Standard	Reference	Note	of DC	SFASII	2008

Standard Reference Note 2008

PREFACE

DGFASLI is technical arm of Ministry of Labour and Employment in matters related to Occupational Safety and Health in Factories, Ports and Docks. The organisation assists the Central Government in formulating policies in the administration of the Factories Act, 1948, enforcing the Dock Workers (Safety, Health and Welfare) Act, 1986 and liaising with State Governments, Union Territories, Port authorities and Industries for effective implementation of these statutes.

The Standard Reference Note 2008 provides comprehensive information on the objectives, functions, important activities and budget of the organisation. It contains details about the research surveys, audits, support services, training programmes, promotional and other activities carried out by DGFASLI in its effort to prevent accidents and occupational diseases in Factories, Ports and Docks. This Standard Reference Note also provides information on targets and achievement of the Plan schemes.

On the 28th April 2008, during the inaugural function of the Tripartite National Seminar "Industrial Safety and Health –Vision 2020: Challenges & Strategies" held at SCOPE Complex New Delhi, Shri Oscar Fernandes, Hon'ble Union Minister of State (Independent Charge) for Labour and Employment, Government of India declared the year 2008 as the "Year of Industrial Safety and Health". To celebrate the year, DGFASLI has launched country-wide and year-long activities to assist in lifting the prevailing occupational safety and health standards to a new high. These included exchanging ideas with regional stakeholders from each region of the country, holding National Seminars and Workshops and Conferences etc., producing documentary films, launching national awareness drive by sending Safety messages through SMSs, Meghdoot post cards and posters.

To recognize safety efforts in Factories, Ports and Docks, DGFASLI, on behalf of Ministry of Labour and Employment, Government of India, organized the Vishwakarma Rashtriya Puraskar and National Safety Awards for the performance year 2006. The Vishwakarma Rashtriya Puraskar & National Safety Awards were presented to 109 and 154 awardees respectively by Hon'ble Union Minister of State for Shipping, Road Transport and Highways, Shri K.H.Muniyappa.

In addition to presenting the information on industrial injuries collected and analysed by Labour Bureau, this Standard Reference Note further contains the state-wise information relating to occupational safety and health in factories based on the information collected by DGFASLI from the Chief Inspectors of Factories. It also provides information on Safety and Health matters such as industrial injuries, safety inspections, investigations etc. in respect of 11 major ports. This compilation of data and its analysis reflects the trends, causes and areas of concern to avoid accidents and enhance working environment in factories and ports.

A comparative analysis of occupational injuries in manufacturing sector in India vis-à-vis some of the countries is also given.

Mumbai April 2009 General (S. K. Saxena) Director

Indusma D

1 General Information

1.1 DGFASLI

The Directorate General of Factory Advice Service & Labour Institutes (DGFASLI), formerly known as Chief Adviser of Factories, was set up in 1945 in Delhi, with the objective of advising the Central and State Governments on administration of the Factories Act, and liaising with factories inspection services in the States. The office was subsequently shifted to Mumbai in 1966.

DGFASLI achieved significant importance as an attached office of the Ministry of Labour and Employment, Government of India serving as a technical arm to assist the Ministry in formulation of National policies on Occupational Safety and Health in Factories and Docks.

The Dock Workers (Safety, Health and Welfare) Act 1986 and the Regulations 1990 provide for Safety, Health and Welfare of dock workers. These are enforced by the DGFASLI through the Inspectorates of Dock Safety set up in all the major ports in India.

1.2 Functions:

- 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.
- Co-ordinating 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 framed there under and enforcing these 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 (i) recognition of good suggestions under Vishwakarma Rashtriya Puraskar and good (ii) worker's outstanding contribution in organizations, under Prime Minister's Shram Awards; and (iii) safety performance under National Safety Awards (on behalf of the Ministry).
- Co-operating with International agencies like ILO, WHO, UNDP and advising Central 9Government in the adoption of international standards concerning safety and health.
- Training of foreign nationals and rendering expert advice to developing countries.
- Building Competence of enforcement agencies.
- Issuing approval to flameproof electrical enclosures.
- Collecting and disseminating information and material relating to safety and health.

1.3 Organisation

DGFASLI organisation comprises of the headquarters, the 5 Labour Institutes and 11 Inspectorates of Dock Safety.

- Headquarter situated in Mumbai
- Central Labour Institute in Mumbai
- Regional Labour Institutes in Kolkata, Chennai, Kanpur and Faridabad
- Inspectorates of Dock Safety at Mumbai, Kolkata, Chennai, Kandla, Mormugao, Tuticorin, New Mangalore, Cochin, Visakhapatnam, Paradip and Jawaharlal Nehru Port. The Inspectorate of Dock Safety at Ennore is being setup.

In 1959, the Central Labour Institute, Mumbai was established under UNDP Project as a socio-economic laboratory and as a national institute dealing with scientific study of human aspects of industrial development. Subsequently, Regional Labour Institutes (RLI) were established at Kolkata, Kanpur, Chennai and Faridabad to serve as Regional Centers. The detailed organisation structure is given in **Appendix I** and the area of operations of the RLIs is shown in **Appendix II**.

The Labour Institutes are fully equipped with necessary laboratory facilities for conducting studies and surveys in the field of safety and health. The Institutes are also having conference facilities fully supported with modern audio-visual equipment. Industrial Safety, Health and Welfare Centres are also established at these Labour Institutes. Apart from this Mobile Safety Exhibition Vans are also available for taking the message of Safety and Health to the doorsteps of factories. Training Centres and Safety Exhibition Centres are also established in some of the inspectorates of dock safety.

1.4 Human Resource

The human-resource in the organization comprises of engineers, medical doctors, industrial hygienists, industrial physiologists, industrial psychologists, statisticians, audio-visual experts, artists etc. The manpower strength of the organization is given in table 1.1.

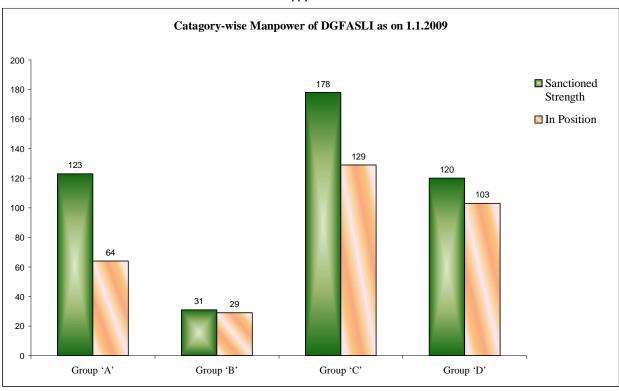
Table 1.1: Manpower strength of the organization as on 1.1.2009

Units	Technical		Administra	ative	Total	
	Sanct- ioned	In- Position	Sanct- ioned	In- Position	Sanct- ioned	In- Position
Headquarters	14	10	56	45	70	55
CLI.Mumbai	93	63	88	68	181	131
4 RLIs*	76	46	75	55	151	101
Dock-Safety	22	13	28	25	50	38

Inspectorates						
Total:	205	132	247	193	452	325

^{*} The posts at RLI, Faridabad are yet to be created

Chart 1.1



2 Budget

The allocation of funds for the various constituents and plan schemes of the organisation for 2008-2009 and 2009-2010 of the XI th Five year plan is given below:

(in '000 Rs)

SI.No.	SCHEMES	Revised Estimates Proposed 2008-2009	Budget Estimates Proposed 2009- 2010
A. NOI	N-PLAN		
1	DGFASLI & IDS	49000	65070
2	Research & Training (CLI & RLIs)	101400	114050
	Total: (NON-PLAN)	150400	179120
B. PLAI	V		
1	Establishment of Regional Labour Institute at Faridabad	5000 (C.W.) 15000	8200
2	Strengthening of DGFASLI Organisation and OSH in Factories and Ports	113000	69800
	Total: (PLAN)	118000	78000
CDAN	D TOTAL:	(C.W.)15000 268400	257120
GRAIN	DIOIAL.	(C.W.)15000	237 120

3 Plan Schemes

Eleventh Five Year Plan

During 2008-2009, two Plan Schemes under the XIth Five Year Plan are taken up by DGFASLI for implementation, namely (1) Strengthening of DGFASLI organization and OSH in Factories & Ports and (2) Establishment of Regional Labour Institute at Faridabad. The plan scheme at serial No. 1 has been created by merging the following five plan schemes operated during Xth Five Year Plan namely

- 1. Development of Safety & Health Information System & Data Bank
- 2. Improvement and Strengthening of Enforcement System for Safety and Health of Dock Workers in Major Ports
- 3. Establishment of a System of Chemical Safety and Monitoring of Occupational Health Status of Workers Employed in Hazardous Industries
- 4. Application of Ergonomics and Improvement in Working Conditions and Productivity in Factories, Docks and Small and Medium Scale Enterprises.
- 5. Reorganization and Strengthening of the DGFASLI and Establishment of Special Cells

Plan Scheme I: Strengthening of DGFASLI organization and OSH in Factories & Ports

Objectives:

To strengthen the infrastructure facilities at DGFASLI organization including Central Labour Institute at Mumbai & Regional Labour Institutes located at Chennai, Kanpur & Kolkata, and Inspectorates Dock Safety at the eleven major ports for improving occupational safety and health status of workers in factories, ports and docks throughout the country thereby contributing to prevention of occupational injuries and diseases.

Table 3.1: Achievements (January to December 2008)

	ible 3.1. Achievements (January to December 200	-									
SI.	Activities	Targets	Achievem								
No			ent								
1.	Upgradation of various laboratories at CLI &	To be	Procureme								
	RLIs	spread over	nt of items								
		the entire	-23								
		plan period									
2.	a) Development of National Inventory on OSH	2	-								
	information and follow up										
	b) Upgradation and development of	11	10								
	databases										
	c) Development of Application Programmes	3	5								
	d) Material Safety Data Sheet (MSDS) on	As per	67								
	request	request from									
		various									

		agencies	
	e) Industry-wise safety and health information	-do-	-
	f) INDOSHNEWS Publication	4	5
	g) Publication of Manuals, brochures,	4	1
3.	Implementation of minimum agenda for e-Governance	Continues	1
4.	Conduction of specialized training programmes, seminars, workshops	25	70
5.	Conduction of studies/surveys/audits	25	29
6.	Enforcement activities in major ports (inspection of ships, container ship, loose gears, docks, container yards, hazardous installations, etc.)	365	1048
7.	Testing of Respiratory & Non Respiratory PPE	300	237
8.	Procurement of audio-visual and communication equipment & software for production of video films, posters, etc.		9 LCD TV/ Monitors procured for conferenc e rooms

Plan Scheme II: Establishment of Regional Labour Institute at Faridabad.

Objectives:

The objective of the Scheme is to cater to the needs of the Northern region in the areas of safety and health, which at present, due to the heavy workload of RLI, Kanpur, are not effectively met. The RLI at Faridabad will serve the States of Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Union territory of Chandigarh and the National Capital Territory of Delhi.

Table 3.6: Achievements (January to December 2008)

SI.	Activities	ities 2008	
No.		Targets	Achievement
1.	Creation of various posts	-	The matter has
			been taken with the
			Ministry
2.	Setting up of laboratories	-	-
3.	Short duration training programme	4	4
4.	Training programme for Target Groups	1	1
	i.e. Factory Inspectors/Safety Officers		
	etc.		
5.	One year Post Diploma Course in	1	-
	Industrial Safety for Safety Officers		
6.	3 months course - Associate Fellow of	1	-
	Industrial Health for Medical Officers		
7.	6 weeks Certificate course on Industrial	1	-

	Hygiene		
8.	Developing State-wise OSH inventory	1	-
9.	Training programmes for small and	2	2
	medium enterprises		
10.	Research/Studies/Surveys	2	1
11.	National Seminar/Workshops	-	1
12.	Publication	-	8 Posters

4 Safety and Health Improvement in Factories, Docks and Construction

4.1 Co-ordination in the Administration of the Factories Act, 1948

The Factories Act, 1948 is the principal and comprehensive Act of the Parliament which provides for the requirements concerning safety, health and welfare amenities needed by workers employed in factories. The provisions of the Act are applicable to the factories as defined under Section 2m(i), 2m(ii) or notified under Section 85 of the Act by the State Governments.

The Ministry of Labour and Employment is accountable to the Parliament for proper enforcement of the Act. Uniformity in the application of the provisions of the Act in various States and Union Territories is achieved by circulating the Model Rules prepared by DGFASLI, which are incorporated by them in their State Factories Rules with necessary modifications to suit local needs. In the task of framing the Model Rules, the DGFASLI, on behalf of the Ministry of Labour and Employment, enlists the cooperation and involvement of the State Governments by convening annually a Conference of Chief Inspectors of Factories. The Conference discusses all matters relating to the administration of the Act as well as proposed amendments. Besides, the Conference also serves as a forum for discussion of the progress made in the techniques and methods of prevention of accidents and ill-health in factories.

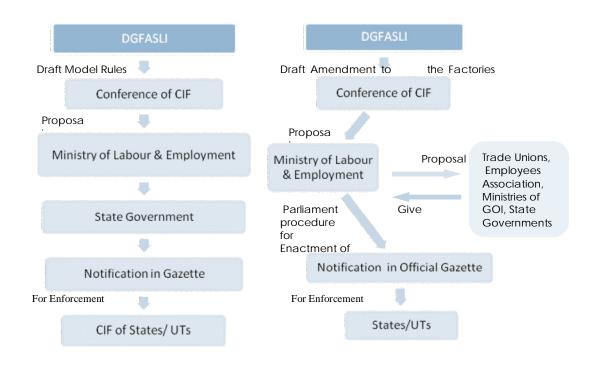
Flowchart showing the system of Technical Standards Development

Framing of model Rules

Amendment to the Factories Act

Conference of CIFs, Field Studies by Labour Institutes, ILO Standards, Representations from Trade Unions other Ministries of GOI, & NGOs

Generate Ideas



During the year the following major activities were carried out:

4.1.1. International/ILO instruments on Safety and Health

4.1.1.1 ILO Convention Concerning Safety in the Use of Asbestos

The ILO Convention No. 162 concerning safety in the use of asbestos has been adopted by the ILO in order to ensure protection of workers exposed to asbestos. The Ministry of Labour & Employment constituted a Committee of **Experts** under Chairmanship of Director General, DGFASLI for examining the viability of ratification of this Convention. The Committee suggested several steps for giving effect to the provisions of the Conventions by way of amending the provisions in various statutes relating to occupational safety, health and welfare. The Committee suggested that the provisions and the requirements in line with those prescribed in the Schedule XIV to the Model Rule 120 framed under Section 87 of The Factories Act, 1948, should be incorporated in statutes such as The Mines Act, 1952, The Building and Other Construction Workers (Regulation of Employment and Conditions of Service), 1996, etc. This recommendation of the Committee has been favorably considered by the Tripartite Committee on Conventions at national level.

4.1.1.2 In addition to the above, the DGFASLI also prepared reports on the following ILO instruments:

- Convention No. 155 concerning occupational Safety and Health.
- Labour Clauses (Public Contracts) Convention 1949 (No.94) and recommendation (No. 84)
- Observations of the ILO Committee of Experts on application of ILO Convention No. 81 concerning Labour Inspection.

- Report on Convention No. 89 concerning Night Work (Women) (Revised) 1948 Protocol of 1990 and Observations, 2005.
- ILO Questionnaire regarding adoption of an autonomous recommendation on "HIV/ AIDS and the World of Work "
- "Strategic Approach to International Chemical Management (SAICM)" as adopted in the first International Conference on Chemical Management held on 6.2.2006 at Dubai, United Arab Emirates.

4.1.2 National level policies and programmes

4.1.2.1 National Policy on Safety Health and Environment at Workplace

The Article 39 of the Constitution of India requires the Government to direct its policy to ensure that the health and strength of workers, men and women and the tender age of children are not abused. The Second National Commission on Labour as well as the Planning Commission of India in its document on the 10th Five Year Plan also recommended formulation of a National Policy on Occupational Safety, Health and Environment. The Ministry of Labour & Employment constituted a Committee under the Chairmanship of Director General, DGFASLI for drafting a National Policy. The Committee formulated a draft policy in the year 2002 and the process of consultation with all stake holders was undertaken. The final draft policy, after incorporating the valuable suggestions and comments received from various stake holders, was prepared and submitted to the Ministry of Labour & Employment for their consideration. The salient features of the National Policy are given below:-

- It recognizes safe and healthy working environment as a fundamental human right.
- It identifies the main areas of concern
- It aims at enhancing the well-being of the employee and the society at large by eliminating work related injuries, diseases, etc.
- It enumerates the goals to be achieved and brings into focuss the objective of continuous reduction in the incidence of work related injuries and diseases.
- It describes the action programme with special emphasis on enforcement and compliance, development of national standards, creation of awareness, research and development, skill development and data collection.
- It also provides for regular review at least once in 5 years.

4.1.2.2 National Programme on Control of Silicosis

A scheme has been submitted to the Ministry of Labour & Employment for development of technical body at DGFASLI for monitoring silicosis in the

country.

The objectives of the scheme are given below:

- To assess the prevalence of Silicosis in India, especially amongst the workers employed in manufacturing, port, construction and unorganized sectors.
- 2. To develop a system for creating and updating a data base on mortality and morbidity due to silicosis in India.
- 3. To suggest appropriate preventive and control measures for elimination of silicosis at respective work places.
- 4. To generate awareness of Silicosis among the working population as well as employers by imparting health education through various means like seminars, symposiums, workshops, training programmes, mass-media etc.
- 5. To take initiative measures for rehabilitation of the afflicted workers.
- 6. To work out the compensation and its modalities towards the victims of silicosis.

Three awareness programmes on "Prevention of Silicosis" were organized at Godhra, Balasinor and Vadodara districts of Gujarat for workers as well as management personnel working in glass manufacturing industry during August, 2008 for about 250 workers and 100 management personnel and manufacturers. A National Workshop on Occupational Health with special reference to silicosis was also organized from 23rd to 26th September, 2008 for Medical Officers from ESIC and Primary Health Centres. The total numbers of participants were 33.

4.1.2.3 Amendments to the Factories Act, 1948

Based on the recommendations of the various Conferences of Chief Inspectors of Factories, DGFASLI prepared a comprehensive proposal on amendments to the provisions of The Factories Act, 1948. The proposal contained 48 items of amendments including certain new provisions. The proposal was presented in the meeting of the Bureau Heads in the Ministry of Labour & Employment, in January, 2008. The decisions taken in the meeting were appropriately reflected in the proposal. The modified proposal was circulated amongst different Ministries / Departments of Govt. of India and also amongst all States and Union Territories for wider consultation. The valuable comments received from these organizations were reviewed, examined and appropriately incorporated in the proposal. The final proposal was sent to the Ministry of Law and Justice, Legislative Department, for their approval. The proposal, after incorporating the suggestions made by the Legislative Department, was forwarded to the Union Cabinet for their consideration. The salient features of the proposal are as below:-

- Redefining the term "hazardous process".
- Incorporation of a new term "hazardous substance"

- Deletion of Section 26 regarding casing of new machinery.
- Restricting the employment of pregnant women, persons with disabilities and young persons on certain machinery
- Incorporating new Section concerning "Personal Protective Equipment".
- Incorporating provisions for separate facilities for male and woman workers
- Scaling down the requirement for canteen from 250 workers to 100 workers.
- Classification of offences and corresponding penalties
- Enhancement of penalties
- Increase in the period of limitation
- Power of Central Government to make rules.

