Directorate General Factory Advice Service & Labour Institutes

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 Government 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.

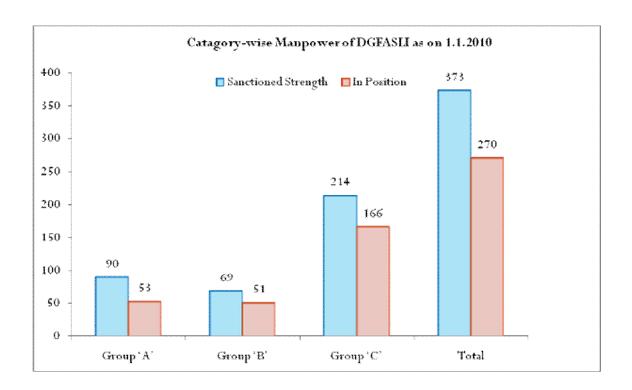
In 1959, the Central Labour Institute, Mumbai was established under UNDP Project as a socioeconomic laboratory and as a national institute dealing with scientific study of human aspects of industrial development. Subsequently, Regional Labour Institutes (RLIs) were established at Kolkata, Kanpur, Chennai and Faridabad to serve as Regional Centers. The detailed organisation structure is given in **Appendix I** and the contact addresses, the area of operations of the RLIs etc. 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. 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 1.1.2011

Units	Tech	nnical	Administrative		Total	
	Sanctioned	In Position	Sanctioned	In Position	Sanctioned	In Position
Headquarters	12	9	47	40	59	49
CLI Mumbai	50	36	68	60	118	96
4 RLIs	61	29	79	54	140	83
11 IDSs	25	20	31	22	56	42
Total:	148	94	225	176	373	270





The DGFASLI Organisation

2 Budget

The allocation of funds for the various constituents and plan schemes of the organisation for 2010-2011 and 2011-2012 of the XI^{th} Five year plan is given below:

			(Rs. in Lakhs)
Sl.No.	SCHEMES	Revised Estimates 2010-2011	Budget Estimates 2011-2012
A. NON	I-PLAN		
1	DGFASLI & IDS	628.00	621.00
2	Research & Training (CLI & RLIs)	1112.00	1074.00
	Total: (NON-PLAN)	1740.00	1695.00
B. PLA	N Establishment of Regional Labour Institute at Faridabad	150.00	150.00
2	Strengthening of DGFASLI Organisation and OSH in Factories and Ports	870.00 NER 203.00	696.00
3	Identification and Elimination of Silicosis in India	9.00 NER	10.00
	Total: (PLAN)	1.00 1233.00	856.00
	GRAND TOTAL:	2973.00	2551.00

3 Plan Schemes

During 2010-2011, two Plan Schemes under the XIth Five Year Plan are taken up by DGFASLI for implementation, namely (1) Establishment of Regional Labour Institute at Faridabad and (2) Strengthening of DGFASLI organization and OSH in Factories & Ports.

3.1 Plan Scheme I: Establishment of Regional Labour Institute at Faridabad

Objectives: The objective of the Scheme is to cater to the needs of the Northern region i.e., the States of Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Union territory of Chandigarh and the National Capital Territory of Delhi, in the areas of safety and health.

Table 3.1 Targets & Achievements (January to December 2010)

Sl. No.	Activities	Targets Achievements					
1.	Creation of Various Posts	40	18 posts created and 17 posts are to boutsourced.				
2.	Setting up of Laboratories	To be spread over	Three Labs have been setup.				
		this period	Strengthening of Labs is in progress.				
3.	Short & Long duration training programmes / Inplant training programmes	10	10				
4.	One year post Diploma Course in Industrial Safety	1	1				
5.	3 month course — Associate Fellow of Industrial Health (AFIH)	-	-				
6.	Six weeks Training Programme on Industrial Hygiene	-	-				
7.	Developing State-wise OSH monitoring	-	-				
8.	Training programme for small and medium enterprises	2	-				
9.	Research/Studies / Surveys	1	1				
10.	National Seminar / Workshops	2	1				
11.	Publication	-	One pocket book in Hindi (Surakhshit jeevan Khushhal jeevan)				
12.	Video / film	-	One Video film (Surkhshit jeevan Khushhal jeevan)				

3.2 Plan Scheme II: 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 3.2 Targets & Achievements (January to December 2010)

Sl.	Activities	Targets	Achievement	
1.	Upgradation of various laboratories at CLI & RLIs	To be spread over	Procurement	
		the entire plan	of items -28 ⁺	
		period		
2.	a) Development of National Inventory on OSH	4	Nil**	
	information and follow up			
	b) Upgradation and development of databases	*	18	
	c) Development of Application Programmes	*	6	
	d) Material Safety Data Sheet (MSDS) on request	*	64	
	e) Industry-wise safety and health information	2	35	
	f) INDOSHNEWS Publication	4	4	
	g) Publication of Manuals, brochures, etc	2	10	
3.	Implementation of minimum agenda for e-Governance	12	12	
4.	Conduction of specialized training programmes,	25	46	
	seminars, workshops			
5.	Conduction of studies/surveys/audits	25	26	
6.	Enforcement activities in major ports (inspection of	1500	1536	
	ships, container ship, loose gears, docks, container			
7.	yards, hazardous installations, etc.)	700	750	
8.	Testing of Respiratory & Non Respiratory PPE Production of Video films		730	
0.	1 roduction of video mins	As per the requirements	-	
9.	Programment of audio vigual and communication	*		
<i>)</i> .	Procurement of audio-visual and communication	*	-	
	equipment & software for production of video films,			
	posters, etc.	period		

^{*}Can't be quantified

^{**} Shortage of manpower

⁺ Renovation & instruments purchased for Upgradation of laboratories

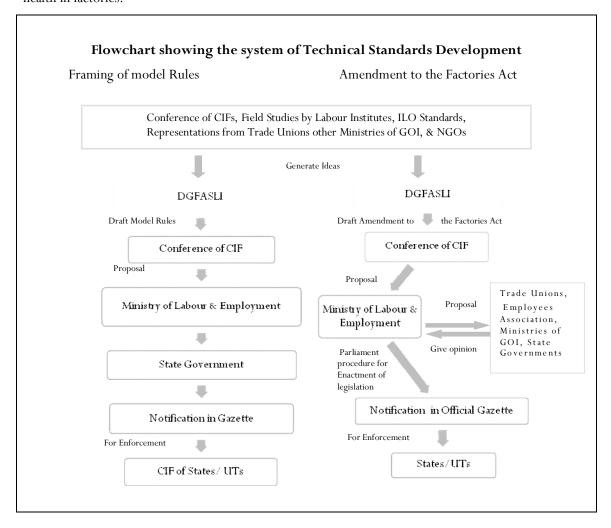
a) Renovation of Working Table of EED. b) Renovation of Working Table of IHL, CLI, c) Spirovit Accessories d) Computerized Spectrophotometer , e) Mercury Analyzer & Electronic Weight Balance , f) Data Logging Personal Heat Stress Monitors - 16 Nos. (12 Nos. for 3 RLIs & 4 Nos. for CLI), g) Sound Level Meter-1No.-CLI, h) UV-VIS Spectrophotometer - 1 No. for CLI, i) 1 Syringe pump for RTL - 1 No. for CLI, j) Multifunctional Ventilation Meter - 3 Nos. for CLI, k) Accubalance Capture Hood - 1 No. for CLI.

