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मेरी कलम से

इंडोशन्यूज का प्रत्येक अंक कार्यस्थल में सुरक्षा और स्वास्थ्य प्रबंधन से संबंधित व्यक्तियों के मन में उठ रही समस्याओं अथवा किसी विशेष समस्या पर मस्तिक मंथन के विचार से सृजन किया गया है।

भारतीय अर्थव्यवस्था के वैश्वीकरण और उदारिकरण के कारण औद्योगिक गतिविधियों की गति बढ़ गई है, जिससे नए जटिल तकनीक, नए खतरे/खतरनाक रसायनिक पदार्थ प्रक्रियाओं और उत्पादन के तरीकों में परिवर्तन आरंभ हुआ है। इन नए आगमनों के साथ बहुत सी जटिल समस्याएं जुड़ी हुई हैं, जिसके कारण देश के लाखों कामगारों का जीवन जोखिम में है। कार्यस्थल में व्यावसायिक सुरक्षा और स्वास्थ्य के वर्तमान स्तर में भरपूर सुधार की आवश्यकता है। जिस प्रकार कोई भी प्रबंधन गतिविधि, किसी प्रणाली के अनुसार कार्य करती है उसी प्रकार व्यावसायिक सुरक्षा और स्वास्थ्य प्रणाली में समस्या की पहचान, मानक स्थापित करना, मूल्यांकन निष्पादन तथा सुधारात्मक उपाय करना सबसे प्राथमिक प्रयत्न होना चाहिए। पहला लेख इन्हीं को उल्लिखित करता है। दूसरा लेख दुर्घटना रोकथाम से संबंधित है।

मैं आशा करता हूँ कि इंडोशन्यूज के इस अंक में दी गई जानकारी सुरक्षा वृत्तियों और उन सभी के लिए जो व्यावसायिक सुरक्षा और स्वास्थ्य से संबद्ध हैं, के लिए लाभदायक सिद्ध होगी।

FROM THE DESK

Each issue of INDOSHNEWS is designed to give a thrust on a particular problem or an important issue, which at that point of time is agitating the mind of the people concerned with the management of safety and health at work place.

Globalisation and liberalization of Indian economy has accelerated the pace of Industrialisation activity which have introduced new complex technology, new hazardous/chemicals substances, processes, and change in production methods. Such influx of new things associates several problems, posing a serious threat to the lives of millions of working population in the country. The present level of Occupational safety and health at work place calls for substantial improvement. As in the procedure in any other management activity, the Occupational safety and health management should also have the basic steps of identification of the problems, setting standards, measuring performance and taking corrective measures. The first article highlights those challenges. The second article deals with the subject of accident prevention.

I hope the information carried by those articles and other features in this issue of INDOSHNEWS will be useful to safety professionals and all those who are concerned with Occupational safety & health.

Dr. M.Rajaram
Editor In-chief

CHALLENGES IN OCCUPATIONAL SAFETY & HEALTH (OSH) IN 21ST CENTURY – STRATEGIES

E. Laxminarayan

Abstracts

In an increasingly integrated and interdependent global village of today, the Safety, Health and Environmental (SHE) issues have emerged as transnational and global issues and are receiving the increased attention of the stake holders the world over. Rapid pace of industrialization, introduction of complex technologies, new materials, hazardous/chemical substances, processes, changes in the production methods, job content and work methods, have been posing a serious threat to the lives and limbs of millions of working population. Even though, the traditional hazards and risks have been addressed to a great extent, newer hazards and risks are emerging day by day thus, posing greater challenges on the Occupational Safety and Health (OSH) front. It is heartening to see that the SHE issues have merged as important dimensions of Corporate Social Responsibility (CSR) and human rights in the recent years. This paper provides a conceptual frame work on the challenges confronted on the Occupational Safety and Health (OSH) front and suggests suitable interventions and strategies to address the challenges.

INTRODUCTION

The present century is posing a number challenges and threats on Safety, Health and Environmental (SHE) front the world over. As John Donne, wrote that "no man is an island in himself, he is part of the main land" goes equally well for safety & health issues of today. In the increasingly integrated and interdependent global village of today, the SHE issues have emerged as transnational and global issues and important dimensions of Corporate Social Responsibility (CSR) and Human Rights. The market imperatives, competitive pressures, increased aspirations of the employees for decent & safe work, increased expectations of the customers, the regulatory agencies and the society at large have added new demands and challenges on the safety and health front. Rapid pace of industrialization, introduction of complex technologies, new materials, hazardous/chemical substances, processes, changes in the production methods, job content and work methods, have been posing a serious threat to the lives and limbs of millions of working population leading to catastrophic risks, increase in the incidence of injuries and occupational diseases. Even though, the traditional hazards & risks have been addressed to a great extent, newer hazards & risks are emerging thus, posing greater challenges on the Occupational Safety & Health (OSH) front. Hence, a greater responsibility is thrust upon, on the Government, the regulatory agencies, the safety professionals, the managements of industrial establishments, the trade unions, the NGO's and other stake holders to address these emerging challenges on SHE front with greater resolve and commitment.

A Country, aspiring to be a global economic and military power in the 21st century needs to demonstrate its firm commitment and resolve to the world community about its intentions to address the challenges and threats in the SHE front. It is heartening to note that the Government of India, has unveiled a National Policy on Safety, Health and Environment at Work Place, in the year 2009, to address the challenges on the OSH front. The Policy demonstrates a firm commitment of the Government at the highest level to promote safety and health in all the sectors of our economic activity (organized and unorganized) in the Country, in the true spirit of our Constitution. Therefore,

the OSH issues have emerged on the top of the agenda and priority concern of the Government in 21st Century. This article is an attempt to provide a conceptual frame work on the challenges confronted on the OSH front in the country and to suggest interventions and strategies to address the challenges.

OSH SCENARIO AT THE GLOBAL LEVEL

According to the Secretary General, International Social Security Association, each year, more people die in the world through accidents and diseases than die in wars as the fast changing and increasingly inter-related world economy bring new risks and new dangers to the workplace. Improving the safety and health of workers urgently requires concerted global efforts from political, social and business leaders (Konkolewsky, 2008). According to ILO estimates, over 2 million people die each year from occupational related diseases and injuries, another 160 million non-fatal diseases and 270 million non-fatal injuries occur annually. Occupational diseases and injuries account for a loss of about 4% of the global gross domestic product (Eijkemans, 2005). These statistics portray a grave situation on OSH front at the global level. Hence, promoting safety & health at work is the responsibility of the society as a whole, and all the members of the society must contribute to achieving this goal by ensuring that priority is given to OSH in the national agenda and by building & maintaining a national preventive safety & health culture (Sameera, 2008).

At the global level, the International Labour Organization (ILO) & World Health Organization (WHO) have been doing a pioneering work in the field of workers safety and health for the last several decades. The WHO Global Strategy on Occupational Health for all by 2001, WHO & ILO Joint initiative, and "Global Action on Silicosis Elimination", are some of the important initiatives pertaining to OHS at the global level. The ILO, a Tripartite, Non-Governmental and Non - Profit Organization has come into existence for the cause of social justice including promotion of safety and health of the working class, the world over. Since its inception in 1919, it has adopted around 188 Conventions and 199 Recommendations known as International Instruments. A majority of these Conventions pertain to OSH. The Decent

Work agenda of ILO has been the guiding force for many developed and developing nations to further their CSR agenda which encapsulates the SHE issues. Decent work includes right at work, employment, social protection (Occupational safety & health) and social dialogue. (Richard et al, 2009). The statement of Kofi Annan, the former Secretary General of the U.N.O, that 'All too often lives are shattered unnecessarily of poor working conditions and inadequate safety systems. Let me encourage everyone to join the ILO in promoting safety and health at work.' It is not only sound economic policy, it is a basic human right" (Mahadevan, 2008)". This aptly sums up the significant role the ILO have been playing in promotion of OSH, across the world. As a founder member of ILO, India ratified around 40 ILO Conventions & Recommendations and a number of them are in the area related to OSH. Recently, India has ratified Convention No: 174, Prevention of Major Industrial Accidents and Convention NO: 127: Concerning Maximum Weights. The Government is also contemplating ratification of Convention No: 155, OSH and Working Environment; Convention NO -170: Concerning Safety in the use of Chemicals and Convention No-162: Safety in the use of Asbestos.