4.1.2.4 The 48th Conference of Chief Inspectors of Factories

The 48th Conference of Chief Inspectors of Factories was organized by the DGFASLI at Haryana Institute of Public Administration, Gurgaon from 9 – 11 Jan. 2008. The Conference was inaugurated by Shri Oscar Fernandes, Hon'ble Minister of State for Labour & Employment (Independent Charge), Government of India on 9th Jan. 2008. Shri A.C. Choudhary, Hon'ble Minister for Labour & Employment, Govt. of Haryana, presided over the function. Madam Blossom Fernandes was the Guest of Honour for the function. Dr. N.C. Wadhwa, IAS, Labour Commissioner and Chief Inspector of Factories, Govt. of Haryana, welcomed the dignitaries, delegates and invitees. Shri S.K. Srivastava, IAS, Joint Secretary, Ministry of Labour & Employment, Govt. of India, gave the welcome address. Shri S.K. Saxena, Director General, DGFASLI proposed the vote of thanks.

The Technical Session of the Conference was attended by 2 officers from the Ministry of Labour & Employment, 26 Chief Inspectors of Factories and 14 officers from the DGFASLI. The Conference deliberated on very important issues connected to safety, health and welfare of workers employed in the factories. Some of the important recommendations made by the Conference are as follows:-

 Constitution of a Committee of CIFs for accreditation of Safety Auditors under The Factories Act, 1948



Shri Oscar Fernandes, Hon'ble Minister of State for Labour & Employment (Independent Charge), Government of India inaugurating the 48th Conference of Chief Inspector of Factories on 9th Jan. 2008



Dr. N.C. Wadhwa, IAS, Labour Commissioner and Chief Inspector of Factories, Govt. of Haryana welcoming the dignitaries on the occasion of inaugural function of the 48th Conference of Chief Inspectors of Factories on 9th Jan. 2008

- Amendment of the Second Schedule to The Factories Act, 1948 in line with the Permissible Limits published by American Council of Government Industrial Hygienists.
- Qualifications of Safety Officers
- Scaling down the requirement of safety officer from 1000 workers to 500 workers.
- Framing of the Model Rule regarding retention of medical records.
- Review of a system of self-certification in respect of factories.
- On-line acceptance of returns under The Factories Act, 1948.
- Overlapping jurisdiction under The Factories Act, 1948 and The Building and Other Constructing Workers (Regulation of Employment and Conditions of Service) Act, 1996
- Exemption of dal and besan mills from the provisions relating to hours of work.

4.1.2.5 Preparation of Model Schedule on Rubber and Plastic Mills and Injection Moulding Machine

The 48th Conference of Chief Inspectors of Factories constituted a Committee comprising Chief Inspectors of Factories Uttar Pradesh, Maharashtra and Haryana and Director (Industrial Medicine), Central Labour Institute for framing a Model Schedule on Rubber and Plastic Mills and Injection Moulding Machine. The meeting of this Committee was held on 11th & 12th March 2008 at Central Labour institute, Mumbai. The Committee drafted the Model Schedule for consideration of the 49th Conference of Chief Inspectors of Factories.

4.1.3 Comments/clarifications etc. on the provisions of the Factories Act, 1948 and other related issues

Comments on statutes, related instruments, reports, clarifications on the statutory provisions and other related issues were prepared.

SI.No.	Particulars Particulars Particulars Particulars	Nos.
1	Statutes and Amendments	5
2	Reports of the Task Force / Committees	5
3	Non statutory Standards, Guidelines	2

The various comments provided includes those relating to coverage of hotels under the Factories Act.1948; working hours provisions under the contract Labour (Abolition & Regulation) Act, 1970 vis-à-vis the Factories Act, 1948; appointment of occupier in respect of Public Sector Undertaking, etc.

4.1.4 Parliament Questions/Assurances

Prepared replies to 19 Parliament Questions and sent to Ministry of Labour and Employment concerning:

- Hotel Industry under the Factories Act, 1948
- Killing of child labourers in Nasik.

- The need to employ trained workers at stone quarries of Mahoba, U.P. and to provide social security and medical facility to the workers.
- Violation of Labour Laws.
- Violation of labour Laws by Insecticides producing industries.
- Asbestos factories and mines.
- Need to enforce stringent safety measures in factories and to check pollution by industrial units in Jharkhand.
- Implementation of legislation for health and safety of workers.
- Violation of Labour Laws in Gujarat on non-implementation of industrial health and safety measures in stone crushing factories.
- Accidents and Death at Workplace.
- Labour Intensive Central Scheme.
- Toll in work related mortality.
- Hazardous Chemicals used in small industries.
- Number of workers dying in accident in construction mines and coal.

4.1.5 Others:

Prepared reports, comments, status etc., on the following:

- Report regarding issues related to safety and health of workers in Orissa.
- Action Taken Report on the accident which took place at M/s. Godavari Power & Ispat Ltd, Raipur Chattisgarh.
- Safety of sewage workers.
- Safety and health summit to be organized by Korea Occupational Safety and Health Agency in Seoul, Republic of Korea on 29.6.2008.
- "India Brazil South Africa (IBSA) Forum" Brazilian proposal for the improvement of IBSA Operational Structure and Non-paper Discussion Document – South Africa
- Representation of Engineering and Electrical Goods Mazdoor Sangh, Gharda Gears Ltd., Dewas, Madhya Pradesh.
- Representation of M/s. SRMB Srijan Limited, Sagarbangha, Durgapur, West Bengal regarding unjustified working hours

4.1.6 Implementation of the Right to Information Act 2005

- The enactment of Right to Information Act, 2005, is a gateway for the citizens to seek information under the control of Public Authority and promote transparency and accountability.
- DGFASLI being one of the Public Authorities, the C.P.I.O. received a total no. of 70 applications during the period January to December, 2008. Information were provided within the stipulated time frame to 69 applications, out of which 49 applications were received under Section 6(3) of the RTI Act and 1 application was rejected under Section 8(1)(j).

An amount of Rs.208 was received during the said period as application fees and cost of provision of information in material form.

- The Appellate Authority of DGFASLI received a total no. of 8 applications during the period, out of which 2 applications were rejected under Section 8(1)(j) and 2(f).
- As directed by the C.I.C., in one of the cases, the C.P.I.O. and the Head of Office, DGFASLI attended the Hearing and honoured the decision of the CIC.

4.1.7 Ship Breaking

The ship-breaking operations are covered under the provisions of the Factories Act, 1948 and the state factories Rules framed there-under. In addition, considering the hazardous nature of operations and health hazards associated with these operations, the Government of Gujarat has notified a separate schedule under Section 41 of the Factories Act, 1948. 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.

- DGFASLI carried out a follow up study to find out the status of use of Personal Protective Equipments (PPE) in the ship breaking industry at Alang. It was observed that the workers were provided with PPE and they showed a positive attitude towards the safety. Almost all workers were using helmets, gloves, safety shoes and mask. The gas cutters were using goggles. It was also found that in most of the yards, washroom and toilet facilities were provided for the workers. Crane operators and helpers were provided with ear muffs/plugs. Safety belts were provided to the people working at heights.
- DGFASLI carried out the radiological study of workers working in the Ship Breaking Industry. 351 workers were medically examined. However, only 79 workers could be x - rayed as the workers had migrated because of low volume of ship breaking activity.

4.2 Administration of the Dock Workers (Safety, Health and Welfare) Act, 1986 and Regulation framed there under and the Environment (Protection) Act, 1986 and Rules framed there under:

The Dock workers (Safety, Health and Welfare), Act, 1986 and the Regulations 1990 framed there under cover safety, health and welfare aspects of all the workers engaged in dock work, whether in loading or unloading of cargo on board the ship, alongside it or in transit sheds, warehouses or yard etc., within the port premises including those engaged in chipping and painting of ships. These statutes are in line with ILO Convention No. 152 on Occupational Safety and Health (Dock Work).

Administration of the Act and the Regulations in major ports is carried out by the Ministry of Labour and Employment, through DGFASLI, Mumbai. The Director General is the Chief Inspector of Dock Safety appointed under the Act. The Chief Inspector of Dock Safety is also an authority for enforcement of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 framed under the Environment (Protection) Act, 1986, in the major ports.

The above statutes are enforced by the Inspectors posted at Inspectorate of Dock Safety at all the major ports viz. Mumbai, Kolkata, Chennai, Kandla, Mormugao, New Mangalore, Cochin, Tuticorin, Visakhapatnam, Paradip and Jawaharlal Nehru Port except Ennore where the Inspectorate is yet to be set up. Presently, the enforcement in this Port is carried out by the Inspectors posted in Inspectorate Dock Safety, Chennai. Inspectors also enforce the Marking of Heavy Packages Act, 1951 and Rules framed there under in the major ports.

The main function of the Inspectorates is to ensure the compliance with the provisions under the statutes. The statutory responsibilities of Inspector include inspection of ships, tankers, loose-gears, container-handling equipment, docks, container-yard and terminal, hazardous installations and isolated storages, tanks; carrying out the investigation of accidents (fatal and serious) and dangerous occurrences; prosecution of employers, attending to complaints, providing advisory services and conducting safety promotional activities like training programmes, workshops, celebration of safety week etc.

The Inspectorate also prosecutes the agency responsible for serious violation of any provision of the Act and Regulations framed there under.

The 10th meeting of the Advisory Committee, constituted under Section 9 of the Dock workers (Safety, Health and Welfare) Act, 1986 was held at Paradip Port on 26th & 27th November, 2008. Shri K. Raghuramaiah, IRTS, Chairman, Paradip Port Trust inaugurated the meeting. Shri S.K. Saxena, Director

General, DGFASLI and Chief Inspector of Dock Safety and Chairman Advisory Committee gave key-note address. The meeting deliberated upon various issues related to improvement of Safety and Health of the dock workers in the major ports such as development of effective safety management system for the protection of safety and health of private & contract workers working at ports, effective measures for the prevention/control of accidents at ports, compulsory use of Timber Grabs for handling of timbers, restriction on the entry of unauthorized persons inside the port and a system of Safety Performance Report for renewal of licences.



Shri K. Raghuramaiah, IRTS, Chairman, Paradip Port Trust addressing on the inaugural function of 10th meeting of the Advisory Committee held at Paradip Port on 25th & 26th November, 2008

The 25th Conference of Inspectors of Dock Safety was held at Goa on 4th & 5th February, 2008. Shri S.K. Srivastava, I.A.S., Joint Secretary, Ministry of Labour & Employment, Government of India inaugurated the Conference. Shri A.K. Vaishnaw, I.A.S., Deputy Chairman, Mormugao Port Trust, Goa and Shri S.G. Redkar, Chief Inspector of Factories & Boilers, Government of Goa, gave special address and Shri S.K. Saxena, Director General, DGFASLI, delivered the key-note address. During the Conference, important issues such as ratification of ILO conventions, experience and age criteria for competent persons, renewal of stevedores licences and safety performance report, computerization of Inspectorates and connectivity with empanelment of Doctors were deliberated upon.

The 6th workshop for competent persons declared under Dock Workers (Safety, Health and Welfare), Act 1986 was held at Kolkata on 4th June, 2008. Shri S.K. Saxena, Chief Inspector of Dock Safety and Director General, DGFASLI, Mumbai, inaugurated the workshop. Shri A. Majumdar, IAS, Deputy Chairman, Kolkata Port Trust, presided over the inaugural function. During the workshop presentations on various topics related to testing and examination of lifting appliances were made in addition to the deliberations on important agenda points such as training on NDT, age relaxation etc.

Tables 4.1, 4.2 and 4.3 give details of enforcement related activities undertaken during the year 2008.



Shri S.K. Srivastava, I.A.S., Joint Secretary, Ministry of Labour & Employment, Government of India inaugurated the 25th Conference of Inspectors of Dock Safety held at Goa on 4th & 5th February, 2008.



Shri. S.K. Saxena, Director General, DGFASLI addressing the gathering on the inaugural function of the 6^{th} workshop for competent persons held at Kolkata on 4^{th} & 5^{th} June, 2008.

Table 4.1: Inspections and other visits in Ports during 2008.

SI.	Ports	Ship	Dock	Gear	Isolated Storage /	Other
No.					Pipelines	Visits
1.	Mumbai	41	29	40	00	297
2.	J.N. Port	09	19	00	00	35
3.	Kandla	55	56	55	00	129
4.	Mormugao	84	31	89	04	40
5.	Kolkata	198	102	133	14	259
6.	Paradip	109	20	109	10	32
7.	Visakhapatnam	105	04	105	02	108
8.	Chennai	63	86	95	08	247
9.	Cochin	31	28	45	02	54
10.	New	122	90	127	00	64
	Mangalore					
11.	Tuticorin	136	62	101	00	43
Total		953	527	899	40	1308

Table 4.2: Prosecutions in Ports during 2008

SI. No.	Ports	Pending from previous year	Launched during the year	Decided during the year	Convicted
1.	Mumbai	06	-	01	01
2.	J.N. Port	02	-	01	01
3.	Kandla	14	-	-	-
4.	Mormugao	-	-	-	-
5.	Kolkata	03	-	-	-

6.	Paradip	01	01	-	-
7.	Visakhapatnam	04	02	-	-
8.	Chennai	06	-	-	-
9.	Cochin	01	-	-	-
10.	New	02	-	-	-
	Mangalore				
11.	Tuticorin	01	01	02	02
	Total	40	04	04	04

Note: - indicates nil

Table 4.3: Investigations into Reportable Fatal Accidents/ Dangerous Occurrences

SI. No.	Ports	Pending from previous year 2007	Initiated during the year 2008	Concluded during the year 2008
1.	Mumbai	2	5	2
2.	J.N. Port	1	4	1
3.	Kandla	3	9	5
4.	Mormugao	1	3	1
5.	Kolkata	3	5	1
6.	Paradip	2	1	2
7.	Visakhapatnam	1	1	2
8.	Chennai	7	9	7
9.	Cochin	1	3	0
10.	New	2	2	1
	Mangalore			
11.	Tuticorin	3	3	4
	Total	26	45	26

Chart 4.1

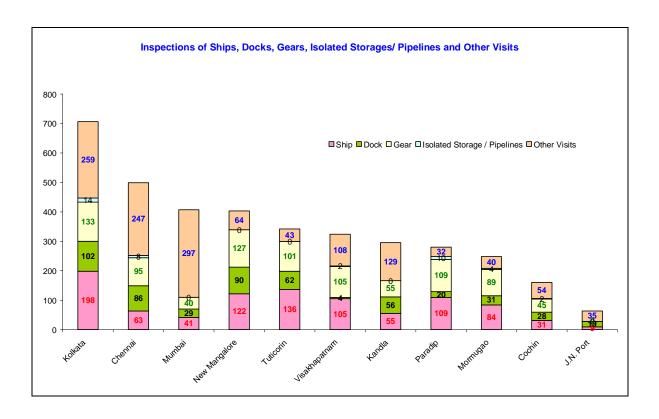
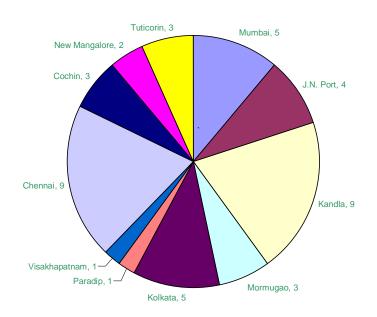


Chart 4.2

Investigations into Reportable Fatal Accidents / Dangerous Occurrences Initiated during the year 2008



Safety week celebrations were held at the Ports of Kolkata, Visakhapatnam Chennai, New Mangalore, Cochin, J.N.Port and Tuticorin. During the

celebrations, various safety promotional activities like safety poster competitions, safety quiz contest, first-aid and fire fighting demonstrations and appreciation programmes were organized for benefit of dock workers and their families.

Table 4.4: Dock Safety Committee meetings conducted/Safety Weeks

celebrated during 2008

SI. No.	Ports	Committee Meetings	Safety Weeks
1.	Mumbai	3	-
2.	J.N. Port	4	1
3.	Kandla	3	-
4.	Mormugao	3	-
5.	Kolkata	6	2
6.	Paradip	3	1
7.	Visakhapatnam	3	1
8.	Chennai	4*	1
9.	Cochin	3	1
10.	New Mangalore	4	1
11.	Tuticorin	4	1
	Total	40	09

^{*} Including 2 Safety Committee Meetings at Ennore Port

4.3. Safety and Health in Construction Sector:

The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act (BOCW Act) was enacted in 1996. The Central Government is the appropriate government for notifying the rules and regulations under the Act as well as the enforcement of the provisions under the said Rules, in respect of establishments in relation to which Central Government is the appropriate government under the Industrial Disputes Act, 1947. In respect of other establishments, the State Government is the appropriate government for notifying the Rules and enforcing the provisions. DGFASLI at the behest of the Ministry of Labour and Employment had done the entire work of drafting the above said Act 1996 as well as framing of the Central Rules of 1998 made thereunder.

DGFASLI is also involved in policy matters related to the administration of the BOCW Act, 1996. The Director General, DGFASLI is a member on the Central Advisory Committee constituted under Rule 10 of the Central Rules of 1998.

DGFASLI declared 11 applicants as competent persons under BOCW Act 1996. Officers from DGFASLI worked as members of Task force constituted for amendment in BOCW Act 1996.

DGFASLI was entrusted with the task of processing applications in respect of approval of Competent Persons under Rule 2(j) of the Central Rules, 1998. DGFASLI processed about 46 applications for granting competency under

the said Rules for the purpose of testing, examination or annealing and certification of lifting appliances, lifting gears, wire ropes or pressure plants and equipment and forwarded the recommendations to the Ministry of Labour and Employment for appointment of competent persons.

4.4 Studies and Surveys

(a) National Studies and Surveys are undertaken by DGFASLI, in its efforts towards helping the Central Government to ascertain the status of working conditions, safety and health in factories and docks, and to formulate the appropriate standards for inclusion in statutes.

Table 4.5: National Studies and Surveys undertaken during 2008

SI.	Title	Status
No.		
1.	Assessment of Capability and Management of	Under
	Occupational Safety & Health in the States of India.	Progress
	During the year, report of Chattisgarh was under progress.	
2.	Safety, Health & Ergonomics study of child labour (ILO	
	Project)	Completed

(b) State level Studies and Surveys are undertaken in the State in certain priority areas to ascertain status of Safety Health and Environment at work place.

Table 4.6: State level Studies and Surveys undertaken during 2008

SI.	Title	Status
1	Status of safety and health in Jute Mills in West Bengal	Completed
2	Joint inspection of storage, handling and processing of hazardous chemicals in collaboration with Directorate of Factories & Boilers, Uttarakhand	Under Progress
3	Radiological study of workers in ship-breaking industry at Alang, Gujarat	Under Progress
4	Diagnostic camp for the confirmation of the Silicosis affected persons at Alirapur, Jhabua District and Kukshi of Madhya Pradesh	Under Progress
5	Joint inspection of storage, handling and processing of hazardous chemicals in collaboration with Directorate of Factories, U.P.	Under Progress

4.5 Unit Level Consultancy Studies

Unit level consultancy studies are carried out at the request of the management and reports are submitted for implementation of the recommendations for further improvement in factories concerned. The

institute-wise details of these studies are given in **Annexure I**.

