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मेरी कलम से

भारत सरकार की एक मुख्य चिंता का विषय सभी आर्थिक क्रियाकलापों में कार्यस्थल पर कामगारों की सुरक्षा और स्वास्थ्य से संबंधित है। केन्द्र और राज्य सरकार, कार्यस्थल में सुरक्षा, स्वास्थ्य और पर्यावरण पर राष्ट्रीय नीति का क्रियान्वयन कर रही है जिससे कामगारों में जागरूकता पैदा हो सके और उन्हें व्यावहारिक मार्गदर्शन प्राप्त हो सके ताकि इससे कार्यस्थल पर व्यावसायिक सुरक्षा और स्वास्थ्य से संबंधित खतरों को कम किया जाए व नियोक्ताओं को उन्हें सुरक्षित और स्वस्थ कार्य परिस्थिति उपलब्ध कराने के लिए प्रभावित किया जा सके।

अन्य लेखों के साथ-साथ इंडोशन्यूज़ के इस अंक में इस मामले से संबंधित दो लेख हैं; पहला लेख, देश के विभिन्न कार्यस्थलों में सुरक्षा और स्वास्थ्य रणनीतियों के विकास और क्रियान्वयन से संबंधित है। दूसरा लेख, कार्यस्थल में वैयक्तिक संरक्षण उपकरणों के उपयोग से उपार्जित लाभ के विवरणों के बारे में है।

आशा है कि सुरक्षा वृत्तिकों और प्रबंधन कार्मिकों को इन लेखों में दी गई जानकारी से लाभ प्राप्त होगा।

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FROM THE DESK

The occupational safety and health of worker at workplace in all economic activities is one of the main concerns of Government of India. The central & state governments are implementing the national policy on safety, health & environment at workplace which envisage and provide practical guidance and creating awareness among employees in their effort to reduce the incidence of occupational safety & health risks at their workplace and to impress upon employers to provide safe & healthy working condition.

This issue of INDOSHNEWS contains two articles in this regard along with other features. The first article deals with the development and implementation of various workplace safety and health strategies in the country. The second article talk about the detail benefits of using personal protective equipment at workplace.

I hope safety professionals and management personnel will take advantage of the information available in these articles.

G.M.EK.Raj
Editor In-chief

DEVELOPMENT AND IMPLEMENTATION OF WORKPLACE SAFETY AND HEALTH IN INDIA

Dr.R.K.Elangovan

ABSTRACT

The workplace safety & health in organized sectors is broadly divided into four areas namely factories, dock works, mines and construction sites. The Constitution of India, under the Directive Principles of State Policy, enshrines provisions relating to Workplace Safety and Health (WSH) in all economic activities. Apart from enforcing the applicable statutes on Workplace Safety and Health, the Central and State Governments are presently implementing the National Policy on Safety, Health and Environment at Workplaces. The Directorate General Factory Advice Service and Labour Institutes (DGFASLI), Government of India, function as nodal agency in executing programmes and devising strategies for ensuring Workplace Safety and Health in India. This paper details on the development and implementation of various Workplace Safety and Health strategies in India.

INTRODUCTION

The workplace safety & health in organized sectors is broadly divided in to four areas namely factories, dock works, mines and construction sites. The Constitution of India, under the Directive Principles of State Policy, enshrines provisions relating to Workplace Safety and Health (WSH) in all economic activities. The Factories Act, 1948 is the legislation dealing with Workplace Safety and Health in factories. The safety in dock work and mines is ensured through the implementation of The Dock Workers (Safety, Health and Welfare) Act 1986 and Regulations 1990 and the Mines Act, 1952, respectively. The Workplace Safety and Health in construction sites are enforced by The Building & Other Construction Workers (Regulation of Employment & and Conditions of Service) Act, 1996 and the applicable Central and State Government Rules. The Government of India has declared, observed and celebrated the Year 2008 as the *Year of Industrial, Safety and Health* in commemoration of completion of sixty years of the Factories Act, 1948. The National Policy on *Safety, Health and Environment at Workplaces* has been declared by the Government of India on 20th February, 2009. Apart from enforcing the applicable statutes on Workplace Safety and Health, the Central and State Governments are presently implementing the National Policy on Safety, Health and Environment at Workplaces.

The Directorate General Factory Advice Service and Labour Institutes (DGFASLI), Government of India, function as nodal agency in executing programmes and devising strategies for ensuring Workplace Safety and Health in India. This paper details on the development and implementation of various Workplace Safety and Health strategies in India.

METHODOLOGY

The statistics of factories, employment, industrial injuries, types of occupational diseases, Constitutional Provisions, ILO Conventions and Legislations on Occupational Safety and Health (OSH) and initiatives of Government of India on Occupational Safety and Health are described in this paper.

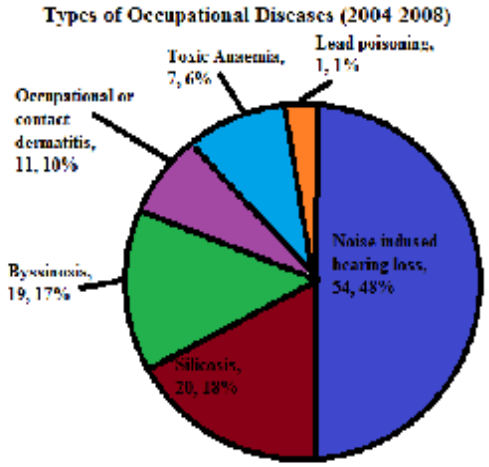
Occupational Safety and Health Statistics of Factories in India for the year 2008 are tabled as follows:

Registered Factories	3,09,618
Working Factories	2,62,827
Employment [Total] Men Women	1,21,41,881 1,05,45,060 15,96,821
Safety Officers	2,164
Welfare Officers	2,885
Factory Medical Officers	7,918
Safety Committees	12,802
MAH Factories	1,724
On-Site Emergency Plans	1,822
Safety Policy	14,120

The Statistics of Employment and Industrial Injuries of workers for the period from 2001 to 2005 are tabled as follows:

Year	No.of Working Factories	Estimated Average Daily Employment (in thousands)	Industrial Injuries		Frequency Rate of Injuries per lakh mandays worked		Incidence Rate of Injuries per thousand workers employed in factories submitting return	
			Fatal	Total	Fatal	Total	Fatal	Total
1	2	3	4	5	6	7	8	9
2001	144800	5733	627	28364	0.07	3.24	0.19	8.67
2002	141085	6330	540	20453	0.13	4.88	0.16	6.14
2003	111895	4927	525	16432	0.08	2.50	0.11	3.33
2004	158991	6802	562	15020	0.05	1.33	0.08	2.21
2005(P)	175341	7180	613	14795	0.05	1.26	0.09	2.07

The Types of Occupational Diseases with their share for the period 2004 to 2008 are as follows:



Constitutional Provisions on Occupational Safety and Health

Labour is a concurrent subject under the Constitution of India, i.e. it is a subject for which both the Centre and States are responsible to ensure compliance with various provisions by all the Stakeholders.The Constitution of India under the Directive Principles of State Policy enshrines detailed provisions relating to Safety and Health of workers in all economic activities and they are as follows:

- Securing the health and strength of employees, men and women, that the tender age of children are not abused, that citizens are not forced by economic necessity to enter vocations unsuited to their age or strength (Article 39)
- just and humane conditions of work and maternity relief are provided (Article 42)
- that the Government shall take steps, by suitable legislation or in any other way, to secure the participation of employee in the management of undertakings, establishments or other organizations engaged in any industry (Article 43A)
- for ensuring that no child below the age of 14 is employed to work in any factory or mine or engaged in any other hazardous employment (Article 24).

Ratification of ILO Conventions

As one of the founder members, India has so far ratified 41 Conventions.The ILO has framed about 30 Conventions relating to occupational safety and health. The Government of India has so far ratified the following three Conventions relating to Occupational Safety and Health.

- Convention No.115 concerning Radiation Protection,
- Convention No.136 concerning Benzene and
- Convention No.174 concerning Prevention of Major Industrial Accidents.

Major Legislations on Occupational Safety and Health

The major legislations on Occupational Safety and Health in India are as follows:

- The Factories Act, 1948 and State Factories Rules.
- The Mines Act, 1952 and the Rules.
- The Dock Workers (Safety, Health & Welfare) Act, 1986 and the Regulations.
- The Building & Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996, Central Rules, 1998 and State Rules.

Initiatives of Government of India

The initiatives of Government of India on Occupational Safety and Health are as follows:

- ✓ DGFASLI as an attached office of the Ministry of Labour and Employment, Government of India serves as a technical arm to assist the Ministry in formulation of National policies on Occupational Safety and Health in Factories and Docks.
- ✓ DGFASLI enforces safety in docks through the Inspectorates of Dock Safety set up in all the major ports in India.
- ✓ Rendering advice and carrying out support research activities for the administration of The Factories Act, 1948 and the Dock Workers (Safety, Health and Welfare) Act, 1986.
- ✓ Coordinating technical and legal activities to facilitate uniform standards of enforcement of safety and health in manufacturing and port sectors.
- ✓ Administration of the Dock Workers (Safety, Health & Welfare) Act, 1986 and Regulations 1990 framed there under and enforcing these statutes in the major ports of the country.
- ✓ Educating and training employers and employees on matters relating to safety and health.
- ✓ Conducting promotional activities by operating schemes for --
  - ➢ recognition of good suggestions under Vishwakarma Rashtriya Puraskar and
  - ➢ good worker's outstanding contribution in organisations, under Prime Minister's Shram Awards; and
  - ➢ Safety performance under National Safety Awards.
- ✓ Training of foreign Nationals and rendering expert advice to developing countries.
- ✓ Building Competence of OSH enforcement agencies.
- ✓ Issuing approval to flameproof electrical enclosures.
- ✓ Collecting and disseminating information and material relating to safety and health.
- ✓ The Government of India have also taken special policy level measures as well as promotional activities for ensuring safety, health and welfare of workers employed in ship-breaking operations.
- ✓ The DGFASLI Website www.dgfasli.nic.in is a source of information on various safety and health related matters and publishes OSH information in India.
- ✓ DGFASLI conducts one year Diploma Course in Industrial Safety in Central Labour Institute, Regional Labour Institutes located at Chennai, Kolkata, Kanpur and Faridabad.
- ✓ DGFASLI also conducts Certificate Course on Associate Fellow of Industrial Health (AFIH), a three months certificate course for the appointment of qualified Medical Officers in factories.
- ✓ Measures for phasing out of manual handling by mechanical handling in mines by DGMS.
- ✓ Considering introduction of NABOSH (National Accreditation Board on Occupational Safety and Health) System in India.
- ✓ Risk Observatory Cell has been established in DGFASLI located at Regional Labour Institute, Chennai.

CONCLUSION

Government of India has taken a lot of initiatives in enhancing Occupational Safety and Health in factories, mines, docks and construction works. The implementation of the National Policy on Safety, Health and Environment (SHE) at workplace takes care of enforcement, National Standards, compliance, awareness, research and development, OSH skill development and data collections in OSH in India.

All the stake holders should take initiative and measures to ensure that our workplace is safer and healthier by implementing the Occupational Safety and Health requirements and the best practices in OSH, thus protecting the workforce from unwanted accidents, injuries and disasters.