THE OSH SCENARIO IN INDIA

In India, around 50,000 to 60,000 accidents occur annually in the manufacturing sector alone resulting in injuries of varied severity and death of around 1000 people (Saxena, 2005). If the accident statistics in other sectors such as ports, mining, construction and other un-organized sectors are also taken into account, this would represent a grim reality of this gigantic problem.

Occupational Safety & Health is accorded an important position in the Policy Frame work of the Indian Constitution. As a part of this Constitutional mandate, the Government of India, enacted several legislations such as the Factories Act, 1948, the Mines Act, 1952, the Dock workers (Safety, Health and Welfare Act), 1986, the Building & other Construction Workers Act, 1996, etc. for promotion of safety and health in the different sectors of economic activity in the country. The Ministry of Labour Government of India is responsible for the matters relating to the safety, health & welfare of the workers in the country. The Ministry also administers the relevant safety and health statutes. The Directorate General factory Advice Service and Labour institutes (DGFASLI) Mumbai, and the Directorate General of Mines Safety (DGMS), Dhanbad, under the administrative control of the Ministry of Labour and Employment have been striving hard to achieve the principles spelled out in the Constitution in the areas of OSH, during the last several decades. Due to the concerted efforts of the DGFASLI and DGMS, there has been a progressive reduction in the frequency and incidence rates of accidents in factories, ports and mines.

The Bhopal Gas tragedy, in 1984, has been a turning point towards comprehensive legislations pertaining to OSH in the Indian context. This led to enactment of several Legislations and Rules concerning OSH. Even though, satisfactory progress has been made on the safety and health front in the organized sectors of economic activity, a majority of the workforce (90 %) of the Country, is still not

covered by the OSH and other social security legislations. Hence, the challenges in the safety and health front are enormous and a great deal needs to be done to establish a preventative safety and health culture in the organized and unorganized sectors of economic activity in the country. A review of the annual reports of many progressive Indian companies reveal that apart from the regulatory compliance, many companies are increasingly adopting Integrated Management Systems of Environment, Safety and Quality as a policy of one product, one system concept. These companies have explicitly stated the philosophy of Zero accidents/ Zero harm/ Zero risk, Zero Emission/Zero discharge /Zero down time etc, as a bench mark to achieve in the years ahead. Many companies are also implementing Behavioral Based Safety (BBS) Systems, Process Safety Management (PMS) Systems to attain world class performance in OSH. These factories represent a miniscule percentage of the total number of registered and unregistered factories operating in the Country. This goes to say that a great deal needs to be done to improve our safety and health standards Vs-a-Vs the world class standards. Hence, this is a great challenge in 21st Century for those concerned with OSH.

OCCUPATIONAL SAFETY, HEALTH (OSH) CHALLENGES

Some of the important emerging and existing challenges on the OSH front at the national and organizational level are stated as under.

The Challenges of Liberalizations and Globalization: The Liberalization of trade and Globalization of the markets have led to outsourcing of manufacturing activities resulting in contractulisation and casualisation of the work force in the country during the last two decades. This has led to increased incidence of injuries, as the illiterate, untrained and seasonal workers are employed to carry out hazardous tasks. Besides this, the migration and cross border transition of work force is also leading to stress and strain in terms of cultural conflicts and psycho-social problems.

The Challenges of Technology Transfer at the National & Industry Level: Import of new technology, complex & hazardous processes into the county, from the developing world is adding new complexities, hazards and risks on the SHE front.

The Challenges of Modern Manufacturing Systems: Many world class manufacturing systems like flexible manufacturing systems, computer aided design (CAD), computer aided manufacturing, automation & introduction of robotics to handle hazardous manual operations have also added new challenges on the OSH front.

The Environmental & Societal Challenges: The society in general has become sensitive to the Environmental, Safety and Health issues. There is an increasing demand for a cleaner, greener and pollution free environment.

The Governmental Challenges: As the economy is expanding at a faster pace, the Government is forced to share some of its roles and responsibilities and obligations in certain areas with the industry by way of decontrolling and de-licensing of the policies. In the present context, self-regulation by the industry itself in some areas becomes more practical and realistic way of ensuring SHE at the work place, as is being done in most of the

developed Countries. The age old labour laws also need to undergo changes in consonance with the prevailing socio-economic and technological environment in the country. Hence, this is great challenge for the Policy Makers.

Challenges of Integration of SHE with Quality and Productivity: Today, the customers have become very demanding, discerning and discriminating. They not only demand high quality products at low cost but also a safe, energy efficient and environment friendly products. Hence, integration safety, health, quality and environmental issues and to establish a Positive Safety and Health Culture at the work place is a great challenge to the manufacturers.

STRATEGIES FOR PROMOTION OF OSH

OSH is a multidimensional, interdisciplinary and all-encompassing subject. It requires multipronged approach to address the emerging challenges. Some of the important macro and micro level, national and organizational level interventions & strategies are stated as under.

1. Implementation of the National Policy on Safety Health & Environment at workplace in different sectors of economic activity in the Country.
2. Ratification of Core Conventions ILO on Safety & Health by India.
3. International cooperation in the field of SHE.
4. Increased cooperation amongst the social partners concerned with OSH.
5. Encouragement of Research and Development in the area of OSH.
6. Use of Information Technology and the proactive role of the media for mass awareness & education in the area of OSH.
7. Strengthening of the enforcement machinery & competency building of the enforcement officials.
8. Development of National Network on SHE with linkages to specialized sub networks and International Networks.
9. Benchmarking of global standards and best safety & health management practices.
10. Development of appropriate HRD interventions for competence building of the work force and the safety professionals on OSH matters.
11. Integration of OSH Management Systems with Environmental and Quality Management Systems and establishment of preventative safety & health culture.
12. Increased emphasis on issues concerning ergonomic interventions and associated problems.
13. Integration of Occupational Health with Primary Health Care in the Country.

CONCLUSIONS

The SHE issues have emerged as important issues of Corporate Social Responsibility (CSR) and have become the major concern of stake holders in our country in the recent years. It is heartening to note that safety and health issues are being perceived as parameters of global competition and business survival in the Indian context. It is no denying fact that satisfactory progress has been achieved in the area of OSH, in the organized sectors of our economic activity due to the concerted efforts of the Government, the managements of the industrial

establishments and other social partners. However, a great deal needs to be done in this regard in the unorganized sectors our economy, which employs around 90% of the total workforce. This poses a greatest ever challenge on the OSH front and concerted efforts are needed by all those concerned with OSH to address this national challenge at a time India is emerging as a global economic power. It is also heartening to note that the President of India has declared the year 2010-2020, as the decade of Innovation (National Innovation Act, 2008). The Prime Minister of India approved the setting up of a National Innovation Council to prepare a road map for the 'Decade of Innovation 2011-2020', under the Chairmanship of Sam Pitroda, adviser to the Prime Minister. The Council has the mandate to evolve an Indian model of innovation focusing on inclusive growth and creating an appropriate ecosystem conducive to fostering inclusive innovation. The Ministry of Labour and Employment, Government of India is in the process of establishing a Sectoral Innovation Council on OSH matters in the office of the Ministry of Labour and Employment at New Delhi. This, initiative along with the National Policy on Safety and Health and ratification of core Conventions of ILO on OSH by India, may give a fillip to the safety and health movement in the Country in the coming decades.