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 states 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 on the progress made in the application of techniques and methods for prevention of accidents and ill-health in factories.



4.2 During the year 2010 comments/clarifications / replies/ materials were prepared on the following matters:

Table 4.1

Sl.	Comments/ Clarifications / Replies/ Materials	No.
1.	Matters regarding Factories Act, 1948	15
2.	Matters regarding ILO Conventions/ILO Meetings	8
3.	Matters relating to Parliament Questions and Parliamentary Standing Committee on	38
	Labour meetings	
4.	Matters regarding Court Cases	4
5.	Other Important Matters	46

4.3 **The 50th Conference of Chief Inspectors of Factories** was held at Mathura, Uttar Pradesh from 7-9 April, 2010. The Conference was inaugurated by Shri S.K.Srivastava, IAS, Additional Secretary to the Government of India, Ministry of Labour and Employment and presided over by Shri R.C.Srivastava, IAS, Principal Secretary, Department of Labour, Government of Uttar Pradesh. Dr.A.K.Chakrabarti, Director General, DGFASLI delivered the keynote address. The Conference was attended by 24 Chief Inspectors of Factories from various States/Union Territories besides 10 officials from DGFASLI.

Some of the important decisions taken during the Conference are establishing a uniform procedure for carrying out inspections of factories for effective implementation of the provisions of the Factories Act, 1948, responsibility of occupier for safe disposal of hazardous substances stored in the premises while closing down the factory, extending the application of Section 85 to units which undertake operations including hazardous substances like asbestos, pesticides, grinding/crushing stones containing silica etc., submission of e-returns, reviewing and revising of the Model Rules, capacity building of State Factory Inspectorates. Further, four Working Groups were constituted to deliberate and finalise on important issues relating to Testing of Pressure Vessels, uniform checklist for carrying out inspections, data collection on OSH, review and revising of the Model Rules, etc.

4.4 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 86 applications during the period January to December, 2010. All applications were attended to as per the provisions of the Act.
- Ministry of Personnel, Public Grievances & Pensions, Department of Personnel & Training, has
 designed and developed a 'logo' for "Right to Information" under the RTI Act, 2005.
 Guidelines for usage of this RTI logo have also been developed to improve and standardize the
 visual presentation and application of same. Action has been initiated by CPIO, DGFASLI for
 proper usage of the logo, as given in the guidelines.
- **4.5 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 is a member of the inter-Ministrial Committee set-up for looking in to the problems in Ship breaking Industry.
- A one-day National Seminar on Emerging Challenges for Occuapational Safety and Health in ship breaking industry was organized on 17.08.2010 at Alang, in collaboration with Directorate of Industrial Safety and Health, Gujarat for the stake holders in ship breaking industry. The seminar was inaugurated by Shri G.M.E.K. Raj, Deputy Director General & HOD, DGFASLI. Shri D.C.Choudhary, Director DISH, Gujarat presided over the function. The seminar was attended by 110 delegates. Officers from DGFASLI, GMB, DISH and Ship Re-cyclers association shared their experiences.



Shri G.M.E.K.Raj, Deputy Director General & HOD, DGFASLI and Shri D.C.Choudhary, Director DISH at the One-day National Seminar on 'Emerging Challenges for Occuapational Safety and Health in ship breaking industry' on 17.08.2010 at Alang.

4.6 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 **27th Conference of Inspectors of Dock Safety** was held at Kandla from 7th & 8th Sept. 2010. The objective of the Conference was to discuss various issues in connection with the administration and enforcement of the Dock Safety Statutes and the Manufacture, Storage and Import Hazardous Chemicals Rules, 1989 and draw a suitable action plan for improving the system. The Conference was inaugurated by, Shri P.D. Vaghela, I.A.S., Chairman Kandla Port Trust, Kandla. Presidential Address was delivered by Shri GMEK Raj, Deputy Director General & Chief Inspector of Dock Safety. Distinguished guests farom Kandla Port, Trade Union representatives, etc. attended the Inaugural function. All the Inspectors of Inspectorate of Dock Safety from all the major Ports attended the Conference.

A National Seminar on "Strengthening of OSH System in Port Sector in India" was held at CLI Auditorium on 16.11.2010 in collaboration with ILO New Delhi. The Seminar was inaugurated by Shri GMEK Raj, Deputy Director General, DGFASLI & Chief Inspector of Dock Safety. Shri S.B. Mathur, Deputy Director General welcomed the delegates. Ms Ingrid Christensen, Senior Specialist on Occupational Safety & Health, ISH, New Delhi delivered the Key Note Address. Shri S.R. Kulkarni, President, Transport and Dock Workers Union, Mumbai and Shri A.K. Gadkari, Chief Mechanical Engineer, Mumbai port Trust were among the high level dignitaries present



Shri P.D. Vaghela, I.A.S., Chairman Kandla Port Trust, Kandla and Shri GMEK Raj, Deputy Director General & Chief Inspector of Dock Safety inaugurating the 27th Conference of Inspectors of Dock Safety held at Kandla from 7th and 8th Sept. 2010.



Shri GMEK Raj, Deputy Director General, DGFASLI & Chief Inspector of Dock Safety, Shri S.B. Mathur, Deputy Director General, DGFASLI, Ms Ingrid Christensen, Senior Specialist on OSH ,ILO, Shri S.R. Kulkarni, President, Transport and Dock Workers Union, Mumbai and other dignitaries at the National Seminar on "Strengthening of OSH System in Port Sector in India" held at CLI Auditorium on 16.11.2010

on the occasion. Two ILO Experts from Brazil on inspection systems discussed about the inspection system in Brazil. Ms Ingrid delivered a talk on "ILO and its Port related activities". The Seminar was attended by 89 delegates from all over the country .

A Two-day National Workshop "Strengthening of OSH Inspection System in Port Sector of India" was organized in Chennai in collaboration with ILO New Delhi on 18th and 19th Nov. 2010. The Workshop was inaugurated by Shri GMEK Raj, Deputy Director General and Head of Department, DGFASLI. Shri S.B. Mathur, Deputy Director General, DGFASLI welcomed the delegates. Ms Ingrid Christensen, Senior Specialist on OSH, ISH, New Delhi delivered the Key Note Address. The Workshop was attended by all the Inspectors of Dock Safety and invitees from Chennai Port, Ennore Port and Private Terminal Operators from Chennai. A total of 27 participants attended the Workshop.