Dr.R.K.Elangovan
Director(Safety) & In-charge
Regional Labour Institute, Adyar,
Chennai 600113

SAFETY POSTER

SAFETY SLOGANS

It's better to be Safety Conscious than Unsafe and Unconscious

You get the level of safety that you are prepared to walk past

Safety is the seam that joins the fabric of life. Don't let a loose thread bring it all undone

PERSONAL PROTECTIVE EQUIPMENT – NON RESPIRATORY

M.K.Mandre

INTRODUCTION

Adequate protection of body is essential in order to ensure the safety of human life at work in every industry though the nature of protection varies from industry to industry and is dependent not only on the type of operation but also on the kind of hazard associated.

The Industries in our country are making all efforts to ensure safety of the workmen in hazardous processes and dangerous operations by adopting safe design of plant, machines, equipment & methodologies. In addition, various types of non-respiratory personal protective equipment such as safety helmets, eye protectors, safety hand gloves, safety shoes and safety clothing are also used in industries as a second line of defence to safeguard the lives & limbs of the workers who are exposed to a series of physical, chemical & biological hazards. The demand for the use of Personal protective Equipment (PPE) has increased in manifold in the recent past due to public awareness, effective safety supervision by the management and strict implementation of statues. The Factories Act, 1948 and the Rules made there under provide legal obligation on the part of employers for making available suitable type of Personal Protective Equipment to the workers who are exposed to unsafe & unhealthy work environment.

The quality of the Non-respiratory Personal Protective Equipment is required to be checked to ensure that it provides the desired level of safety to the USERS. The Bureau of Indian Standards (BIS) has brought out many standards describing the quality of Personal Protective Equipment used for the protection of head, eyes, face, arms, hands, legs, feet and body. However, the testing facilities to examine the quality of Personal Protective Equipment as per the specification laid down by the BIS are available only in some manufacturing units and government laboratories with specific purpose.

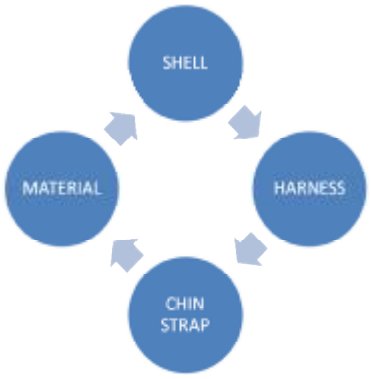
The Directorate General Factory Advice Service & Labour Institutes (DGFASLI) under Ministry of Labour & Employment, Government of India is primarily concerned with Safety & Health of Industrial Workers. As such, the department established the Non-respiratory Personal Protective Equipment Testing Laboratory at Central Labour Institute in late eighties to carry out performance tests of various types of Personal Protective Equipment and to ensure that it is meets the specification laid down by the Bureau of Indian Standards (BIS). This laboratory is well equipped with precision electronic instruments to carry out the testing of Safety Helmets, Eye protectors, Safety Hand Gloves, Safety Clothing and Safety Shoes. The manufacturers and user industries are extensively utilizing the facilities available in the laboratory.

TYPES OF NON-RESPIRATORY PERSONAL PROTECTIVE EQUIPMENT

Non-respiratory Personal Protective Equipment for various parts of the body can be divided into five broad groups.

1) Safety Helmet
2) Ear & Eye Protectors
3) Safety Hand Gloves
4) Safety Cloths
5) Safety shoes

Safety Helmet IS:2925



Helmet is one of the most important types of Personal Protective Equipment and widely used by the workers for protection against head injuries, which may be caused by falling /striking objects in industries like mining, tunneling, ship building, construction and engineering.

A blow to the head is the most common cause of all head injuries in the workplace. Sharp, heavy objects can penetrate & break open the skull causing deep cuts, fractures or brain injury. Safety helmet acts as a barrier against such hazards and it can also protect the head from flame, preventing burn injuries. Safety Helmet used for protection of head deflects object and distributes he force of the impact over the whole head, diffusing the gravity of the blow. A permanent extension of the shell over the eyes protects the face, and especially eyes from injury. The brim is a narrow rim surrounding the shell also helps to deflect objects away from the head. The chin strap holds the helmet securely in place. Ventilation holes in the shell allow circulation of air inside. Safety helmet should be of right size, to fit correctly and comfortably.

The hard shell of the safety helmet is designed to protect the head against impact. The specification for industrial safety helmets, as given in IS:2925-1984 is as follows.

Safety helmet shall be tested for shock absorption test where force transmitted from the head form to the base shall not be higher than 510 kgf. This test is required to be carried out after three conditions of the sample for 4 hrs. at $50^{O}C$ + 5, -10^{O} + 2 and with water flow (1 lir,.min.). For penetration test, safety helmet should withstand the impact of a steel plumb bob of 500 gm. With conical steel point having an included angle of 360 and a spherical point radius of not more than 0.5 mm from a clear height of 3.0 meters with the pointed end downwards on the top of the crown of the helmet without getting pierced, dented or suffering failure of any integral part. Other tests carried

out are heat resistance, flammability, disinfection and water absorption test.

EAR & EYE PROTECTORS

(a) Ear Protector: Hearing is one of life's most precious gifts. Exposure to loud noise can cause hearing loss. Such a loss is temporary and it is restored after a period of rest away from the noise source. Permanent hearing loss usually is the gradual decrease in hearing sensitivity over a period time. High level of noise can also create stress that can sometimes affect one's physical and mental well being & cause accident in the work place when people cannot hear instructions and warning signals. There are three basic types of ear protectors namely Ear Plugs, Canal caps, and Earmuff. Ear muffs and ear plugs are tested as per IS:6229-1980 & IS:9167-1979. It is believed that a properly carried out audiometric testing program will determine whether the hearing protective devices worn by the employees are in fact protecting their hearing system from noise. No matter how good a hearing protective device may be, its comfort has a great deal of influence on how well it will be accepted by the users.

(b) Eye Protector: Eyes are windows to the world and the best means of direct and instant communication that the body has with environment. If eyesight is lost, a curtain of darkness descends between us and the world, isolating us physically, psychologically, and emotionally. Hence, it is very much important to protect this vital part of our body by all means. Wearing right type of eye protection on the job is the key to the prevention of eye injury at work. Selection of proper eye protector according to the type of hazards is very much important. If, grinding, chipping and cutting operations are involved, there is a great risk of flying particles and dust, leading to eye injury. Industrial Safety spectacles with side shields are used for eye protection. Box cup goggles also provide protection against these hazards. Chemical splash goggles are used while handling chemicals. Welding goggles or optical filters should be used against radiation hazards. Improper use of eye protectors can lead to eye injury or eye fatigue and there is also a chance of accident.To ensure quality of eye protectors, its samples are tested as per BIS specification IS:5983-1984 / IS:7524 -1980 Part-I / Part-II for stability at elevated temperature 55^{O}C in hot air oven. Robustness test is carried out for glasses after conditioning them at (i) 550C & (ii) -50C for one hour. The important tests are spherical and cylindrical power test and transmittance test for specific radiation for which they are used. In case of chemical goggles, chemical splash test is carried out to check resistance against splashes. Face shields are tested as per IS:8521-1977 and IS:1994 for impact test, robustness test, transmittance test and flammability.

SAFETY HANDGLOVES

Protection of hands and arms becomes necessary when workers have to handle materials having sharp end, sharp edges of hot and molten metals, chemicals and corrosive substances. Whenever machinery is in use, hands are at risk from mechanical hazard. Safety hand gloves will give protection from lacerations, amputation with punctured flesh and bone leading to serious infection. They also protect from destruction of tissue, severe burns, frost bite leading to loss of fingers and toes. Contact with irritating substances can lead to inflammable of the skin and dermatitis caused by chemical and biological agents.

Safety hand gloves are made of leather, canvas, PVC coated fabric, Rubber etc. They are tested against IS:2573-1986, IS:6994-1973, IS:4770-1991 & 4501-1981 for chrome content, tongue tear test, braking strength, tensile strength, elongation at break and resistance to chemicals, etc.

SAFETY CLOTHING

In hazardous work environment, the skin is the most vulnerable part of our body to get physical injury and infection from harmful exposures. The skin has two layers. The epidermis or the outer layer constantly sheds dead cells and replaces them with new ones. The dermis which forms the inner layer contains sweat glands, nerves endings, oil, etc. The skin acts as a barrier against harm from sunlight, bacteria and physical injury. However, the protective skin of human body cannot withstand with penetration of harmful chemicals and solvents. A number of chemicals are absorbed through the coetaneous root without one being aware of it. The harmful effect of this can be severe and long effects are often irreversible.

SAFETY SHOE

Adequate protection may have to be provided to the workers employed in certain jobs where there may be risk of feet injury in handling of heavy materials, exposure to caustic and corrosive liquid, oils and grease, molten metals, etc. Common foot and leg protective equipment are safety shoes and boots, leggings, foot guard and leg guards.

There are various types of safety shoes such as Ankle Shoe, Jodhpuri Shoe, Derby Shoe, Safety Knee Boots and Safety Gum Boots.

The main feature of safety shoes is carbon steel toe cap of thickness 1.8 mm $\pm$ 0.2 which can withstand an impact of 14 kg force for protection of our toe. The upper leather conforms to IS:5677-1992. The mass of complete pair of safety shoe size 8 (Derby) should not exceed 1200 gm. Laces should conform to IS:4778-1982 and it should be tested for oil resistance / chemical resistance, hardness tensile strength / elongation at break, relative density and if required for antistatic property.

Safety Belt Full Body Harness	**IS : 3521**
	1. Static Test
	2. Dynamic Test

PERSONAL PROTECTIVE EQUIPMENT – RESPIRATORY

The consumers of the respirator have a bigger role to play in maintaining the quality of production by sending a sample of respirator procured by them to the Central Labour Institute for testing to have a cross check. The other difficulty encountered in the production of the good quality of respirator is the production of components by different manufacturers. Unless all the component manufacturing units. (e.g. units manufacturing activated carbon, particulate filters etc.) do not adhere to the quality of production required to meet the specification of a respirator, a respirator manufacturing programme may not be a success. Hence, in the present situation, a consumer or a manufacturer of respirator or a manufacturer of components of respirator should utilize the available testing facilities in the CLI to produce a respirator of a standard quality.

New Test

i) BIS 9473, FFP1, FFP2, FFP3
ii) Gas Filter IS: 15323 – 2003

A
B
E
K
Type 1, 2, 3

CARE & EFFECTIVE USE OF NON-RESPIRATORY PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment should always be carefully inspected, repaired and maintained in its original condition. For this purpose, following points must be kept in mind.

- Proper maintenance of safety helmet is required to be done by regular checking for cracks, dents and for broken straps. The sweatbands and cradle of the safety helmet should be washed with warm, soapy water or suitable detergent solution.
- Goggles must be frequently inspected while in service. See that damage parts, lenses, etc. are replaced before they cause any discomfort or result in loss of protection.
- Goggles should be kept clean and it should be ensured that they are sterilized frequently lenses should be wiped carefully with a clean, soft cloth.
- Goggles should always be kept in a substantially clean case or box to prevent scratching. It should not be thrown carelessly into boxes or on to the bench. Never carry goggles loose in the pocket.
- Provision of a comfortable Safety Shoe. A good fitting will be cramp or chafe the feet on the job. Keep shoes as dry as possible.
- Do not allow shoes to get deteriorated beyond repairable condition, whether the repair is undertaken by the employee or employer.
- Replace worn out sole before it gets further damaged.
- For protection against acids, caustics, solvents and similar materials, fabrics impregnated or coated with plastics are used for garments.
- Use warm soapy water for cleaning chemical resistant clothing & gloves.
- Protect rubber equipment from excessive heat and mechanical damage.