REFERENCES

1. Eijkemans, Gerry (2005) Asian-Pacific News Letter on Occupational Health and Safety, Volume-11, Number-3, Nov.2005.
2. ILO Conventions on OSH: C- 155, C-161; C-162; C-170 & C- 187.
3. ILO- OSH-2001: International Labour Organisation Guidelines on Occupational Safety and Health Management Systems.
4. Konkolewsky, H.H (2008) Asian-Pacific News Letter on Occupational Health and Safety, Volume-15, Number-2 Sept, 2008.
5. Mahadevan, H (2008) Employee Participation in Achieving Industrial Safety & Health-Vision 2020: NDOSHNEWS, Vol-2, April - June Issue, DGFASLI, Mumbai.
6. The National Policy on Safety, Health and Environment at Work Place, Govt. of India, Document.
7. The National Innovation Act, 2008.
8. OHSAS-18001 (Occupational Health and Safety Assessment Series) Specification, 2007.
9. Robert, R and Roberto, O (2009) Innovations to improve OSH in the informal Economy. Asian-Pacific News Letter on Occupational Health and Safety, Volume-16, Number-1 Sept, 2009.
10. Sameera.N.AI. (2008) Asian-Pacific News Letter on Occupational Health and Safety, Volume-15, Number-2 Sept, 2008
11. Saxena, S.K. (2005) Perspectives on OSH of workers, at the national level; INDOSHNEWS, Vol-1, Jan - March issue, DGFASLI, Mumbai.
12. Standard reference Note DGFASLI, 2009
13. World Health Organization: Occupational Health - <http://www.who.int/occupationalhealth/en/>

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ACCIDENT PREVENTION & ROLE OF INDUSTRIAL MANAGEMENT

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Abstract

Safety is everybody's business, and safety requires the active participation of management, supervisors, and workers. No one group can do the job alone. If the employees don't hold up their end, then the company's safety procedures, equipment, and training don't get used and accidents happen. If employees don't stay alert to, and report, accidents, near misses, and unsafe acts and conditions that they experience or notice on the job, you may not know about them and won't be able to correct them and improve the prospects for everyone's safety. Turning workers into safety champions may seem like a challenge but it's well worth the effort to achieve a safer workplace and improved employee morale. Techniques you might try to encourage workers to take personal responsibility for safety, supported by individual recognition, include the following: Don't focus on the numbers; focus on individual performance. A manager who sees employees doing the right thing should personally inform them that the behavior is valued. The paper highlights various dimensions of accident prevention in industries.

INTRODUCTION

"Jobs that are widow-makers are to be thought and restructured" - Peter Drucker.

Nations are the citizens of humanity, as individuals are the citizens of the nation. Humanisation at work place in industry at the micro level is no different from the humanization of the nation. We come across millions of examples where the people have died /injured on account of accidents during the activities of construction-industrial-port etc. The basic question arises as to whether these accidents would have been avoided. Now a days, due to privatization - globalization - technological upgradation - competitive bidding creates a new scenario which ultimately leads a demand for Safety for Industrial activities.

PHILOSOPHICAL APPROACH TO ACCIDENT PREVENTION

The role of "Safety" in its widest context should concentrate on "Prevention" not "Cure". So we must first define Hazard, Accident & Safe.

Accident is an unplanned event, which has a probability of causing personal injury or property damage.

Safe a thing is provisionally categorized as safe if its risks are deemed known & in the light of that knowledge judged to be acceptable".

Thus a condition of "safety" is only reached by removing the risks or hazards which could result in an accident. This is the task of the Safety Specialist in association with the frequency. The safety philosophy developed because of the tremendous forces of production, which resulted in numerous injuries & death. It was also realized that a large portion of accidents could be prevented.

The five reasons to work hard to prevent accidents & occupational illness are;

- Needless destruction of life & health is a moral evil.
- Failure to take necessary precautions against predictable accidents & occupational illnesses involves moral responsibility for those accidents & occupational illnesses.
- Accidents & occupational illnesses severely limit efficiency & productivity.

- Accident & Occupational illnesses produce far reaching social harm.
- The safety movement has demonstrated that its techniques are effective in reducing accident rates & promoting efficiency.

The industrial activities in developing countries are labour intensive & as such many workers are exposed to risk. On humanitarian grounds alone, there is every justification to alleviate the human sufferings, which also tend to frustrate the efforts of the employees. It must be accepted that the legislation measures cannot solve all the problems but a sound human approach on the part of all concerned is bound to create better impact & result in a safer working environment.

Most of the accidents are occurred due to negligence, ignorance & complacency on the part of the worker or the management or both.

Safety is at the most a lip- service to the managers. They should feel that safety must be a basic component of management philosophy just as profit making, because the **cost of accident** itself may not only drain away the profits but may affect the very survival of the company. To bring awareness about serious repercussions of the lack of safety, it is required to have continuous & concerted publicity effort, special law enforcing safety regulation, legal binding in tender documents, in addition to the normal preventive measures taken at the site of work by following safety codes.

The primary aim of safety management is to provide a working environment within which industrial activities can proceed in a safe manner.

Now it is the need of the hour to realize the importance of safety aspects. The safety precautions are no longer dispensable luxury, nor a matter of charity. It can help reduction in cost of works & prevent a drain in the national production.

It is therefore, a dire need today for each one in the industry, to set out to make it a safe industry so that a good deal of injury, damage & tragedy, which results from unnecessary accidents, could be prevented. Every organization should have had therefore, to strive hard in this regard. "Labour" is a part & parcel of the Industry & its

safety & contentment greatly adds to the efficient working & strength of the Industry".

Cost of each accident is indisputable evidence of the need for recognizing accident prevention is an essential for sound business management. It is found that the Indirect Cost is 4 times greater than direct cost. (Compensation & liability, medical payment, Insurance premium, cost of lost time etc.). This 4 to 1 ratio should prove to be a powerful stimulus to preventive action. The factors for indirect /incidental/ hidden cost may be are (1) Cost of lost time of injured employee (2) Cost of time lost by other employees who stop work out of curiosity, sympathy, to assists injured employee. (3) Cost of time lost by foreman, supervisor or other executives while assisting injured employee, investigating the cause of accident, selection /training/placement of a new employee to replace the injured employee, preparing accident reports, attending hearing before court of law. (4) Cost of time spent on the case by First-aid attendant & hospital department staff (5) Cost due to damage to the machine tools, property or to the spoilage of material (6) Incidental costs due to interference with production, failure to fill orders on time (7) Cost of salary/wages paid during leave or when he has not fully recovered. (8) Loss of morale due to the accident etc. It is pointed out that lack of adequate safety measures can also have an economic repercussion on the contractor, as the cost of accidents can be pretty high.

So one way of making the industry aware of serious repercussions of the lack of safety is to have continuous & concerted publicity effort, in addition to the normal preventive measures taken at the site of work.

SAFETY SYSTEM

Safety Policy: All firms should evolve its own safety policy which should depict the intention of management towards safety. This will enhance the morale of the worker.

Risk Assessment: Risk Assessment in industrial activities should invariably be undertaken covering structural, construction, fire & health safety. The probability of risk arising out of unforeseen factors, including the vulnerability to natural disasters should also be considered. It is a specialized job & requires proper understanding of the technical intricacies of work as well as experience of practical considerations that are involved. It is one of the primary responsibilities of manager to avoid or minimize the anticipated or unforeseen problems.

Safety Audit: It is the evaluation of the strength & weaknesses of the existing safety system prevailing in the organisation & also a methodical assessment in terms of compliance with the statutory provisions, codes etc. in our country.

Accident investigation & reporting: Any accident in industry opens a window through which one should peep to look into the lacunas in the existing safety system of the organisation. Hence, accident investigation is the stepping-stone for deciding the course of actions in accident prevention work for the future.

Management should establish a clear way for employees to report job-related injuries, illnesses, near misses, or other incidents. Employees also need a way to report hazards or make safety suggestions. Sometimes workers are afraid to report what they perceive to be a minor injury for fear of punishment. They must be reassured that prompt reporting will not result in the blame game.

But due to illiteracy of workers, un-organized work, working at remote places, corruption, money power of contractors etc. leads to a situation that most of the fatal / injury accidents are not at all reported & investigated by client & contractor.

Purchase Control: All site purchase & supply orders must comply with safety provisions & relevant B.I.S. norms.

Recruitment, Training & Placement: Getting employees to take safety training seriously begins with management taking it seriously. If management's attitude toward training is that it's an expensive nuisance, something the company is just doing because of statutory requirement then; employees are going to get the impression that they don't have to pay attention. If management ignores employees' safety concerns, doesn't correct hazards, or fails to provide necessary safety equipment and controls, employees are going to think that management doesn't care about safety. And, if management doesn't care, why should they?

On the other hand, if management promotes a positive safety culture, one that makes employee safety and health a priority, and rewards safe behavior, employees may have a more positive attitude toward safety. When employees and management are on the same side, working toward the goal of a safer workplace is easier to attain. In other words, if safety training is important to you, it will be to your employees also.