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

4.7 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. The Director General, DGFASLI is a member on the Central Advisory Committee constituted under Rule 10 of the Central Rules of 1998. 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 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.

4.8 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 4.2 National Studies and Surveys undertaken during 2010

Sl.	National Studies and Surveys	Status
1	Regional Study on assessment of airborne asbestos chemical contaminants in the	Completed
	work environment of painting operations in Goa	
2	Occupational Health & Hygiene Study at Stone Breaking units in the State of Tripura	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 4.3 State level Studies and Surveys undertaken during 2010

Sl.	State level Studies and Surveys	Status
1	Investigation of an accident at Balco, Korba in Chhattisgarh	Completed
2	Status of Health & work environment in Sugar Industries in U.P.	Completed
3	Joint investigation of an accident at NTPC, Dadri in collaboration with Director of Factories U.P.	Completed
4	Regional Project on prioritization of Major Accident Hazard Factories in Uttarakhand	Completed

c) 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 4.4 Unit level consultancy studies undertaken during 2010

Sl.	Area	No. of Cons	ultancy Studies
	_	Completed	Under Progress
1	Safety Audit	13	8
2	Occupational Health	-	1
3	Airborne Chemical Contaminants	15	5
4	Noise Assessment Study	1	1
5	Ventilation	1	1
6	HAZOP	2	-
7	Safety Audit-MAHC	2	1
8	Identification of Hazard	3	1
9	Ergonomic Survey	1	-
10	Transport Hazard Study	1	-
11	Work Environmental study	9	2
12	Illumination Assessment study	2	1
13	Breathing Air Quality	1	-
14	Dispersion Modeling	2	-
	Total:	53	21

4.10 Education and Training

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

4.10.1 **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 4.4 Seminars conducted during 2010

Sl.	Title	Venue	Date	Parti.	Organi.
1.	Safety & Productivity in Tea manufacturing	Guwahati,	26/01/10	100	80
	Industries" organised jointly with Chief	Assam			
	Inspector of Factories, Assam				
2.	Safety in the Use of Lifting Tackles	CLI, Mumbai	09/02/10	304	35
3.	Symposium on "Occupational Safety &	RLI,	10/02/10	75	58
	Health – Challenges in MSME Sector"	Faridabad			
4.	Seminar on "Safety, Health and Environment	Haldia,	19/02/10	106	72
	Hazard Management in Industries" organised	West Bengal			
	jointly with Indian Chamber of Commerce,				
	Kolkata.				• 0
5.	"Prevention of OSH Hazards in Petroleum	Guwahati,	11/03/10	102	28
	Industries"	Assam			
6 .	"OSH provisions under BOCW Act, 1996"	RLI, Chennai	07/05/10	62	31
7.	"Dispersion Modelling and Impact	RLI, Chennai	24-	11	9
	Assessment of Toxic and Flammable		25/06/10		
0	Releases"	DII Chamai	26/07/10	225	40
8.	"Occupational Safety and Health in IT and ITES Industries"	KLI, Chennai	26/07/10	225	49
0		Alana	17/08/10	125	100
9.	" Emerging Challenges for Safety and Health in Ship Recycling Industry" organised jointly	Alang,	17/08/10	123	100
	with Directorate of Industrial Safety and	Gujarat			
	Health, Gujarat.				
10.	"Issues on Occupational Safety & Health	NEEPCO	06/10/10	100	50
10.	Hazards in Power Generation Industries"	Auditorium,	007 107 10	100	30
	organised jointly with NEEPCO	Shillong			
11.	"Emerging Trends in Occupational Safety and	RLI, Chennai	29/10/10	197	123
	Health Management"		_,,,,,,,		
12.	"Balancing Increased Productivity and	Agartala,	02/11/10	86	43
	Improved working Condition in Factories - a	Tripura			
	Review" organised jointly with Directorate of	1			
	Factories & Boilers, Tripura				
13.	"Strengthening of OSH System in Port	CLI, Mumbai	16/11/10	89	24
	Sectors in India" organised jointly with ILO,				
	New Delhi				
14.	Best Practices in Safety, Health and	RLI, Chennai	22/11/10	225	116
	Environment at Workplace.				
15.	"Behaviour Based Safety"	CLI, Mumbai	26/11/10	99	8
16.	"Sustainable Industrial Growth through	Durgapur,	03/12/10	89	59
	Prevention of Occupational Safety, Health &	West Bengal			
	Environment Hazards" organised jointly with				
	Directorate of Factories, West Bengal and				
	Indian Chamber of Commerce, Kolkata				
			Total	1995	885

^{4.10.2} The **workshops** are organized to enhance the skills of the participants in dealing with matters connected to safety, health, productivity and environment etc.

Table 4.7 Workshops conducted during 2010

Sl.	Title	Venue	Date	Part.	Orgs
1.	Workshop on "Higher productivity & better to place at work"	Ponda, Goa	04/02/10	43	43
2.	Workshop on "Higher productivity & better to place at work"	Ponda, Goa	05/02/10	20	20
3.	Workshop on "Silicosis in Stone Crushing Industries" by DGFASLI in collaboration with Inspectorate of Factories, Govt. of Assam.	Guwahati	25/02/10	60	40
4.	Regional Workshop to Operationalise National Policy on Safety, Health & Environment	RLI, Faridabad	09/03/10	52	34
5.	Regional workshop to Operationalise National Policy on Safety, Health & Environment at work place.	RLI, Kanpur	16/03/10	100	65
6.	Regional Workshop to Operationalize National Policy on Safety, Health & Environment at Workplace	RLI, Kolkata	19/03/10	60	40
7.	Regional Workshop to Operationalize National Policy on Safety, Health & Environment at Workplace	RLI, Chennai	25/03/10	81	54
8.	Workshop on "Dispersion Modeling and Impact Calculation"	CLI, Mumbai	26- 30/04/10	15	3
9.	Selection & Quality Assurance for Effective Use of PPE	CLI, Mumbai	28- 30/04/10	11	7
10.	Workshop on "Modern Techniques of Inspection for the Factory Inspectorate with specific reference to Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and Rules"	RLI, Chennai	22/06/10	37	1
11.	Intensive training workshop on Workplace Health promotion	RLI, Faridabad	26- 27/09/10	30	25
12.	Workshop in Monitoring of work environment	RLI, Kanpur	06- 09/10/10	17	9
13.	Workshop on Hazard & Operability	CLI, Mumbai	13- 15/10/10	10	4
14.	Workshop on First Aid Measure in Dock Work.	Kolkata	10/11/10	46	2
15.	National Workshop on "Strengthening of OSH Inspection System in Port Sector in India" organised jointly with ILO, New Delhi.	Chennai	18- 19/11/10	27	5
16.	Higher Productivity & Better Place to Work	Asia Motor Works, Bhuj	02/12/10	37	37
17.	Higher Productivity & Better Place to Work	Asia Motor Works, Bhuj	03/12/10	27	27
18.	Improvement of OSH Awareness in Paper Industries organised by DGFASLI in collaboration with Directorate of Factories, Govt. of Assam	Nagaon Paper Mill, Assam	07/12/10	62	4
19.	Work shop on "Safety Audit for Executives"	RLI, Kanpur	13- 15/12/10	21	11