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Smt. M.K.Mandre
Assistant Director (Industrial Hygiene)
Central Lbaour Institute, DGFASLI
Sion, Mumbai 400 022

INVITING ARTICLE FOR INDOSHNEWS

INDOSHNEWS is a quarterly newsletter that facilitates exchange of ideas and data developed through research, study and surveys in the areas of occupational safety and health. DGFASLI invites articles from individuals, industry, industrial associations, trade unions, professional bodies etc. having information on OS&H and willing to share the same with others at the national and international level.

1. Manuscripts for publication should be typed in double space within 3 to 4 A4 size sheets only on one side of the paper and sent in duplicate to the Editor-in-Chief.

2. Once the manuscripts are accepted for publication, publisher reserves the right to make editorial changes as may be necessary to make the article suitable for publication; and publisher reserves the right not to proceed with publication for whatever reason.

3. Authors should take care to ensure the accuracy of data and reference.

QUOTABLE QUOTES

- Safety glasses: All in favour, say "Eye!"
- Move your ladder to avoid reaching.
- Hard hats, they're not just for decoration.
- To avoid a scene, keep your workplace clean
- Safety first, to last.

डीजीफासली की एक झलक

कारखाना सलाह सेवा और श्रम संस्थान महानिदेशालय (डीजीफासली) भारत सरकार के श्रम और रोजगार मंत्रालय का एक सम्बद्ध कार्यालय है। कारखानों और गोदियों में व्यावसायिक सुरक्षा और स्वास्थ्य से सम्बन्धित राष्ट्रीय नीतियां बनाने में एक तकनीकी पक्ष के रूप में मंत्रालय की सहायता करने के लिए तथा कार्यस्थल पर कामगारों की सुरक्षा, स्वास्थ्य, दक्षता और कल्याण संबंधी मामलों पर राज्य सरकारों और कारखानों को परामर्श देने के लिए भारत सरकार के श्रम मंत्रालय के अधीन डीजीफासली का गठन १९४५ में किया गया था । यह देश के प्रमुख पत्तनों पर सुरक्षा और स्वास्थ्य विधानों का प्रवर्तन भी करता है।

कारखाना सलाह सेवा और श्रम संस्थान महानिदेशालय (डीजीफासली) की संरचना में निम्नलिखित शामिल है :-

- मुंबई स्थित मुख्यालय
- मुंबई स्थित केंद्रीय श्रम संस्थान
- कोलकाता, चेन्नई, फरीदाबाद और कानपुर स्थित क्षेत्रीय श्रम संस्थान

डीजीफासली की संकल्पना:- सभी के लिए कारखानों और पत्तनों में कार्यस्थल पर सुरक्षा और स्वास्थ्य सुनिश्चित करने के लिए ज्ञान का सृजन, नीतियां बनाने, मानक और व्यवहार में उत्कृष्ठ संगठन के रूप में स्थापित होना डीजीफासली की संकल्पना है।

डीजीफासली का उदेश्यः- डीजीफासली का उदेश्य भागीदारी, मार्गदर्शन, विशिष्ट क्षेत्रों में नियामक क्रियाकलापों के माध्यम से कारखानों और पत्तनों में सुरक्षित और स्वस्थ कार्यस्थल के लिए व्यावसायिक सुरक्षा और स्वास्थ्य में सुविज्ञता उपलब्ध कराना, और सूचनाओं का आदान-प्रदान करना डीजीफासली का उदेश्य है।

डीजीफासली संगठन में मुंबई स्थित मुख्यालय, मुंबई स्थित केन्द्रीय श्रम संस्थान, चेन्नई, कानपुर, कोलकाता और फरीदाबाद स्थित चार क्षेत्रीय श्रम संस्थान तथा मुंबई, जवाहर लाल नेहरू पोर्ट, कांडला, मार्मुगांव, न्यू मैंगलोर, चेन्नई, तूतीकोरिन, कोच्चि, विशाखापट्नम, कोलकाता और पारादीप स्थित ग्यारह गोदी सुरक्षा निरीक्षणालय हैं। डीजीफासली संगठन में लगभग १२९ अधिकारियों (इंजीनियर, फिजीशियन, औद्योगिक हाइजिनिस्ट, शरीर वैज्ञानिक, एर्गोनॉमिस्ट, औद्योगिक मनौचिकित्सक, कमर्शियल आर्टिस्ट आदि) और ८१ तकनीकी कर्मचारी सदस्यों का बहुआयामी दल है। डीजीफासली और केन्द्रीय श्रम संस्थान, मुंबई में विभिन्न विशिष्ठ प्रभाग/स्कंध सम्मिलित हैं। यह संगठन आगे, विकास और बढती मांग को पूरा करने के लिए तत्पर है। विकासशील देश में जहां विभिन्न और जटिल प्रक्रिया उद्योग बडी संख्या में विद्यमान है वहां कामगारों की सुरक्षा और संरक्षण एक कठिन कार्य है। तकनीक, औद्योगिक समाज की साख और समर्पित कर्मचारियों की शक्ति से सज्जित संगठन आने वाले कल की चुनौतियों को पूरा करने में सक्षम है। यह कार्यस्थल को सुरक्षित बनाने के लक्ष्य के लिए कृतसंकल्प है।

वेबसाइट : www.dgfasli.nic.in देखें।

ONE DAY NATIONAL SEMINAR ON OCCUPATIONAL RISK MANAGEMENT ON FEBRUARY 18, 2011 AT REGIONAL LABOUR INSTITUTE, CHENNAI

A one day National Seminar on *Occupational Risk Management* was conducted by the Risk Observatory Cell in the Auditorium of Regional Labour Institute, Chennai on February 18, 2011.

Seated from left to right: Shri K.Balasubramanian, Director (Safety), RLI, Chennai; Shri P.K.N.Panicker, President Of Chemical Industries Association, Chennai; Dr.M.Rajaram, Dy. Director General, DGFASLI, Mumbai and Dr.R.K.Elangovan, Director (Safety) & In-Charge, RLI, Chennai. Standing at the podium is Shri G.M.E.K.Raj, Dy. Director General & HOD, DGFASLI, delivering the inaugural address.

Hazard is the potential of a substance or a system to cause harm and the risk is the likelihood of an occurrence of a hazard. Risk is the product of probability and consequence of an occurrence of a hazard and Risk Analysis deals with analyzing the risk, qualitatively and quantitatively. Risk Assessment is a decision making process by which acceptability of the risk is ensured. The Risk Management is a process of identification, assessment and prioritization of risk followed by coordinated and economical application of resources to minimize, monitor and control the probability and/or the impact of undesired events.

As a part of implementation of the National Policy and keeping in view the necessity for effective management of occupational risks in industries, this one day National Seminar on *Occupational Risk Management* was organized at RLI, Chennai on February 18, 2011 by the Risk Observatory Cell set up at RLI, Chennai. There was a tremendous response for the National Seminar and the seminar was attended by one hundred and ninety six participants comprising of Management Executives, Supervisors, Safety Professionals, Doctors, Factory Inspectors and Professors from Educational Institutions.

The Seminar was inaugurated by the Chief Guest Shri G.M.E.K.Raj, the then Director General, DGFASLI, Mumbai. The welcome address was delivered by Dr.R.K.Elangovan, Director-in-Charge, RLI, Chennai. The Key Note Address was delivered by Dr.M.Rajaram Dy.Director General, DGFASLI. Shri P.K.N.Panicker, President, Chemical Industries Association, Chennai, delivered Presidential Address. Shri K.Balasubramanian delivered Vote of Thanks.

Technical presentations were made on the following topics:

Introduction to Risk Management & Consequence Studies, Risk Management in Chemical Industries, Risk Management in Engineering Industries, Risk Control & Management in Construction Industries and Emerging Trends in Risk Management.

These technical sessions were handled by eminent external speakers. Dr.R.K.Elangovan, Director-in-Charge handled one Technical Session on *Risk Control and Management in Construction Industries*.

The feed back received from the participants was excellent. A total number of One hundred and ninety six participants comprising of Management Executives, Supervisors, Doctors, Factory Inspectors and Professors from Eucational Institutions attended the Seminar.

SEMINAR ON EMERGING ISSUES ON OCCUPATIONAL SAFETY & HEALTH MANAGEMENT ON FEBRUARY 02, 2011 AT REGIONAL LABOUR INSTITUTE, KANPUR

Chief Guest Hon. Vice Chancellor, CSJM University, Kanpur Prof. H.K. Sehgal is inaugurating the seminar. Sitting on the dias from left: Shri S.B. Mathur, DDG, DGFASLI; Shri GMEK Raj, HOD & DDG, DGFASLI; Prof. (Dr.) R.K. Khitoliya, Director H.B.T.I., Kanpur & Dr. Brij Mohan DD (IH) & HOO RLI, Kanpur.

Regional Labour Institute, Kanpur organized a seminar on *Emerging Issues on Occupational Safety & Health Management* on February 02, 2011. The seminar was aimed to provide an opportunity to interact and exchange views with professionals and experts on Occupational Safety & Health Management which will help stakeholders in preparing strategies to meet the emerging challenges in this field. The seminar was attended by about one hundred and twenty seven delegates from eighty six industries.

The seminar was inaugurated by Hon. Prof. H.K. Sehgal, Vice Chancellor, CSJM University and inaugural session was presided over by Shri G.M.E.K. Raj, Head of Department & Deputy Director General, FASLI, Mumbai. Professor Sehgal stressed that that productivity of the organization is directly linked with the health of the workers. Healthy work force will yield high production and ultimately better productivity. He advocated development

of sound safety management system in industries to deal with emerging challenges of the future. He also shared his professional experiences with the delegates of the seminar.

Shri GMEK Raj, Head of Department & Deputy Director General, DGFASLI, in his presidential address highlighted the various emerging issues in the field of OSH management and stressed for comprehensive planning for safety to face the emerging issues. He discussed the government initiatives & declaration of National Policy to meet the challenges. He announced that RLI, Kanpur has been declared by the Government of India as a centre of excellence for Tannery & Sugar Industry. He declared that the best paper in each technical session will be published in INDOSHNEWS, an official newsletter of DGFASLI.

Prof. (Dr.) R.K. Khitoliya, Director H.B.T.I., Kanpur graced the occasion as a Guest of Honour and in his address he pointed out that industry should assess its own strength & weakness in the matter of prevailing occupational safety system. He said that engineers and safety professionals are aware about the techniques & technologies involved for developing a safe system but they should not allow complacency in day to day work. He praised the role of RLI, Kanpur and asked industries to utilize his technical expertise to develop OSH system.

Shri S.B. Mathur Deputy Director General, DGFASLI gave the address welcoming chief guest, invitees and delegates. He gave brief overview of the activities carried out by the DGFASLI and made the delegates aware about various technical sessions to be held.

During the seminar following three technical sessions were organized.