Recruitment practice should recognize safety criteria in the screening & selection of employees. Every worker is to be given briefing on safety & he is to be employed only after he passes the safety proficiency test. Everybody should know how to do their job safely and this means training. Require employees to attend all training sessions and follow all safety instructions

The necessary Induction training for all new employees & workers is to be arranged & the trend of the workers in the industry to acquire skill through family tradition to be discouraged. Workers are totally ignorant about safety & health issues related to his work. Site personnel who carry out specialized task e.g. Crane driver, scaffold etc. must be trained & their competency to be regularly monitored. One of the methods for this, the industries may conduct "Danger prediction training system". It is a 10 to 15 minutes duration programme, where the workers they themselves predicted the danger & find out their solution. Such training can be conducted at the beginning of the day's work at the site office. Safety Office / labour officer at site should ensure that such trainings are being adopted as a routine task. Arrangement of on-the-job safety training & retraining for all levels of personnel involved in

Ergonomic Evaluation of the Work: Industrial workers are subjected to awkward postures resulting back pain & other job related physical stresses. Construction workers are using primitive tools, which are not at all scientifically designed & hence ergonomically designed hand tools & apparatus must be designed to reduce such stresses.

Practice Good Housekeeping: Maintaining good housekeeping is an important part of the overall job supervision. There are a number of advantages to having a clean and orderly workplace including: avoidance of accidents, better fire prevention, improved health of employees, and increased worker efficiency and morale. A responsible supervisor knows that good housekeeping cannot be maintained simply by an occasional large cleanup. It must be planned on a regular basis. It should also be a part of everyone's daily routine.

Avoidance of accidents is one of the major goals of any organization. An occasional piece of scrap or wet spot on the floor can cause slip, trip, and fall hazards. Cluttered aisles and congested work areas can add to the dangers. A thorough, regular, and successful program of good housekeeping that eliminates hazards makes good sense for everyone.

Client Contractor Safety System & PPE: This team must have their agreed safety plan regarding safety monitoring by contractor & safety monitoring by client. Client supervision must not relieve the contractor of his safety responsibilities. This team must demonstrate adequate management systems for the provisions & used of personnel protective equipment (PPE). It has severe limitations in that an operator must wear the PPE correctly all the time that he is exposed to the risk. However, the provision and use of any item of PPE must be viewed as the last resort, when all other strategies have failed, or an interim measure until some other form of control strategy can be applied. The limitations of PPE should be clearly established and Employers should ensure that PPE is 'suitable' & it is appropriate for the risks and conditions where exposure may occur, takes account of ergonomic requirements and the state of health of the wearer, is capable of fitting the wearer correctly. The industrial activities cannot run by the site manager alone. The success of any project depends on the co-operation of the site managers & their sub-ordinates. The role of line managers and safety professionals in preventing the safety-related incidences is quite important. Therefore, it is necessary that safety requirements are assured on regular basis by scrupulous field rounds and the deficiencies identified are attended to promptly. Further, the attributes and requirements to achieve effective management of safety right from the design stage to execution and operation must be identified and addressed appropriately through a structured program. To achieve this prime objective, it is imperative to recognize the important elements of the safety management system and strengthen the same at each stage.

A.K.Chakraborty
Assistant Director (Safety)
Regional Labour Institute
Kanpur

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 उत्कृष्ट संगठन के रूप में स्थापित होना डीजीफासली की संकल्पना है।

डीजीफासली का उद्देश्य:- डीजीफासली का उद्देश्य 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 उद्देश्य 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, विशाखापट्टनम, कोलकाता और पारादीप स्थित ग्यारह गोदी सुरक्षा निरीक्षणालय हैं। डीजीफासली संगठन में लगभग १२९ अधिकारियों (इंजीनियर, फिजीशियन, औद्योगिक हाइजिनिस्ट, शरीर वैज्ञानिक, एर्गोनॉमिस्ट, औद्योगिक मनोचिकित्सक, कर्मशायल आर्टिस्ट आदि) और ८१ तकनीकी कर्मचारी सदस्यों का बहुआयामी दल है। डीजीफासली और केन्द्रीय श्रम संस्थान, मुंबई में विभिन्न विशिष्ट प्रभाग/स्कंध सम्मिलित हैं। यह संगठन आगे, विकास और बढ़ती मांग को पूरा करने के लिए तत्पर है। विकासशील देश में जहां विभिन्न और जटिल प्रक्रिया उद्योग बड़ी 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।

श्रम दिवस के अवसर पर, क्षेत्रीय श्रम संस्थान, कानपुर में कार्य स्थितियों का मानवीकरण - सुरक्षा, स्वास्थ्य एवं कल्याण विषय पर विचार गोष्ठी का आयोजन एवं विभिन्न ट्रेड यूनियनों का अनूठा संगम

क्षेत्रीय श्रम संस्थान, कानपुर द्वारा श्रम दिवस के अवसर पर दिनांक मई ०१, २०१२ को कार्य स्थितियों का मानवीकरण - सुरक्षा, स्वास्थ्य एवं कल्याण विषय पर एक विशाल विचार गोष्ठी का आयोजन किया गया। विचार गोष्ठी को श्री पी.एस. बाजपेयी, उपाध्यक्ष, राष्ट्रीय मजदूर कांग्रेस, उत्तर प्रदेश, श्री अरविन्द राज स्वरूप, उप महासचिव, अखिल भारतीय ट्रेड यूनियन कांग्रेस, श्री विष्णु शुक्ला, संगठन सचिव, निर्माण मजदूर पंचायत संगम, उत्तर प्रदेश, श्री महेन्द्र प्रताप सिंह, महासचिव, भारतीय मजदूर संघ, उत्तर प्रदेश एवं श्री एच.एन. तिवारी, महासचिव, राष्ट्रीय मजदूर कांग्रेस, उत्तर प्रदेश द्वारा संबोधित किया गया। कार्यक्रम की अध्यक्षता डा. बृज मोहन, कार्यालयाध्यक्ष, क्षेत्रीय श्रम संस्थान, कानपुर द्वारा की गई।



श्री पी.एस. बाजपेयी, उपाध्यक्ष, राष्ट्रीय मजदूर कांग्रेस, मध्य प्रदेश, उत्तर प्रदेश संगोष्ठी को संबोधित करते हुए एवं मंचासीन श्री अरविन्द राज स्वरूप श्री महेन्द्र प्रताप सिंह, डा. बृज मोहन, श्री एच.एन. तिवारी, एवं श्री ए.के. चक्रवर्ती

श्रम दिवस के अवसर पर विचार गोष्ठी को संबोधित करते हुए श्री पी. एस. बाजपेई ने कहा कि सरकार ने मजदूरों के हित के लिए कानून तो अनेक बनाए हैं परन्तु उनका क्रियान्वयन नहीं हो पाता है जिसकी वजह से असुरक्षित कार्य स्थितियां बनी रहती हैं। उन्होंने बिजली उद्योग से जुड़े हुए इलेक्ट्रिशियंस की दुर्घटनाओं के बारे में अपनी चिंता व्यक्त की।

श्री अरविन्द राज स्वरूप ने इस अवसर पर कहा कि मई दिवस मानवीकरण की आवाज है एवं वैश्वीकरण के कारण कामगारों को उनके अधिकारों से वंचित किया जा रहा है। उन्होंने श्रम दिवस की महत्ता एवं श्रमिकों के अधिकारों के बारे में विस्तृत चर्चा की।

श्री विष्णु शुक्ला ने निर्माण कार्य से जुड़े हुए खतरों के बारे में एवं विषम कार्य स्थितियों की चर्चा की एवं उन्होंने कहा कि कामगारों की सुरक्षा में भागीदारी से कारखाने की उत्पादकता में वृद्धि होती है।

श्री महेन्द्र प्रताप सिंह ने इस अवसर पर कहा कि मानको को उत्पादकता के नाम पर नजरंदाज करने से कारखानों में दुर्घटनाएं होती हैं एवं उन्होंने असंगठित क्षेत्र में कार्य कर रहे श्रमिकों के सुरक्षा एवं स्वास्थ्य के बारे में चर्चा की।