- 4.10.3 Details of some of the seminars and workshops are given below:
 - 1. A seminar on "Safety & Productivity in Tea Manufacturing Industries" was organised on 26th January, 2010 in Guwahati, Assam by DGFASLI in collaboration with Chief Inspector of Factories, Govt. of Assam. The objective of the seminar was to implement National Policy on Safety, Health and Environment at Workplace by OSH Stakeholders & to improve the OSH awareness for betterment of OSH management and improvement of productivity. The seminar was formally inaugurated by Shri Dileswar Tanti, Former Labour & Employment, Government of Assam and renowned Trade Union Leader. The Seminar was attended by 60 dignitaries & delegates from 28 organisations.
 - 2. The Central Labour Insitute, Mumbai celebrated Institute Day on 9th Feb. 2010. On this occasion a one day seminar on "Safety in the Use of Lifting Tackles" was conducted. The seminar was inaugurated by Prof. K.G.Narayankhedkar, Director, VJTI, Mumbai. The objective of the seminar was to facilitate the delegates to understand various information of lifting tackles with a view to ensure safe practices. The seminar was attended by 304 delegates comprising Safety Professionals, Maintenance Engineers, Competent Persons, Manufacturers and Users of Lifting tackles from industries. Off-shore operations and Ports and the employees of DGFASLI organisation. During the valedictory session, certificates were awarded to the successful students of Advanced Diploma in Industrial Safety (batch 2007-08) and Associated Fellow in Industrial Health June 2009.
 - 3. The Regional Labour Institute, Faridabad celebrated Institute Day on 10th Feb. 2010. On this occasion, a Symposium on "Occupational safety and health Challenges in MSME Sector" was organised. The symposium was inaugurated by Shri GMEK Raj, Deputy Director General & HOD, DGFASLI, Mumbai in presence of Shri Rajiv Chawala, President Faridabad Small Industries Association. The symposium was attended by 75 delegates from 58 organisations. On this occasion an Exhibition on "Occupational Safety and Health" was organised where various PPE, work-environment monitoring equipment manufacturers and suppliers, book publishers and suppliers, educational and training films producers, etc put up their stalls and displayed their products.
 - 4. A One day Seminar on "Safety, Health and Environment Hazard Management in Industries" was held at Hotel Golden Retreat, Haldia on 19th February, 2010 by Indian Chamber of Commerce, Kolkata in collaboration with DGFASLI. The objective of the seminar was to enhance awareness and implementation of National Policy. It was attended by 102 dignitaries and delegates from 80 organisations.
 - 5. A Workshop on "Silicosis in Stone Crushing Industries" was organised on 25th February, 2010 at Hotel Ambarish, Guwahati in Assam by DGFASLI, Mumbai in collaboration with Inspectorate of Factories, Government of Assam. The objective of the workshop was implementation of National Policy on Safety, Health and Environment at Workplace and increasing the OSH awareness of various agencies involved with Silica Dust in industries. Chief Guest Shri K.K.Mittal, IAS, Chief Secretary, Department of Labour & Employment, Government of Assam, inaugurated the workshop. The workshop was attended by 60 dignitaries & delegates from 28 organisations.
 - 6. A Regional Workshop on "National policy on Safety, Health and Environment at workplace" was held on 9th March, 2010 at RLI Faridabad.
 - 7. A one day Seminar on "Prevention of OSH Hazards in Petroleum Industries" was held at Hotel Agneedeep Continental, Guwahati in Assam on 11th March, 2010 by DGFASLI in collaboration with Chief inspector of Factories, Govt. of Assam. It was attended by 102 dignitaries & delegates from 28 organisations.
 - 8. A Regional Workshop to Operationalize National Policy on Safety, Health and Environment was held at Regional Labour Institute, Kanpur on 16th March, 2010. It was attended by 100 delegates from 23 organisations.

- 9. A Regional Workshop to Operationalize National Policy on Safety, Health and Environment at Workplace was held at Regional Labour Institute, Kolkata on 19th March, 2010. It was attended by 60 participants from Eastern and North Eastern parts of the country.
- 10. The Second National Exhibition of Books and Films on Occupational Safety and Health was organised at Central Labour Institute, Mumbai on 23rd April, 2010. Shri A.C.Pandey, Joint Secretary to Govt. of India, Ministry of Labour & Employment inaugurated the Exhibition. Dr. A.k.Chakraborti, Director General, (DGFASLI), presented the key note address during the inaugural function. He announced the establishment of an archive on Occupational Safety and Health Films, where anyone can get complete information about the films. The book exhibition was participated by 8 leading book agencies of Mumbai, and 25 documentary films on various aspects of Occupational Safety and Health were screened in the film exhibition.
- 11. One day Seminar on "Issues on Occupational Safety & Health Hazards in Power Generation Industries" was held at Shillong by DGFASLI in collaboration with NEEPCO at NEEPCO Auditorium on 6th October, 2010
- 12. A National Seminar was conducted on **Behaviour Based Safety** at CLI, Auditorium on 26.11.2010. The seminar was attended by about 300 participants including 99 delegates from across the country & officers and staff from CLI, DGFASLI, IDS & PAO. Experts from leading industries made presentation on Human Behaviour: ABC Model, Observation process and providing feed back, Management commitment for BBS, Union leaders support and involvement for implementing BBS, role of workers in BBS, Successful implementation of BBS in Industry engineering, chemical & process industries & Case study. A good amount of interaction was held between the faculty and participants.
- 13. One day seminar on "Balancing Increased Productivity and Improved Working Condition in Factories A Review" at Pragna Bhavan, Hall No.3 Agartala, Tripura was organised by DGFASLI, Ministry of Labour & Employment, Govt. of India in collaboration with Directorate of Factories & Boilers, Govt. of Tripura on 2nd November, 2010. The seminar was attended by 86 participants from 42 organisations.
- 14. Seminar on "Sustainable Industrial Growth through Prevention of Occupational Safety, Health & Environmental Hazards" was organised by DGFASLI, Ministry of Labour & Employment, Govt. of India & Directorate of Factories, Government of West Bengal in collaboration with Indian Chamber of Commerce, Kolkata at Hotel City Residency, Durgapur on 3rd December, 2010. The seminar was attended by 89 dignitaries and delegates from 59 organisations. Shri U.K.Das, Director (Safety), RLI, Kolkata delivered speech on importance of holding the Seminar by DGFASLI in view of declaration of National Policy on Safety, Health and Environment at Workplace by Govt. of India discussed about the role of the Government, Industries, Trade Unions and other related OSH Stakeholders towards various aspects of the National Policy. The Seminar was formally inaugurated by Shri Dipankar Dutta Gupta, Managing Director, East India Pharmaceutical Works & Chairman National Policy Safety Council, West Bengal chapter.
- 15. A one day training workshop on "Improvement of OSH awareness in Paper Industries" was organised by DGFASLI, Ministry of Labour & Employment, Govt. of India in collaboration with Inspectorate of Factories, Govt. of Assam at the auditorium of Nagaon Paper Mill, HPC, Jagiroad on 7th December, 2010. The workshop was attended by 62 dignitaries and delegates from 4 organisation. The Training Programme was formally inaugurated by lighting the inaugural lamp by the Shri H.N.Baruah, Chief Executive, Hindustan Paper Corporation Ltd., Assam.
- 4.10.4 Further, to upgrade the technical competence of officers and scientific staff of the organization, 4 Professional Interaction & Update Seminar (PIUS) and 1 Satellite Professional Interaction & Update Seminar (SPIUS) were organized.