The first technical session was on *Occupational Safety & Health Management: Future Strategy*. This session was chaired by Shri G.M.E.K. Raj, Head of Department & Deputy Director General, DGFASLI, Mumbai & five following technical papers were presented by the OSH Experts in this session on various aspects of emerging issues of OSH Management:

Challenges in Occupational Safety & Health in 21st Century – Strategy by Dr. E. Laxminarayana, Dy. Director (ST&P), Central Labour Institute (DGFASLI), Mumbai.

Behavioral Based Safety by Mohd. Zahid Ansari, Manager-Environment, Health and Safety, Moserbaer Photo Voltaic Ltd., Greater Noida.

Role of Safety Committee in Occupational Health & Safety Management by Shri P.N. Singh, Manager (Safety), Tata Motors Ltd, Lucknow.

Role of Employees for Organizational Excellence by Shri Arvind Kumar Drave, Administrative Officer & Head (Training), Indian Institute of Technology Kanpur.

The Expansion of the Existing Classification of Occupational Diseases by International Labour Office, Geneva by Dr. T K Joshi, Director, Occupational and

Environmental Medicine Programme, Centre for Occupational Environ. Health, MAMC, New Delhi.

The second technical session was organised as a poster session where following papers on the specialized subject were available for open discussion with authors.

Emerging issues on Safety & Health in Process Safety by Shri Pratik Sharma, Manager- F&S, Chambal Fertilisers & Chemicals Limited, Kota.

Education and Training in Safety by Shri Diwakar Vishwakarma, Dy. Manager, Environment & Safety, WIMCO Ltd. Bareilly.

Behavior Based Safety by Shri Madhur Saxena, Tata Chemicals Ltd, Babrala.

Training & Education in Safety: A Tool to Generate Awareness by Shri Mohit Sharma and Shri Jaswant Singh, PDIS Students, Batch 2010-11.

Incident investigation: A Technique by Shri Sudhir Kumar Dixit, Manager (Safety), ACC Limited, Kymore Cement Works, Katni.

The poster session recieved a huge response. The delegates enthusiastically participated and actively interacted with the authors.

The Third Technical Session was devoted on Technical Aspects of *Occupational Safety & Health: Emerging Issues & their Management*. The session was chaired by Shri S.B. Mathur Deputy Director General FASLI, Mumbai and the following papers were presented:

Industrial Hygiene Challenges and Control Strategy in the Use of Hazardous Chemicals by Shri P.B. Pal, Director (Industrial Hygiene), Central Labour Institute, Mumbai.

Risk Assessment: Recent Trends & Practices by Dr. R. K. Elangovan, Director (Safety) & In Charge Regional Labour Institute, Chennai.

Construction Safety by Shri R.P.Singh, Superintending Engineer, Central Public Works Department (CPWD), Kanpur.

Emerging issues of Safety & Health in Process Industry by Shri N.P.Rao, Deputy General Manager (Fire & Safety), IFFCO, Aonla, Bareily.

Current Issues of Safety & Health in Construction Industry by Shri A.K. Tripathi, HSE Advisor, L& T Ltd.

During the seminar, three students of PDIS batch 2009-2010, Mr. Amardeep Singh, Ambuja Cement Ltd., Roorkee who topped the batch, Mr. P.K. Singh Ordnance Factories Itarsi and Dr. P.K. Singh Hindalco

industries Ltd., who stood second and third in merit respectively were felicitated by the Chief Guest.

Dr. Brij Mohan, Deputy Director (IH) & Head of Office, Regional Labour, conveyed vote of thanks at the end to all invitees, delegates & press personnel and seminar ended with the National Anthem.

ONE DAY AWARENESS PROGRAMME ON IDENTIFICATION & PREVENTION OF SILICOSIS ORGANIZED BY DGFASLI IN COLLABORATION WITH DIRECTORATE OF FACTORIES, GOVT. OF ASSAM AT GUWAHATI ON FEBRUARY 10, 2011

On February 10, 2011 a one day awareness programme on *Identification & Prevention of Silicosis* was organized by DGFASLI, Ministry of Labour & Employment, Govt. of India, Mumbai, in collaboration with Inspectorate of Factories, Govt. of Assam at Guwahati. The objective of the programme was to enhance awareness about Silicosis. Shri Joydeep Baruah, Head of Environment Department, Assam Science Technology & Environment Council, Dr. K. K. Deka, Sr. Medical & Health Officer, Mahendra Mohan Chowdhury Hospital, Guwahati, Govt. of Assam, Smt. Z. R. Ahmed, ACS, Chief Inspector of Factories, Govt. of Assam and Shri U. K. Das, Director (Safety), Regional Labour Institute, Kolkata graced the awareness prgramme besides fifty seven dignitaries & delegates from twenty seven organizations. Shri C. Purakayasthya, Addl. Chief Inspector of Factories, Assam welcomed all dignitaries, participants and delegates to the seminar and Shri S. Das, Chief Inspector of Factories, Assam explained the programme perspective.

Left to right Smt. Z. R. Ahmed, ACS, Chief Inspector of Factories, Govt. of Assam, Shri U. K. Das, Director (Safety), Regional Labour Institute, Kolkata, Dr. K. K. Deka, Sr. Medical & Health Officer, Mahendra Mohan Chowdhury Hospital, Guwahati, Govt. of Assam & Shri Joydeep Baruah, Head of Environment Department, Assam Science Technology & Environment Council

Shri U. K. Das, Director (Safety), RLI, Kolkata underlined the importance of holding the awareness programme on *Identification and prevention of silicosis for the employees of silica based industries in Assam* in his speech. He invited the attention of the delegates to the health hazards responsible for causation of silicosis and the need for preventive measures.

The programme was formally inaugurated by Shri Joydeep Baruah, Head of Environment Department, Assam Science Technology & Environment Council followed by his inaugural speech.

There were two technical sessions. In the first technical session, Smt. Z. R. Ahmed, ACS, CIF, Assam presented a paper on *Accident Scenario and Statutory Compliance of SHE Legislation in Stone Crashing Industries, Cement Industries & Brick Field*.

The second paper was presented by Shri U. K. Das, Director (Safety), RLI, Kolkata on *Safety Philosophy & Accident Prevention.*

Health Hazards in Silica based Industries was the third paper delivered by Dr. S. K. Haldar, Deputy Director (Medicine), RLI, Kolkata.

In the second technical session, Dr. S. N. Banerjee, Deputy Director (IH), RLI, Kolkata presented his paper on *Work Environment Monitoring*.

The second presentation was from Dr. S. K. Haldar, Deputy Director (Med), RLI, Kolkata on *Identification & Prevention of Silicosis.*

Dr. D. C. Deka, Sr. Inspector of Factories, Assam presented a paper on *Understanding Silicosis*.

A session on feedback and suggestion was held which was chaired by Shri U. K. Das, Director (Safety), RLI, Kolkata & Smt. Z. R. Ahmed, ACS, Chief Inspector of Factories, Government of Assam. In this session, interactive discussions were held amongst the participants, speakers and enforcement authority. Questions/queries from the delegates were replied by the speakers.

The programme ended after distribution of Certificates and vote of thanks by Shri C. Purakayasthya, Addl. Chief Inspector of Factories, Government of Assam.

ONE DAY SEMINAR ON SAFETY AND PRODUCTIVITY IN TEA MANUFACTURING INDUSTRIES BY DGFASLI IN ASSOCIATION WITH INSPECTORATE OF FACTORIES, ASSAM AT SILCHAR ON FEBRUARY 22, 2011

Sitting from left to right: Shri C. Purakayasthya, Addl. Inspector of Factories, Government of Assam; Shri Alok Mahavir, Chairman, Indian Tea Association, Surma Valley Branch, Assam; Shri U. K. Das, Director (Safety), Regional Labour Institute, Kolkata and Shri P. K. Mishra, Chairman, Tea Association of India, Barak Valley Branch, Assam.

National Policy on Safety, Health & Environment envisages and provides practical guidance and creating awareness among employees in their effort to reduce the incidence of occupational safety & health risks at their workplaces and to impress upon employers & employees to provide safe & healthy working condition. As a part of the implementation of the National Policy, a one day seminar on *Safety & Productivity in Tea Manufacturing Industries* was organized by DGFASLI, Ministry of Labour & Employment, Govt. of India in collaboration with Inspectorate of Factories, Govt. of Assam at Silchar, Assam on February 22, 2011. This seminar was organised with an aim to improve the awareness towards SHE by the participants.

Shri Alok Mahavir, Chairman, Indian Tea Association, Surma Valley Branch, Assam, Shri P. K. Mishra, Chairman, Tea Association of India, Barak Valley Branch, Assam, Smt Z. R. Ahmed, ACS, Chief Inspector of Factories, Government of Assam & Shri U. K. Das, Director (Safety), Regional Labour Institute, Kolkata graced the seminar besides one hundred and two dignitaries & delegates from fifty three organizations.

Shri G. D. Paul, Inspector of Factories, Assam welcomed all dignitaries, participants and delegates to the seminar and Shri C. Purakayasthya, Addl. Chief Inspector of Factories, Assam explained the programme perspective to the participants.

Shri U. K. Das, Director (Safety), RLI, Kolkata in his speech, invited the attention of the delegates about the role of the Government, Industries, Trade Unions, Institutions and other OSH Stakeholders on improvement of safety and productivity in tea manufacturing industries.

The seminar was formally inaugurated by lighting the inaugural lamp by the Chief Guest Shri Alok Mahavir, Chairman, Indian Tea Association, Surma Valley Branch, Assam followed by his inaugural speech.

The seminar had two technical sessions. In the first technical session, Shri U. K. Das, Director (Safety), RLI, Kolkata presented a paper on *SHE Management and Accident Prevention Programme in Industries*.

Safety Measures Adopted by Management for Reduction of Accident was presented by Shri I. V. Ubadia, Manager, Roskandi, Tea Estate, Silchar.

Dr. Rajat Gupta, Professor, NIT, Silchar presented first paper in the second technical session on *Productivity Improvement – Issues and challenges of Tea Industries of Barak Valley.*

The second presentation was by Shri H. Chattopadhyay, Deputy Director (Safety), RLI, Kolkata on *Common Causes of Accident and Use of PPE in Accident Prevention.*

The final presentation was from Shri S. K. Dey, Inspector of Factories, Tezpur on *Integration of Safety and Productivity in Tea Industries of Barak Valley*.

Shri B. P. Borthakur, Law Assistant, Chief Inspector of Factories, Government of Assam conveyed thanks to the DGFASLI, Government of India, Ministry of Labour & Employment, for extending cooperation and all kind of assistance for organizing the seminar. He said that the seminar was a grand success in creating awareness for improvement of safety and productivity in tea manufacturing industries. The programme ended with distribution of certificates to the participants.

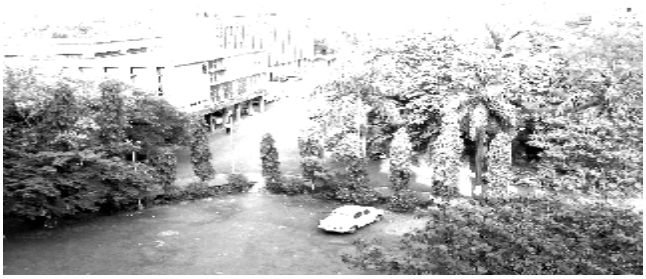
SAFETY POSTER

QUOTABLE QUOTES

- Ignoring a warning can cause much mourning.
- A **CASUAL** attitude toward **safe TY** = **CASUALTY**
- Some have eyes and cannot see.
  Some have ears and cannot hear.
  So lets be wise
  And wear our safety gear.

