- tivity	19th Feb - 23rd Feb. 15%		C.L.I., Mumbai. (Indl. Psy. Din.)
Total Quality Management & ISO 9000	5th Feb - 9th Feb. 1996		C.L.I., Mumbai (Productivity Dvn.)
Evaluation and Control of hazards In Dyestuff Industry.	5th Feb - 9th Feb. 1996		C.L.I., Mumbai (Indl. Hygiene Divn.)

January - March 1996 ❖ Indoshnews

Announcements

Course Title	Date	Level	Venue
Motivation for Safety	20th Feb. - 22nd Feb. 1996	Executives	C.L.I., Mumbai (Indl. Psy. Divn.)
Training of Trainers for Safety & Health in Industry.	19th Feb - 23rd Feb 1996		C.L.I., Mumbai (Staff. Trg. Divn.)
Wage & Salary Adminis- tration	18th Feb • 22nd Feb. 1996	Manager Sr. Trade Union officials	C.L.I., Mumbai (Productivity Divn.)
Evaluation & control of Hazards In manufacturing & formulation units of pesticides.	11th Feb. • 15th Feb. 1996		C.L.I. , Mumbai (Indl. Hygiene Divn.)
Trg. Prog. for C.I.S.	12th Feb. • 14th Feb. 1996		C.L.I., Mumbai (Safety Divn.)
Management of Safety, health and environment at workplace.	25th Feb. • 29th Feb. 1996		C.L.I., Mumbai (Safety Divn.)
Diploma Course in Industrial Safety 199596	1st Mar. • 29th Mar. 1996		C.L.I., Mumbai (Safely Division)
industrial Safety for CIS	6th Mar. • 8th Mar. 1996		C.L.I., Mumbai (Safety Divn)
Evaluation and Control of Hazards in Mfg. & For- mulation Units of Pesticides	11th Mar. • 15th Mar. 1996		C.L.I., Mumbai (Indl. Hygiene Dvn.)

January - March 1996 ❖ *Indoshnews*

Announcements

course Title	Date	Level	Venue
Safety In Construction Work	11th Mar. - 15th Mar. 1996	•	C.L.I., Mumbai (Construction Safety Divn)
Trg. Programme on Techniques of Hazard Assessment and Its Control in MAH Installation	18th Mar. • 22nd Mar. 1996		C.L.I., Mumbai (MAHCA Divn.)
Approaches to QWL	18th Mar. - 22nd Mar. 1996		C.L.I., Mumbai (Productivity Dvn.)
Specialisd Training Course on Safety Report	25th Mar. 27th Mar. 1996 & 28th Mar. • 30th Mar. 1996		C.L.I., Mumbai (Safety Divn.)
Management of Human Factors for Safety & Health	8th Apr. • 12th Apr. 1996	•	C.L.I., Mumbai (Psy. Divn.)
Identification of Hazards/Stresses in Industry	15th Apr. • 19th Apr. 1996		C.L.I., Mumbai (Phy. Divn.)
Selection & Quality Assurance for Effective use of PPE	9th Apr. - 11th Apr 1996		C.L.I., Mumbai (Ind. Hyg. Divn.)
Supervisory Development	15th Apr. • 19th Apr. 1996		C.L.I., Mumbai (Staff Trg. Divn.)
Industrial Safety & Health (Hindi)	15th Apr. • 19th Apr. 1996		C.L.I., Mumbai (Safety Divn.)
Partkipative Approach for Safety & Health	22nd Apr. • 26th Apr. 1996		C.L.I.; Mumbai (Psy. Divn)
TQM & ISO-9000	22nd Apr. • 26th Apr. 1996	•	C.L.I., Mumbai (Productivity Dvn.)

January - March 1996 ♦ Indoshnews

Announcements

Course Title	Date	Level	Venue
Advanced Training Programme on Occupational Health & Environmental Medicine.	20th May - 31st May 1996	Medical Doctor'	C.L.I., Mumbai (Indl. Medicine Divn.)
Electrical Safety	8th May - 10th May 1996	▪	C.L.I., Mumbai (Safety Divn.)
Industrial Ergonomics for augmenting Safety, Health & Productivity at work	13th May - 17th May 1996	▪	C.L.I., Mumbai (Phy. Divn.)
Safety In Engg. Industry	22nd May- 24th May 1996	▪	C.L.I., Mumbai (safety Divn.)
Indl. Safety for CIS	12th June- 14th June 1996	▪	C.L.I., Mumbai (Safety Divn.)
Identifiiation of Hazard/Stresses in Industry	17th June- 21st June 1996	▪	C.L.I., Mumbai (Phy. Divn.)
Diploma In Industrial Safety 1996-97	24th June- 30th June 19%	▪	C.L.I.. Murnbal (Safety Divn.)
Team Building	24th June- 23th June 1996	▪	C.L.I.. Mumbai (Staff Trg. Divn.)

January - March 1996 ❖ *Indoshnews*

Announcements

TRAINING PROGRAMMES

JANUARY - JUNE 1996

REGIONAL LABOUR INSTITUTE, LAKE TOWN. CALCUTTA-700 089.