Table 4.5 Professional Interaction & Update Seminar (PIUS)

Sl.	Title	Date	Participants	Orgnisations
1.	Modern trends & best practices in fire	28/04/10	35	1
	prevention and control			
2.	Office Fire Safety - Prevention & Control (PIUS)	02/06/10	32	1
3.	First Aid & Emergency Care (PIUS)	08/07/10	23	1
4.	Professional Interaction Update Seminar (PIUS)	08/12/10	137	4
	on Safety in the Use of LPG			
		Total	227	7

Table 4.6 Satellite Professional Interaction Update Seminar (SPIUS)

Sl.	Title	Date	Participants	Orgnisations
1.	Occupational Safety and Health Labour	01/04/10	29	1
	Inspections			
'		Total	29	1

4.10.5 Longer Duration Training Programmes:

- a) 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.
- b) 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 4.9 Longer Duration Training Programmes:

Sl.No.	Area and Participant	Programmes	Participants	Organisations
Α.	Professional Programmes			
	Advance Diploma in Industrial Safety	5	162	132
	AFIH	2	55	49
	One-month Certificate Course for Supervisory	2	16	10
	Personnel in hazardous processes factories			
B.	Inspectors of Factories			
	Basic course	1	24	5
	Refresher course	1	4	3
	Chemical Safety	3	49	28

	Construction Safety	1	17	6
C.	Management Personnel			
	Refresher course for Medical Officer	1	23	17
	Refresher course for Safety Officer	1	11	10
	Industrial Safety	3	38	15
	Industrial Hygiene	3	12	8
	Occupational Health	4	79	38
	Ergonomics	3	31	11
	Staff Training	2	37	18
	MAHC	3	46	13
	Construction Safety	1	16	5
	Environmental Pollution	2	19	11
	Hazardous Substances	2	25	13
D.	Supervisors			
	Industrial Safety	4	128	77
	Chemical Safety	3	25	13
	Safety & Health	4	61	29
	Dock Safety	2	82	23
	Environment	1	6	4
	Productivity	5	175	22
	Psychology	3	45	10
E.	Trade Union Leaders/Workers/Joint Partici	pation		
	Industrial Safety	4	99	11
	Staff Training	4	65	18
	Indl. Psychology	1	16	1
	Total:	71	1366	600

4.10.6 **Need Based In-Company Training Programmes:** On the request of managements, various disciplines of DGFASLI conduct in-company 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 4.10 Need based In – company Training Programmes conducted during 2010

Sl.No.	Level of Participants	Programmes	Participants	Organisations
1.	Management Personnel	16	553	16
2.	Supervisors	6	156	6
3.	Trade Union Leader/Workers/Joint	8	221	8
	Participation			
	Total	30	930	30

4.10.7 **Short Duration Training Programmes:** DGFASLI also organized short duration (1 - 2 days) training programmes for the benefit of supervisors, workers, and workers representatives from factories. Such programmes are organized in the field of Safety, Health, Hygiene, Psychology, etc. The institute-wise details of Short Duration Training Programmes are given in **Annexure IV.**

Table 4.11 Short Duration Training Programmes conducted in 2010

Sl.	Level of Participants	Programmes	Participants	Organisations
1.	Management Personnel	3	50	19
2.	Trade Union Leader/ Workers/ Joint Participation	1	49	6
3.	Students of Educational Institutions	7	214	7
4.	Other Enforcement officers	1	4	1
	Total:	12	317	33

4.10.8 **Appreciation and Promotional Programmes:** Each of the Labour Institutes at Mumbai, Kolkata, Kanpur and Chennai has an Industrial Safety Health and Welfare Centre. There are also half day appreciations programmes conducted at various laboratories and divisions of the organization.

Table 4.12 Appreciation and Promotional Programmes conducted in 2010

Sl.	Visits to	Programmes	Beneficiaries	Organisations
1.	Appreciation Programmes	267	5733	1376
2.	Safety Health Welfare Centre	74	1887	97

4.11 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.

4.12 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 4.13 Personnel Protective Equipment tested in 2010

Sl.No.	Type of Equipment	No. of Equipments tested
1.	Non-Respiratory Equipment	312
2.	Respiratory Equipment	690
	Total:	1002

4.13 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 4.14 Approval of Flameproof Electrical Enclosures during the year 2010

Approvals issued	4 manufacturers for 21 flame-proof electrical enclosu	ires
11	1	11 C5
Inspection visits	4 Manufacturing units.	

4.14 Talks:

The officers of the organization 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 4.15 Institute -wise Talks delivered during 2010

Sl.No.	Institute –wise	No. of Talks	Participants	Organisations
1.	DGFASLI (HQ)*	40	1497	339
2.	Central Labour Institute, Mumbai	23	1538	120
3.	Regional Labour Institute, Kolkata	3	59	3
4.	Regional Labour Institute, Chennai	18	2413	212
5.	Regional Labour Institute, Kanpur	2	38	24
6.	Regional Labour Institute, Faridabad	0	0	0
	Total:	86	5545	698

Comprising of Factory Advice Service & Dock Safety Divisions.

4.15 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 4.16 Article Presented in 2010

Sl.No.	Paper/Article	Periodicals/Events	Date
1.	Role of Behavioral scientist:	Indian Science Congress association. Annual at	04-Jan-10
	Challenges ahead	Thiruvanantpuram	
2.	Occupational Health Hazard	One day Seminar on "Occupational Safety,	19-Feb-10
	and its prevention in the	Health & Environment Hazards management in	
	Haldia Industrial Prospective	Industries" at Hotel Retreat, Haldia, West	
	conducted by Indian Chamber	Bengal.	
	of Commerce		
3.	"Silicosis a concern for silica	One day Workshop on Silicosis at Hotel	25-Feb-10
	dust Industries"	Ambarish, Guwahati, Assam.	