CENTRAL LABOUR INSTITUTE: MUMBAI

During the quarter from January 2011 to March 2011, Central Labour Institute carried out several activities of which important ones are given below.



Studies

Assessment of Airborne Chemical Contaminants in the Work Environment of a Petrochemical Refinery in Kerala (Pal, P. B. and Metkari, M. A., Industrial Hygiene Division, Central Labour Institute, Mumbai)

Two Assessment Studies of Airborne Contaminants in the Workzone of Chemical Factory in Maharashtra (Mandre M.K., Industrial Hygiene Division, Central Labour Institute, Mumbai)

Assessment of Airborne Contaminants in the Workzone of a Tyre Factory in Maharashtra (Mandre M.K., Industrial Hygiene Division, Central Labour Institute, Mumbai)

Assessment of Airborne Contaminants in the Workzone of a Chemical Factory in Gujarat (Mandre M.K., Industrial Hygiene Division, Central Labour Institute, Mumbai)

Safety Audit at a Ceramic Industry in Orissa (Shri P.B.Pal & Shri S.C.Sharma, Major Hazard & Chemical Safety Division, Central Labour Institute, Mumbai)

Training Programme

The Industrial Hygiene Division conducted a three-day training programme on *Recognition and Evaluation of Chemical Hazards at Workplace* from February 16 to 18, 2011. The programme was attended by twenty six participants from eleven organizations.

Workshops/Seminars/Conference

The Staff Training/Productivity Division conducted a three-day workshop on *Productivity and Quality Improvement through Effective Employee Participation* from January 19 to 21, 2011. Eight participants from one organization attended the workshop.

The Staff Training/Productivity Division conducted a one-month specialized certificate course for *Supervisors working in Hazardous Process Industries* from January 10, 2011 to February 09, 2011. Twenty five participants from fifteen organistaions attended the course.

The Major Hazards & Chemical Safety Division conducted a workshop on *Dispersion Modelling & Impact Assessment of Major Toxic & Flammable Releases* from February 23 to 25, 2011. Seventeen participants from 13 organisations attended the workshop.

The Major Hazards & Chemical Safety Division conducted a workshop on *Noting/Drafting in Hindi* for CLI & DGFASLI Officers & Staffs on March 10, 2011.

REGIONAL LABOUR INSTITUTE, KANPUR

During the quarter from January 2011 to March 2011, Regional Labour Institute carried out studies, training programmes etc. which are described here.

Training Programmes

The Institute conducted a training programme on *Chemical Hazards and their Control* from February 23 to 25, 2011 under the Plan Scheme. Four participants representing two organizations participated.

Workshops/Seminars/Conference

The institute conducted a seminar on *Emerging Issues on Occupational Safety & Health Management* on February 02, 2011. The seminar was attended by one hundred and twenty seven delegates representing eighty eight industries/organizations.

Paper/Presentations/Talks

Shri Anjan Chakraborty, Assistant Director (Safety) delivered a talk on January 27, 2011 at I.I.T. Roorkee on *Safety Audit* in a training programme organised by Chemical Engg. Department of I.I.T. Roorkee, for the officials of the Pollution Control Boards. Forty participants from Central & State Government offices attended the programme.

Dr. C. Bhattacharya, Deputy Director, (Industrial Medicine), delivered a talk on March 11, 2011 on *Occupational Diseases* in a training programme organised by at Small Arms Factory, Kanpur. The programme was attended by forty officials.

REGIONAL LABOUR INSTITUTE, CHENNAI

During the quarter from January 2011 to March 2011, Regional Labour Institute carried out following technical activities.

Studies

Safety Audit was conducted at Fibre Glass Manufacturing Industry in Andhra Pradesh (Elangovan, R.K., Safety Division, Regional Labour Institute, Chennai)

Training Programme

The institute conducted a three-day training programme on *Management of Hazardous Substances* from February 01 to 03, 2011. The training programme was attended by twenty two participants comprising of Management Executives and Supervisors.

Workshops/Seminars/Conference

The institute conducted a one-day national seminar on *Occupational Risk Management* on February 18, 2011. One hundred and ninety six participants comprising of Management Executives, Supervisors, Doctors, Factory Inspectors and Professors from Eucational Institutions attended the seminar.

Paper/Presentations/Talks

Dr.R.K.Elangovan, Director (Safety), delivered a talk on *Material Handling in Port Trusts, Types of Cranes used and their Safe Operations* on January 20, 2011 to the delegates of two days workshop on *Cranes and Lifting Tackles* in Bangalore organized by Indian Institution of Plant Engineers (IIPE), Karnataka Chapter. The workshop was attended by forty five management executives.

Dr.R.K.Elangovan, Director (Safety), delivered talks on *Occupational Safety and Health – Legal Compliance* in the training programme on *Latest Developments in Environment and Safety Legislation and Its Compliance* organized in Chennai and Mumbai by Green Tech. Foundation, New Delhi, on January 21 and 22, 2011 and on January 28 and 29, 2011 respectively. Thirty two management executives attended.

Dr.R.K.Elangovan, Director (Safety), delivered a talk on *Safety Awareness* in the inaugural function of seminar on *Industrial Safety* organized by Confederation of Indian Industry at Chennai on 25.1.2011. About one hundred management executives attended.

Dr.R.K.Elangovan, Director (Safety), delivered a talk in the Inaugural Function of the one day Seminar on *Emergency Management* at the R&D Centre of Chennai Petroleum Corporation, Manali, Chennai on February 08, 2011 and handled a technical session by delivering a talk on Emergency Preparedness. The function was attended by one hundred fifty management executives, supervisors, workers and trade union leaders.

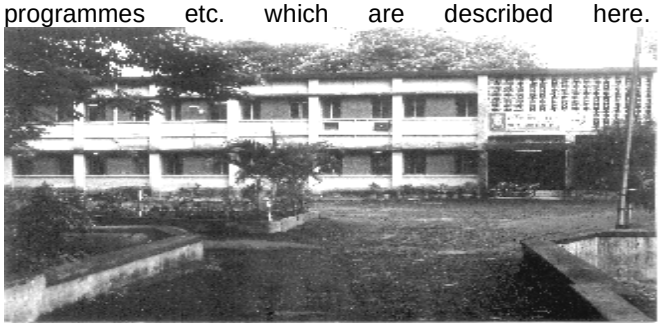
Dr.R.K.Elangovan, Director (Safety), presented a paper on *Risk Assesment-Emerging Trends and Practices* in the seminar on *Emerging Issues on Occupational Safety and Health Management* organized at RLI, Kanpur on February 02, 2011. One hundred and twenty seven participants attended the seminar.

Dr.R.K.Elangovan, Director (Safety), delivered a talk on *Safety in Garment Industries* during National Safety Day Celebration on February 04, 2011 organized by Triumph International (India) Pvt. Ltd., Singaperumalkoil, Kanchipuram district in their plant. Five hundred women comprising of management executives, supervisors and workers cadre attended the celebration.

Dr.R.K.Elangovan, Director (Safety), delivered a talk on *Health, Safety and Environment on Legal Context in India* to the participants of the seminar on *Safety, Synergy-Different Dimensions Moral, Legal and Financial Aspects* organized by NIST Institute Pvt. Ltd., Chennai along with NEBOSH, UK, Chennai on March 31, 2011. Forty senior executives attended the seminar.

REGIONAL LABOUR INSTITUTE, KOLKATA

During the quarter from January 2011 to March 2011, Regional Labour Institute carried out studies, training programmes etc. which are described here.



Training programmes

The institute conducted a two-day training programme in three batches for Post Diploma in Industrial Safety Course for the session 2010-11 of Asian Workers Development Institute, Rouekela, Orissa from January 27 to 28, 2011, January 31 to February 01, 2011 & February 03 to 04, 2011 respectively. Ninety one participants attended the programme.

The institute conducted a two-day training programme for Post Diploma in Industrial Safety Course for the session 2010-11 of Chinmay Institute of Fire & Safety Engineering, Rouekela, Orissa, from March 15 to 16, 2011. Thirty seven participants attended the programme.

The institute conducted a two-day training programme for Post Diploma in Industrial Safety Course for the session 2010-11 of Dr. Ambedkar Memorial Institute of Industrial Safety (AMIIS), Rourkela, Orissa from March 28 to 29, 2011. Four hundred forty seven participants attended the programme.

The institute conducted a five-day training programme under Plan Scheme on *Safety, Health & Environment at Workplace for Supervisors & Senior Workers* from March 07 to 11, 2011. Twenty six candidates attended the programme.

The institute conducted a five-day training programme on *Refresher Course for Plant Medical Officers* from March 21 to 25, 2011. Eleven Medical Officers from various industries attended the programme.

The institute conducted the AFIH course during the year 2010. The course commenced from December 01, 2010 and successfully ended on February 28, 2011. Three candidates attended the course.

Paper/Presentations/Talks

Shri U. K. Das, Director (Safety), delivered talk on *Safety Philosophy & Accident Prevention* in one day awareness programme on *Identification & Prevention of Silicosis*

organized by DGFASLI, Ministry of Labour & Employment, Govt. of India in collaboration with Inspectorate of Factories, Govt. of Assam in Guwahati on February10, 2011. Fifty seven participants attended the programme.

Dr. S. K. Haldar, Dy. Director (Industrial Medicine), delivered talk on *Health Hazards in Silica Based Industries* & *Identification & Prevention of Silicosis* in one day awareness programme on *Identification & Prevention of Silicosis* organized by DGFASLI, Ministry of Labour & Employment, Govt. of India in collaboration with Inspectorate of Factories, Govt. of Assam in Guwahati on February 10, 2011. Fifty seven participants attended the programme.

Dr. S. N. Banerjee, Deputy Director (Industrial Hygiene), delivered talk on *Work Environment Monitoring* in one day awareness programme on *Identification & Prevention of Silicosis* organized by DGFASLI, Ministry of Labour & Employment, Govt. of India in collaboration with Inspectorate of Factories, Govt. of Assam in Guwahati on February 10, 2011. Fifty seven participants attended the programme.

Shri U. K. Das, Director (Safety), presented a paper on *SHE Management and Accident Prevention Programme in Industry* in one day seminar on *Safety & Productivity in Tea Manufacturing Industries* organized by DGFASLI, Ministry of Labour & Employment, Govt. of India in collaboration with Inspectorate of Factories, Govt. of Assam, Govt. of Assam at Silchar, Assam on February 22, 2011. One hundred and two participants attended the seminar.

Shri H. Chattopadhyay, Dy. Director (Safety), presented a paper on *Common Causes of Accident and Use of PPE in Accident Prevention* in one day seminar on *Safety & Productivity in Tea Manufacturing Industries* was organized by DGFASLI, Ministry of Labour & Employment, Govt. of India in collaboration with Inspectorate of Factories, Govt. of Assam, Govt. of Assam at Silchar, Assam on February 22, 2011. One hundred and two participants attended the seminar.

Dr. S. K. Haldar, Dy. Director (Industrial Medicine), presented a paper on *Occupational Health Hazards & its prevention* in International Seminar on *Occupational Health & Hygiene- Update* organized by MDC on Safety, Health & Environment, Bhubaneswar, Orissa on February 25, 2011.