श्री एच.एन. तिवारी द्वारा श्रम दिवस के आयोजन एवं संगठित एवं असंगठित क्षेत्र के श्रमिकों की स्थितियों के बारे में चिन्ता व्यक्त की एवं उन्होंने श्रम कानूनों का कड़ाई से पालन किए जाने की आवश्यकता महसूस की।

डा. बृज मोहन द्वारा कार्यक्रम की अध्यक्षता करते हुए श्रम दिवस की उपयोगिता एवं कारखाना अधिनियम के विभिन्न सुरक्षा, स्वास्थ्य एवं कल्याण से संबंधित प्रावधानों एवं भारत सरकार द्वारा कार्य स्थलों पर सुरक्षा स्वास्थ्य एवं पर्यावरण की राष्ट्रीय नीति के बारे में चर्चा की। उन्होंने श्रम संगठनों के प्रतिनिधियों से सुरक्षा एवं स्वास्थ्य को प्राथमिकता प्रदान करने का आग्रह किया। कार्यक्रम का संचालन श्री करुणेश श्रीवास्तव, अति. सहायक निदेशक (सुरक्षा) द्वारा किया गया एवं धन्यवाद प्रस्ताव श्री ए.के. चक्रवर्ती, सहा. निदेशक (सुरक्षा) द्वारा ज्ञापित किया गया।



विचार गोष्ठी में भाग लेते हुए श्रमिक प्रतिनिधि एवं कारखानों में कार्यरत श्रमिक गण

यह संगोष्ठी विभिन्न प्रतिष्ठित ट्रेड यूनियनों का अनूठा संगम था जिसमें सभी संघ प्रतिनिधियों द्वारा इस कार्यक्रम के सफल आयोजन के लिए क्षेत्रीय श्रम संस्थान, कानपुर की सराहना की गई। इस कार्यक्रम में लगभग १०० श्रमिक प्रतिनिधियों एवं कारखानों के श्रमिकों ने सक्रिय रूप से भागीदारी की।

NATIONAL SEMINAR ON IMPLEMENTATION OF NATIONAL POLICY ON SAFETY, HEALTH AND ENVIRONMENT IN WORKPLACE ON MAY 04, 2012 IN KOLKATA



Left to Right - Shri C. Purkayastha, Chief Inspector of Factories, Govt. of Assam, Shri Shri R. C. Dutta, Chief Inspector of Factories, Govt. of West Bengal, Dr. R. B. Raidas, Deputy Director General, DGFASLI, Mumbai, Shri Ramen Pandey, Working President, Indian National Trade Union Congress.

On May 04, 2012, National seminar on *Implementation of National Policy on Safety, Health and Environment at Workplace* was organized at Indian Chamber of Commerce in Kolkata by Regional Labour Institute, Kolkata.

The objectives of the seminar were to promote the issues relating to Occupational Safety and Health at the workplace, enhancing awareness of safety and better abidance of such standards for the continuous reduction in the incidences of work related injuries, fatalities, diseases, disasters & loss of national assets and to promote research & development in the field of industrial safety besides development of R&D facilities and skill-ness in the field of OSH.

The seminar was started with the read out of message sent by Shri. Purnendu Basu, Minister-in-Charge, Department of Labour & ESI, Government of West Bengal.

Shri U. K. Das, Director (Safety) & In-Charge, RLI, Kolkata welcomed all the dignitaries & delegates and Shri H. Chattopadhyay, Deputy Director (Safety), RLI, Kolkata explained the programme perspective to all dignitaries and delegates for attending the Seminar.

Shri R. C. Dutta, Chief Inspector of Factories, Govt. of West Bengal, Shri C. Purkayastha, Chief Inspector of Factories, Govt. of Assam, Shri Ramen Pandey, Working President, Indian National Trade Union Congress, Ms. Dola Sen, President, INTUC, W. B., Dr. Bidyut Bhattacharya, Professor, Mechanical Engineering Department & School of Management Science, BESU, Shri D. B. Deb, Ex. Deputy Director General, DGFASLI, Mumbai graced the Seminar besides Two Hundred dignitaries & delegates from Ninety Six organization attended in the Seminar.

Dr. R. B. Raidas, Deputy Director General, DGFASLI, Mumbai formally inaugurated the seminar by lighting the inaugural lamp and addressed the dignitaries & delegates highlighting the importance of holding the seminar by DGFASLI in view of declaration of National Policy on Safety, Health and Environment at Workplace by Govt. of India. He invited the attention of the delegates to the various aspects of the National Policy and discussed about the role of the Government, Industries, Trade Unions and other related OSH Stakeholders.

There were two technical sessions:

The first technical session was chaired by Shri D. B. Deb, Ex. Deputy Director General, DGFASLI, Mumbai.

The first technical paper was presented by Shri U. K. Das, Director (Safety), RLI, Kolkata on *An outline of National Policy on Safety, Health and Environment at Workplace*.

The second deliberation of the first technical session was from Shri G. C. Kundu, Chief Manager (F&S), IOCL, Haldia on *OSH Measures in Petroleum Industries in Compliance to implementation of National Policy on Safety, Health and Environment*.

The second technical session was chaired by Prof. Ranjit Kumar Goswami, Director, BIMFS, Kolkata.

Shri Samiran Das, Addl. Chief Inspector of Factories, Assam & Shri A. Naskar, Dy, Chief Inspector of Factories, W. B presented paper on *Strategies and Issues related to Enforcement for Safety Statutes* in light of the National Policy in the State of Assam and *Role of Trade Union in Implementation of National Policy on OSH at Workplace* presented by Shri Debanjan Chakraborty, Secretary, CITU, W. B. Shri A. Sil, General Manager (Safety & Environment), Tata Chemicals Ltd, Haldia presented a paper on *Measures on Safety, Health and Environment at Workplace in Industries and Self Compliance of Statutory Requirement*.

The last presentation of the technical sessions was from Dr. S. K. Haldar, Deputy Director (Med), RLI, Kolkata on *Occupational Health Services in India*.

Shri Ramen Pandey, Working President, Indian National Trade Union Congress, Ms. Dola Sen, President, INTTUC, W. B, Shri Ranjit Guha General Secretary, All India Trade Union Congress have discussed various aspects of *Role of Trade Union in Implementation of National Policy on OSH at Workplace*.

After deliberation in all technical sessions an interactive session was held in the seminar. The session was chaired by Dr. R. B. Raidas, Deputy Director General, DGFASLI, Mumbai. Shri U. K. Das, Director (Safety), RLI, Kolkata & Prof. Ranajit Kumar Goswami, Director, BIMFS, Kolkata were also present at the session. Besides, interaction amongst the delegates raised some questions and answers on implementation of various aspects of the National Policy.

The seminar was concluded with vote of thanks by Shri S. Dutta Chowdhary, Asst. Director, RLI, Kolkata.

CIS: INTERNATIONAL OCCUPATIONAL SAFETY AND HEALTH INFORMATION CENTRE

CIS (from the French name, Centre International d'information de securite et d'hygiene du travail) i.e. International Occupational Safety and Health Information Centre, is a part of the International Labour Office, Geneva, Switzerland.

The mission of CIS is to collect world literature that 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'.

INSTITUTE NEWS

CENTRAL LABOUR INSTITUTE: MUMBAI

During the second quarter from April 2012 to June 2012, Central Labour Institute carried out several activities of which important ones are given below.



Studies/Surveys

Safety Audit at a Chemical Industry in Maharashtra (Pal, P.B., Mandre, M.K., Major Hazard & Chemical Safety Division)

Assessment of Airborne Chemical Contaminants in the Workplace Environment of Automotive Focused Industrial Unit at a Car Production Factory in Maharashtra (Sreeramulu, A., Industrial Hygiene Division)

Study on Ergonomic Evaluation for Manual Operations and Office-work in Chemical Industry in Maharashtra (Chandra, S., Environmental Engineering Division)

Study of Noise Level Assessment in Soft Drinks Manufacturing Industry in Maharashtra (Chandra, S., Environmental Engineering Division, Central Labour Institute, Mumbai)

Illumination Level Measurement Study in Soft Drinks Manufacturing Industry in Maharashtra (Chandra, S., Environmental Engineering Division)

Training Programme

The Industrial Hygiene Division conducted a three-day workshop on *Safety, Health & Environment Management in Chemical Industries* from April 24 to 26 2012. The training programme was attended by thirteen participants from five organizations.