4.	"Environmental Monitoring of Free Silica Dust"	One day Workshop on Silicosis at Hotel Ambarish, Guwahati, Assam.	25-Feb-10
5.	Implementation of National	One day Seminar on "Safety & Productivity in	26-Feb-10
5.	policy on Safety, Health and	Tea manufacturing Industry at Hotel Ambarish,	20-1 00-10
	Environment.	Guwahati, Assam.	
6.	Occupational Health Hazards	One day Seminar on "Safety & Productivity in	26-Feb-10
0.	& its Prevention in Tea	Tea manufacturing Industry at Hotel Ambarish,	20-1 00-10
	Industries	Guwahati, Assam.	
7.	Better safety and health	One day Seminar on "Safety & Productivity in	26-Feb-10
	improves productivity	Tea manufacturing Industry at Hotel Ambarish,	
	provide production	Guwahati, Assam.	
8.	"Implementation of National	Seminar on "Prevention of OSH Hazards in	11-Mar-
•	Policy on Safety, health &	Petroleum Industries" organised by DGFASLI in	10
	Environment by OSH	collaboration with Chief Inspector of Factories,	
	Stakeholders"	Government of Assam at Hotel Agneedeep	
		Continental, Guwahati, Assam	
9.	"Preparation of On-site and	Seminar on "Prevention of OSH Hazards in	11-Mar-
	Off-site Emergency Plan"	Petroleum Industries" organised by DGFASLI in	10
	2 ,	collaboration with Chief Inspector of Factories,	
		Government of Assam at Hotel Agneedeep	
		Continental, Guwahati, Assam	
10	Implementation of National	Orissa State safety Conclave 2010 at Hotel May	14-Sep-10
	Policy on Safety, Health and	Fair Convention Centre, Bhubaneswar	
	Environment at Work Place		
11	Implementation Of National	Seminar on "Issues on Occupational Safety &	06-Oct-
	Policy on Safety, Health &	Health Hazards in Power Generation Industries"	10
	Environment at Workplace	at Shillong by DGFASLI in collaboration with	
		NEEPCO at NEEPCO Auditorium, Shillong,	
1.2	On site Foresses Plan in	Meghalaya	06.04
12	On-site Emergency Plan in	Seminar on "Issues on Occupational Safety &	06-Oct-
	the Power Plants	Health Hazards in Power Generation Industries"	10
		at Shillong by DGFASLI in collaboration with NEEPCO at NEEPCO Auditorium, Shillong,	
		Meghalaya	
13	Risk Management -	Seminar on "Emerging Trends in Occupational	29-Oct-
13	Implementation & Experience	Safety and Health Management" at RLI, Chennai	10
14	Implementation of National	One day Seminar on 'Balancing Increased	02-Nov-
	Policy on Safety, Health &	Productivity and Improved working Condition	10
	Environment at Workplace	in Factories - a Review" at Pragna Bhavan, Hall	
	1	No.3, Agartala, Tripura	
15	Occupational Health Hazards	One day Seminar on 'Balancing Increased	02-Nov-
	and their Prevention	Productivity and Improved working Condition	10
		in Factories - a Review" at Pragna Bhavan, Hall	
		No.3, Agartala, Tripura	
16	Productivity and Safety in	One day Seminar on 'Balancing Increased	02-Nov-
	Manufacturing Industries	Productivity and Improved working Condition	10
		in Factories - a Review" at Pragna Bhavan, Hall	
		No.3, Agartala, Tripura	
17	Basic Principles of Safety and	Training Programme under Self Generation of	27-Nov-
	Accident Prevention - Fire	Fund organized by Central Board of Workers	10
	Safety	Education, Ministry of Labour & Employment,	

		Govt. of India, Kolkata at UAL Bengal, Konark	
		Nagar, Kharagpur	
18	Role of Work Environment	Seminar on Sustainable Industrial Growth	03-Dec-
	Monitoring for improvement	through Prevention of Occupational Safety,	10
	of Working Condition	Health & Environment Hazards at Hotel City	
		Residency, Durgapur	
19	Prevention of Occupational	Seminar on Sustainable Industrial Growth	03-Dec-
	Health Hazards saves lives of	through Prevention of Occupational Safety,	10
	employees and economic	Health & Environment Hazards at Hotel City	
	losses in Industries	Residency, Durgapur	
20	SHE Management and	One day training workshop on "Improvement of	07-Dec-
	Accident Prevention	OSH Awareness in Paper Industries" at the	10
	programme in Industry	auditorium of Nagaon Paper Mill, HPC,	
	,	Jagiroad	
21	Process Safety and Emergency		07-Dec-
	Preparedness	through Prevention of Occupational Safety,	10
	•	Health & Environment Hazards at Hotel City	
		Residency, Durgapur	
22	Common causes of accident	Seminar on Sustainable Industrial Growth	07-Dec-
	and role of PPE in accident	through Prevention of Occupational Safety,	10
	prevention	Health & Environment Hazards at Hotel City	
	•	Residency, Durgapur	
23	Implementation of National	One day Workshop on various facets of	16-Dec-
	Policy on Safety, Health and	Industrial Safety & Health for representative of	10
	Environment at Workplace	all big industries in the State of Chhattisgarh at	
		Raipur	

4.16 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

4.17 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.

Table 4.17 Papers/Articles Published in 2010

Sl.No.	Papers/Articles Published	Periodical
1.	Health Hazards in Industries - An overview	INDOSHNEWS VOL. 14 No. 3
2.	Occupational Safety and Health Behaviour: An Indian Perspective	INDOSHNEWS VOL.14
3.	Role of Trade Unions in Occupational Safety & Health of Employees	INDOSHNEWS VOL.14
4.	DGFASLI's perspectives vis-à-vis Disaster Management	INDOSHNEWS VOL 15 No.1
5.	Recent trends of Accidents in docks and Ports	INDOSHNEWS VOL 15 No.1
6.	Occupational Health Study & Environmental Monitoring in Some Stone Breaking Units	INDOSHNEWS VOL. 15 No. 2
7.	Occupational Safety & Health - Challenges in India & Solutions	INDOSHNEWS VOL. 15 No. 2

4.18 **DGFASLI website:**

The DGFASLI website www.dgfasli.nic.in is a source of information on various safety and health related matters. 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 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.

5.1 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.