Dr. S. N. Banerjee, Deputy Director (Industrial Hygiene), presented a paper on *Monitoring of Work Environment* in International Seminar on *Occupational Health & Hygiene-Update* organized by MDC on Safety, Health & Environment, Bhubaneswar, Orissa on February 25, 2011.

इंडोश्नेट

भारत सरकार का श्रम एवं रोज़गार मंत्रालय व्यवसायिक सुरक्षा और स्वास्थ्य सूचना प्रणाली पर इंडोश्नेट नामक राष्ट्रीय नेट वर्क का विकास कर रहा है। श्रम मंत्रालय का एक संबद्ध कार्यालय, कारख़ाना सलाह सेवा एवं श्रम संस्थान महानिदेशालय इस नेट वर्क प्रणाली के सफल कार्यान्वयन में सहायता देता है । इस नेट वर्क का उद्देश्य व्यवसायिक सुरक्षा और स्वास्थ्य संबंधी राष्ट्रीय जानकारी सुदृढ़ करना और लाभहानि रहित आधार पर इसका आदान-प्रदान करना है ताकि हमारे समग्र सूचना स्रोतों का परस्पर लाभ के लिए उपयोग हो सके। आपस में सूचना या जानकारी की यह सहभागिता केवल राष्ट्रीय स्तर तक ही सीमित नहीं होगी बल्कि इसमें अंतर्राष्ट्रीय स्रोत भी शामिल होंगे । इस जानकारी का आदान-प्रदान ई-मेल के साथ-साथ डाक/कुरियर सेवा द्वारा किया जाएगा । यदि औद्योगिक संगठनों, संस्थानों, उद्योग संघों, मज़दूर संघों, व्यवसायिक निकायों और ग़ैरसरकारी संगठनों के पास व्यवसायिक सुरक्षा स्वास्थ्य संबंधी कोई जानकारी हो और वे राष्ट्रीय और अंतर्राष्ट्रीय स्तर पर उक्त जानकारी बाँटना चाहते हों तो कारख़ाना सलाह सेवा एवं श्रम संस्थान महानिदेशालय की ओर से इस नेट वर्क के सदस्य के रूप में भाग लेने के लिए उनका स्वागत है । इच्छुक इकाइयाँ संगठनात्मक रूंपरेखा संबंधी प्रोफार्मा के लिए महानिदेशक, कारख़ाना सलाह सेवा एवं श्रम संस्थान महानिदेशालय, केंद्रीय श्रम संस्थान भवन, एन.एस.मंकीकर मार्ग, सायन, मुम्बई-४०० ०२२ से संपर्क करें ।

टिप्पणी : जिन इकाइयों ने हमारे पहले आग्रह के संदर्भ में संपर्क किया है और निर्धारित प्रोफार्मा में रूपरेखा भेज दी है, वे दुबारा आवेदन न करें ।

CIS: INTERNATIONAL OCCUPATIONAL SAFETY AND HEALTH INFORMATION CENTRE

CIS (from the French name, Centre International d'information dr 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 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 91 Centres.

Central Labour Institute, Mumbai has been designated as the CIS National Centres of India. CIS can offer you rapid access to comprehensive information on occupational safety and health through its abstracts on latest OSH publications, the CIS Thesaurus and ILO Bulletin 'Safety and health at Work'.

Assessment of Airborne Chemical Contaminants in the Work Environment of a Petrochemical Refinery in Kerala **(Pal, P. B. and Metkari, M. A., Industrial Hygiene Division, Central Labour Institute, Mumbai)**

An Industrial Hygiene Study was carried out in a large scale public sector refinery which manufactures petrochemicals including propylene and polybutenes, Petroleum Hydrocarbon Solvent and Mineral Turpentine Oil and other value-added products, besides conventional petroleum products. Airborne concentration levels of 10 chemical contaminants, namely, Benzene, Toluene, Diethanolamine, Naphtha, Naphthalene, Sulphur Dioxide, Hydrogen Sulphide, Sulphur Dust, Welding Fumes and Particulate Matter, at 22 different locations from eleven Units/Depts. of the company were assessed. Amongst the findings, the mean airborne concentration of Sulphur Dioxide was 0.80 ppm and 1.0 ppm at two locations which was within its PLE of 2 ppm. However, it exceeded its TLV-STEL of 0.25 ppm. Similarly, the airborne concentration of Hydrogen Sulphide was within its PLE of 10 ppm at 6 locations but the same exceeded its TLV of 1 ppm. Moreover, the airborne concentration of Benzene also exceeded both its PLE and TLV of 0.5 ppm at three locations. Recommendations offered were – minimization of fugitive emissions /leakages of chemical contaminants in the work environment, use of appropriate PPE and their procurement as per BIS standards, Health and Safety training to workers, etc.

Assessment of Airborne Contaminants in the Workzone of a Chemical Factory in Maharashtra **(Mandre M.K., Industrial Hygiene Division, Central Labour Institute, Mumbai)**

Factory is in the production of chemicals which are used for textiles and as packing materials. The study was carried out for evaluation of the levels of airborne contaminant such as styrene Phenol, formaldehyde, Naphathalene, sulphuric acid, in their workplace environment to which workers are exposed. Airborne concentration of all chemicals is well below their respective PLE/TLV permissible limits of exposure. The recommendations such as use of dust respirators and safety goggles while packing operation, easy accessiblity to Eye fountains to the operators, education and training to workers regarding the use and maintenance of dust filters respirators and other personal protective equipment were given to management.

Assessment of Airborne Contaminants in the Workzone of a Chemical Factory in Maharashtra **(Mandre M.K., Industrial Hygiene Division, Central Labour Institute, Mumbai)**

The factory manufactures polyols and polyethers which chemicals are used for textiles and for various packing materials.These chemicals are also used for strengthening the cement in construction Industry. The study was carried out for evaluation of the levels of airborne contaminants such as Ammonia and Adipic acid to which the the workers are exposed in the plant, during mixing, heating, filling, loading and unloading of amines , adipic acid from storage to the reaction vessel. The airborne concentrations of particulate matter of adipic acid and ammonia are well within the Permissible Limits of Exposure, The recommendations such as regular maintenance and inspection programme for exhaust systems to maintain their efficacy were given to management.

Assessment of Airborne Contaminants in the Workzone of a Tyre Factory in Maharashtra **(Mandre M.K., Industrial Hygiene Division, Central Labour Institute, Mumbai)**

The factory is in the production of tyres for radial, medium, commercial trucks and earthmovers. The study was carried out for evaluation of the levels of airborne contaminants such as solvent naphtha, particulate matter, carbon black, airborne concentration of particulate matter and solvent vapour of Naphtha which were found to be well within their respective TLV at all locations. Airborne concentration of Carbon black exceeded its TLV value at boiler house. The recommendations such as use of dust respirators while carbon black handling operation were suggected to management.

Assessment of Airborne Contaminants in the Workzone of a Chemical Factory in Gujarat **(Mandre M.K., Industrial Hygiene Division, Central Labour Institute, Mumbai)**

The factory is in the production of chemicals which are used for textiles and as packing materials. The study was carried out for evaluation of the levels of airborne contaminants such as Styrene & Ethyl benzene, in their workplace environment to which workers are exposed. Airborne concentrations of all chemicals are well below their respective PLE/TLV permissible limits of exposure. The recommendation such as use of safety goggles while sampling operation were given.

Safety Audit at a Ceramic Industry in Orissa **(Shri P.B.Pal & Shri S.C.Sharma, Major Hazard & Chemical Safety Division, Central Labour Institute, Mumbai)**

The document is a report of safety audit carried out in Production area, Bulk Storage area, Raw material & finish product area, Electrical section, etc. The main products of the plant are refractory's bricks. The Reports list about 100 suggestions including discharge of static electricity at different points. The general impression that arises looking at the observations and the recommendations is that the management is quite keen in managing the safety and health matter. The report reveals that the company has a safety policy. The safety committee is functioning well in the organisation. It has, however, been suggested that the worker members of the committee should be elected directly by the workers by holding the elections as provided in the rules. The long term safety aspects like appointment of qualified fire officer, proper housekeeping, electrical safety, power press safety, kiln safety, safety of storage tanks, dust control, pipe lines safety, proper ventilation, discharge of static electricity, machine guarding, etc. are some of the areas where perpetual attention is required. The management should keep a close watch over the changing statutes and keep a pace with the amendments.

Safety Audit at a Fibre Glass Manufacturing Industry in Andhra Pradesh **(Elangovan, R.K., Safety Division, Regional Labour Institute, Chennai)**

A Safety Audit was conducted at Fibre Glass manufacturing industry, Andhra Pradesh with a view to identify the hazards so that the management can devise suitable procedures and system for enhancing safety in the industry. The Safety Audit was conducted as per BIS: 14489:1998. An opening meeting was conducted at the beginning of the Safety Audit as per the procedures. After the Safety Audit, a closing meeting was conducted and the findings were finalized in the closing meeting. The Safety Audit covered all the management and technical elements outlined in the BIS Standard 14489:1998. The major findings of the Safety Audit are : Process safety, lightning protection, preparing SOPs and SMPs dust control, access control, fencing of pits, tanks and water ponds, housekeeping, Occupational Health Centre, use of PPEs, LPG Safety and the need for conducting heat stress, noise, illumination and work environment monitoring study in the factory.

FILM ARCHIVE ON OCCUPATIONAL SAFETY, HEALTH & ENVIRONMENT AT CENTRAL LABOUR INSTITUTE, MUMBAI

The Government of India declared the National Policy on Safety, Health and Environment at Workplace on 28th February 2009. One of the goals of the National policy is to build and sustain preventive safety and health culture in the country in order to eliminate the hazards at workplace and to enhance the well being of employees in all the sectors of economic activities in our country. To attain this goal, one of the steps taken by Directorate General Factory Advice Service & Labour Institutes (DGFASLI) is to develop a **Film Archive on Occupational Safety, Health and Environment at Central Labour Institute in Mumbai**.

All the Film Producers, Organisations, Industries, Industrial Association, Trade unions, Professional bodies, Government and Non-Government organisations, Educational Institutes etc. are invited to enlist their films on Occupational Safety, Health & Environment (OSHE) in CD, DVD format etc. with the Film Archive for preparing a directory of OSHE films.

Interested Agencies/Individuals may please fill-up the proforma and send to:

The Director General,
DGFASLI
Central Labour Institute,
N.S.Mankiker Marg, Sion,
Mumbai 400022

or E-mail at editorindosh@gmail.com. The proforma may be downloaded from DGFASLI website at www.dgfasli.nic.in.

DGFASLI AT A GLANCE

The Directorate General Factory Advice Service & Labour Institutes (DGFASLI) is an attached office of the Ministry of Labour & Employment Government of India. DGFASLI organization was set up in 1945 under the Ministry of Labour, Government 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 workplace. 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 in Mumbai
- Regional Labour Institutes in Kolkata, Chennai, Faridabad and Kanpur

Vision* of *DGFASLI: DGFASLI envisions emerging as an organization of excellence in creating knowledge, formulating policies, standards and practices to ensure safe and healthy workplaces for all in factories and ports.

Mission of DGFASLI: The mission of DGFASLI is to render its expertise in occupational safety and health for evolving safe and healthy workplaces in factories and ports through a process of partnership, guidance, regulatory activities in specific sector and information sharing.