Table 4.7 Unit level consultancy studies undertaken during 2008

SI.	Area	No. of Consult	ancy Studies
No.		Completed	Under Progress
1	Safety Audit	7	10
2	Occupational Health	0	0
3	Airborne Contaminants	10	7
4	Noise Level	2	1
5	Ventilation	1	1
6	HAZOP	3	0
7	Safety Audit-MAHC	2	0
8	Ergonomic Evaluation	5	0
9	Risk Assessment	2	0
10	Industrial hygiene	1	0
11	Environmental conditions	3	0
12	Illumination	2	0
	Total:	38	19

4.6 Education and Training

DGFASLI organises workshops, seminars, training programmes etc. for the benefit of industries, ports, enforcement officials etc.

4.6.1 Seminars:

Seminars are organized on the basis of findings and recommendations of various national studies; unit level studies and surveys; and issues and priorities of national concern. These seminars provide platform for discussing various issues related to safety and health; and recommend national level/ State level/ Unit level action plan in respective area of concern.

Table 4.8: Seminars conducted during 2008

SI. No.	Title	Venue	Date	Partic- ipants
1.	Strategies and Programme on Health	Venue	Date	іраніз
1.	A Hygiene	RLI, Chennai	17/01/2008	34
2.	Seminar on Need for Improvement of OSH Status	Kandla SEZ	21/01/2008	63
3.	Seminar on Emerging Roles and Challenges of Safety Professionals in Indian Industries	CLI, Mumbai	09/02/2008	256
4	Safety Culture-a ground reality, not a myth	RLI Kolkata	26/03/2008	63
5	Occupational Safety & Health Information	CLI, Mumbai	24/04/2008	15
6	Seminar on Occupational Safety and Health - Vision 2020: Challenges and Strategies	SCOPE Complex, New Delhi	28/04/2008	272
7	Occupational Safety & Health	CLI, Mumbai	05/05/2008	15

	Information			
8	"SHE in Hazardous Industries &	NOIDA	00/00/0000	004
	Related Gender issues"	NOIDA	20/09/2008	234
9	Collaborative Seminar on			
	"Occupational Safety & Health issues			
	and Developments" with MCCI,	Channai	10/10/2000	70
10	Chennai. Collaborative Seminar on "	Chennai	18/10/2008	70
10				
	Humanizing Work Environment in Industries for Creating Positive Safety			
	and Health Culture"	Bhubaneswar	25/10/2008	165
11	and ricalin Guitare	Mazagaon	23/10/2000	103
' '	Seminar on"Industrial Safety &	Dock Ltd.,		
	Health"	Mumbai	04/11/2008	35
12	"Construction Safety: Challenges &			
	Solutions " in collaboration with			
	consolidated Construction			
	Consortium Ltd., (CCC) Chennai	Chennai	06/11/2008	165
13	National Conference on			
	"Occupational Safety, Health &			
	Work Environment" in collaboration			
	with Directorate of Factories &		13-	
	Boilers, Govt. of Karnataka	Bangalore	14/11/2008	600
14	Collaborative National Seminar on			
	"Industrial Safety & Health			
	Management organized by FICCI,	F1001		
	New Delhi with the support of MOL &	FICCI, New	20-	F.0
1.5	E Consider Consider on "Cofety is	Delhi	21/11/2008	59
15	One day Seminar on "Safety is	DIL Kalkata	12/12/2000	2.4
	always profitable"	RLI, Kolkata	12/12/2008	24
	Total			2070

Further, to upgrade the technical competence of officers and scientific staff of the organization, 3 Professional Interaction & Update Seminar (PIUS) and 3 Satellite Professional Interaction & Update Seminar (SPIUS) were organized.

Table 4.9: Satellite Professional Interaction Update Seminars (SPIUS)

14210	1:7: datelike i rolessional interaction	oddio ooiiiiidi	3 (01 100)
S.	Title	Date	No. of Participants
No.			
1.	Effectiveness of Safety Education	11/06/2008	32
	Programme and Ergonomic Design of		
	Safety Helmet for Industrial Workers.		
2.	"Safety in Bulk Storage of Hazardous	29/08/2008	30
	Chemicals"		
3.	Noise Hazards in Industries and Use of	03/11/2008	25
	Effective Protection		
	Total		87

Table 4.10: Professional Interaction & Update Seminar (PIUS)

SI No	Title	Date	No. of Participants
1	"Little Insight in the Human Body and Mind"	30/5/2008	52
2	" Occupational Safety & Health Issues & Strategies"	03/07/2008	42
3	"Safety Behavior at Work: Role of Authority"	5/09/2008	55
	Total		149

4.6.2 Workshops:

The workshops are organized to enhance the skills of the participants in dealing with matters connected to safety, health, productivity and environment etc.

 Table 4.11 : Workshops conducted during 2008

SI. No.	SI. No. Title		Organi-
		pants	sations
1.	Workshop on Safety Audit	22	8
2.	Workshop on Dispersion Modeling & Impact Assessment of Major Toxic & Flammable release.	9	6
3.	One day Workshop on ILO Radiograph (2000 Version) as a part of Refresher course for Plant Medical Officers	16	12
4.	Hazards and Operability (HAZOP) Study	11	4
5.	Workshop on Safety, Health & Environment Management - Innovations/Challenges for Safety Professionals	14	4
6.	6th All India Workshop for Competent Persons appointed under Dock Safety Statutes.	51	49
7.	Workshop on Safety & Health in Hazardous Industries of Uttrakhand	60	30
8.	Training Workshop on Selection & Quality Assurance, Effective use of PPE	14	8
9.	Workshop on Hazard Operability Study	26	16
10.	National Workshop on occupational Health with special reference to Silicosis	33	9
11.	Training Workshop on Industrial Hygiene techniques	2	1
12.	Workshop on Safety Audit	8	7
13	Tripartite Regional Workshops of Occupational, Safety & Health Stakeholders held in Mumbai	42	23
14	Tripartite Regional Workshops of Occupational, Safety & Health Stakeholders in NOIDA	65	51
15	Tripartite Regional Workshops of Occupational, Safety & Health Stakeholders in Chennai	64	41
16	Tripartite Regional Workshops of Occupational, Safety & Health Stakeholders in Kolkata	31	30
	Total	468	299

4.6.3 Professional Programmes:

To fulfill the need of qualified Safety officers, and Factory Medical Officers in the industry, the organisation conducts one year Advance Diploma Course in Industrial Safety and three months "Associate Fellow of Industrial Health" Certificate Course respectively. In order to meet the demands of supervisors competent to handle and supervise hazardous processes in industries, a one month certificate course in industrial safety and health was started at CLI Mumbai as well as RLI Kolkata, Kanpur and Chennai.

Table 4.10: Professional Programmes- 2008

SI.	Participants and Area	Programmes	Participant	Organisatio
			S	ns
1	Advance Diploma in Industrial Safety	4	149	119
2	AFIH - certificate course in	2	58	54
	occupational health			
3	One-month Certificate Course for	1	6	6
	Supervisory Personnel in hazardous			
	processes factories			
	Total:	7	213	179

4.6.4 Longer Duration Training Programmes

Specialised training programmes are conducted for identified target groups such as Senior Managers, Safety Officers, Factory Medical Officers, Supervisors, Trade Union Officials and Safety Committee members from Industry. Basic course for inspectors of factories who are freshly recruited is conducted to impart technical knowledge and skills in the field of safety and health. In view of the need for inspection of specific industries and Major Accident Hazards units, specialised courses are also conducted for senior inspectors.

Some of the programmes are exclusively conducted for the union-leaders where joint participation of management personnel and union representatives from industries are the special features of some programmes.

The institute-wise details of Longer Duration Training Programmes and Professional Programmes are given in **Annexure-II**

Table 4.11: Longer Duration Training Programmes - 2008

SI.	Participants and Area	Programmes	Participants	Organisations
A.	Inspectors of Factories			
	Basic course	1	26	5
	Refresher course	2	18	11
	Chemical Safety	2	20	10
	MAHC	1	11	5
B.	Management Personnel			

	Refresher course for Medical	1	16	12
	Officer			
	Refresher course for Safety	1	14	8
	Officer			
	Industrial Safety	9	218	99
	Industrial Hygiene	3	26	23
	Industrial Productivity	1	4	1
	Occupational Health	3	32	26
	Industrial Physiology	7	85	28
	Industrial Psychology	1	18	6
	Ergonomics	1	11	5
	Staff Training	3	47	17
	MAHC	4	51	39
	HAZOP	1	14	1
	Construction Safety	2	52	33
	Environmental Pollution	2	13	11
C.	Trade Union Leaders/Workers	/Joint Participati	on	
	Industrial Safety	5	78	42
	Staff Training	1	13	5
	Chemical Safety	1	27	12
	Indl. Psychology	5	76	24
	Hazardous Substances	1	7	7
	Dock Safety	2	47	6
	Total:	60	924	429

4.6.5 Need Based In-Company Training Programmes:

On the request of managements, various disciplines of DGFASLI conduct incompany need based training programmes for the benefit of cross-section of personnel from respective units. Such programmes are designed after proper identification of needs of the defined target through preliminary discussions with the managements. The institute-wise details of the need-based in - company Training Programmes are given in **Annexure – III**

Table 4.12: Need based in - company Training Programmes conducted during 2008

SI.No.	Level of Participants	Programmes	Participants	Organisations
1.	Management Personnel	11	354	11
2.	Supervisors	8	291	8
3.	Trade Union	4	138	4
	Leader/Workers/Joint			
	Participation			
	Total	23	783	23

4.6.6 Short Duration Training Programmes:

DGFASLI also organises short duration (1 - 2 days) training programmes for the benefit of supervisors, workers, workers representatives from factories. Such programmes are organised in the field of Safety, Health, Hygiene, Psychology, etc. The institute-wise details of Short Duration Training

Programmes are given in **Annexure IV**.

Table 4.13: Short Duration Training Programmes in 2008

SI.N	Level of Participants	Progra-	Participant	Organis-
Ο.		mmes	S	ations
1.	Supervisors	7	86	19
2.	Trade Union Leader/ Workers/ Joint	2	55	6
	Participation			
3.	Management Personnel	3	69	20
4.	Students of Educational Institutions	9	198	9
5.	Other Enforcement officers	1	16	1
	Total:	22	424	55

4.6.7 Appreciation and Promotional Programmes:

Each of the Labour Institutes at Mumbai, Kolkata, Kanpur and Chennai has an Industrial Safety Health and Welfare Centre and "Mobile Safety Exhibition Van". The exhibition vans are equipped with daylight film/video projection system and other audio visual equipment. There are also half day appreciations programmes conducted at various laboratories and divisions of the organization.

During the year, 3187 beneficiaries visited the Industrial Safety, Health and Welfare Centres at CLI Mumbai and RLI Kolkata, Kanpur and Chennai.

Table 4.14: Appreciation and Promotional Programmes in 2008

SI.	Institute	Visitors to	Programmes	Beneficiaries	Organisation
1.	CLI	Appreciation	186	3654	190
	Mumbai	Programmes			
		SHW Centre	107	2250	173
2.	RLI	Appreciation	63	1124	493
	Kolkata	Programmes			
		SHW Centre	4	111	44
3.	RLI	Appreciation	16	587	15
	Chennai	Programmes			
		SHW Centre	16	598	16
4.	RLI	Appreciation	-	-	-
	Kanpur	Programmes			
		SHW Centre	-	-	-
5.	Dock	Appreciation	-	-	-
	Safety	Programmes			
		SHW Centre	7	228	7
	Total	Appreciation	265	5365	698
		Programmes			
		SHW Centre	134	3187	240

4.7 Technical Advice

Technical advice and guidance are provided to industries and port users on various aspects relating to control of hazards, prevention of accidents and

occupational diseases, work environment, productivity etc.

Table 4.15: Technical Advice rendered in 2008

SI.No.	Institute	No. of Units
1.	Dock Safety Inspectorates	35
2.	Central Labour Institute, Mumbai	16
3.	Regional Labour Institute, Kolkata	5
4.	Regional Labour Institute, Chennai	6
5.	Regional Labour Institute, Kanpur	2
	Total:	64

4.8 Testing of Personal Protective Equipment

The respiratory and non-respiratory protective equipment testing laboratories at the Central Labour Institute, Mumbai undertake performance tests of canisters, masks, helmets, safety shoes, safety goggles, safety belts, welding glasses etc.

Table 4.16: Personnel Protective Equipment tested in 2008

SI.No.	Type of Personal Protective Equipment	Personal Protective Equipments tested
1.	Non-Respiratory Equipment	347
2.	Respiratory Equipment	148
	Total:	495

4.9 Approval of Flameproof Electrical Enclosures

Use of flame/explosion - proof electrical enclosures is mandatory in hazardous units where flammable environment exists. The control on quality of such flameproof electrical enclosures is assured through test methods as stipulated in IS: 2148-2004. DGFASLI is the approving agency for these enclosures for the purposes of the Factories Act. The approvals are issued on the basis of inspection of units manufacturing these equipments and the test reports of recognized Testing Laboratories such as Central Power Research Institute and Central Institute of Mining and Fuel Research.

Table 4.17: Approval of Flameproof Electrical Enclosures during the year 2008

Applications	10				
received					
Approvals issued	4 manufacturers	for	36	flame-proof	electrical
	enclosures				
Inspection visits	5 Manufacturing units.				

4.10 Talks

The officers of the organisation deliver talks on special topics in programmes organized by outside agencies to disseminate latest technical information

with specific reference to national studies, unit level studies, surveys conducted. They are also publishing papers and articles and presenting them in important symposia, workshops and seminars

Table 4.18: Talks delivered during 2008

Sl.No.	Institute	No. of Talks	Partici- pants	Organ- isations
1.	DGFASLI (HQ)*	25	704	39
2.	Central Labour Institute, Mumbai	15	599	71
3.	Regional Labour Institute, Kolkata	3	60	2
4.	Regional Labour Institute, Chennai	4	387	62
5.	Regional Labour Institute, Kanpur	6	164	53
6.	Regional Labour Institute, Faridabad	0	0	0
	Total:	53	1914	227

^{*} Comprising of Factory Advice Service & Dock Safety Divisions.

4.11 Presentation of Papers/Articles/Reports Publication of Articles/Papers:

The contribution of DGFASLI officers in preparation of papers and articles and presenting/publishing them in important symposia, workshops and seminars are highlighted as under.

 Table
 4.19: Presentation of Papers in 2008

SI. No	Title Paper/Article	Periodicals/Events	Date
1.	Fire & Safety in MAH Units - A Legislative Approach	Fire, Safety & Security India Conference 2008 held at Green- Tech, Mumbai	10/04/200
2.	Introduction on Occupational Health	5th National Conference of Inspectorate of Factories and Green Triangle Society at Goa.	02/05/200
3.	Identiification and Evaluation of Major Risk in Industries	National Seminar on Safety, Health and Environment in Hazardous Industries & Related Gender Issues at Noida.	20/09/200
4.	Effect of Hazardous Chemicals especially on female workers	National Seminar on Safety, Health and Environment in Hazardous Industries & Related Gender Issues at Noida.	20/09/200
5.	Identification and Assessment of Risk	Seminar on Safety and Health jointly organized by DGFASLI, & Madras Chamber of Commerce & Industry at Chennai	18/10/200 8
6.	Health Hazards in Industries - Present Perspective	Seminar on Safety and Health jointly organized by DGFASLI, & Madras Chamber of Commerce & Industry at Chennai	18/10/200 8
7.	Accident Prevention in Industries	Workshop on "Challenges on Health & Safety in Present Industrial	20/10/200 8

		Scenario" at NTPC, Rihand	
8.	Effect of Hazardous Chemicals at the Workplace and their effects specially on Female Workers	Workshop on "Challenges on Health & Safety in Present Industrial Scenario" at NTPC, Rihand	20/10/200
9.	Noise & Vibrations - Consequences & Control Measures	National Conference on Occupational Safety & Work Environment, Bangalore	13/11/200 8
10	Occupational diseases- Prevention & Control	Technical seminar on Industrial Safety & Health Management, Delhi	20/11/200 8
11	OSH Management System and Standards	Seminar on Occupational Safety & Health - Issues & Development	18/10/200 8
12	Participative Approach to develop positive Safety & Health Culture	National Seminar on Occupational Safety & Work Environment, Bhubaneswar	25/10/200 8
13	MAH in India with Global Perspectives	National Conference on Occupational Safety, Health and Work Environment & Exhibition organised by Govt. of Karnataka at Bangalore	12/11/200 8
14	Issues and Solution in Construction sector	A National seminar on "Safety & Health in Construction Sector - Challenges & Solutions" at Chennai	06/11/200 8
15	Overview on the Safety requirements for lifting appliances under BOCW Rules, 1996	A National seminar on "Safety & Health in Construction Sector - Challenges & Solutions" at Chennai	06/11/200 8
16	Accident Prevention - Challenges and Solutions	Seminar on Occupational Safety & Health - Issues & Development	18/11/200 8
17	The concept of Humanization through ergonomically designed workplaces/workstations with interfaces and control system	National Seminar on Occupational Safety & Work Environment,	25/11/200 8
18	Occupational Health Service Vs. Profitability	Seminar on safety is always profitable at RLI, Kolkata	12/12/200 8
19	Status of Hazard Identification & Risk Analysis due to chemicals in Ports & Docks	Workshop on Hazard Identification & Risk Assessment in Ahmedabad (Organised by DMI, Bhopal & FICCI)	11/12/200 8
20	Industrial Safety and Health - Policy, Legal and Regulatory Issues	Seminar on "Industrial Safety and Health Management" at FICCI, New Delhi	20/11/200

Table 4.20: Publication of Papers/Articles - 2008

SI.No.	Title	Periodical/Events
1.	Management Occupational Back-Pain on	INDOSHNEWS Vol.12 No.1
	Shop Floor	

2.	Status of Use of PPEs in Ship Breaking Industry	INDOSHNEWS Vol.12 No.1
3.	Occupational Health Hazards in Tanneries	INDOSHNEWS Vol.12 No.2
4.	The Method of Checking the Effectiveness of Ear-Defenders	INDOSHNEWS Vol.12 No.2
5.	Industrial Injuries & Women Workers	INDOSHNEWS Vol.12 No.3
6.	Knowledge Based Society and Quality of Work-Life	INDOSHNEWS Vol.12 No.4
7.	Intervention for Prevention of Silicosis using provisions under Factories Act, 1948	INDOSHNEWS Vol.13 No.1
8.	Industrial Safety & Health-Vision 2020: Challenges and Strategies Industry Perspective	INDOSHNEWS Vol.13 No.2
9	Employee Participation in Achieving Industrial Safety & Health-Vision 2020	INDOSHNEWS Vol.13 No.2
10.	Policy and Statutory Framework on Industrial Safety and Health	INDOSHNEWS Vol.13 No.3

4.12 CIS National Centre for India:

As a CIS National Centre for India CLI provides information and services on:

- Microfiche reference
- Awareness on current events
- Information access through CD-ROMs of ILO, WHO, etc.
- MSDS
- DISPERSION MODELS

4.13 INDOSHNEWS Newsletter:

In order to create Safety and Health awareness and to project the services offered by the organisation and its achievements DGFASLI brings out a Quarterly newsletter "INDOSHNEWS". This quarterly newsletter is intended to reach to the people round the globe and bring about awareness in matters related to safety and health, highlight important issues, latest developments, current events in the area of safety and health. During 2008 seven volumes of INDOSHNEWS were brought out.