The Safety Division conducted a three week basic training course for *Inspectors of Factories* from April 09 to 27, 2012. Thirteen participants attended the programme.

The Safety Division conducted a three-day collaborative training programme with NSC-Maharashtra Chapter from May 29 to 31, 2012. Twenty one participants attended the programme.

The Major Hazard & Chemical Safety Division conducted three days training programme on *Safe handling of chemicals* for safety committee members from May 16 to 18, 2012. The training programme was attended by fourteen participants from five organisations.

Workshop/Seminar/Conference

The Productivity division conducted a training workshop on *Effective Supervision for Results in Safety, Health and Environment in Industries at Work* from June 19 to 21,

2012. Twenty Four participants from four organizations were benefitted.

The Productivity division conducted a training workshop on *Effective Participative Skills for Improving Safety, Health & Environment in Industries* from April, 02 to 04 2012, Twenty Two participants from three organizations were benefitted.

REGIONAL LABOUR INSTITUTE, KANPUR

During the second quarter from April 2012 to June 2012, Regional Labour Institute carried out studies, training programmes etc. which are described here.



Studies/Surveys

Study of Impact of Glass Wool in Ship Recycling Activities in Gujarat (Brij Mohan, Industrial Hygiene Division, Bhattacharya, C., Medical Division)

Training Programmes

The Institute conducted a three-days training programme for plant operators & supervisors on *Prevention & Control of Fire in Industry* from April 11 to 13, 2012. Twenty two participants representing eighteen organizations participated in the programme.

Workshop/Seminar/Conference

The Institute organised a Symposium on *Humanisation of Working Conditions- Safety, Health & Welfare* on the occasion of May Day. i.e. May 01, 2012. Seventy One leaders of different trade unions, workers representatives of safety committee & safety professionals representing from fifty six organizations participated in the programme.

REGIONAL LABOUR INSTITUTE, CHENNAI

During the second quarter from April 2012 to June 2012, Regional Labour Institute carried out studies, training programmes etc. which are described below.



Studies/Surveys

Safety Audit at Petroleum Refinery in Kerala (Elangovan, R.K., Safety Division, Dhende K.N., Industrial Hygiene Division)

Construction Safety Audit at a Power Project Plant in Tamil Nadu (Elangovan, R.K., Safety Division, Dhende K.N., Industrial Hygiene Division)

Training programmes

The Institute conducted one day in-plant training programme on *Promoting a Positive Health and Safety Culture* at Batteries Industry in Andhra Pradesh on April 02, 2012. The programme was attended by sixty participants.

The Institute conducted one day in-plant training programme on *Industrial Safety for Senior Management Personnel* in Thoothukudi, Tamilnadu on May 30, 2012. The programme was attended by forty participants.

The Institute conducted a certificate course on *Occupational Safety* in association with Madras Management Association from May 18 to 22, 2012. The course was attended by thirty two participants.

Seminar /Work shop

The Institute conducted a national seminar on *Enhancing Occupational Safety and Health - Effective Implementation of Safety, Health and Environment (SHE) Culture* in association with Madras Management Association in Chennai on June 15, 2012. The seminar was attended by one hundred and seventy six participants.

Paper/Presentations/Talks

Dr.R.K.Elangovan, Director (Safety Division), delivered a talk on *Construction Safety* to the M.Tech. students of IIT, Madras on April 10, 2012.

Dr.R.K.Elangovan, Director (Safety), delivered a talk on *Statutory Requirements regarding machine guarding* at Indian Institute of Plant Engineers, Bangalore on April 19, 2012. to the management executives numbering Forty participants.

Dr.R.K.Elangovan, Director (Safety), delivered a talk on *National Policy on SHE and Construction Safety* to a group of ninety five participants organized by Builder's Association of India, Southern Centre on June 04, 2012.

REGIONAL LABOUR INSTITUTE, KOLKATA

During the second quarter from April 2012 to June 2012, Regional Labour Institute carried out the following activities etc. which are described here.



Training programmes

The Institute conducted one-day in-plant awareness programme on *Occupational Safety & Health* for the workers in Kolkata on April 20, 2012. Eleven workers attended the programme.

The Institute conducted five-days training programme on *Management of Physical Hazards and Hazardous Wastes in Industries* for the Executives from April 23 to 27, 2012. Forty One candidates from nine organization attended the programme.

The Institute conducted five-days training programme on *Safety in Construction Industry* for the Managers, Engineers, Executives and Supervisors of construction industries from May 07 to 11,2012.Seven candidates from seven organisations attended the programme.

The Institute conducted five-days training programme on *Safety, Health & Environment at Workplace* for the Executive/ Engg. Safety Officers from May 21 to 25, 2012. Thirty Six candidates from twelve organisatio attended the programme.

The Institute conducted five-days training programme on *Safety and Fire Fighting Management in Industries* for the Executives/ Safety Officers/Security Officer/ Supervisors from June 18 to 22, 2012. Fifty One candidates from twenty one organizations attended the programme.

Paper/Presentation/Talks

Dr. S. K. Halder, Deputy Director (Med), delivered a talk on *Occupational Health Overall Scenario* at Rabindra Bharati University, Kolkata on April 03, 2012. Thirty three participants attended the programme.

इंडोश्नेट

भारत सरकार का श्रम एवं रोजगार मंत्रालय व्यवसायिक सुरक्षा और स्वास्थ्य सूचना प्रणाली पर इंडोश्नेट नामक राष्ट्रीय नेट वर्क का विकास कर रहा है। श्रम मंत्रालय का एक संबद्ध कार्यालय, कारखाना 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, मजदूर संघों, व्यवसायिक निकायों और गैरसरकारी संगठनों के पास व्यवसायिक सुरक्षा स्वास्थ्य संबंधी कोई जानकारी हो और वे राष्ट्रीय और अंतर्राष्ट्रीय स्तर पर उक्त जानकारी बाँटना चाहते हों तो कारखाना 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 इकाइयों संगठनात्मक रूपरेखा संबंधी प्रोफार्मा के लिए महानिदेशक, कारखाना सलाह सेवा एवं श्रम संस्थान महानिदेशालय, केंद्रीय श्रम संस्थान भवन, एन.एस.मंकीकर मार्ग, सायन, मुंबई-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, दोबारा आवेदन न करें।

Safety Audit at a Chemical Industry in Maharashtra (Pal, P.B., Mandre, M.K., Major Hazard & Chemical Safety Division, Central Labour Institute, Mumbai)

The safety audit was carried out in Production / Bulk Storage area / Raw material & finish product area/ Electrical section etc. 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 main products of the plant are acrylamido methyl propane sulphonic acid and its sodium salt. About 84 recommendations have been suggested in this Safety Audit Report in order to improve safety standard of the plant.

Assessment of Airborne Chemical Contaminants in the Workplace Environment of Automotive Focused Industrial Unit of a Car Production Factory in Maharashtra (Sreeramulu, A., Industrial Hygiene Division, Central Labour Institute, Mumbai)

The factory is Manufacturing of Car Production as a Automotive focused industrial unit. Assessment of airborne chemical contaminants carried out in the Body Shop, Paint Shop and Assembly Shop.. After assessment, it is found that the airborne chemical contaminants of Welding fumes in Body shop, Solvent Vapours such as Xylene, Butyl Acetate in Paint Shop and Assembly Shop were found within their individual PLEs and TLVs at the different locations. The PLEs are prescribed in the Second Schedule (Section 41-F) of the Factories (Amendment) Act 1987 and the TLVs are recommended by the American Conference of Government Industrial Hygienists (ACGIH), 2010. USA.

Study on Ergonomic Evaluation for Manual Operations and Office-work in Chemical Industry in Maharashtra (Chandra, S., Environmental Engineering Division, Central Labour Institute, Mumbai)

The industry is engaged in manufacturing and dispatching of colour pigments. The team has selected 47 locations in different concerned departments and offices. The objectives of the study were to identify the areas having mismatch among man, machine and working environment and to suggest the ways and means to improve the work method for enhancing safety, health and efficiency of the workers. During the study the team has evaluated work station measurement, work posture through photography, Anthropometry, dynamometers, physiological and environmental parameters. The observations were taken on shop floor as well as concerned offices for ergonomic applications evaluation during day shift. It is found that there were mismatch between man and their workstation at different locations. Due to continue standing operations workers were suffering from various musculoskeletal pains in different body parts. It is recommended for redesigning of workstation; revamp the work pattern to provide ergonomically healthy work environment. It is also recommended daily stretching/warming up exercise for fitness of the workers on the job.