DGFASLI organization comprises of its Headquarters situated in Mumbai, Central Labour Institute (CLI) in Mumbai, four Regional Labour Institutes (RLI) in Chennai, Faridabad, Kanpur & Kolkata and eleven Inspectorate of Dock Safety (IDS) offices located at different ports situated all over the country.

DGFASLI organization consists of a multidisciplinary team of around 129 officers (engineers, physicians, industrial hygienists, physiologists, ergonomists, industrial psychologists, commercial artists etc. and 81 technical staff members.

Various specialty divisions/cells under DGFASLI office and Central Labour Institutes in Mumbai include

a) Factory Advice Service b) Dock Safety
c) Construction Safety d) Awards e) Statistics
f) Industrial Safety g) Industrial Hygiene
h) Industrial Medicine i) Industrial Physiology & Ergonomics j) Staff Training, Productivity & Small Scale
k) Industrial Psychology l) Major Hazards Chemical Safety m) Management Information Services
n) Environmental Engineering and o) Communication Division.

Armed with the technology, good will of the industrial society and the strength of the dedicated staff, the organization is well prepared to meet the challenges of tomorrow.

Visit us at: www.dgfasli.nic.in

The Library & Information Centre of Central Labour Institute has unique collection of Material Safety Data Sheet of about 1,20,000 chemicals/materials taken from Canadian Centre for Occupational Health & Safety. MSDS provides extensive coverage over safety perspective with detailed evaluation of health, fire and reactivity hazards. It also provides precaution as well as recommendation on handling, storage, personal protective equipment, accidental release etc. A brief Material Safety Data Sheet on few points for Diallyl Maleate is given below.

PRODUCT NAME(S)

Diallyl Maleate

CHEMICAL FAMILY/USE

Maleic Acid Esters

FORMULA

C10H12O4

HAZARDS IDENTIFICATION

Emergency Overview: Straw Colored Liquid. Pungent Odour. Harmful if inhaled. May be fatal if swallowed. Harmful if absorbed through the skin. Do not inhale vapors. Avoid contact with skin and eyes. Causes moderate skin irritation. May cause moderate eye irritation. Causes severe respiratory irritation.

POTENTIAL HEALTH EFFECTS

Ingestion: Harmful if swallowed.
Skin Contact: Causes moderate skin irritation. Harmful if absorbed through the skin.
Inhalation: Causes severe respiratory irritation. Harmful if inhaled.
Eye Contact: Causes moderate eye irritation. May cause corneal injury.
Medical Conditions Aggravated: Respiratory, Liver, kidney, Dermal ailments.
Subchronic (Target Organ) Effects: Dermatitis. Respiratory ailments. Liver and kidney damage. Corneal damage.
Chronic Effects/Carcinogenicity: This product or one of its ingredients present 0.1% or more is not listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

FIRST AID MEASURES

Ingestion: If swallowed, induce vomiting immediately by giving two glasses of water and sticking fingers down throat; never give anything to an unconscious person. Get medical attention.
Skin: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse. Remove contaminated shoes and discard.
Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.
Eyes: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled: Wipe, scrape or soak up in an inert material and put in a container for disposal. Wear proper protective equipment as specified in the protective equipment section. Warn other workers of spill.

HANDLING AND STORAGE

Precautions to be taken in handling and storage: Keep container closed when not in use.
Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Use only in a well ventilated area. Do not inhale vapors. Wash hands before eating and smoking.

PERSONAL PROTECTION

Respiratory Protection: Use in a well ventilated area. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure.
Protective Gloves: Rubber gloves.
Eye And Face Protection: Monogoggles. Face shield.
Other Protective Equipment: Rubber apron.
Ventilation: Use only in well ventilated area. Mechanical ventilation.

FIRE FIGHTING MEASURES

Flash Point: 123 (C) 253 (F)
Ignition Temperature: UNK (C) UNK (F)
Flammable Limits in Air - Lower (%): UNK
Flammable Limits in Air - Upper (%): UNK
Sensitivity to Mechanical Impact (Y/N): NO
Sensitivity to Static Discharge: Sensitivity to static discharge is not expected.
Extinguishing Media: All standard firefighting media
Special Firefighting Procedures: Wear respiratory protection if in a confined area. Positive pressure, self-contained breathing apparatus. Wear full protective clothing.

STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: will not occur
Hazardous Thermal Decomposition/Combustion Products: Phenol. Fumes of allyic compounds.
Incompatibility (Materials To Avoid): Contact with oxidizing agents.

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- 400 022. MSDS on about 1,20,000 chemicals/materials are available with Central Labour Institute. Computer printout will be supplied on nominal charge.
Ph. No.:- 022-24092203, Fax. No.:- 022-24071986

TRAINING CALENDER FOR THE YEAR 2011: DGFASLI

CENTRAL LABOUR INSTITUTE
N.S.MANKIKER MARG, SION, MUMBAI – 400022
Telephone: 91-22-24092203, Fax: 91-22-24071986/24033995
Visit us at: www.dgfasli.nic.in

S.No	Title of the Programme	Period	Coordinator (Technical)
1.	Workshop on Hazards & Operability (HAZOP) Study	April, 5-7	S.C. Sharma
2.	Basic Course for Inspector of Factories	April, 11-29	B.L.Bairwa
3.	Training Workshop on TQM, Productivity & Quality Improvement	April, 19-21	R.N. Meena
4.	Safety, Health and Environment Management in Chemical Industry	April, 27-29	M.A. Metkari
5.	Effective Supervision for enhancing Safety, Health & Environment at Workplace.	May, 4-6	N.K. Rustagi
6.	Collaborative Training Programme with NSC-Maharashtra Chapter on Industrial Safety	May, 18-20	S. Bharathi
7.	Workshop on Industrial Ventilation	May, 24-26	Subhash Chandra
8.	Training Programme on Safe Handling of Chemicals for Safety Committee Members	May, 25-27	S.C. Sharma
9.	Workshop on Team Building for Development of Health, Safety & Welfare at Work	June, 06-08	N.K. Rustagi
10.	3-weeks Training Programme for Safety Auditors* (*Specific Circular will appear in our website inviting applications during Feb./Mar. 2011)	June, 06-24	S. Bharathi
11.	Training workshop on Productivity & Quality Improvement through Effective Employee Participation	June, 21-23	R.N. Meena
12.	Advanced Diploma in Industrial Safety (ADIS) 2011-12: First Teaching Term	July 19 – Oct 21, 2011	S Bharathi
13.	Training programme on Safety & Health Management in Process Industries.	July, 20-22	S.C. Sharma
14.	Collaborative Training Programme with NSC-Maharashtra Chapter on Industrial Safety	Aug. 01 – 03	S. Bharathi
15.	Workshop on Industrial Noise	Aug. 09-11	Subhash Chandra
16.	Workshop on Training Methodology for Trainers in Safety, Health & Environment	Aug. 17-19	N.K. Rustagi
17.	Training workshop on Effective Implementation of OHS-MS in Manufacturing Industries	Aug. 23-25	R.N. Meena
18.	Training Programme for Nurses, Health / Medical Assistants on 'Occupational Health Practices'	Sept. 26-30	Dr.S.S.Waghe
19.	Workshop on Selection & Quality Assurance for Effective Use of Personal Protective Equipments.	Oct. 03-05	Mrs. M.K.Mandre
20.	Training Workshop on TQM, Productivity & Quality Improvements	Oct., 11-13	R.N.Meena
21.	Advanced Trg. programme for Industrial Doctors	Oct., 17-21	Dr.S.S. Waghe
22.	Workshop on Hazards & Operability (HAZOP) Study	Oct., 19-21	S.C. Sharma
23.	One Month Specialized Certificate Course in Safety and Health for Supervisory Personnel Engaged in Hazardous Process Industries.	Nov. 01 -30	N.K. Rustagi
24.	Refresher Course for Senior Inspectors of Factories	Nov. 07-18	S. Bharathi
25.	Impact of Environmental Pollutants & their Control at Workplace	Nov., 21-23	Subhash Chandra
26.	Collaborative Training Programme with NSC-Maharashtra.	Nov.,23-25	S. Bharathi
27.	Workshop on Industrial Noise	Nov.,28-30	Subhash Chandra
28.	AFIH Course for Doctors	Dec.,11 to Feb. 28 2012	Dr. S.S.Waghe
29.	ADIS 2011 – 12 : 2nd Teaching Term (continued)	Nov.,21, 2011 to May 05, 2012	S. Bharathi
30.	Workshop on Monitoring of Work Environment and its Control in Industries.	Dec., 07-09	Mrs.M.K. Mandre
31.	Training programme on Safety in Storage, Handling and Management of Hazardous substances in Process Industries	Dec., 14-16	S.C. Sharma
32.	Training workshop on Productivity & Quality Improvement through Effective Employee Participation	Dec., 20-22	R.N. Meena

REGIONAL LABOUR INSTITUTE
SARVODAYA NAGAR, KANPUR - 208 005
Telephone: 91-512-2218691/92, 2218745, Fax: 91-512-2215112
E-mail Address: rli_Kanpur@vsnl.net, rlikanpur@hotmail.com

S.No	Title of the Programme	Period	Coordinator
1.	Training Programme on Prevention & Control of Fire in Industry	April 13-15	Dr. Brij Mohan
2.	Training Programme on Safety & Health in Sugar Industry	April 26-28	Dr. Brij Mohan
3.	Orientation Programme on Occupational Health for Para-Medical Staff	June 28-30	Dr. C. Bhattacharya
4.	Training Programme on Chemical Safety for Safety Committee Members	July 05-08	Dr. Brij Mohan
5.	Post Diploma Course on Industrial Safety 2011-2012	July 2011 - March 2012	K.Srivastava
6.	Training Programme On Testing & Examination of Lifting Machines & Pressure Vessels	August 22-26	G.S.Pandey
7.	Training Programme on Safety & Law	September 06-08	G.S.Pandey
8.	Orientation Programme on Occupational Health for Para-Medical Staff	September 13-15	Dr.C. Bhattacharya
9.	Workshop on Monitoring of Airborne Contaminants of work place & their Control	October 11-13	Dr. Brij Mohan
10.	One Month Certificate Course on Safety & Health	November 01- 30	A.K.Chakraborty
11.	Workshop on Safety Audit	December 13-15	A.K.Chakraborty
12.	Training Programme on Process Safety Management for Inspectors of Factories	December 19-23	Dr. Brij Mohan

REGIONAL LABOUR INSTITUTE
TTTI P.O. THARAMANI, ADYAR, CHENNAI - 600 113
Telephone: 91-44-22350737,25220888, Fax: 91-44-22355690
E-mail Address: rlic@vsnl.net

S.No	Title of the Programme	Period	Coordinator
1.	Training Programme on Dispersion Modelling	April 05-06	A.Sreeramulu & N. Varadharajan
2.	Training Programme on Lifting Machinery and Lifting Tackles	May 10-11	K.Balasubramanian
3.	One year Diploma course in Industrial Safety	July 2011 – April 2012	Dr. R.K. Elangovan
4.	Training Programme on Occupational Safety and Health in Construction Industries	July 26-27	K.Balasubra manian
5.	Training Programme on Safety Audit	August 24-26	C.M.Nigli
6.	Training Programme on Major Accident Hazard Control in Industries for Inspectors of Factories	September 20 -23	A.Sreeramulu
7.	Training programme on Management of Hazardous Substances in Chemical Industries	November 08-11	A.Sreeramulu
8.	Training Programme on Occupational Safety and Health in Construction Industries	December 07-08	K.Balasubra Manian
9.	Training Programme on Dispersion Modelling	December 22-23	A.Sreeramulu & N. Varadharajan