4.14 DGFASLI website

The DGFASLI website www.dgfasli.nic.in is a source of information on various safety and health related matters. The website was launched in January 2001. The website contains database on abstract on OS&H studies, reports; information on advisory services rendered by DGFASLI in the area of testing of respiratory and non-respiratory personal protective equipment, flame proof equipment approval, material safety data sheets and National Referral Diagnostic Centre, etc. The INDOSHNEWS newsletters of DGFASLI are also

available on the website. The training programme calendar for all the labour institutes, announcement on National Safety Awards & Vishwakarma Rashtriya Puraskar awards, AFIH course, Diploma Course in Industrial Safety along with the application forms are available on the website. The website enables users to access other useful websites related to safety and health and get the national directory of organisation-profile of agencies engaged in the field of safety and health. The website also contains the text of the Factories Act, 1948 and the Model Rules framed there under and also the Dock Workers (Safety, Health and Welfare) Act, 1986 etc. Statistics of Factories, Docks, List of Chief Inspectors of Factories, List of Dock Safety Inspectorates are also available.

5 Celebration of "Year of Industrial Safety and Health"

In the concluding session of the 48th Conference of Chief Inspectors of Factories held at Gurgaon, on 10th January 2008, Smt. Sudha Pillai, Secretary to Ministry of Labour & Employment, Government of India mooted the idea for celebrating the completion of 60 years of the Factories Act, 1948. It was thought that country-wide year-long activities could be launched to render a quantum lift to the prevailing occupational safety and health status in the country. The idea culminated into declaration of the year 2008-09 as "Year of Industrial Safety and Health" by Shri Oscar Fernandes, Hon'ble Union Minister of State (Independent Charge) for Labour and Employment, Government of India, during the inauguration of the Tripartite National Seminar "Industrial Safety and Health - Vision 2020: Challenges & Strategies" held on the 28th April, 2008 at SCOPE Complex New Delhi. This curtain-raiser national seminar was attended by 271 delegates representing occupational safety and health stakeholders from industries, employer's and employee's associations, research institutes, Government Departments from the Centre and States. On this occasion an impressive colorful logo was unveiled by Shri Oscar Fernandes, Hon'ble Union Minister of State (Independent Charge) for Labour and Employment, Government of India. Besides this, the Hon'ble Minister released the newly formatted INDOSHNEWS, the Quarterly newsletter on OSH published by DGFASLI. In the concluding session of the seminar a 23point resolution was adopted to give a direction for undertaking various activities by the stakeholders throughout the year 2008-09 to augment occupational safety and Health at the enterprise, state and national levels.



Shri Oscar Fernandes, Hon'ble Union Minister of State (Independent Charge) releasing newly formatted INDOSHNEWS, the Quarterly newsletter on OSH published by DGFASLI on the occasion of Tripartite National Seminar on "Industrial Safety and Health – Vision 2020: Challenges & Strategies" on the 28th April, 2008 at SCOPE Complex New Delhi.

To carry-forward these resolutions and to draw an action plan for the celebration four Tripartite Regional Workshops were held, viz, in Mumbai for the western region, at NOIDA for the northern region, in Chennai for southern region and in Kolkata for the eastern region. These workshops were attended by officials representing Ministry of Labour & Employment, Chief Inspectors of Factories from States and Union Territories, representatives from leading industries as well as Employers' and Employees' Associations.

During the four Tripartite Regional Workshops all the participating stakeholders resolved to use the Logo of '2008: Industrial Safety & Health' in various ways to communicate the importance of the year to all concerned.

DGFASLI on its part made large electrical at glow signs of the logo for display at strategic positions for full public view in all the Labour institutes at Mumbai, Chennai, Kanpur, Kolkata, Faridabad and the Inspectorate of Dock Safety (IDS) offices located at all the major ports in India. The logo was used in all the official correspondences. Stakeholders from all over the country reported the use of the logo on tie-pins, on training kits, manuals, training handbooks, in all important OSH publications throughout the year, and on a plaque for use as a souvenir for holding any important seminar, conference or workshops on OSH.

A series of National Tripartite Seminars and Conferences were organized by DGFASLI in partnership with other OSH stakeholders in various parts of the country.

1. A National Seminar on Safety, Health & Environment in Hazardous Industries & Related Gender Issues was held on the 20th September, 2008 at NOIDA, in collaboration with Director of Factories, Department of Labour, U.P.; National Capital Power Station, NTPC, Dadri and Power Management Institute, NOIDA. The Seminar was inaugurated by Smt Sudha Pillai, IAS, Secretary to the Govt of India, Ministry of Labour & Employment. Around 234 delegates participated in the seminar. The seminar deliberated upon two topics, (1) Occupational Safety & Health in Hazardous Industries and (2) gender issues ranging from reproductive risk behavior problem, working hours, Ergonomic stress, repetitive motion /manual labour, Video Display terminals, infertility, pottery work, silicosis, respiratory ailments to exposure to spices /tobacco.



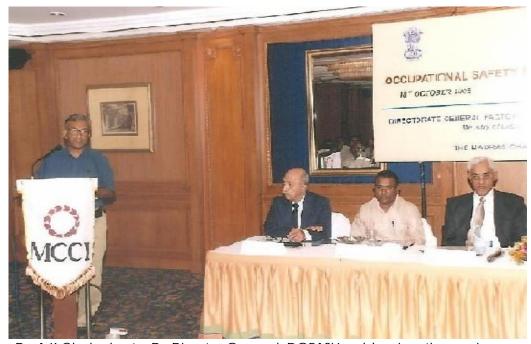
A National Seminar on Safety, Health & Environment in Hazardous Industries & Related Gender Issues held on 20th September, 2008 at NOIDA

2. DGFASLI organized a National Workshop on "Occupational Health with Special Reference to Silicosis" from 23rd to 26th September, 2008 at CLI, Mumbai. The Workshop was inaugurated by Shri Prabhat C. Chaturvedi, Director General, ESIC. Twenty five ESI Medical Officers and 8 Medical Officers from Primary Health Centers from 12 States participated in the workshop. The objective of the workshop was to create awareness about Occupational health with special reference to silicosis so that early detection of the cases can be done. All the delegates were trained to make diagnosis based on the ILO Radiographs on Pneumoconiosis with special reference to silicosis.



Shri S.K.Saxena, Director General, DGFASLI addressing the gathering on the occasion of National Workshop on Occupational Health with special reference to silicosis held on 23rd to 26th September, 2008 at CLI, Mumbai

3. A seminar on "Occupational Safety & Health - Issues and Developments" was held on the 18th October, 2008 at Chennai in collaboration with the Madras Chamber of Commerce & Industry. The seminar was inaugurated by Dr.T.Prabhakara Rao, IAS Secretary to the Govt. of Tamil Nadu, Dept. of Labour. It was attended by 70 delegates. Some of the resolutions adopted in the seminar included total involvement of MCCI, sensitizing employees in industries, efforts towards early detection of occupational diseases, health education, failure data analysis and OSH education at Technical Institution.



Dr. A.K.Chakrabarty, Dy.Director General, DGFASLI addressing the seminar on "Occupational Safety & Health – Issues and Developments" held on the 18th October, 2008 at Chennai.

4. On the 25th October, 2008 a **National Seminar on "Humanizing Work** Environment in Industries for Developing Positive Safety & Health Culture" was organized in Bhubaneswar by Government of Orissa and Multi-disciplinary Centre on Safety, Health and Environment, Bhubaneswar, Orissa in collaboration with DGFASLI. Shri S. Krishnan, IAS, Special Secretary, Government of India, Ministry of Labour & Employment inaugurated the seminar. More than 165 delegates from 131 organisations were present in the seminar. A souvenir on OSH was released on this occasion. During the action plan was prepared for implementation recommendations adopted during the national seminar on "Industrial Safety and Health -Vision 2020: Challenges & Strategies" held on the 28th April, 2008 at SCOPE Complex New Delhi.



Shri S.Krishnan, IAS Special Secretary, Government of India, Ministry of Labour & Employment inaugurating the National Seminar on "Humanizing Work Environment in Industries for Developing Positive Safety & Health Culture" in Bhubaneswar on the 25th October, 2008.

A National seminar on "Safety & Health in Construction Sector -Challenges & Solutions" was held on the 6th November, 2008 at Chennai in collaboration with Consolidated Construction Consortium Ltd., Chennai. Shri R.Chellamuthu, Principal Secretary to the govt. of Tamil Nadu, Housing and Urban Development Department, Chennai, inaugurated the Seminar. The objective of the Seminar was to make the management as well as the trade union representatives to acquire knowledge on various aspects of safety and Health in construction activities which will lead to reduced incidents of injuries and diseases. There were 165 delegates consisting of construction site engineers, safety officers, industrial hygienists, occupational health specialists, trade union leaders, eminent educationists from universities, executives and senior officers from government, and private construction agencies. The seminar provided a platform to exchange experiences and ideas regarding new approaches, methods and strategies to ensure safe and healthy work environment, updated knowledge on construction related health hazards and promote closure interaction among OSH stake holders.



National seminar on "Safety & Health in Construction Sector - Challenges & Solutions" in progress on the 6th November, 2008 at Chennai.

- 6. **A seminar on "Safety & Health in ship-building"** was held on the 4th November, 2008 at Mazgaon Dock Limited Mumbai. The seminar was inaugurated by Shri. Deen Dayal, General Manager Mazgaon Dock Limited. The seminar was attended by 35 delegates and invitees from ship-building industries. During the seminar the need for upkeep of appliances of operation, continuous training in view of the hazardous nature of operation in ship-building was highlighted. An action plan on addressing issues related to testing and examination of lifting machinery, pressure vessel and scaffolding was also proposed.
- 7. A National Conference on "Occupational Safety, Health & Work Environment" and exhibition was held on the 13th & 14th November, 2008 in Bangalore in collaboration with the Directorate of Factories & Boilers, Government of Karnataka. The inauguration of the conference was done by Hon'ble Minister of State for Labour and Employment (Independent charge) Shri Oscar Fernandes and presiding address was delivered by Hon'ble Minister for Labour, Government of Karnataka. Around 600 delegates participated in it. The objective of this conference was to bring several experts, professionals and academicians together for an intensive interaction to address contemporary issues in Safety and Health. A souvenir was also released during the inaugural function. Twenty five agencies had displayed different types of equipment and instruments connected with Industrial safety, health and hygiene in the exhibition.
- 8. A two-day technical **seminar on "Industrial Safety and Health Management**" was organized at New Delhi from 20th to 21st of Nov.'2008. The seminar was organized jointly by Federation of Indian Chambers of

Commerce and Industry (FICCI), Ministry of Labour and Employment, Government of India and DGFASLI, Mumbai. The seminar was attended by 40 delegates from industries and 19 specialists in the field of industrial safety & health. Shri S.K.Saxena, Director General of DGFASLI inaugurated the seminar. During the seminar problems related to safety and health in Indian industries and legal statutory framework on Industrial Safety & Health were discussed.



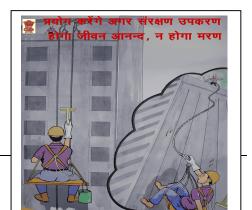
Technical seminar on "Industrial Safety and health management" in progress at New Delhi during the 20-21st November 2008

Ten more national seminars and workshops on diverse topics such as Best practices in occupational safety and health in industries (Guwahati), Occupational Safety & Health Relevance in global perspective (Hyderabad), Machine guarding & Ergonomics (Mumbai), Insurance & Industrial Safety (Mumbai), Safety & Health in Ship-breaking (Alang, Gujarat) etc. in collaboration with state Govts., are being planned.

DGFASLI has also designed and printed eleven posters on occupational safety & health both in Hindi and English to create awareness among workers regarding the use of personal protective equipment, safe practices at work place, prevention of Silicosis etc. These posters were distributed among various industries and agencies related to occupational safety and health.

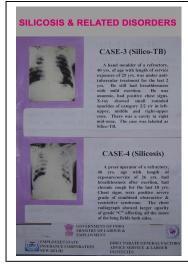
Posters on Occupational Safety & Health

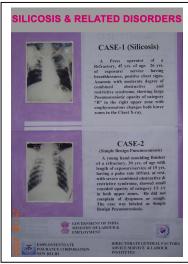






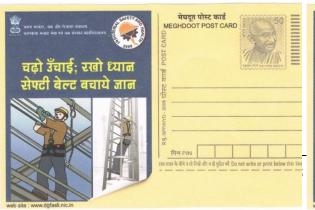








A national awareness drive was launched through publication of pictorial occupational safety & health messages in seven Indian languages (Hindi,





Marathi, Gujrathi, Tamil, Telugu, Bengali and Oriya) through Meghdoot Post-Card in collaboration of Department of Posts. The purpose was to spread the message of occupational safety and health to various strata of the society, especially the migratory workers.

A national drive to send Safety messages in Hindi and English in the form of SMSs to one crore Mobile users of BSNL network all over India is being undertaken.

Labour [Regional Institute, Faridabad was inaugurated on the 10th Feburary, 2009 by Hon'ble Minister of state for Labour & Employment (Independent Meghdoot Post-Cards Oscar Fernandes in the presence of Shri A.C.Chudhari, Hon'ble Minister of Labour & Employment, Govt. of Haryana Smt. Sudha Pillai, and Secretary, Ministry of Labour & Employment, Govt. of India and



other dignitaries present on the occasion.]

Five short duration documentary films are being produced by DGFASLI in collaboration with Films Division of India, Ministry of Information & Broadcasting, Govt. of India, on various subjects related to OSH. Brief descriptions of the films are given below:

- 1) Safety in Construction Industry: The construction workers are exposed to wide variety of hazards at work. The film shows the hazards of collapsing excavated soil, working at heights, etc. The precautionary measures and safe methods to be observed in construction activities are also highlighted in the film.
- 2) Stay Healthy with PC: The film shows simple steps to be followed while using computers to safeguard one's health. It highlight, an appropriately designed workstation is more likely to enhance productivity and efficiency by eliminating musculoskeletal and other health disorders while working on computers.
- 3) Beware of Asbestos Fibre: Asbestos fibre has a wide range of applications in industrial, domestic, construction and agricultural industries. The film shows that, the exposure to asbestos fibres may lead to an occupational disease called "Asbestosis" which may further

develop into a lung cancer. The symptoms of asbestosis and the control measures for reducing the asbestos exposure have been screened in the film.

- 4) Silicosis- A killer Disease of Work Force: Silicosis is one of the oldest diseases of the workmen exposed to the free silica dust and is prevalent in most parts of the world including India. The film is shot in a slate pencil manufacturing factory. The prolonged exposure of worker and the contraction of the disease followed by socio- economic problems are shown in the film. The different preventive measures have also been highlighted in the film.
- Suraksha Hee Zindagi: The documentary film on ship recycling is an attempt to highlight the importance of safe operating procedures and work practices while working in the ship-recycling industry.

6 Safety Awards

To appreciate the contribution made by the factories and docks towards producing quality goods and providing efficient services in safe and healthy conditions the following awards are being given.

6.1 Prime Minister's Shram Awards (PMSA): The Prime Minister's Shram Awards (PMSA) were instituted in 1985, for the workers (as defined in Industrial Disputes Act, 1947) in recognition of their outstanding contributions in organizations both in public and private sector and who have distinguished record of performance, devotion to duty of a high order, specific contribution in the field of productivity, proven innovative abilities, presence of mind and exceptional courage and also to the workmen who have made supreme sacrifice of laying down their lives in the conscientious discharge of their duties.

It has been decided from the year 2004 onwards that the private sectors shall also be included within the ambit of Prime Minister's Shram Awards and the workers in the private sector units employing 500 or more workers and engaged in manufacturing and productive processes will be eligible to apply for these awards. The number of awards has been increased from 17 to 33. The awards, in order of sequence are Shram Ratna, Shram Bhushan, Shram Vir/Veerangana and Shram Shri/Devi. The recognition consists of a Sanad and cash award of Rs. Two lakh (1 award), Rs. One lakh (4 awards), Rs. 60,000 (12 awards) and Rs. 40,000 (16 awards) respectively.

6.2 Vishwakarma Rashtriya Puraskar & National Safety Awards:

The DGFASLI on behalf of the Ministry of Labour and Employment has been implementing the Vishwakarma Rashtriya Puraskar (VRP) (earlier known as Shram Vir National Awards) and the National Safety Awards scheme since 1965. These schemes were modified in 1971, 1978 and again in 2007. The schemes presently in operation are as follow:

(i) Vishwakarma Rashtriya Puraskar: It is designed to give recognition at the national level to outstanding suggestions resulting in (i) higher productivity (ii) improvement in safety and working conditions (iii) savings in foreign exchange (import substitution as well as quality and safety of products), (iv) improvement in overall efficiency of the establishments. It covers workers employed in factories and docks. The prizes are grouped in three classes i.e. CLASS (A) - 5, CASH AWARD OF RS.75,000/- EACH, CLASS (B) - 8, CASH AWARD OF RS.50,000/- EACH AND CLASS(C) - 15, CASH AWARD OF RS.25,000/- EACH.

(ii) National Safety Awards: National Safety Awards are given in recognition of outstanding safety performance on the part of the industrial establishments covered under the Factories Act 1948, the employers covered under the Dock Worker (Safety, Health and Welfare) Act 1986, the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and Installations under Atomic Energy Regulatory Board (AERB). Shields and Citation Certificates are awarded to Winners and Runners Up. Schemes I to X are meant for factories, construction sites and nuclear Installations and Schemes XI and XII are for Ports.

Achievement in 2008: The Awards presentation function for Vishwakarma Rashtriya Puraskar and National Safety Awards for the Performance year 2006 was held on 17.11.2008 at Vigyan Bhavan, New Delhi and the awards were presented by the Hon'ble Minister of State for Shipping, Road Transport and Highways, Shri K.H.Muniyappa. Total 177 applications were received for Vishwakarma Rashtriya Puraskar-2006, out of which 28 applications were adjudged for granting of awards. The 109 workers have shared these 28 awards. Total 344 applications were received for National Safety Awards, out of which 154 applications have been adjudged for granting of awards. These awards were presented to 119 winners & 35 runners-up under the different schemes.

Table 6.1: Applications received for Vishwakarma Rashtriya Puraskar and the

number of awards given during the last 5 years:

Performance Year	Vishwakarma Rashtriya	a Puraskar
	Applications	Awards
2002	184	18
2003	246	28
2004	249	28
2005	221	28
2006	177	28

Table 6.2: Estimated annual savings resulting from the suggestions during the last 5 years.