Study of Noise Level Assessment in Soft Drinks Manufacturing Industry in Maharashtra (Chandra, S., Environmental Engineering Division, Central Labour Institute, Mumbai)

The industry is engaged in manufacturing and dispatching of soft drinks. The process involves Carbonated water and drinking water formulation, molding of plastic bottle, washing/sorting /inspection of glass bottle and dispatching processes of finished goods. The objective of the study was to identify the noise prone area, machinery, equipment and to suggest the ways to control the noise level with in permissible limit for controlling the occupational disease like blood pressure, hearing loss etc. among the workers. The equipment used during the study was the Sound Level Meter with octave band analyser. The study reveals that the noise level was found beyond prescribed permissible limit values at some of the locations. The report contains the recommendations for minimizing noise level by means of the engineering control with a view to protect all concerned Engineers Workers/Technicians/who are working on the shop floor.

Illumination Level Measurement Study in Soft Drinks Manufacturing Industry in Maharashtra (Chandra, S., Environmental Engineering Division, Central Labour Institute, Mumbai)

The industry is engaged in manufacturing and dispatching of soft drinks. The process involves Carbonated water and drinking water formulation, molding of plastic bottle, washing/sorting /inspection of glass bottle and dispatching processes of finished goods. The study was conducted to measure illumination level on selected locations. The objectives of the study were to identify the areas having weak or faulty illumination levels and to suggest the ways and means to improve the illumination levels for enhancing safety, health and efficiency of the workers. The instrument was used during the field study was Exttech Digital Light Meter. The observations were taken during day as well as night hours. The results observed were compared with the lighting standards under National Building Code, Factory Act 1948 and Maharashtra Factory Rules. It was noted that the general illumination levels were less than the prescribed limit during night at few locations in the plant .The suggestions including increasing the exact numbers of luminaries, lowering height of the lamps wherever it is essential and proper maintenance of luminaries i.e. cleaning the glass covers and reflectors.

Study of Impact of Glass Wool in Ship Recycling Activities in Gujarat (Brij Mohan, Industrial Hygiene Division, & C.Bhattacharya Medical Division Regional Labour Institute, Kanpur)

The present study in ship recycling activities was carried out by the RLI Kanpur to assess the impact of glass wool on the workers in the ship recycling activities. In the study area one hundred & seventy one ship recycling units are existing, out of which one hundred & thirty units were operational employing about twenty thousand workers at the time of study .Monitoring of airborne glass wool was carried out in ten randomly selected ship recycling units and personal exposure of glass wool among workers handling glass wool during ship recycling activities were

determined by harnessing the personal samplers. Fifty five workers from thirteen ship recycling units were subjected to detail clinical, pathological, radiological investigations to find out the prevalence of occupational diseases among them due to exposure of glass wool. It was observed that time weighted exposure (TWA) of the airborne glass wool among workers in different ship breaking yards in one location were varying from 3.47 mg/m³ to 12.00 mg/m³ whereas in the units located in other location average exposure was ranging 3.07 mg/m³ to 5.56 mg/m³. The permissible limit of Exposure of exposure of glass wool dust is 10 mg/m³ and exposure of airborne glass wool dust exceeded in some of the units. The workers involved in glass wool handling were found using helmets safety shoes, gloves, dust respirator for personal protection but personal hygiene and awareness among workers on safety & health was not satisfactory. General information related to physical & social aspects of workers engaged in glass wool handling were also collected through questionnaire to correlate the results of medical study. General examination of the selected workers was done followed by examination of the respiratory & other systems. The clinical examination was carried out with particular reference to respiratory, cardio-vascular system and skin. Chest radiograph of the workers was compared with Standard ILO Radiographs of Pneumoconiosis to categorize and quantify the radiological abnormality consistent with exposure of workers to inhale glass wool particle. The workers were also subjected to Lung Function Tests to measures their FVC (Forced Vital Capacity) and FEV₁ (Forced Expiratory Volume in one second) Complete blood count (CBC) & examination of sputum for AFB was also conducted. No significant radiological & pathological findings of occupational diseases were observed in workers randomly selected for medical study. Based on the general observations & findings of industrial hygiene and medical study, several recommendations are suggested like portable local exhaust ventilation system on glass wool operation, use of personal protective equipment, good personal hygiene & effective medical surveillance of the workers, training & education etc to improve the condition of work and protect the health of workers involved in ship recycling activities for glass wool handling.

Safety Audit at a Petroleum Refinery in Kerala (Elangovan, R.K., Safety Division, Regional Labour Institute, Chennai)

The Safety Audit was conducted with a view to identify the hazards so that the management can devise suitable procedures and methods for enhancing safety in the industry. The Safety Audit was conducted as per BIS: 14489:1998. The major findings of the study includes suggestions for Process Safety Management, safe access, static electricity protection, electrical safety, MSDS, pipeline safety, colour coding, preparation of SOPs and SMPs, chemical safety, safety communication, safety in material handling, training, On-site and Off-site Emergency Planning and mock drills.

Construction Safety Audit at a Power Project Plant in Tamilnadu (Elangovan, R.K., Safety Division; Dhende, K.N., Industrial Hygiene Division; Regional

Labour Institute, Chennai)

A Construction Safety Audit was conducted at Tamilnadu Power Corporation, Vallur Power Project, Ponnery with a view to identify the hazards in their construction site so that the management can devise suitable procedures and methods for enhancing safety in the industry. The Construction Safety Audit was conducted as per BIS: 14489:1998. The major findings of the study include suggestions for safe access, scaffolding, electrical safety, preparation of SOPs and SMPs, work at height, supply and use of personal protective equipments, contractor safety, excavation safety, safety in material handling and emergency action planning.

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 editorindosh10@gmail.com.

The proforma may be downloaded from DGFASLI website at www.dgfasli.nic.in.

SAFETY SLOGANS

"A spill, a slip, a hospital trip."

"A wound neglected is a wound infected"

"Accidents Big Or Small, Avoid Them All"

"Do the do's not the don'ts!"

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 Benzaldehyde is given below.

PRODUCT NAME(S): Benzaldehyde

HAZARDS IDENTIFICATION: Harmful

PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid

Color: Colorless

Odor: Characteristic

Change in condition

Melting point/Melting range: -55.6°C (-68°F)

Boiling point/Boiling range: 179°C (354°F)

Sublimation temperature / start: Not determined

Flash point: 64°C (147°F)

Ignition temperature: 190°C (374°F)

Decomposition temperature: Not determined

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor pressure: Not determined

Density at 20°C (68°F): 1.05 g/cm³

Solubility in / Miscibility with

Water: Slightly soluble

FIRST AID MEASURES

After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact: Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek immediate medical advice

HANDLING AND STORAGE

Information for safe handling: Keep container tightly sealed. Store in cool, dry place in tightly closed and well sealed containers. Ensure good ventilation at the workplace. Keep cool. Store locked up.

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

ACCIDENTAL RELEASE MEASURES

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Measures for environmental protection: Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

EXPOSURE CONTROL/PERSONAL PROTECTION

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace: Not required.

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves. Check protective gloves prior to each use for their proper condition.

Material of gloves: The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Eye protection: Safety glasses

Body protection: Protective work clothing.

FIRE FIGHTING MEASURES

Suitable extinguishing agents: Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards caused by the material, its products of combustion or resulting gases: In case of fire, the following can be released: Carbon monoxide and carbon dioxide

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Materials to be avoided: Vermiculite Oxidizing agents.

Dangerous reactions No dangerous reactions known

Dangerous products of decomposition: Carbon monoxide and carbon dioxide

TOXICOLOGICAL INFORMATION

LD/LC50 values that are relevant for classification:

Oral LD50 1000 mg/kg (guinea pig), 1300 mg/kg (rat), Inhalative LC50 >500 mg/m³ (rat), Irritation of skin moderate 500 mg/24H (rabbit)

Primary irritant effect on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Other information (about experimental toxicology):

Tumorigenic effects have been observed on tests with laboratory animals.