REGIONAL LABOUR INSTITUTE
LAKE TOWN, KOLKATA - 700 089
Telephone: 91-033-25343254, 25342732 Fax: 91-033-25348182
E-mail Address: regi_876109@bsnl.in

S.No	Title of the Programme	Period	Coordinator
1.	Management of Physical Hazards and Hazardous Wastes in Industries	April, 25-29	Dr.S.N.Banerjee
2.	Safety Health & Environment at Workplace	May, 21-25	Shri. H. Chattopadhyay
3.	Safety in Construction Industry	May 9-13	Shri U.K.Das
4.	Safety, Security and Fire Fighting in Industries.	June 20-25	Shri U.K.Das
5.	One year Diploma in Safety Engineering Course	July 15, 2011 to June 30, 2012	Shri S.Dutta Chowdhury.
6.	Safety Health & Environment at Workplace	July 26- 29	Shri H. Chattopadhyay
7.	Training Programme on Chemical Safety	August 8-12	Shri U.K.Das
8.	Identification, Evaluation and Control of Hazards in Industries.	August, 22-26	Dr.S.N.Banerjee
9.	Safety in Construction Industries	September 26 -30	Shri U.K.Das
10.	Safety & Health Awareness programme for members of Safety Committee	October, 10-14	Shri S.Dutta Chowdhury
11.	"Occupational Health and environmental Medicine for	October 17-21	Dr. S.K.Haldar

	Medical & non-medical executives of the industries"		
12.	Workers Development Programme on Health	November 7- 9	Dr. S.K.Haldar
13.	Industrial Safety	October, 31 to November, 4	Shri S.Dutta Chowdhury
14.	One Month Specialized Certificate Course in "Safety & Health" for Supervisory working in Hazard Industries	November 14 - December 13	Shri S.Dutta Chowdhury
15.	Associate Fellow of Industrial Health	December 01, 2011 – February 28, 2012	Dr. S.K.Haldar

REGIONAL LABOUR INSTITUTE
SECTOR 47, FARIDABAD (HARYANA) – 121 003
Telephone: 0129-246800-299 Fax: 0129-2737064
E-mail Address: rlifaridabad@yahoo.com

S.No	Title of the Programme	Period	Coordinator
1.	Occupational Stress Management	January 17- 19	S.M.Chaugule
2.	Chemical Safety at Workplace	February 16-18	M.R.Rajput
3.	Management of Safety Health and Environment at Workplace	April, 20-22	S.K. Dwivedi
4.	Environmental hazards and their Management at work place	May, 25-27	S.M. Chaugule
5.	Human Factors in Occupational Safety Health and Environment and their Management	June. 22- 24	Dr. Avneesh Singh
6.	Occupational Hazards and their Management	July, 20-22	Rajeev Shukla
7.	One Year Post Diploma in Industrial Safety (PDIS)	July 2011 – May, 2012	M.R. Rajput
8.	Developing Positive Safety Culture	August 17-19	Dr. Avneesh Singh
9.	Management of Safety Health and Environment at Workplace	September 7-9	S.K.Dwivedi
10.	Storage, Handling & Management of Hazardous substances	October 19-21	M.R. Rajput
11.	Occupational Safety and Health in Construction Industry	November 23-25	Rajeev Shukla

- Training programme brochures will be mailed sufficiently in advance, specifying the dates of commencement of course, its venue etc., to the organisations as per mailing list available.
- Course-coordinator may be contacted for details such as training programme dates, venue, programme contents, level of participants, course fee and its payment etc.
- Admission to the course will be restricted to 20 participants on First-Come-First-Served basis. Participants are not allowed to attend the training course without written confirmation by the course-coordinator.
- Limited Hostel Accomodation on sharing and chargeable basis will be available on 'First-Come-First-Served' basis.

इन्डोश्न्यूज़ में प्रकाशन के लिए लेख संबंधी

इन्डोश्न्यूज़ एक त्रैमासिक समाचार पत्र है जो व्यावसायिक सुरक्षा और स्वास्थ्य के क्षेत्र में अनुसंधान, ध्ययन और सर्वेक्षण के माध्यम से उपलब्ध जानकारी तथा तत्संबंधी विचार विनिमय में अत्यंत सहायक है । कारख़ाना सलाह सेवा एवं श्रम संस्थान उन व्यक्तियों,उद्योगों,औद्योगिक संगठनों, मज़दूर संघों और व्यावसायिक निकायों से लेख आमंत्रित करता है जिनके पास व्यावसायिक सुरक्षा एवं स्वास्थ्य संबंधी जानकारी है तथा जो उसे स्वेच्छा से दूसरों में बाँटना चाहते हैं ।

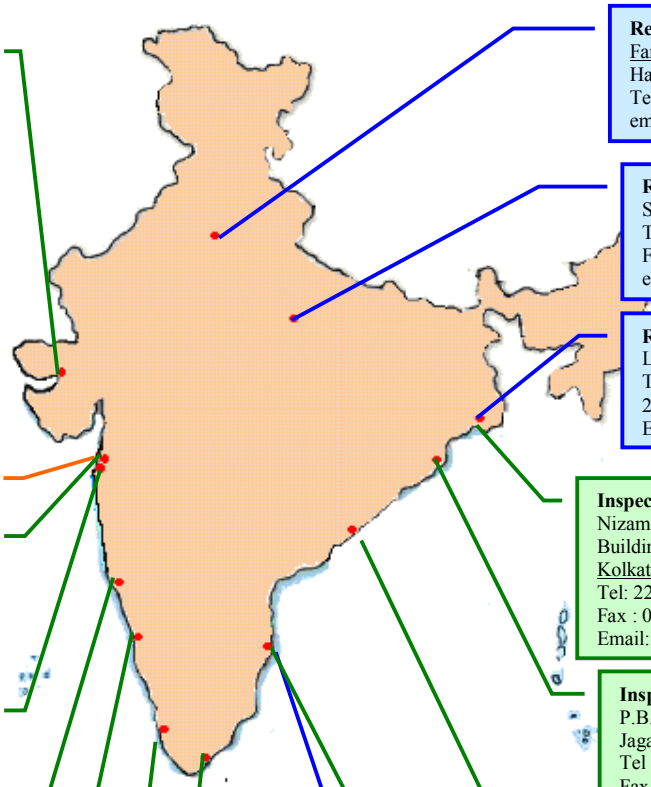
१. प्रकाशन के लिए पांडुलिपि की दो प्रतियां 'डबल स्पेस' में ए-४ आकार के काग़ज़ पर एक ओर टाइप किए गए लेख जो ३ या ४ पृष्ठ से अधिक न हों, मुख्य संपादक के पास भेजी जानी चाहिए । कोई फ़ोटो छापा नहीं जाएगा ।

२. प्रकाशन के लिए स्वीकृत पांडुलिपियों में प्रकाशन की दृष्टि से आवश्यक संपादकीय परिवर्तन करने का अधिकार प्रकाशक का है । प्रकाशक बिना कोई कारण बताए लेख का प्रकाशन नहीं भी कर सकता है ।

३. लेखक अपने लेख में दिए गए आँकड़े तथा संदर्भ स्वयं सुनिश्चित करने में सावधानी बरतें ।

कारखाना सलाह सेवा और श्रम संस्थान महानिदेशालय के अधिष्ठान

ESTABLISHMENTS OF DIRECTORATE GENERAL FACTORY ADVICE SERVICE & LABOUR INSTITUTES



Inspectorate Dock Safety,
Near Bunder Gate
New Kandla-370210
Tel: 270249 Fax: 02836 – 270249
e-mail: idskandla@sancharnet.in

Directorate General Factory Advice Service & Labour Institutes &
Central Labour Institute, Mumbai
N.S.Mankiker Marg, Sion, Mumbai - 400 022.
PBX No.91-22-24092203
Fax: 022-24071986
e-mail:dgfasli@gmail.com
dgfasli@yahoo.com
cli@dgfasli.nic.in

Inspectorate Dock Safety
Operation Service Centre, 3rd Floor,
P.D'mello Rd., Mumbai-400 038
Tel: 22613391, 22692180
Fax : 022 – 22613391
Email: idsmumbai@vsnl.net

Inspectorate Dock Safety,
POC Canteen Bldg.,
J.N. .Port, Sheva
Navi Mumbai – 400 707
Tel: 27471584, 27470201

Inspectorate Dock Safety,
108,NeogiMansion,Vasco-Da-Gama
Mormugao, Goa-403802
Tel: 2517334 Fax: 0832 -2517334

Inspectorate Dock Safety,
New Mangaluru Port, Panambur,
New Mangaluru-575010
Tel: 2407781 Fax: 0824 – 2407781
e-mail: idsmlr@sancharnet.in

Inspectorate Dock Safety,
C.D.L.B. Dispensary Building, G.V.Ayyar Rd, Willington Island, Kochy-682003
Tel: 2666532 Fax : 0484 – 2666532
Email: idscochin@sancharnet.in

Inspectorate Dock Safety,
Tuticorin Port Trust Admn. Office Building,
P. B. No.4, Harbour P.O. Tuticorin-628004
Tel: 2352372 Fax: 0461 – 2352372
e-mail: idstuty@sancharnet.in

Regional Labour Institute*
Faridabad Sector 47,
Haryana - 121003
Tel No.: 0129-2225308
email: rlifaridabad@yahoo.co.in

Regional Labour Institute,
Sarvodya Nagar, Kanpur-208 005
Tel: 2218691,2218692, 2218745
Fax : 0512-21511282
e-mail: rli_kanpur@vsnl.net

Regional Labour Institute
Lake Town, Kolkata 700089
Telephone: 91-033-25343254,
25342732 Fax: 91-033-25348182
E-mail: regi_876109@bsnl.in

Inspectorate Dock Safety,
Nizam Palace, 1st floor, 2nd M.S.O. Building, 234/4, A.J.C. Bose Road,
Kolkata-700 020.
Tel: 22830718, 22830719
Fax : 033 – 22830718
Email: idskol@vsnl.net

Inspectorate Dock Safety,
P.B. No.126, Dist. Paradip,
Jagatsinghpur, Orissa – 754142.
Tel : 222413
Fax : 06722 – 222413
e-mail: idsparadip@sify.com

Inspectorate Dock Safety,
Old D.L.B. Building, 1st Floor,
Port Area, Opp. Harbour Main Gate
Building, Visakhapatnam-530 035
Tel: 2563857
Fax : 0891 – 2563857
Email: idsvizag@sancharnet.in

Inspectorate Dock Safety,
3rd Floor, Anchor Gate Building,
Rajaji Salai, Chennai - 600 001.
Tel: 25220888, 25246419
Fax: 044 – 25220888
Email: idschn@vsnl.net

Regional Labour Institute,
Sardar Patel Road, Adyar, TTTI PO,
Chennai-600113
Phone: 22350737, 22351569, 22355690
FAX : (044) 2352457
email: rlic@vsnl.net