Performance	Savings in Ind	ian Currency in	Savings in Foreign Currency in			
Year	Rupees		Rupees			
	Recurring Non-Recurring		Recurring	Non-Recurring		
2002	99,01,32,800	31,01,03,000	2,81,15,000	5,79,72,000		
2003	150,58,61,000	506,91,00,000	834,29,80,600	237,85,13,600		
2004	230,28,74,300	12,24,04,900	172,22,59,700	6,15,71,100		
2005	47,25,19,700	21,47,25,000	4,72,25,000	82,50,000		
2006	91,72,45,000	3,04,12,000	3,02,40,000	83,40,000		

Table 6.3: National Safety Awards under different schemes for the period 2002 – 2006:

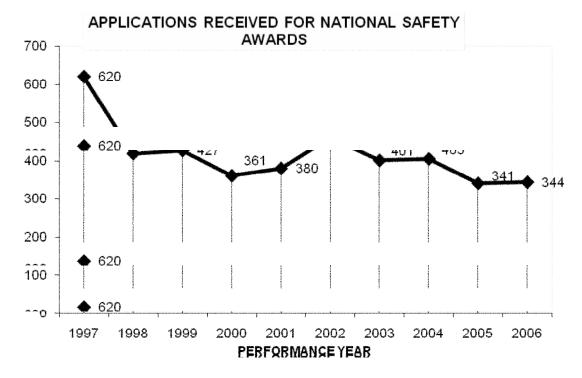
Performan	National Safety	SCHEMES									
ce Year	Awards	ı	I	III	IV	٧	VI	VII	VIII	IX	X

2002	Applications	12	101	76	68	45	37	4	3		
	Awards	7	16	12	13	11	10		2		
		23									
2003	Applications	13	107	26	24	24	19	31	30	4	1
	Awards	5	18	11	13	9	8	9	10		1
		26									
2004	Applications	11	42	28	27	29	25	27	29	3	3
	Awards	2	29	11	12	10	9	10	11		
		26									
2005	Applications	73	36	26	27	32	34	31	29		
	Awards	23	14	09	10	10	10	10	09		
2006	Applications	73	36	26	27	32	34	31	29	1	1
	Awards	33	18	24	12	26	8	24	7	1	1

Chart 6.1

APPLICATIONS RECEIVED FOR VISHWAKARMA RASHTRIYA

Chart 6.2







Shri K.H.Muniyappa, Minister of State for Shipping, Road Transport and Highways, inaugurating and distributing the Vishwakarma Rashtriya Puraskar and National Safety Awards for the Performance year 2006, at Vigyan Bhavan, New Delhi on 17.11.2008

7 Human Resource Development

The officers of the Organisation are deputed to the programmes organised by various agencies within the country and abroad, for their exposure to the latest technical developments that are taking place in the field of Industrial Safety and Health. The details of such participation during the year are given below:

Table: 7.1 International Programmes attended in 2008

SI.No.	Area/Institute	Period	No. of officers trained
1	4th China International Forum on Work Safety	18-20 Nov.	1
	conducted by State Administration of work safety		
	China and ILO Beijing, at People's Republic of China.		

Table: 7.2 National Programmes attended in 2008

	.abio.	rabio: 7:2 Hational Frogrammos attoriada in 2000								
Ī	SI.No.	Area/Institute	Period	No. of						
			l	officers						
			l	trained						

1	National Seminar on "Adolescent's problem and its	9~10	1
	management" at BJB Autonomous College, Bhubaneswar	Mar.	
2	Fire, Safety & Security India Conference 2008 held at Green-Tech, Goregaon, Mumbai	9~11 Apr.	1
3	Workshop on Environmental Management and Disaster Reduction within the local tourism industry at Kanyakumai	8~11Jun.	1
4	Certification course on administration and interpretation of Personality Factor at Hotel Ramoda Palm Grove, Mumbai	9~12 Jul.	6
5	Workshop on "Challenges on Health & Safety in Present Industrial Scenario" at NTPC, Rihand	20~21 Oct.	3
6	Seminar on Comparative Systems for Labour Law Environment organized by ILO sub-regional office for South Asia. at V.V.Giri National Labour Institute NOIDA	20~22 Oct.	2
7	Training Programme for Labour Officers and Labour Inspectors at V.V.Giri National Labour Institute, Gautambudha Nagar, NOIDA	22~25 Oct.	2
8	Workshop on Hazard Indentification & Risk Assessment organized by DMI, Bhopal & FICCI at Ahmedabad	11~12 Dec.	1

8 Occupational Safety and Health in Factories

The statistics of factories is collected and compiled by the Labour Bureau on the basis of the Annual Returns/Reports in respect of the Factories Act 1948, furnished by various States and Union Territories. The information relating to occupational injuries in factories given in this chapter in table 8.1 to 8.5 is based on the statistics provided by Labour Bureau up to the year 2005(P).

8.1 Profile of Industrial Injuries in Factories

Under the Factories Act, 1948, injuries resulting from industrial accidents, by reasons of which the person injured is prevented from attending to work for a

period of 48 hours or more immediately following the accident, are recorded. The important indices on injuries are Frequency Rate (FR) and Incidence Rate (IR). The Frequency Rate is defined as number of total injuries per 1, 00,000 man-days worked. The Incidence Rate is the number of injuries per 1000 workers employed in the factories.

8.2 All India Industrial Injuries and Rates:

The statistics of number of working factories, employment therein, number of fatal and non-fatal injuries and their rates for the years 2001-2005 (P) are given in table 8.1 to the extent available from **Labour Bureau**.

As per the statistics given in table 8.1, the total industrial injuries have decreased from 28364 in 2001 to 10714 in 2005. The frequency rate and incidence rate of total injuries do not show any definite trend.

The fatal injuries decreased from 627 in 2001 to 501 in 2005. However the frequency rate and incidence rate of fatal injuries do not show any definite trend.

Table: 8.1 Statistics of Employment, Industrial Injuries, etc. in Factories

Year	No. of Working Factories	Estimated Average daily Employment (in thousands)			Frequency Rate of injuries per lakh Man- days worked		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(P)	158991	6802	562	15020	0.05	1.33	80.0	2.21
2005(P)	123063	5583	501	10714	0.08	1.64	0.11	2.30

Note: Data is based on the returns received under Factories Act. 1948 from States/UTs through Labour Bureau correspondence

(P): Provisional

Limitations of the data as stated by Labour Bureau Chandigarh:

1 Figures for 2001 excludes A & N, Arunachal Pradesh, Bihar, Chattisgarh, Dadra & Nagar Haveli Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand., Karnataka, Kerala, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, U.P., Uttaranchal and West Bengal,

2 Figures for 2002 excludes Arunachal Pradesh,. Bihar, Chattisgarh, Dadra & Nagar Haveli, Delhi Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala,, Lakshadweep, Manipur, Mizoram, Meghalaya,,Nagaland, Sikkim, U.P., Uttaranchal and West Bengal,, 3 Figures for 2003 excludes Arunachal Pradesh,. Bihar, Chattisgarh, Dadra & Nagar Haveli, Delhi Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala,, Lakshadweep, Manipur, Mizoram, Meghalaya,,Nagaland, Sikkim, Tamil Nadu, U.P., Uttaranchal and West Bengal.

4 Figures for 2004 (P) excludes A & N, Arunachal Pradesh, Bihar, Chattisgarh, Dadra & Nagar Haveli, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Lakshadweep, Manipur, Mizoram, Nagaland, Pondicherry, Sikkim, Uttar Pradesh, Uttaranchal and West Bengal, 5 Figures for 2005 (P) excludes A & N, Arunachal Pradesh, Bihar, Chattisgarh, Dadra & Nagar Haveli, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Lakshadweep, Manipur, Mizoram, Nagaland, Pondicherry, Sikkim, Uttar Pradesh, Uttaranchal and West Bengal,

The Number of injuries has been given on the basis of notices of accidents whereas the rates have been worked out on the basis of Annual Return

Table 8.2: State-Wise Total Number of Industrial Injuries In Factories (2001 – 2005)

States/Union Territory	2001	2002	2003(P)	2004(P)	2005(P)
Andaman & Nicobar	NA	37(-)	53(-)	NA	NA
Andhra Pradesh	3010(118)	2316(99)	1976(100)	1911(91)	1822(139)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	149(15)	62(11)	65(6)	78(12)	51(5)
Bihar	NA	NA	NA	NA	NA
Chandigarh	4(-)	5(-)	81(11)	3(-)	2(1)
Chattisgarh	NA	NA	NA	NA	NA
Dadra Nagar Haveli	NA	NA	NA	NA	NA
Delhi	28(6)	NA	NA	NA	NA
Goa	142(4)	185(13)	145(3)	166(12)	203(16)
Gujarat	6417(175)	NA	NA	NA	NA
Haryana	NA	245(34)	181(25)	198(64)	272(38)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu Kashmir	NA	NA	NA	NA	NA
Jharkhand	NA	NA	NA	NA	218(21)
Karnataka	NA	2132(44)	2013(50)	1262(45)	NA
Kerala	NA	NA	NA	305(9)	NA
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	2232(32)	1947(49)	2065(48)	1525(29)	1188(40)
Maharashtra	9679(178)	7616(150)	6416(159)	5479(161)	4680(143)
Manipur	NA	NA	NA	NA	NA
Meghalaya	NA	NA	NA	9(-)	1(-)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Orissa	812(20)	709(34)	700(49)	694(40)	615(37)
Pondicherry	592(4)	559(5)	581(8)	NA	NA
Punjab	492(5)	458(8)	404(7)	199(7)	331(7)
Rajasthan	2555(33)	1997(57)	1748(58)	1286(52)	1326(52)
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	2245(37)	2172(36)	NA	1928(40)	NA
Tripura	7(NA)	5(-)	4(1)	3(-)	5(2)
Uttar Pradesh	NA	NA	NA	NA	NA
Uttaranchal	NA	NA	NA	NA	NA
West Bengal	NA	NA	NA	NA	NA
Total:	28364(627)	20453(540)	16432(525)	15020(562)	10714(501)

Note: (i) NA = Not Available, (ii) - = Nil, (iii) Figures in brackets pertain to "Fatalities" and are included in the total, (iv) P = Provisional. (v) For limitations of data refer note of Table 8.1 Source: Labour Bureau, Shimla & Chandigarh

The state-wise frequency rate of injuries and incidence rate of injuries are given in the table 8.3 and 8.4 respectively. Further, industry wise injuries and their incidence rate are given in table 8.5

Table:8.3 Frequency Rates of Industrial Injuries in Factories during 2001-2005

Table:8.3 Freque	ncy Rates (of Industrial Ir	njuries in Facto	ories during	2001-2005
State/UTs	2001	2002	2003	2004(P)	2005(P)
Andaman & Nicobar	NA	1.70 (-)	4.17(-)	NA	NA
Andhra Pradesh	3.39 (0.13)	2.16 (0.09)	1.93 (0.10)	1.73(0.08)	1.64(0.13)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	1.69 (0.17)	0.52 (0.09)	1.61(0.06)	0.78(0.12)	0.46(0.04)
Bihar	NA	NA	NA	NA	NA
Chandigarh	0.22 (-)	0.12 (-)	2.15(0.29)	0.09(-)	0.07(0.03)
Chattisgarh	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA
Delhi	0.17 (0.04)	NA	NA	NA	NA
Goa	1.67 (0.05)	1.81 (0.13)	1.38 (0.03)	1.51(0.11)	2.04(0.16)
Gujarat	7.73 (0.21)	NA	NA	NA	NA
Haryana	NA	0.17 (0.02)	0.52 (0.07)	0.32(0.10)	0.43(0.06)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu & Kashmir	NA	NA	NA	NA	NA
Jharkhand	NA	NA	NA	NA	0.26(0.03)
Karnataka	NA	2.28 (0.05)	2.02(0.05)	104(0.04)	NA
Kerala	NA	NA	NA	0.90(0.03)	NA
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	7.71 (0.11)	4.86 0.12)	3.90(0.09)	1.51(0.03)	3.27(0.11)
Maharashtra	4.96 (0.09)	3.22 (0.06)	2.75(0.07)	2.50(0.07)	2.04(0.06)
Manipur	NA	NA	NA	NA	NA
Meghalaya	NA	NA	NA	1.49(-)	0.06(0.00)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Orissa	2.24 (0.06)	2.06 (0.10)	2.16 (0.15)	2.06(0.12)	1.76(0.11)
Pondicherry	4.34 (0.03)	246.21 (2.20)	255.90(3.52)	NA	NA
Punjab	3.12 (0.03)	1.21 (0.02)	1.14 (0.02)	0.61(0.02)	1.15(0.02)

Rajasthan	6.44	5.05 (0.14)	4.63 (0.15)	3.21(0.13)	3.26(0.13)
	(80.0)				
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	0.67	0.65 (0.01)	NA	0.55(0.01)	NA
	(0.01)				
Tripura	1.29 (-)	0.95 (-)	0.58 (0.14)	0.49(-)	0.19(0.08)
Uttar Pradesh	NA	NA	NA	NA	NA
Uttaranchal	NA	NA	NA	NA	NA
West Bengal	NA	NA	NA	NA	NA
Total:	3.24	4.88(0.13)	2.50(0.08)	1.33(0.5)	1.64(0.08)
	(0.07)				

Note: (i) F.R. = Frequency Rate per lakh man-days worked (ii) NA = Not Available, (iii) (-) = Nil or Negligible, (v) Figures in bracket pertain to "Fatalities" and are included in the total, (vi) P = Provisional. For limitations of the data please refer note under table 8.1 Source: Labour Bureau, Chandigarh & Shimla.

Table:8.4 Incidence Rates of Industrial Injuries in Factories during 2001-2005

		· · · · · · · · · · · · · · · · · · ·	uries in Facto		l
State/UTs	2001	2002	2003	2004(P)	2005(P)
Andaman &	NA	5.11 (-)	10.14 (-)	NA	NA
Nicobar					
Andhra Pradesh	6.97 (0.27)	5.90 (0.25)	2.76 (0.14)	2.50(0.12)	2.36(0.18)
Arunachal	NA	NA	NA	NA	NA
Pradesh					
Assam	3.47 (0.35)	1.58 (0.28)	1.69 (0.06)	0.79(0.12)	0.48(0.05)
Bihar	NA	NA	NA	NA	NA
Chandigarh	0.49 (-)	0.56 (-)	5.59(0.76)	0.22(-)	0.16(0.08)
Chattisgarh	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA
Delhi	0.53 (0.11)	NA	NA	NA	NA
Goa	4.41 (0.12)	5.58 (0.39)	3.22 (0.07)	3.91(0.28)	4.54(0.36)
Gujarat	23.98	NA	NA	NA	NA
	(6.65)				
Haryana	NA	2.83 (0.39)	0.50 (0.07)	0.36(0.11)	6.08(0.85)
Himachal	NA	NA	NA	NA	NA
Pradesh					
Jammu &	NA	NA	NA	NA	NA
Kashmir					
Jharkhand	NA	NA	NA	NA	0.78(0.07)
Karnataka	NA	6.70 (0.14)	2.01(0.05)	139(0.05)	NA
Kerala	NA	NA	NA	0.75(0.02)	NA
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	18.34	15.26	4.96 (0.12)	3.22(0.06)	2.58(0.09)
_	(0.25)	(0.38)			
Maharashtra	12.02	9.77 (0.19)	5.28(0.13)	4.44(0.13)	3.60(0.11)
	(0.22)				
Manipur	NA	NA	NA	NA	NA
Meghalaya	NA	NA	NA	2.01(-)	0.23(0.00)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Orissa	8.00 (0.20)	6.88 (0.33)	5.34 (0.37)	5.32(0.31)	4.41(0.27)
Pondicherry	20.84	19.70	10.51(0.14)	NA	NA
	(0.14)	(0.18)	, ,		
Punjab	7.58 (0.05)	3.94 (0.07)	0.88 (0.02)	0.41(0.01)	0.63(0.01)
Rajasthan	20.01	16.05	4.68 (0.16)	3.33(0.13)	3.33(0.13)
,	(0.26)	(0.46)		, ,	
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	3.01 (0.26)	1.87 (0.03)	NA	1.50(0.03)	NA
Tripura	2.08 (-)	2.35 (-)	0.12 (0.03)	0.09(-)	0.15(0.06)
Uttar Pradesh	NA	NA	NA	NA	NA
	14/1	1 4 / 1	1 47 1	1471	1471

West Bengal	NA	NA	NA	NA	NA
Total:	8.67	6.14	3.33(0.11)	2.21(0.08)	2.30(0.11)
	(0.19)	(0.16)			

Note: (i) I.R. = Incidence Rate per 1000 workers employed, (ii) NA = Not Available,(iii) (-) = Nil or Negligible, (v) Figures in bracket pertain to "Fatalities" and are included in the total, (vii) P = Provisional. For limitations of the data please refer note under table 8.1 Source: Labour Bureau, Chandigarh & Shimla.

Table 8.5: Industrial Injuries and their Incidence Rate per Thousand Workers

Employed by Important Industries

SI.N	nployed by Imp Industry	NIC	20		20	002	20	003	20	04	200)5(P)
О.	-	Cod e	Total No.of Injuries	Rate per 1000 Workers								
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	All Textiles	17.1 8	10586 (64)	10.15	7276 (39)	6.14 (0.03)	5332 (39)	6.53 (0.05)	4172 (66)	3.22 (0.05)	2823 (29)	3.94 (0.04)
2.	Manufacture of Paper & paper products & printing, publishing & allied products	21.2 2	1153 (22)	7.23	1088 (25)	4.46 (0.10)	976 (23)	4.92 (0.12)	617 (19)	2.40 (2.07)	249 (13)	1.58 (0.08)
3.	Manufacture of Chemicals & Chemical products (Except products of Petroleum and coal)	24	1947 (125)	4.98	988 (78)	2.86 (0.23)	944 (78)	2.50 (0.21)	982 (54)	1.67 (0.09)	968 (74)	2.66 (0.20)
4.	Manufacture of Non-metallic mineral products	26	1274 (64)	8.32	992 (36)	6.55 (0.24)	799 (46)	2.50 (0.14)	821 (52)	1.87 (0.12)	456 (39)	1.20 (0.10)
5.	Basic metal and alloys Industries	27	2149 (57)	11.66	1449 (87)	7.58 (0.46)	1370 (79)	3.97 (0.23)	1130 (78)	2.84 (0.20)	1327 (95)	3.07 (0.22)
6.	Manufacture of metal products & Parts(except machinery & transport equipment)	28	1149 (19)	7.94	876 (17)	5.05 (0.10)	659 (16)	2.32 (0.06)	723 (37)	1.85 (0.09)	501 (24)	2.26 (0.11)
7.	Manufacture of machinery, machine tools & parts (except electrical machinery)	29.3	1692 (19)	10.81	1141 (21)	2.59 (0.05)	993 (19)	3.26 (0.06)	923 (25)	2.49 (0.07)	733 (13)	2.43 (0.04)
8.	Manufacture of transport equipment and parts	34.3 5	1698 (10)	6.34	1703 (24)	4.39 (0.06)	1184 (12)	3.93 (0.04)	1399 (36)	3.57 (0.09)	863 (31)	3.12 (0.11)
9.	Electricity, Gas and Steam	40	662 (22)	10.59	333 (28)	5.53 (0.47)	274 (31)	3.17 (0.36)	699 (32)	6.27 (0.29)	478 (27)	4.97 (0.28)
	al of (Sl.No. 1 to 9 Industries) :		2231 0 (402)	8.66 (0.16)	1584 6 (355)	3.96 (0.09)	1253 1 (343)	4.13 (0.11)	1146 6 (399)	2.70 (0.29)	8398 (345)	2.85 (0.12)
* Tot	al of All Industries :		2836	8.67	2045	6.14	1643	3.33	1502	2.21	1071	2.30
			4 (627)	(0.19)	3 (5.40)	(0.16)	2 (525)	(0.11)	0 (562)	(80.0)	4 (501)	(0.11)
	to : (i) Figures										(301)	

Note: (i) Figures in brackets indicate "Fatalities" and are included in the Total, (ii) P = Provisional

(iii)* The figures for All Industries include the figures of other industries apart from above