Course Title	Date	Level	Venue
Seminar on role of ILO and DGFASLI in preventing accidents and occupational disorders.	3rd week of Jan. 1996.	-	R.L.I. Calcutta
Safety Engineering and Management.	2nd week of Feb. 1996.	-	-DO-
Chemical Safety for worker members of Safety Committee	3rd week of Feb. 1996.	-	-DO-
Advanced Action oriented prog. on Safety, Productivity and a better place to work.	3rd week of Feb. 1996.	-	-DO-
Worker Development Programme.	4th week of Feb. 1996.	-	-DO-
Training Programme on Chemical Safety for Worker Members of the Safety Committee	13th - 15th Feb. 19%	Worker	-DO-
Safety Engineering and Management	1 1th - 15th Mar. 19%	Middle Management Personnel	-DO-
Appreciation Course in industrial Hygiene	22nd - 26th Apr. 1996	Junior/Senior Executives	-DO-
Train-the-Trainer Workshop on Safety in the use of chemicals	13th - 17th May 1996	Training Officers/ Safety Officers	-DO-

January - March 1996 ❖ Indoshree

Announcements

Course Title	Date	Level	Venue
Safety, Health and Environment at Workplace	3rd week of May 1996	Middle Management Personnel	-DO-
Training Programme on Safety Audit	2nd week of June	Jr./Sr. Executives including Safety Officers	-DO-
Safety, Health and Environment at Workplace	4th week of June	Jr./Sr. Executives	-DO-

January - March 1996 & Indoshnews

Rnnouncements

TRAINING PROGRAMMES

JANUARY -JUNE 1996

REGIONAL **LABOUR** INSTITUTE, SARDAR **PATEL** ROAD, MADRAS-600 1 13.

Course Title	Date	Level	Venue
Management of hazardous substances.	Sth-12th Jan. 1996.		R.L.I. Madras
Improvement of working conditions and productivity in small & medium scale Industries .	15th-25th Jan. 1996.		-DO-
Hazard and Operability (Hazop)	7th-9th Feb. 1996		-DO-
Safety In Chemical Industry	21st-23rd Feb. 1996		-DO-
Identification Analysis, Assessment and Control of major accident hazards in chemical industries .	1st week of March. 1996		-DO-
Management of Hazardous Substances	12th - 16th Feb. 1996	Managers	-DO-
Workshop on 'Improvement of Working Conditions and Productivity in Small & Medlum Scale Enterprises'	27th - 1st Mar. 1996	Small Scale Entrepreneurs	Palakkad
Hazard and Operability Study (HAZOP)	5th - 7th Mar. 1996	Senior Managers	R.L.I. Madras
Specialised Course in Chemical Safety	20th - 24th May 1996	Safety Professionals	-DO-

January - March 1996 & Indoshnews

Announcements

TRAINING PROGRAMMES

JANUARY-JUNE, 1996

REGIONAL LABOUR INSTITUTE, BARVODAYA NAGAR, KANPUR-208005.

course Title	Date	Level	Venue
Industrial Safety Hygiene	8th - 12th Jan. 1996	-	R.L.I. Kanpur
Safety & Law	12th - 16th Feb. 1996	-	-DO-
Executive Excellence	1st - 15th Mar. 1996	-	-DO-
Training Programme on Industrial Safety & Hygiene	8th - 12th Jan. 1996	Middle Management	-DO-
Training Programme on Safety & Law	12th - 16th Jan. 1996	Executives	-DO-
Training Programme on Industrial Ergonomics for Augumenting Safety, Health & Productivity at Work	18th - 22nd Mar. 1996	-DO-	-DO-
Training Programme on Assessment of Hazards in the Working Environment of Industries	22nd - 26th Apr. 1996	-DO-	-DO-
Training Programme on Testintg & Examination of Lifting Machines Tackles and Pressure Vessels	6th - 10th May, 1996	-DO-	-DO-
Training Programme on Team Building for Hearth Safety & Welfare	10th - 14th June, 1996	-DO:	-DO-

January - March 1996 ❖ Indoshree

Announcements

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 Institutes (DGFASLI), an attached office of the Ministry of Labour, will act as nodal agency 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 communication of information will be through E-mail (NICNET) as well as postal/courier service. We invite industrial organisations, institutions, industries associations, trade unions, professional bodies and non-governmental organisations having information on OS & H and willing to share the same with others at the national and International level to participate as member in the network interested agencies. may please write with a brief profile of their organisation and Information capabilities clearly indicating type of OS & H information required and the information available that can be shared with others to Shri S.K. Saxena, Director General, Directorate General Factory Advice Service & Labour Institutes, N.S. Mankkar Marg, Slon, Mumbai- 400 022 within 30 days of the publication date of this announcement.

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

January - March 1996 ❖ Indoshnews

GOVT. OF INDIA, MINISTRY OF LABOUR
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 notional 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 **Directorate** General Factory Advice Service **& Labour** Institutes (**DGFASLI**) comprises :

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

The Central **Labour** Institute at Mumbai functions as a socioeconomic 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 stature and has earned **national** and International recognition. It has been recognised 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.I.S. (International 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 services** to the **Industrial** sector through **studies,** 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 modern 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 task of protecting safety and **health** of the employees **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.

*Being setup

**DIRECTORATE GENERAL
FACTORY ADVICE SERVICE & LABOUR INSTITUTES
ESTABLISHMENTS IN INDIA**