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. These awards are applicable to the workers of Industrial establishments covered under the Factories Act, 1948, the employees 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).
- (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 2010: The Awards presentation function for Vishwakarma Rashtriya Puraskar and National Safety Awards for the Performance year 2008 was held on 27.09.2010 at Vigyan Bhavan, New Delhi and the awards were presented by the Hon'ble Minister of Labour & Employment, Shri Mallikarjun Kharge. Total 192 applications were received for Vishwakarma Rashtriya Puraskar-2008, out of which 28 applications were adjudged for granting of awards. The 128 workers have shared these 28 awards. Total 412 applications were received for National Safety Awards, out of which 114 applications have been adjudged for granting of awards. These awards were presented to 71 winners & 43 runners-up under the different schemes.

Table 5.1 Applications received for Vishwakarma Rashtriya Puraskar and the number of awards given

Performance Year	Applications	Awards
T CHOI mance Tear	Applications	A war ds
2004	249	28
2005	221	28
2006	177	28
2007	146	28
2008	192	28

Table 5.2 Estimated annual savings resulting from the suggestions

		-			
Performance	Savings in Indian C	Currency in Rupees	Savings in Foreign Currency in Rupees		
Year	Recurring	Non-Recurring	Recurring	Non-Recurring	
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	
2007	4,63,01,051	79,42,285	85,16,560	4,48,12,646	
2008	145,20,20,000	10,09,50,000	23,00,00,000	-	

Table 5.3 National Safety Awards under different schemes

Performance	National	SCHE	EMES										
Year	Safety Awards	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
2004	Applications	112	42	28	27	29	25	27	29	3	3		
	Awards	26	29	11	12	10	9	10	11				
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		
2007	Applications	66	32	31	29	30	32	45	48	7	9	1	1
	Awards	26	17	10	11	7	7	8	8	2	3	1	1
2008	Applications	25	21	13	11	9	9	8	8	3	4	1	2
	Awards												





Shri.Mallikarjun Kharge Hon'ble Minister for Labour & Employment, inaugurating and distributing the Vishwakarma Rashtriya Puraskar and National Safety Awards for the Performance year 2008, at Vigyan Bhavan, New Delhi on 27.09.2010

6 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: 6.1 International Programmes attended by officers of DGFASLI in 2010

Sl.No.	International Programmes	Place	From	То	No. of officers trained
1.	Occupational Safety and Health Inspection Course for Asia Pacific Countries	Singapore	22/02/10	26/02/10	1
2.	An officer of FAS Division visited Incheon, Republic of Korea, to participate in ILO's training programme to promote National Policy Framework on Occupational Safety and Health held at Korean Occupational Safety and Health Agency (KOSHA)	Republic of Korea	21/06/10	30/06/10	1
3.	48th Annual meeting of the ILO-CIS and the 5th China International Forum for work Safety held at Beijing, China	Beijing, China	30/08/10	02/09/10	1
4.	ILO-ITC Programme on Building Modern and Effective Labour Inspection System.	Turin ITALY, Lisbon, Portugal and Madrid Spain	30/08/10	10/09/10	2
5.	Inter-Agency Awareness-raising Workshop on the Sound Management of Industrial Chemicals with Special Emphasis on Asbestos for the Asia Pacific Region organised by ILO & WHO	Bangkok, Thailand	31/08/10	03/09/10	1
6.	ILO-ITC Programme on Occupational Safety and Health Management in the Construction Sector.	Turin ITALY	13/09/10	24/09/10	1
7.	The 1st International Conference on Accident Prevention (ICAP-2010) .	Busan, South Korea	17/10/10	24/10/10	1
8.	International Seminar organized by ILO on "Good practices on labour inspection"	Brazil	06/12/10	09/12/10	1

Table: 6.2 National Programmes attended by officers of DGFASLI in 2010

Sl. No.	National Programmes	Place	From	То	No. of officers trained
1	"Mainstreaming Disaster Risk Reduction in Development"	National Institute of Disaster Management, New Delhi	07/01/10	08/01/10	1
2	National orientation workshop for nodal officers of Ministries on workplace policy on HIV/AIDS	India Habitat Centre, New Delhi (Organised by ILO and MOL)	05/02/10	05/02/10	1
3	Workshop-Discussion & Development of training strategy for Labour Inspection	Noida	09/03/10	10/03/10	1
4	Conference of HODs of Field Officers under Ministry of Labour & Employment located in the southern region	Bangalore	05/04/10	05/04/10	1
5	Statutory provisions for construction safety in India	Cidadede Goa	24/05/10	26/05/10	1
6	PHAST Introduction Training	DNV, Hyderabad	02/08/10	03/08/10	1
7	ILO-NLI Training of trainers on Labour Inspection.	N.L.I. New Delhi	03/08/10	14/08/10	2
8		Hotel Raintree, Anna Salai, Chennai	15/12/10	16/12/10	1

7 Statistics on Occupational Safety and Health in Factories

7.1 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. 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.

The information relating to occupational injuries in factories given in this chapter in table 7.1 to 7.7 and Chart 7.1 to 7.2 is based on the statistics provided by Labour Bureau up to the year 2007.

Table: 7.1 Sta	tistics of Employmen	t. Industrial Iniur	ies, etc. in Factories

Year	No. of	Estimated	Industrial Injuries		ll Injuries Frequency Incidence Rate of		e Rate of	
	Working	Average daily			Rate of	injuries	njuries injuries per	
	Factories	Employment			per	lakh	thousand	Workers
		(in thousands)			Man	Man-days		yed in
					WOI	worked		ories
							Submittir	ng Return
			Fatal	Total	Fatal	Total	Fatal	Total
1	2	3	4	5	6	7	8	9
2003	111895	4927	525	16432	0.08	2.50	0.11	3.33
2004	158991	6802	562	15020	0.05	1.33	0.08	2.21
2005	175341	7180	613	14776	0.05	1.27	0.09	2.06
2006	196097	8269	1068	19912	0.08	1.42	0.13	2.41
2007(P)	163299	8015	821	15290	0.09	1.73	0.10	1.91

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

P: Provisional

Source: Data received from Labour Bureau through correspondence dated 25.1.2011

Limitations of the data as stated by Labour Bureau Chandigarh:

- 1 Figures for 2005 excludes A & N, Arunachal Pradesh, Bihar, Chhattisgarh, Dadra & Nagar Haveli, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Lakshadweep, Manipur, Mizoram, Nagaland, Pondicherry, Sikkim, Uttar Pradesh, Uttaranchal and West Bengal,
- 2 Figures for 2006 excludes A & N, Arunachal Pradesh, Bihar, Chhattisgarh, Dadra & Nagar Haveli, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Lakshadweep, Manipur, Mizoram, Nagaland, Pondicherry, Sikkim, Uttar Pradesh, Uttaranchal and West Bengal,
- 3 Figures for 2007 (P) excludes A & N, Arunachal Pradesh, Bihar, Chhattisgarh, 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 7.2 State-Wise Total Number of Industrial Injuries in Factories