Industries shown

For Limitations of data refer footnote of table 8.1

Source: Labour Bureau, Chandigarh by correspondence

Chart 8.1

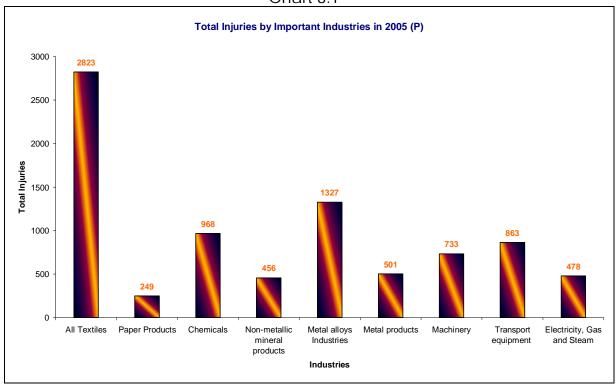
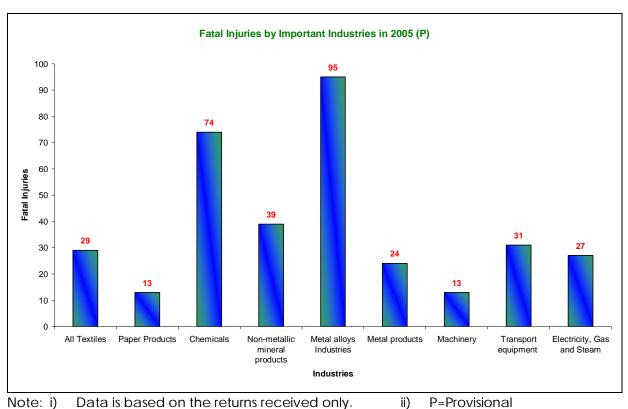


Chart 8.2



Source: Labour Bureau, Chandigarh. For Limitations of data refer footnote of table 8.1

Chart 8.3

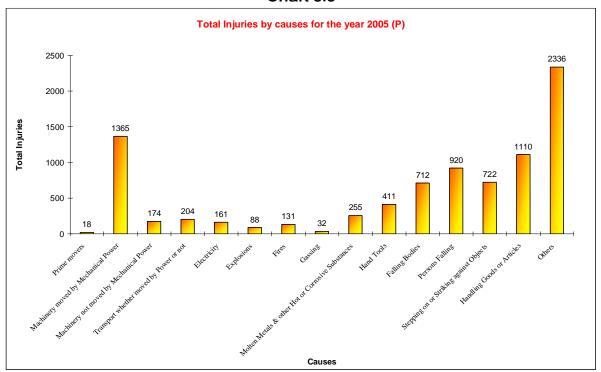
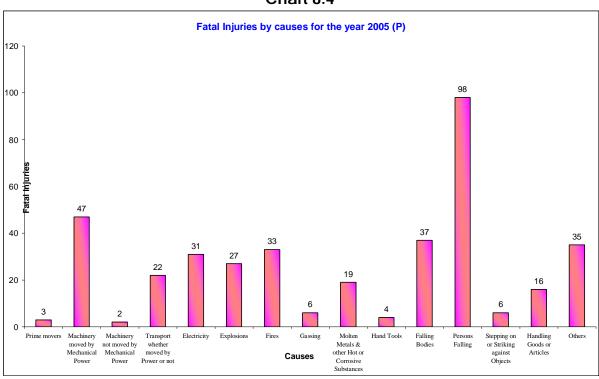


Chart 8.4



Note: i) Data is based on the returns received only. ii) P=Provisional Source: Labour Bureau Chandigarh For Limitations of data refer footnote of table 8.1

Statistics on Status of compliance with statutory provisions (Data collected by DGFASLI)

The DGFASLI receives information relating to factories covered under 8.3 the provisions of the Factories Act, 1948 from States and Union Territories from time to time. This information is mainly collected through FAS Forms as well as through correspondence as and when required. It is entered in the data bank specially created at DGFASLI for disseminating any specific information as and when necessary. However, due to non-receipt of statistics from all the States and Union Territories, there are limitations to the use of this data bank. Though this information can be used for knowing the state-wise status of safety and health as well as compliance level with statutory standards in factories, no national level statistics can be prepared for arriving at conclusive inferences. However, the information can definitely be used for estimation of various trends. It is emphasized here that the information given in the following pages/tables should be referred to with these limitations in mind and State Governments/Union Territory Administration concerned may be contacted for ascertaining the correctness or the updated information.

Statistics of Factories at a Glance: 2007(Estimates)

Registered Factories : 304276

Working Factories : 254951

Employment - Total : 11162501

- Women : 1845341

Injuries - Total (Year 2008) : 34522

- Fatal (Year 2008) : 1387

Specialists - Safety Officers : 2308

Welfare Officers : 2810Factory Med. Officers : 6953

Safety Policy : 12158 Safety Committees : 11757

MAH Factories : 2245

On-site Emergency Plans : 2128
Canteens : 5713
Creches : 5085

Standard Reference Note of DGFASLI 2008

Table 8.6: State-wise Status of Employment in Factories during 2007(P)

States/ Union		Working	Total	Female	Male
Territories	Factories	Factories	Employment		Workers
Andaman &	ractories	ractories	Limployment	WOIKCIS	WOIKCIS
Nicobar Islands	37	37	4594	168	4426
Andhra Pradesh	40324	29884	829674	183365	646309
Assam	3490	2299	121018	2843	118175
Bihar	6697	5922	87385	58	87327
Chandigarh	782	457	8003	332	7671
Chattisgarh					
Daman & Diu &					
Dadra & Nagar					
Hawelli	4776	3790	87170	26400	60770
Delhi					
Goa	709	690	48950	6955	41995
Gujarat	32461	23308	1093040	42960	1050080
Haryana	9526	9157	446168	69207	376961
Himachal Pradesh		••	••		
Jammu & Kashmir	1260	885	40724	1087	39637
Jharkhand	10731	7185	244773	6923	237850
Karnataka	11425	11003	1031605	322798	708807
Kerala	17744	16791	540942	259420	281522
Madhya Pradesh	6970	6250	251722	4795	246927
Maharashtra	36999	31510	1011471	381271	630200
Manipur					
Meghalaya	124	113	7213	600	6613
Nagaland	729	464	21800	2125	19675
Orissa	3107	2207	162667	6859	155808
Pondicherry	2890	2218	72040	10487	61553
Punjab	16721	16318	568282	3518	564764
Rajasthan	10839	10239	425562	7600	417962
Tamil Nadu	41591	31213	1426991	429230	997701
Tripura	1477	1477	41400	8905	32495
Uttar Pradesh	13721	13345	1010000	22500	987500
Uttaranchal	1714	1714	136993	14150	122843
West Bengal	13999	13563	914713	19436	895277
Total	290843	242039	10634900	1833992	8800848

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional .. Not Available

Source: Correspondence with Chief Inspector of Factories of States/UTs

Table 8. 7: Hazardous Factories 2(cb) as on 2007 (P)

States/ Union Territories	No. of Hazardous Factories	No. of Workers
Andaman & Nicobar Islands	3	197
Andhra Pradesh	1989	
Assam	12	3281
Bihar	20	8005
Chandigarh	0	0
Chattisgarh		
Daman & Diu & Dadra & Nagar Hawelli	46	1450
Delhi		
Goa	211	26816
Gujarat	5075	247742
Haryana	765	24010
Himachal Pradesh		
Jammu & Kashmir	12	952
Jharkhand	39	4331
Karnataka	1065	150058
Kerala	1194	41843
Madhya Pradesh	775	68395
Maharashtra	4915	362209
Manipur		
Meghalaya	25	3206
Nagaland	1	54
Orissa	361	65487
Pondicherry	204	18011*
Punjab	378	66402
Rajasthan	890	92995
Tamil Nadu	12702	320885
Tripura	14	1013
Uttar Pradesh	2335	289788
Uttaranchal	427	50779
West Bengal	3180	216194
Total	36638	2046092

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

Source: Correspondence with CIFs of states and UTs

^{..} Not Available * 1978 persons are directly involved in process

P : Provisional

Table 8. 8: Inspectors of Factories and Certifying Surgeons for the year 2007 (P)

(P) States/ Union	Insp	ectors	•	cialist	Cert	No. of	
Territories				ector		geon	Factories
	Sanct	ln-	Sanct	ln-	Sanct-	ln-	Inspecte
	-	position	-	position	ioned	position	d
	ioned		ioned				
Andaman &							
Nicobar Islands	2	2	0	0	4	4	11
Andhra Pradesh	76	59	2	2	0	0	6103
Assam	30	23	1	1	3	0	483
Bihar	23	10	4	3	0	0	12326
Chandigarh	0	6	0	0	0	0	36
Chattisgarh							
Daman & Diu &							
Dadra & Nagar							
Hawelli	1	1	0	0	0	0	220
Delhi							
Goa	8	5	2	2	1#	0	161
Gujarat	110	61	11	6	10	4	13123
Haryana	22	20	10	9	2	2	1460
Himachal							
Pradesh							
Jammu &							
Kashmir	5	4	0	0	0	0	891
Jharkhand	26	20	0	0	0	0	3223
Karnataka	45	42	1	1	0	0	6875
Kerala	52	44	11	7	0	0	11530
Madhya							
Pradesh	41	34	1	1	0	0	2785
Maharashtra	131	64	2	2	1	**27	17391
Manipur							
Meghalaya	3	3	0	0	0	0	44
Nagaland	3	3	0	0	0	0	367
Orissa	26	22	2	1	1	1#	2004
Pondicherry	8	7	3	3	1	1	1452
Punjab	27	12	5	5	0	0	
Rajasthan	39	32	6	6	0	0	6750
Tamil Nadu	134	105	0	0	9	6	31694
Tripura	5	5	0	0	14#	14#	1163
Uttar Pradesh	45	21	2	1	0	**1	3288
Uttaranchal	2	3	0	0	0	0	78
West Bengal	52	34	14	9	9	5	3312
Total	906	642	77	59	54	65	126770

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories **P**: Provisional, ... Not Available, **The State Government has appointed additional Inspectors of Factories as per the provisions contained in Sub Sec 2B of the FactoriesAct.1948, # CMO/ Civil Surgeons at district level are

appointed / notified Factories of States/UTs	as	civil	surgeons	Source:	Correspondence	with	Chief	Inspector	of

Table 8.9: Prosecution and Convictions under Section 92 & Section 96A for the year 2007 (P)

States/ Union Territories	Pending from previous year	Launched during the year	Decided during the year	Convic- tion	Imprison- ment (Person)	Total fine imposed(Rs.)
Andaman &						
Nicobar						
Islands	0	0	0	0	0	0
Andhra						
Pradesh	2359	786	585	540	0	3769530
Assam	0	7	0	16	0	0
Bihar	43	6	0	0	0	0
Chandigarh	15	15	16	16	0	69000
Chattisgarh						
Daman & Diu & Dadra & Nagar						
Hawelli	0	0	0	0	0	0
Delhi						
Goa	10	8	2	2	0	24000
Gujarat	27312	2369	5177	4042	0	12109000
Haryana	4785	2113	1721	1707	0	9524814
Himachal						
Pradesh						
Jammu &						
Kashmir	110	0	0	0	0	0
Jharkhand	25	2	0	0	0	0
Karnataka	216	196	96	66	0	1810900
Kerala	75	47	46	33	0	334000
Madhya						
Pradesh	3609	212				794500
Maharashtra	674	492	152	152	0	1104500
Manipur						
Meghalaya	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0
Orissa	1046	85	2	0	0	0
Pondicherry	0	3	3	3	0	110000
Punjab	447	441	313	169	0	2253200
Rajasthan	914	76	57	56	0	477700
Tamil Nadu	10985	2743	2180	2213	0	11947875
Tripura	5	7	2	2	0	9000
Uttar						
Pradesh	2116	148	99	93	0	1267400
Uttaranchal	100	3	0	0	0	0

Total	55287	9884	10493	9147	0	46211419
West Bengal	441	125	42	37	0	606000

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional, .. :Not Available Source:Correspondence with

Source:Correspondence with Chief Inspector of Factories of States/UTs

Table 8.10: Fatal and Non-fatal Injuries in Factories (P)

Table 6. 10. Fatal aliu i	2006			07	2008	
		Non		Non		Non
States/ Union	Fatal	Fatal	Fatal	Fatal	Fatal	Fatal
Territories	Injuries	Injuries	Injuries	Injuries	Injuries	Injuries
Andaman &						
Nicobar Islands	0	71	0	41	0	66
Andhra Pradesh	176	1334	157	1622	163	1411
Assam	5	50	11	65	3	129
Bihar	6	108	11	28	6	48
Chandigarh	0	7	0	4	2	7
Chattisgarh	94	422	92	365	103	343
Daman & Diu &						
Dadra & Nagar						
Hawelli	8	29	10	27	12	44
National Capital of						
Delhi	14	50	17	35	5	37
Goa	8	196	10	181	7	161
Gujarat	184	4843	222	3151	195	2725
Haryana	71	186	101	114	74	112
Himachal Pradesh	1	18	10	9	6	5
Jammu & Kashmir	0	118	1	306	4	247
Jharkhand	27	243	21	105	22	190
Karnataka	64	1371	107	1225	91	1052
Kerala	13	577	22	172	15	158
Madhya Pradesh	35	2099	52	1590	40	1419
Maharashtra	175	4223	197	3351	218	3088
Manipur						
Meghalaya	1	1	2	2	0	6
Nagaland	0	0	0	0	0	0
Orissa	74	479	81	468	81	437
Pondicherry	12	249	8	208	1	235
Punjab	48	139	35	136	45	144
Rajasthan	61	1129	60	1145	45	997
Tamil Nadu	48	1198	60	1089	67	1252
Tripura	0	5	1	2	0	1
Uttar Pradesh	118	235	78	182	81	141
Uttaranchal	31	59	19	44	15	65
West Bengal	75	24761	68	17096	86	18615
Total	1349	44200	1453	32763	1387	33135

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional, .. Not Available

Table 8.11: State-wise status of Safety Officers (SO) in factories during 2007(P)

States/ Union Territories		ractories appointing SO under 40-B(1)	rec u	SO appointed under 40-B(1)
Andaman & Nicobar	0	0	0	0
Andhra Pradesh	99	84	135	94
Assam	3	3	3	69
Bihar	18	17	24	21
Chandigarh	2	2	2	2
Chattisgarh	••			
Daman & Diu & Dadra &				
Nagar Hawelli	10	25	15	15
Delhi	••			
Goa	6	9	6	16
Gujarat	317	312	363	401
Haryana	74	65	78	70
Himalchal Pradesh				
Jammu & Kashmir	3	3	3	3
Jharkhand	179	161	179	161
Karnataka	154	124	176	160
Kerala	34	30	41	37
Madhya Pradesh	84	74	100	85
Maharashtra	251	261	318	364
Manipur				
Meghalaya	0	0	0	0
Nagaland	3	3	3	3
Orissa	60	60	142	129
Pondicherry	3	2	3	2
Punjab	36	36	36	36
Rajasthan	45	45	45	45
Tamil Nadu	244	181	260	181
Tripura	1	0	1	0
Uttar Pradesh	215	110	251	130
Uttaranchal	26	16	28	19
West Bengal	252	250	282	265
Total	2119	1873	2494	2308

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional, .. Not Available

Table 8. 12: Declaration of Safety Policy for the year 2007 (P)

States/ Union Territories	Factories	Factories Having	
States/ Official ferritories	Requiring		
Andaman & Nicobar	0	0	
Andhra Pradesh	0	0	
Assam	12	12	
Bihar	3	3	
Chandigarh	2	2	
Chattisgarh			
Daman & Diu & Dadra & Nagar Hawelli	42	50	
Delhi			
Goa	17	38	
Gujarat	3728	3404	
Haryana	1067	992	
Himachal Pradesh			
Jammu & Kashmir	19	21	
Jharkhand	17	17	
Karnataka	1149	903	
Kerala	626	570	
Maharashtra	1669	919	
Madhya Pradesh	922	852	
Meghalaya	38	24	
Manipur			
Nagaland	0	0	
Orissa	396	372	
Pondicherry	27	27	
Punjab	479	449	
Rajasthan	445	370	
Tamil Nadu	854	749	
Tripura	0	0	
Uttar Pradesh	4461	1461	
Uttaranchal	327	267	
West Bengal	656	656	
Total	16956	12158	

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional,

^{.. :}Not Available

Table 8.13: Constitution of Safety Committee for the year 2007(P)

Table 6.13 . Constitution of Salety Committee	Factories	Factories
States/ Union Territories	Requiring	Having
Andaman & Nicobar	0	0
Andhra Pradesh	855	760
Assam	12	12
Bihar	3	3
Chandigarh	2	2
Chattisgarh		
Daman & Diu & Dadra & Nagar Hawelli	47	55
Delhi		
Goa	17	54
Gujarat	3352	3088
Haryana	600	531
Himachal Pradesh		
Jammu & Kashmir	19	21
Jharkhand	17	17
Karnataka	930	713
Kerala	331	262
Madhya Pradesh	559	508
Maharashtra	1211	741
Manipur		
Meghalaya	20	10
Nagaland	0	0
Orissa	129	129
Pondicherry	29	29
Punjab	374	350
Rajasthan	332	289
Tamil Nadu	1853	1719
Tripura	14	1
Uttar Pradesh	2761	1567
Uttaranchal	227	252
West Bengal	644	644
Total	14338	11757

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional,

^{.. :}Not Available

Table 8.14: On-site Emergency Plan (in respect of MAH Units) as on 2007(P)

Table 0.14. On sice Emergency Flam (III)	Factories	Factories
States/ Union Territories	Requiring	Having
Andaman & Nicobar	3	3
Andhra Pradesh	143	137
Assam	12	12
Bihar	3	3
Chandigarh	0	0
Chattisgarh		
Daman & Diu & Dadra & Nagar Hawelli	0	8
Delhi		
Goa	16	16
Gujarat	530	530
Haryana	48	47
Himachal Pradesh		
Jammu & Kashmir	107	107
Jharkhand	12	12
Karnataka	360	276
Kerala	26	26
Madhya Pradesh	68	68
Maharashtra	344	327
Manipur		
Meghalaya	4	4
Nagaland	2	2
Orissa	31	31
Pondicherry	4	4
Punjab	74	69
Rajasthan	108	108
Tamil Nadu	118	112
Tripura	2	2
Uttar Pradesh	121	117
Uttaranchal	24	22
West Bengal	85	85
Total	2245	2128

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional,

.. :Not Available

Table 8.15: Medical Facilities in factories for the year 2007 (P)

Table 0.13. Wedlearte	Full time MO	Retainership or part-time	Factories having	Factories having
States/ Union	IVIO	MO	Ambulance	Ambulance
Territories	Appointed	Appointed	Van	Rooms
Andaman & Nicobar	0	0	2	2
Andhra Pradesh	0	210	0	206
Assam	0	0	0	47
Bihar	16	7	15	15
Chandigarh**	1	1	1	1
Chattisgarh				
Daman & Diu & Dadra & Nagar Hawelli	1	25	5	8
Delhi				
Goa	20	10	16	6
Gujarat	197	2530	344	359
Haryana	25	46	61	60
Himachal Pradesh		••		•••
Jammu & Kashmir	9	0	6	5
Jharkhand	0	0	0	42
Karnataka	256	198	223	333
Kerala	34	51	29	44
Madhya Pradesh	95	293	91	115
Maharashtra	258	358	207	232
Manipur				
Meghalaya	2	13	5	1
Nagaland	0	0	0	0
Orissa	43	20		
Pondicherry	8	22	9	9
Punjab	0	0	0	83
Rajasthan	93	0	0	93
Tamil Nadu	146	569	256	336
Tripura	1	1	0	1
Uttar Pradesh	594	340	555	187
Uttaranchal	9	36	14	21
West Bengal	334	81	287	295
Total	2142	4811	2126	2501

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories P: Provisional, ** Covered under ESI Act

^{.. :}Not Available

Table 8.16: Canteens, Shelters, Rest Rooms and Creches for the year 2007

(P)