Mutagenic effects have been observed on tests with human lymphocytes.

Mutagenic effects have been observed on tests with laboratory animals.

Subacute to chronic toxicity:

Local contact with benzaldehyde may cause dermatitis and act as a local anesthetic. May also act as a central nervous system depressant and in large doses it may cause convulsions.

Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals: Behavioral - somnolence (general depressed activity). Behavioral - coma. Behavioral - tremor. Sense Organs and Special Senses (Eye) - conjunctive irritation. Lungs, Thorax, or Respiration - other changes. Lungs, Thorax, or Respiration - respiratory depression Lung, Thorax, or Respiration - cough. Related to Chronic Data - death. Brain and Coverings - other degenerative changes. Liver - fatty liver degeneration. Liver - changes in liver weight. Liver - multiple effects. Blood - changes in other cell count (unspecified). Blood - changes in erythrocyte (RBC) count. Nutritional and Gross Metabolic - weight loss or decreased weight gain. Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis). Gastrointestinal - ulceration or bleeding from small intestine. Gastrointestinal - tumors. Kidney, Ureter, Bladder - urine volume increased. Tumorigenic - neoplastic by RTECS criteria.

Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

ECOLOGICAL INFORMATION

General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Do not allow material to be released to the environment without proper governmental permits.

TRANSPORT INFORMATION

DOT regulations: Hazard class: 9

Identification number: UN1990

Packing group: III

Proper shipping name (technical name):

BENZALDEHYDE Label 9

Land transport ADR/RID (cross-border) class: 9 (M11)

Miscellaneous dangerous substances and articles

Danger code (Kemler): 90

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.:- 022-2407186

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

TRAINING CALENDAR FOR THE YEAR 2012: DGFASLI

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S.No	Title of the Programme	Period	Coordinator (Technical)
1.	Advanced Diploma in Industrial Safety (ADIS)	July,2012 to May,2013	S.Bharathi
2.	Motivation for Safety, Health & Productivity	July, 18-20	R.N.Meena
3.	Safety & Health Management in Process Industries	July, 25-27	A.Sree Ramulu
4.	Occupational Hazards in use of computer & VDT Appliances in shop floor, its evaluation & management for safety, health and productivity at work	August, 06-08	Subhash Chandra
5.	Recognition and Evaluation of Chemical Hazards at Workplace	August, 07-09	A.Sree Ramulu
6.	One Month Specialized Certificate Course of Supervisors working in Hazardous Process Industries	August, 27 to September, 27	R.N.Meena
7.	Fitness in Industry to improve Safety, Health & Productivity at Work	September,04-06	Subhash Chandra
8.	"Occupational Health Practices" for Nurses, Health / Medical Assistants	September, 10-14	Dr.P.P. Lanjewar
9.	Collaborative Trg. Prog. With NSC-Maharashtra Chapter on Industrial Safety	September, 26-28	Milind T.Barhate
10.	Workshop on Selection and Quality Assurance for Effective use of PPE	October,03-05	Mrs.M.K. Mandre
11.	Advanced Trg. Prog. For Industrial Doctors	October, 08-12	Dr.P.P. Lanjewar
12.	Workshop on Industrial Noise	October,09-11	Subhash Chandra
13.	Workshop on Hazard & Operability (HAZOP) Study	October 17-19	A.Sree Ramulu
14.	Making Safety Committee more Effective	October 29-31	R.N.Meena
15.	Refresher Course for Senior Inspectors of Factories	October 29 to November 09	S.Bharathi
16.	Ergonomics-A tool for Ensuring Safety, Health & Productivity at Work	November 06-08	Subhash Chandra
17.	Collaborative Trg. Prog. With NSC Maharashtra Chapter on Industrial Safety	November 20-22	Milind T.Barhate
18.	Impact of Environmental Pollutants & their Control at Workplace	November 20-22	Subhash Chandra
19.	Productivity & Quality Improvement through Employee Participation	November 21-23	R.N.Meena
20.	Associate Fellow of Industrial Health (AFIH) Course for Doctors	03 Dec. 2012 to 28 Feb., 2013	Dr. P.P. Lanjewar
21.	Workshop on Monitoring of Work Environment and its control in Industries.	December 04-06	A.Sree Ramulu
22.	Training Methodology for Trainers	December 12-14	R.N.Meena
23.	Workshop on "Safety Reports"	December 19-21	S.Bharathi
24.	Safety in Storage Handling and Management of Hazardous Substances in Process Industries	December 17-19	A.Sree Ramulu

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S.No	Title of the Programme	Period	Coordinator
1.	Workshop on Chemical Safety for Safety Committee Members	July, 3-6	Dr. Brij Mohan
2.	Post Diploma Course on Industrial Safety	July, 2012 to March, 2013	Karunesh Shrivastava
3.	Training Programme on Testing & Examination of Lifting Machines & Pressure vessels	August, 27-31	G.S. Pandey
4.	Orientation Programme on Occupational Health for Para Medical Staffs	September, 12-14	Dr. Champak Bhattacharya
5.	Training Programme on Safety & Law	September, 25-27	A.K. Chakraborty
6.	One Month Certificate Course on safety & Health	November, 1-30	A.K. Chakraborty

7.	Workshop on safety Audit	December, 12-14	A.K. Chakraborty
8.	Training Programme On Safety & Health on Process Industry For Inspectors Of Factories	December, 17-21	Dr. Brij Mohan

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S.No	Title of the Programme	Period	Coordinator
1.	One year Diploma Course in Industrial Safety	July, 2012–April,13	Dr.R.K.Elangovan
2.	Occupational Safety and Health in Construction Industries	July, 17- 18	K.Balasubramanian
3.	Workshop on Monitoring of Work Environment	August, 08 - 10	Dr. S.B. Mishra
4.	Major Accident Hazard in Industries for Inspectors of Factories	September, 18 - 21	Dr. S.B. Mishra
5.	Safety Audit	October, 09-10	Dr.R.K.Elangovan
6.	Heat Stress	November, 08 - 09	Dr. S.B. Mishra

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S.No	Title of the Programme	Period	Coordinator
1.	One year Diploma in Safety Engineering Course	July 16, 2012 to June 30, 2013	
2.	Safety, Health & Environment at Workplace.	July, 23-27	Shri H. Chattopadhyay
3.	Training Programme on Chemical Safety	August, 06–10	Shri U. K. Das
4.	Identification, Evaluation and Control of Hazards in Industries	August, 22–24	Dr. S. N. Banerjee
5.	Safety & Health Awareness programme for Members of Safety Committee	September, 03–07	Shri H. Chattopadhyay
6.	Safety Audit in Factories, Ports & Construction Industries	September, 24–28	Shri U. K. Das
7.	Occupational Health and environmental Medicine for Medical & non-medical executives of the industries"	October, 08–12	Dr. S. K. Haldar
8.	Industrial Safety	October, 29 to November, 02 & November, 05–09	Shri S. Dutta Chowdhury
9.	Workers Development Programme on Health	November, 21–23	Dr. S. K. Haldar
10.	One Month Specialized Certificate Course in "Safety & Health" for Supervisory working in Hazardous Industries	November, 19 to December, 18, 2012	Shri H. Chattopadhyay
11.	Associate Fellow of Industrial Health	December, 01, 2012 to February, 28, 2013	Dr. S. K. Haldar

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S.No	Title of the Programme	Period	Coordinator
1.	Occupational Hazards and their Management	July, 18-20	Rajeev Shukla
2.	One Year Post Diploma in Industrial Safety (PDIS)	July, 2012 to May,2013	S.K.Dwivedi
3.	Developing Positive Safety Culture	August, 21-23	Dr. A. Singh
4.	Management of Safety, Health and Environment at Workplace	September, 11-14	S.K. Dwivedi
5.	Storage, Handling & Management of Hazardous Substances	October, 17-19	M.R. Rajput
6.	Occupational Safety in Construction Industry	November, 6-9	M.R.Rajput
7.	Occupational Safety and Health in Construction Industry	November, 20-22	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.

Workshop on Safety & Health

Training Programme on Safety & Health in Process Industry, For Inspectors of Factories

December 15-16

December 17-18

A.K. Choudhary

Dr. Jay Mohan

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