States/ Union Territories	Canteen Shelter, Rest Room, Lunch Room Cre				Cred	ches
States/ Union Territories	Factories	Factories	Factories	Factories	Factories	Factories
	Requiring	Having	Requiring	Having	Requiring	Having
Andaman & Nicobar	3	3	8	8	0	0
Andhra Pradesh	391	370	520	493	439	378
Assam	28	99	70	103	29	33
Bihar	27	27	0	0	0	0
Chandigarh	7	7	7	7	2	2
Chattisgarh						
Daman & Diu & Dadra						
& Nagar Hawelli	50	65	100	120	85	85
Delhi						
Goa	20	46	65	91	39	10
Gujarat	443	442	759	753	166	146
Haryana	273	230	400	389	84	57
Himachal Pradesh						
Jammu & Kashmir	40	40	46	54	0	0
Jharkhand	40	29	70	70	10	9
Karnataka	618	588	832	809	1204	1101
Kerala	532	370	1019	983	702	644
Madhya Pradesh	188	185	368	365	48	45
Maharashtra	602	632	1150	1163	103	111
Manipur						
Meghalaya	3	2	7	2	3	1
Nagaland	13	13	15	15	0	0
Orissa	129	129	165	165	55	48
Pondicherry	28	28	49	31	3	3
Punjab	238	236	341	321	56	48
Rajasthan	147	147	402	402	23	22
Tamil Nadu	1278	1235	2334	2303	2374	2209
Tripura	3	3	3	3	1	0
Uttar Pradesh	434	290	684	482	174	66
Uttaranchal	92	92	142	142	43	39
West Bengal	405	405	656	698	28	28
Total	6032	5713	10212	9972	5671	5085

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional,

^{.. :}Not Available

Table 8.17: Welfare Officers for the year 2007(P)

State/UTs	Factories	Factories	Officers	Officers
State/013	Requiring	Having	Required	Appointed
Andaman & Nicobar	2	1	2	1
Andhra Pradesh	147	127	179	135
Assam			9	132
Bihar	16	16	27	27
Chandigarh	2	2	2	2
Chattisgarh				
Daman & Diu & Dadra &	4	4	4	4
Nagar Hawelli				
Delhi				
Goa	12	12	12	18
Gujarat	253	230	271	253
Haryana	107	99	111	97
Himachal Pradesh				
Jammu & Kashmir	7	4	7	4
Jharkhand	60	60	60	60
Karnataka	346	384	332	370
Kerala	62	58	66	59
Madhya Pradesh	111	108	128	127
Maharashtra	391	419	326	368
Manipur				
Meghalaya	1	1	1	1
Nagaland	3	3	3	3
Orissa	66	66	124	124
Pondicherry	7	7	10	7
Punjab	93	83	93	83
Rajasthan	94	99	94	100
Tamil Nadu	299	250	347	279
Tripura	1	1	1	1
Uttar Pradesh	254	208	270	218
Uttaranchal	33	33	26	24
West Bengal	329	329	320	313
Total	2700	2604	2825	2810

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional,

^{.. :}Not Available

Table 8.18: Notification of Model Rules framed under the Factories (Amendment) Act, 1987

States/ Union Territories	Model Rules			
Andaman & Nicobar Islands	No hazardous unit, hence Rules			
Andaman & Nicobai islands	Not applicable			
Andhra Pradesh	Notified			
Assam	Notified			
Bihar	Notified			
Chandigarh	Notified in Punjab Factories Rules			
Chattisgarh	*			
Daman, Diu, Dadra & Nagar	Under process			
Haveli	·			
National Capital Territory of Delhi	Notified			
Goa	Notified			
Gujarat	Notified			
Haryana	Notified			
Himachal Pradesh	Not Notified			
Jammu & Kashmir	Not Notified			
Jharkhand	*			
Karnataka	Notified			
Kerala	Notified			
Madhya Pradesh	Notified			
Maharashtra	Notified			
Manipur	Draft submitted for Govt.			
	approval			
Meghalaya	Notified			
Nagaland	Draft submitted for Govt.			
	approval			
Orissa	Notified			
Pondicherry	Notified			
Punjab	Notified			
Rajasthan	Notified			
Tamil Nadu	Notified			
Tripura	Not Notified (will be placed			
	before the Govt. approval)			
Uttar Pradesh	Notified			
Uttaranchal	Not Notified			
West Bengal	Notified			

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

"*": Newly created States.

Source: Correspondence with CIFs of states and UTs

Table 8.19: Notification of Major Accidents Hazard Control Rules

	MALIO P. L. 1997
States/ Union Territories	MAHC Rules, 1997
Andaman & Nicobar	No hazardus unit, hence Rules Not
Islands	applicable
Andhra Pradesh	Notified
Assam	Notified
Bihar	Draft Rules Sent for Publication
Chandigarh	Notified
Chattisgarh	*
Daman, Diu, Dadra &	Notified
Nagar Haveli	
National Capital	Notified
Territory of Delhi	
Goa	Notified
Gujarat	Notified
Haryana	Sent for notification
Himachal Pradesh	Not Notified
Jammu & Kashmir	Not Notified
Jharkhand	Notified
Karnataka	Notified
Kerala	Notified
Madhya Pradesh	Notified
Maharashtra	Notified
Manipur	Draft Rules submitted for approval of state
	Govt.
Meghalaya	Notified
Nagaland	Not Notified
Orissa	Notified
Pondicherry	Draft notification under consideration of
	Govt.
Punjab	Notified
Rajasthan	Notified
Tamil Nadu	Notified
Tripura	Notified
Uttar Pradesh	Notified
Uttaranchal	Notified
West Bengal	Draft sent for notification
	Lakshadwoon Mizoram and Sikkim Factories Act 1049

Note: For Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim Factories Act, 1948 not yet introduced/ No registered factories

Source: Correspondence with CIFs of states and UTs

^{*} Newly created States.

9. Occupational Injuries in Ports

DGFASLI is enforcing the Dock Workers (Safety, Health & Welfare) Act, 1986 and Regulations 1990 in all the major ports of the country. The Inspectorate of Dock Safety offices located in the major ports enforce the Act and Regulations. Under Regulations 91(1) & (6) it is obligatory on the part of the Employers of the Dock Workers to report the accidents/ dangerous occurrences to the Inspectorates.

Table 9.1 shows that Mumbai Port accounts for maximum injuries and Cochin port accounts for maximum dangerous occurrences. Kandla and Chennai Ports account for maximum fatal injuries. However with the efforts of the Inspectorates in creating safety awareness among all personnel connected with dock work, chart 9.1 shows that numbers of accidents have registered a decrease from 251 in 1999 to 149 in 2008. Among fatal injuries there is no significant change, as depicted in chart 9.2.

As per the analysis of reportable accidents depicted in chart 9.3 and chart 9.4, unitized and break-bulk cargo accounts for the maximum number of injuries whereas stepping on, striking against, struck by etc. are the major causes for these accidents during the year 2008.

Table 9.1: Port-wise Dangerous Occurrences Fatal and Non-Fatal Injuries during 2008

SI. No.	Ports	FATAL	TOTAL	Dangerous Occurrences
1.	Mumbai	04	48	05
2.	J.N. Port	03	09	04
3.	Kandla	07	09	0
4.	Mormugao	02	09	01
5.	Kolkata	04	26	02
6.	Paradip	0	04	01
7.	Visakhapatnam	01	06	0
8.	Chennai	07	11	05
9.	Cochin	02	11	07
10.	New Mangalore	01	04	00
11.	Tuticorin	02	12	00
	Total	33	149	25

P=Provisional

^{*} Including 1 fatal accident of Ennore Port

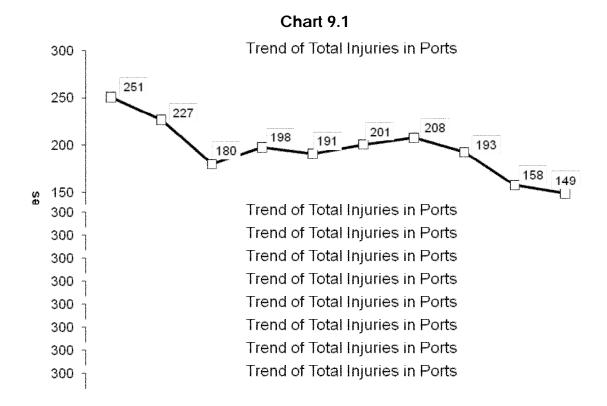


Chart 9.2

40 7	Trend of Fatal Injuries in Ports
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Table: 9.2 CLASSIFICATION OF REPORTABLE ACCIDENTS – ACCORDING TO AGENCY (2008)

Agency	Mumba i	J.N. Port	Kandl a	Mormuga o	Kolkat a	Paradi p	Visakhapatn am	Chenn ai	Cochi n	New Mangalor e	Tuticori n	Total
A. Lifting Appliances	-	1	-	-	8(2)	-	-	3	-	-	1	13(2)
B. Loose Gear and Ropes	10	1	-	-	7(1)	1	2	-	3	01	1	26(1)
C. Unitized and Break Bulk Cargo	18(1)	-	2(2)	3	3	-	2	1(1)	6(1)	01	8	44(5)
D Bulk Cargo	6	-	1(1)	-	1	1	-	-	-	-	-	9(1)
E. Electrical Equipments	-	1	-	-	-	-	-	-	-	-	-	1
F. Tools and Implements	-	-	-	-	-	1	1	1(1)	-	-	-	3(1)
G. Means of Access	3	1(1)	-	-	1	-	-	2(2)	2(1)	-	-	9(4)
H. Mean of Transportati on	6(2)	4(2)	6(4)	2(1)	06(1)	1	-	2(2)	-	02(1)	2(2)	31(15)
I. Other Agencies	5(1)	1	-	4(1)	-	-	1(1)	2(1)	-	-	-	13(4)
Total	48(4)	9(3)	9(7)	9(2)	26(4)	4(-)	6(1)	11(7)	11(2)	04(1)	12(2)	149(33)

NOTE: Figures in brackets indicate FATAL ACCIDENTS

 Table: 9.3
 CLASSIFICATION OF REPORTABLE ACCIDENTS – ACCORDING TO TYPE (2008)

Туре	Mumbai	J.N. Port	Kandla	Moarmugao	Kolkata	Paradip	Visakhapatnam	Chennai	Cochin	New Mangalore	Tuticorin	Total
A. Fall of persons	10(1)	3(1)	-	3	3	1	1(1)	2(2)	3(1)	-	2	28(6)
B. Fall of Objective	4(1)	1	2(2)	-	7(1)	1	1	2(1)	1	1	1	21(5)
C. Stepping on, striking against or struck by objects excluding falling objects	25(1)	4(2)	5(4)	4(1)	9(2)	1	2	3(2)	2	3(1)	7(2)	65(15)
D. Caught in or between	7(1)	-	1	-	7(1)	1	1	2(1)	5(1)	-	2	26(4)
E. Over exertion or wrong movement	1	-	-	1	-	-	1	1	1	-	1	2
F. Exposure to or contact with extreme temperature	-	-	-	-	-	-	-	-	-	-	-	-
G. Exposure to or contact with electric current	1	-	-	-	-	-	-	1	1	-	1	-
H. Exposure to or contact with dangerous goods	-	-	-	-	-	-	-	-	-	-	-	-
J. Explosion	-	-	-	-	-	-	-	-	-	-	-	-
J. Others	2	1	1(1)	1(1)	-	-	-	2(1)	-	-	-	7(3)
TOTAL	48(4)	9(3)	9(7)	9(2)	26(4)	4(-)	6(1)	11(7)	11(2)	04(1)	12(2)	149(33)

NOTE: Figures in brackets indicate FATAL ACCIDENTS

Chart 9.3

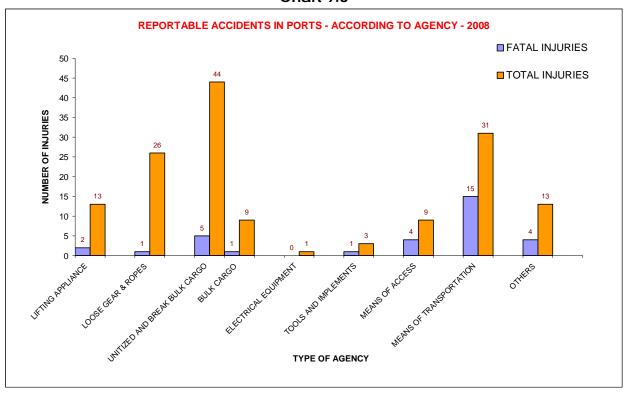
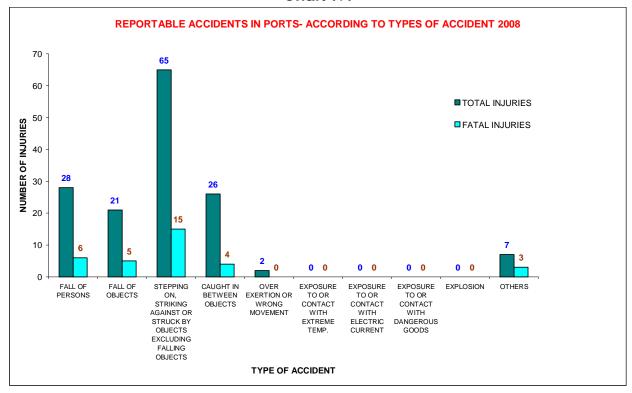


Chart 9.4



10 International Statistics on Occupational Injuries

The International Labour Organisation (ILO) publishes the country-wise Labour Statistics in its Year Book. These statistics contains information on:

- (i) Economically active population
- (ii) Employment
- (iii) Hours of work
- (iv) Wages
- (v) Labour cost
- (vi) Consumer price indices
- (vii) Occupational injuries
- (viii) Strikes and lock outs

In order to have a comparative analysis of the Indian situation with regard to occupational injuries in manufacturing sector, the effort is being made to use the information published in the LABORSTA Internet, an International Labour Office database on labour statistics operated by the ILO Bureau of Statistics, available in respect of some of the countries. In this context it is felt that, the information relating to total injuries alone would be inappropriate measure for comparison of the status. Therefore, the rate of injuries has been taken as a basis of comparison. The country-wise rate of reported fatal injuries and nonfatal injuries in manufacturing sector are given in table 8.1 & table 8.2 respectively, for the period 1997-2006. The incidence rate of fatal injuries per one lakh workers employed is highest in respect of India which varies from 22 in 2000 to 8 in 2004, However, it is to be noted that the rate of fatal injuries in India is consistently decreasing during the period 1997 – 2005. The lowest rate is achieved in United Kingdom which varies from 1.6 to 1.1 during the period.

In respect of rate of non-fatal injuries per one lakh workers employed, India has demonstrated much better performance compared to the countries like Australia, Canada, France, Italy Denmark, U.K. etc. Further, the rate is



Table 10.1: Country-wise rate of reported fatal injuries in Manufacturing Sector per one lakh workers employed

Table 10.1. Country-wise			iatai ii ja	100		9 000.0	. po. o	iaitii iio	110.0	J
COUNTRY	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Australia*	4.00	4.00	1.00	2.00	3.30	2.60	2.50	2.80	1.60	2.70
Bulgaria	6.33	4.53	7.11	4.80	6.60	5.40	4.60	6.70	6.80	6.10
Canada*	8.10	7.80	8.60	9.30	8.60	9.90	8.80	8.80	10.40	9.40
Croatia*	7.35	3.43	2.13	1.46	2.61	3.42	4.20	3.40	4.20	4.90
Czech Republic	4.50	4.20	3.30	-	5.40	5.00	4.10	2.70	4.60	2.70
Denmark	3.00	3.00	3.00	2.00	2.00	-	-	-	-	-
Finland*	3.40	3.10	2.60	3.90	2.30	2.10	2.40	2.70	1.50	1.70
France*	4.04	3.76	3.77	-	-	-	-	-	-	-
Hungary	3.24	2.96	3.12	2.88	2.61	2.71	1.03	4.25	2.76	1.96
India	19.00	16.00	18.00	22.00	19.00	16.00	11.00	8.00	11.00	-
Italy*	6.00	7.00	6.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00
Japan #	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01
Korea, Republic of* #	-	-	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
Norway	-	3.70	3.00	3.40	3.10	2.80	2.10	0.80	2.00	2.00
Philippines #	-	-	-	0.01	-	0.03	0.01	-	-	-
Poland	5.80	5.50	-	5.80	5.30	4.50	5.00	4.90	4.20	5.00
Romania	8.00	7.00	6.00	6.00	6.00	7.00	5.00	6.00	7.00	6.00
Singapore #	-	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	11.30	10.20	9.69	8.82	8.23	5.97	4.98	5.33	5.00	5.40
Sweden	2.30	1.70	1.70	0.70	1.40	1.10	1.20	1.10	1.60	1.70
Switzerland*	-	-	-	-	-	-	-	-	-	-
United Kingdom	1.40	1.60	1.10	1.20	1.30	1.22	0.80	1.40	1.40	1.32
United States	4.00	3.00	4.00	3.00	3.00	3.00	2.50	3.00	2.00	3.00

Note: # Rate of injuries per million hours worked,

Source: LABORSTA Internet, an International Labour Office database on labour statistics operated by the ILO Bureau of Statistics.

^{*} Compensated injuries,

⁻ Not available,

For India, published data of Labour Bureau, Shimla used.

Table 10.2: Country-wise rate of reported Non-fatal injuries in Manufacturing Sector per one lakh workers employed

COUNTRY	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Australia*	3110.0	2960.0	2960.0	2760.0	1110.0	1060.0	1020.0	1150.0	1130.0	1080.0
Bulgaria	922.0	931.0	799.0	485.0	423.0	387.0	329.0	295.0	289.0	245.0
Canada*	5466.0	5188.0	5080.0	5101.0	4688.0	4194.0	3914.0	3685.0	3633.0	3492.0
Croatia*	3434.0	3118.7	2987.6	2959.0	2899.3	2839.0	2965.0	2853.0	2840.0	3135.0
Czech Republic	3642.0	3701.0	3504.0	-	3356.0	3453.0	3256.0	3263.0	3231.0	3153.0
Denmark	3789.0	3571.0	3429.0	3404.0	3219.0	-	-	-	-	-
Finland*	4897.8	4855.9	4465.4	4369.0	4256.0	4011.0	4006.0	3884.0	3926.0	3912.0
France*	5106.9	5092.3	5154.7	-	-	-	-	-	-	-
Hungary	1464.0	1383.0	1307.0	1166.0	1249.0	1234.0	1235.0	1153.0	1136.0	1056.0
India	1623.0	1113.0	1111.0	1071.0	848.0	598.0	322.0	213.0	219.0	-
Italy*	4804.0	4851.0	4786.0	4588.0	4237.0	3937.0	3737.0	3586.0	3510.0	3420.0
Japan	-	-	-	-	-	-	-	-	-	-
Korea, Republic of	-	-	-	-	-	-	-	-	-	-
Norway	-	3243.6	2991.3	2823.1	2607.6	2290.0	1985.6	1828.0	1639.0	1404.0
Philippines #	-	-	-	10.1	-	5.8	6.5	-	-	-
Poland	-	-	-	-	-	-	-	-	-	-
Romania	140.0	127.0	125.0	120.0	124.0	120.0	118.0	120.0	107.0	107.0
Singapore #	-	-	2.1	1.8	0.0	1.9	1.8	1.8	1.7	2.5
Spain	9972.7	10474.5	11325.0	11297.0	10856.2	10358.0	9786.8	10094.7	10083.0	10209.0
Sweden	1272.0	1364.0	1413.0	1488.0	1377.0	1426.0	1313.0	1355.0	1302.0	1277.0
Switzerland*	-	3249.0	3130.8	2977.0	2988.0	2918.0	2783.0	2612.0	2578.0	2538.0
United Kingdom	1233.7	1166.2	1208.5	1191.3	1157.2	1152.6	1117.0	1036.0	994.6	942.2
United States	-	-	-	-	-	-	-	-	-	-

Note: # Rate of injuries per million hours worked

^{*} Compensated injuries,

- Not available, For United States comparable figures not available Source: LABORSTA Internet, an International Labour Office database on labour statistics operated by the ILO Bureau of Statistics For India, published data of Labour Bureau, Shimla used

ANNEXURE- I

UNIT LEVEL CONSULTANCY STUDIES – 2008

SI. No.	Area	CLI M	IUMBAI	RLI K	OLKATA	RLI C	HENNAI	RLI K	ANPUR	RLI FAI	RIDABAD
		Comp- leted	Under Progress								
1	2	3	4	5	6	7	8	9	10	11	12
1	Safety Audit	4	4	1	3	-	1	2	2	-	-
2	Occupational Health	-	-	-	-	-	-	-	-	-	-
3	Airborne Contaminants	10	7	-	-	-	-	-	-	-	-
4	Noise Level	2	1	-	-	-	-	-	-	-	-
5	Ventilation study	1	1	-	-	-	-	-	-	-	-
6	Maximum Credible Loss Scenario	-	-	-	-	-	-	-	-	-	-
7	HAZOP	3	-	-	-	-	-	-	-	-	-
8	Safety Audit- MAHC	2	-	-	-	-	-	-	-	-	-
9	Risk Assessment	2	-	-	-	-	-	-	-	-	-
10	Ergonomic Evaluation	5	-	-	-	-	-	-	-	-	-
11	Heat Stress	2	2	-	-	-	-	-	-	-	-
12	Industrial Hygiene Survey	-	-	-	-	-	-	1	-	-	-

13	Dispersion	-	-	-	-	-	-	-	-	-	-
	Modeling										
14	Environmental	1	-	-	-	2	-	-	-	-	-
	Conditions										
15	Illumination	2	-	-	-	-	-	-	-	-	-
	Total:	34	15	1	3	2	1	3	2	-	-

		LON	GER DUI	RATION	TRAININ	NG PROC	GRAMME	S - 2008				ANI	NEXURE- II
SI.	Participants and Area	CLI MUN	/IBAI	RLI KOLI	KATA	RLI CHENN	IAI	RLI KANF	PUR	RLI FARIDA	ABAD	IDS	OFFICES
		Progra- mmes	Partici- pants	Progra mme	Partici- pants								
A.	Inspectors of Factories												
	Basic	1	26(5)	-	-	-	-	-	-	-	-	-	-
	Refresher course	1	11(8)	-	ı	-	-	1	7(3)	-	-	-	-
	Chemical	-	-	1	4(4)	-	-	1	16(6)	-	-	-	-
	Refresher Course- MAHC	-	-	-	ı	1	11(5)	-	-	-	-	-	-
B.	Safety Officers												
	ADIS	1	46(37)	1	29(19)	1	37(31)	1	37(32)	-	-	-	-
	Refresher Course	1	14(8)	-	ı	-	-	-	-	-	-	-	-
C.	Factory Medical Officers												
	AFIH	1	50(48)	1	8(6)	-	-	-	-	-	-	-	-
	Refresher Course	-	-	1	16(12)	-	-	-	-	-	-	-	-
D	Management Personnel												
	Industrial Safety	2	52(40)	3	75(10)	2	47(28)	2	44(21)	-	-	1	51(19)
	Industrial Hygiene	2	18(17)	1	8(6)	-	-	-	-	-	-	-	-
	Occupational Health	2	24(21)	1	8(5)	-	-	-	-	-	-	-	-
	Industrial Physiology	7	85(28)	-	-	-	-	-	-	-	-	-	-
	Ergonomics	1	11(5)	-	-	-	-	-	-	-	-	-	-
	Staff Training	3	47(17)	-	-	-	-	-	-	-	-	-	-
	Industrial Productivity	1	4(1)	-	-	-	-	-	-	-	-	-	-
	Industry Psychology	1	18(6)	-	-	-	-	-	-	-	-	-	-
	MAHC	2	16(6)	1	9(7)	1	26(26)	-	-	-	-	-	-
	HAZOP	-	-	1	14(7)	-	-	-	-	-	-	-	-
	Hazardous substances	-	-	-	-	-	-	-	-	-	-	-	-
	Hazardous Processes	1	6(6)	-	-	-	-	-	-	-	-	-	-
	Risk assessment	-	-	-	-	-	-	-	-	-	-	-	-
	Construction Safety	-	-	1	22(22)	1	30(11)	-	-	-	-	-	-
	Environmental Pollutants	1	9(7)	1	4(4)	-	-	-	-	-	-	-	-
E. Tr	ade Union Leaders/workers/ J	oint Partici	pation								_		
	Industrial Safety	2	40(31)	1	14(1)	-	-	2	24(10)	-	-	-	-
	Staff Training	1	13(5)	-	-	-	-	-	-	-	-	-	-
	Industrial Productivity	-	-	-	-	-	-	-	-	-	-	-	-
	Indl. Psychology	5	76(24)	-	-	-	-	-	-	-	-	-	-

Hazardous Substances	-	-	1	7(7)	ī	-	1	-	-	-	-	-
Chemical Safety	-	-	-	-	i	-	1	27(12)	-	-	-	-
Ergonomics	-	-	-	-	-	-	-	-	-	-	-	-
Dock Safety	-	-	1	12(5)	-	-	-	-	-	-	1	35(1)
Total:	36	566(320)	16	230(115)	6	151(101)	8	155(84)	-	-	2	86(20)

Note: Figures in bracket indicate number of organisations.

ANNEXURE-

Ш

IN COMPANY TRAINING PROGRAMMES - 2008

SI.	Participants and Area	CLI MI	JMBAI	RLI KC	LKATA	RLI CH	IENNAI	RLI KA	ANPUR	RLI FAR	IDABAD
No.		Progra- mmes	Partici- pants								
A.	Management I	Personnel									
	a) Industrial Safety	6	221(6)	1	81(1)	3	68(3)	-	-	-	-
	b) Occupational Health			-	-	-	-	-	-	-	-
	c) Industrial Physiology	3	130 (3)	-	-	-	-	-	-	-	-
	d) Industrial Ergonomics	-	-	-	-	-	-	-	-	-	-
	e) Productivity	-	-	-	-	-	-	-	-	-	-
	f) Staff Training	1	26(1)	-	-	-	-	-	-	-	-
	g) Industrial Psychology	-	-	-	-	-	-	-	-	-	-
	h) MAHCA	2	47(2)	-	-	-	-	1	10(1)	-	-
B.	Trade Union Lea	aders/worl	cers/ Joint	Participation	on						
	a) Industrial Safety			-	-	-	-	-	-	-	-

b) Industrial Hygiene	1	40(1)	-	-	-	-	-	-	-	-
c) Occupational Health	-	-	-	-	-	-	-	-	-	-
d) Industrial Psychology	4	120(4)	-	-	-	-	-	-	-	-
e) Dock Safety	1	40(1)	•	-	-	-	-	-	-	-
Total:	18	624(18)	1	81(1)	3	68(3)	1	10(1)	-	-

Note: Figures in bracket indicate number of organisations.

SHORT DURATION (1-2days) TRAINING PROGRAMMES - 2008

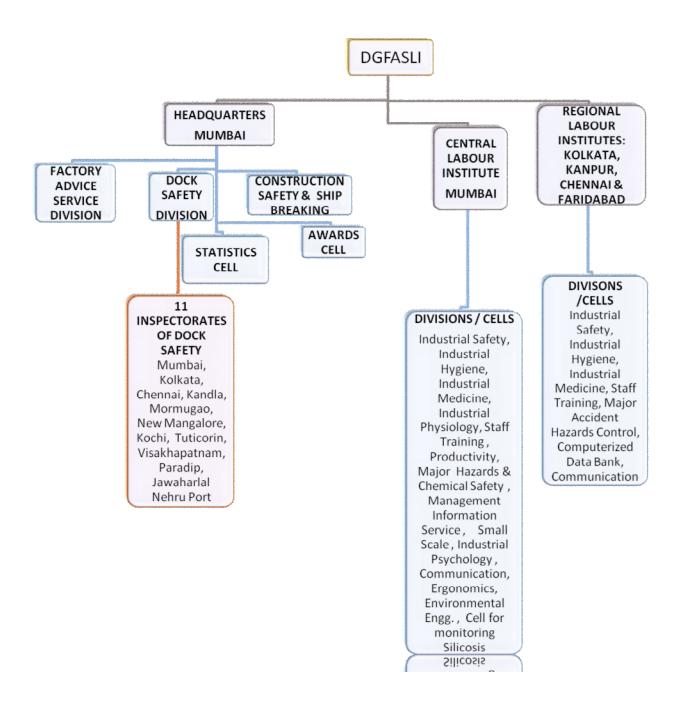
ANNEXURE- IV

SI.	Participants and Area	CLI MI	UMBAI	RLI KC	DLKATA	RLI CI	HENNAI	RLI KANPUR		INSPECTORATE OF DOCK SAFETY	
No.		Progra- mmes	Partici- pants	Progra- mmes	Partici- pants	Progra- mmes	Partici- pants	Progra- mmes	Partici- pants	Progra- mmes	Partici- pants
1	Industrial Safety	-	-	2	86 (2)	1	16(1)	1	34(12)	-	-
2	Industrial Hygiene	1	3 (1)	1	20 (5)	-	-	-	-	-	-
3	Dock Safety	-	-	-	-	-	-	-	-	8	149 (26)
4	Industrial Ergonomics	5	74 (5)	-	-	-	-	-	-	-	-
5	Industrial Physiology	2	24 (2)	-	-	-	-	-	-	-	-
6	Industrial Psychology	1	12(1)	-	-	-	-	-	-	-	-
7	MAHCA	-	-	-	-	-	-	-	-	-	-
	Total:	9	113(9)	3	106 (7)	1	16(1)	1	34(12)	8	149 (26)

Note: Figures in bracket indicate number of organisations

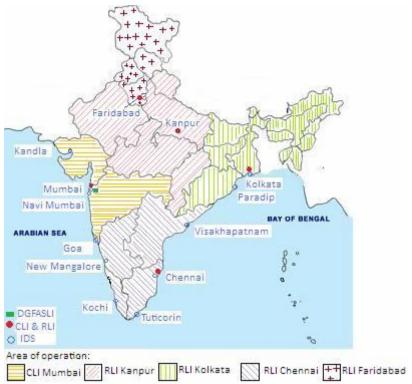
APPENDIX - I

ORGANISATION CHART



Location Map of DGFASLI Offices

APPENDIX - II



Directorate General Factory Advice Service & Labour Institutes & Central Labour Institute, Mumbai N.S.Mankikar Marg, Sion, Mumbai-400

022.

PBX No.91-22-24092203 Fax: 022-24071986 e-mail: fasli@dgfasli.nic.in e-mail: cli@dgfasli.nic.in

Regional Labour Institute, Kanpur Sarvodya Nagar, Kanpur-208 005 Tel: 2218691,2218692, 2218745

Fax: 0512-21511282 e-mail: rli_kanpur@vsnl.net

Regional Labour Institute, Kolkata

Lake Town, Kolkata-700 089 Tel: 25342732, 25342735, 25343254 Fax: 033 – 25348182

email: rlikol@vsnl.net

 ${\bf Regional\ Labour\ Institute,\ Chennai}$

Sardar Patel Road, Adyar, TTTI PO, Chennai-600113

Phone: 22350737, 22351569, 22355690 FAX: 044-2352457

email: rlic@vsnl.net

Regional Labour Institute, Faridabad

Sector 47, Haryana - 121003 Tel: 0129-2468022 FAX: 0129-2437064

email: rlifaridabad@yahoo.co.in

Inspectorate of Dock Safety, Mumbai
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, J.N.Port POC Canteen Bldg., J.N. .Port, Sheva, Navi Mumbai – 400 707

Tel: 27471584, 27470201

Inspectorate Dock Safety, Goa 108,NeogiMansion,Vasco-Da-Gama

Mormugao, Goa-403802

Tel: 2517334 Fax: 0832 -2517334 e-mail: fasli@dgfasli.nic.in

Inspectorate Dock Safety, New Mangalore

New Mangalore Port, Panambur, New Mangalore-575010 Tel: 2407781 Fax: 0824 – 2407781

e-mail: idsmlr@sancharnet.in

Inspectorate Dock Safety, Cochin C.D.L.B. Dispensary Building, G.V.Ayyar

Rd, Willington Island, Cochin-682003 Tel: 2666532 Fax: 0484 – 2666532 Email: idscochin@sancharnet.in Inspectorate Dock Safety, Kandla

Near Bunder Gate, New Kandla -370210 Tel: 270249 Fax: 02836 – 270249

e-mail: idskandla@sancharnet.in

Inspectorate Dock Safety, Visakhapatnam 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, Chennai

3rd Floor, Anchor Gate Building, Rajaji Salai,

Chennai - 600 001.

Tel: 25220888, 25246419 Fax: 044 – 25220888

E-mail: idschn@vsnl.net

Inspectorate Dock Safety, Tuticorin

Tuticorin Port Trust, Admn. Office Building, Post. Box No.4, Harbour P.O. Tuticorin-628004 Tel: 2352372 Fax: 0461 – 2352372

e-mail: idstuty@sancharnet.in

Inspectorate Dock Safety, Kolkata

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, Paradip

P.B. No.126, Dist. Paradip, Jagatsinghpur, Orissa – 754142.

Tel: 222413 Fax: 06722 – 222413

e-mail: idsparadip@sify.com

APPENDIX-III

List of Contact Officers

As on 1.4.2009

	AS On 1.4.2009						
SI.No	Name and Designation	Office	Residence				
Α.	DIRECTORATE GENERL FACTORY ADVICE SERVICE & LABOUR INSTITUTES	PBX No. 91-22-24092203					
	1. Shri. S.K.Saxena, Director General	24074358	24091526(D)				
	2. Shri S.G.Darvhekar, Deputy Director General	Ext-203	24073760(D)				
	and CPIO		Ext.207				
	3. Dr. A.K. Chakrabarti, Deputy Director General	Ext-226					
	 Shri G.M.E.K. Raj, Director (Safety), In-Charge Dock Safety Division & MIS 	Ext-270					
	Shri K. Balasubramanium, Director (Safety), In- Charge Awards Division	Ext-290					
	 Shri. V.B. Sant, Director (Staff Training /Productivity), In-Charge Factory Advice Service Division 	Ext-263	24037532(D) Ext.333				
	7. Shri B.D.Dubey, Director (Industrial Hygiene)	Ext-273	206				
	8. Smt Supriya Roy, Joint Director (Statistics)	Ext-264	-				
	9. Shri P.S.Ghosh, Under Secretary & Head of Office (HQ)	Ext- 279					
B.	CENTRAL LABOUR INSTITUTE, MUMBAI	PBX No. (022) 24092203					
	 Dr. M. Rajaram, Director(Staff Training/ Productivity), In-Charge Productivity and Small Scale Cell 	Ext-291	Ext-214				
	 Dr. R.B.Raidas, Director (Industrial Medicine), In- Charge Industrial Medicine Division 	Ext-247	Ext-210				
	3. Dr. S.S.Waghe, Director (Industrial Medicine), Incharge Cell for Monitoring Silicosis	Ext- 250	-				
	4. Shri. S. S. Gautham Director(I.H), In-Charge MHC&S, and Env. Engg. Division	Ext-256	Ext-208				
	5. Shri.P.B.Pal Director(I.H), In-Charge Industrial Hygiene Division	Ext- 255	Ext-215				
	6. Shri. H. Viswanathan, Director (Safety), In- Charge Industrial Safety Division (Trg.), Communication and Rajbhasha Adhikari	Ext-233	-				
	 Dr. R.K.Elangovan, Director (Safety), In-charge Safety Division (Safety Audits, Safety Centre & Workshop) 	Ext-232	-				
	8. Shri. N.K. Rustogi, Director(Staff Training/ Productivity), In-Charge, Staff Training Division	Ext-294	-				
	9. Shri P.K.Mohanty, Deputy Director (Ind.Psy.) In-	Ext-305	Ext-219				

charge Industrial Psychology & Head of Office (CLI)		
10. Shri. D.R.Krishna, Deputy Director (Safety) In- Charge Industrial Physiology & Ergonomics	Ext-309	-

SI.No.	Name and Designation	Office	Residen ce			
С	REGIONAL LABOUR INSTITUTE, KOLKATA					
	Shri. U.K. Das, Director-In-Charge	033-25343254	2534554			
	& Head of Office	26342735	7			
		25342732				
D	REGIONAL LABOUR INSTITUTE, KANPUR					
	Shri S.B.Mathur, Director-In-Charge	0512-2218691	2235941			
	& Head Of Office	2218692	2219355			
	DECIONAL LABOUR INICITIUTE QUENINAL	2218745				
E	REGIONAL LABOUR INSTITUTE, CHENNAI	044 00055 (00				
	Shri. S. Bharathi, Director-In-Charge	044-22355690	-			
	& Head Of Office	22350737 22351569				
F	REGIONAL LABOUR INSTITUTE, FARIDABAD	22301009				
Г	Dr A. Singh , Director (Industrial Psychology)	0129-2437064				
	Di A. Siligit, Director (ilidustilai Esychology)	2468022	-			
	INSPECTORATE DOCK SAFETY, MUMBAI	2400022				
G	Shri. B N. Jha, Deputy Director (Safety)	022-22613391	2892400			
	Sim. Biv. Sha, Deputy Bilector (Salety)	22692180	7			
	INSPECTORATE DOCK SAFETY, KANDLA	22072100	,			
Н	Shri., D.K.Saxena Asstt. Director(Safety),	02836-270249	270724			
	INSPECTORATE DOCK SAFETY, MORMUGAO					
	Shri D. Gnanasundaram,	0832-2517334	-			
	Addl.Asstt.Director(Safety)					
J	INSPECTORATE DOCK SAFETY, JNP					
.	Shri V.J.Gonsalves, Addl.Asstt.Director (Safety)	022-27245099	-			
		27240461				
К	INSPECTORATE DOCK SAFETY, KOLKATA					
	Shri. Amar Singh , Deputy Director (Safety)	033-22830718	-			
		22830719				
L	INSPECTORATE DOCK SAFETY, PARADIP					
	Shri Dutta Choudhary, Asstt. Director(Safety)	06722-222413	222368			
М	INSPECTORATE DOCK SAFETY, VISAKHAPATNAM					
	Shri. B.P.Chakraborty, Addl. Asstt. Director	0891-2563857	2559854			
	(Safety)					
N	INSPECTORATE DOCK SAFETY, CHENNAI					
	Shri. G. P. Nijalingappa, Deputy Director (Safety)	044 -25220888	2536268			
		25246419	7			
	INSPECTORATE DOCK SAFETY, TUTICORIN					

0	INSPECTORATE DOCK SAFETY, TUTICORIN		
	Shri. K. Sukumaran, Asstt. Director (Safety)	0461-2352372	2252272
Р	INSPECTORATE DOCK SAFETY, COCHIN		
•	Shri B.S. Chavan, Addl. Asstt. Director(Safety)	0484 -2666532	2667068
0	INSPECTORATE DOCK SAFETY, NEW MANGALORE		
	Shri. K.S. Patkotwar, Addl. Asstt. Director	0824 -2407781	2407857
	(Safety)		