States/Union Territory	2003	2004	2005	2006	2007(P)
Andaman & Nicobar	53(-)	NA	NA	NA	38(-)
Andhra Pradesh	1976(100)	1911(91)	1822(139)	1569(177)	1755(162)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	65(6)	78(12)	51(5)	55(5)	76(11)
Bihar	NA	NA	42(7)	NA	162(11)
Chandigarh	81(11)	3(-)	2(1)	12(-)	6(2)
Chhattisgarh	NA	NA	NA	NA	NA
Dadra Nagar Haveli	NA	NA	NA	NA	NA
Delhi	NA	NA	NA	NA	NA
Goa	145(3)	166(12)	203(16)	204(8)	191(10)
Gujarat	NA	NA	NA	5002(160)	NA
Haryana	181(25)	198(6 4)	272(38)	203(27)	145(43)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu Kashmir	NA	NA	NA	NA	NA

Total:	16432(525)	15020(562)	14734(606)	19912(1068)	15290(821)
West Bengal	NA	NA	NA	NA	43(1)
Uttaranchal	NA	NA	NA	NA	NA
Uttar Pradesh	NA	NA	NA	NA	NA
Tripura	4(1)	3(-)	5(2)	5(-)	3(1)
Tamil Nadu	NA	1928(40)	1624(50)	1290(49)	NA
Sikkim	NA	NA	NA	NA	NA
Rajasthan	1748(58)	1286(52)	1326(52)	1190(61)	1205(60)
Punjab	404(7)	199(7)	331(7)	408(4)	NA
Pondicherry	581(8)	NA	NA	NA	NA
Orissa	700(49)	694(40)	615(37)	553(74)	550(81)
Nagaland	NA	NA	NA	NA	NA
Mizoram	NA	NA	NA	NA	NA
Meghalaya	NA	9(-)	1(-)	NA	-(-)
Manipur	NA	NA	NA	NA	NA
Maharashtra	6416(159)	5479(161)	4680(143)	4547(403)	7216(342)
Madhya Pradesh	2065(48)	1525(29)	1188(40)	1168(35)	1623(53)
Lakshadweep	NA	NA	NA	NA	NA
Kerala	NA	305(9)	971(18)	631(13)	NA
Karnataka	2013(50)	1262(45)	1425(37)	2805(25)	2151(23)
Jharkhand	NA	NA	218(21)	270(27)	126(21)

Note: (i) NA = Not Available,

Source: Data received from Labour Bureau through correspondence dated 25.1.2011.

Table: 7.3 State-wise and year-wise Frequency Rates of Industrial Injuries in Factories

	•				
State/UTs	2003	2004	2005	2006	2007(P)
Andaman & Nicobar	4.17(-)	NA	NA	NA	2.85(-)
Andhra Pradesh	1.93 (0.10)	1.73(0.08)	1.61(0.12)	1.34(0.15)	1.40(0.13)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	1.61(0.06)	0.78(0.12)	0.46(0.04)	0.56(0.05)	0.86(0.12)
Bihar	NA	NA	1.28(0.21)	NA	1.41(0.30)
Chandigarh	2.15(0.29)	0.09(-)	0.07(0.03)	0.44(-)	0.23(0.08)
Chhattisgarh	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA
Delhi	NA	NA	NA	NA	NA
Goa	1.38 (0.03)	1.51(0.11)	2.03(0.16)	1.69(0.07)	1.37(0.07)
Gujarat	NA	NA	NA	5.78(0.18)	NA
Haryana	0.52 (0.07)	0.32(0.10)	0.43(0.06)	0.22(0.03)	0.32(0.09)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu & Kashmir	NA	NA	NA	NA	NA
Jharkhand	NA	NA	0.26(0.03)	0.32(0.03)	0.20(0.03)
Karnataka	2.02(0.05)	104(0.04)	1.18(0.03)	1.82(0.02)	1.53(0.02)
Kerala	NA	0.90(0.03)	3.67(0.07)	1.40(0.03)	NA

⁽ii) - = Nil, (iii) Figures in brackets pertain to "Fatalities" and are included in the total,

⁽iII) P = Provisional. (iv) For limitations of data refer note of Table 7.1

Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	3.90(0.09)	1.51(0.03)	3.27(0.11)	1.20(0.04)	4.65(0.15)
Maharashtra	2.75(0.07)	2.50(0.07)	2.04(0.06)	2.10(0.19)	3.21(0.15)
Manipur	NA	NA	NA	NA	NA
Meghalaya	NA	1.49(-)	0.06(0.00)	NA	-(-)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Orissa	2.16 (0.15)	2.06(0.12)	1.76(0.11)	1.48(0.20)	1.26(0.18)
Pondicherry	255.90(3.52)	NA	NA	NA	NA
Punjab	1.14 (0.02)	0.61(0.02)	1.15(0.02)	1.32(0.01)	NA
Rajasthan	4.63 (0.15)	3.21(0.13)	3.26(0.13)	2.54(0.13)	2.38(0.12)
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	NA	0.55(0.01)	0.45(0.01)	0.35(0.01)	NA
Tripura	0.58 (0.14)	0.49(-)	0.19(0.08)	0.14(-)	0.13(0.04)
Uttar Pradesh	NA	NA	NA	NA	NA
Uttaranchal	NA	NA	NA	NA	NA
West Bengal	NA	NA	NA	NA	0.46(0.01)
Total:	2.50(0.08)	1.33(0.5)	1.27(0.05)	1.42(0.08)	1.73(0.09)

Note: (i) **F.R.** = Frequency Rate per lakh man-days worked (ii) NA = Not Available, (iii) (-) = Nil or Negligible, (iv) Figures in bracket pertain to "Fatalities" and are included in the total, (v) P = Provisional. For limitations of the data please refer note under table 7.1 **Source**: Data received from Labour Bureau through correspondence dated 25.1.2011.

Table: 7.4 State-wise and year-wise Incidence Rates of Industrial Injuries

State/UTs	2003	2004	2005	2006	2007(P)
Andaman & Nicobar	10.14 (-)	NA	NA	NA	7.39(-)
Andhra Pradesh	2.76 (0.14)	2.50(0.12)	2.36(0.18)	1.98(0.22)	2.11(0.19)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	1.69 (0.06)	0.79(0.12)	0.48(0.05)	0.48(0.04)	0.63(0.09)
Bihar	NA	NA	0.47(0.08)	NA	1.56(0.11)
Chandigarh	5.59(0.76)	0.22(-)	0.16(0.08)	0.92(-)	0.50(0.17)
Chhattisgarh	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA
Delhi	NA	NA	NA	NA	NA
Goa	3.22 (0.07)	3.91(0.28)	4.54(0.36)	4.19(0.16)	3.63(0.19)
Gujarat	NA	NA	NA	4.95(0.16)	NA
Haryana	0.50 (0.07)	0.36(0.11)	0.47(0.07)	0.32(0.04)	0.21(0.06)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu & Kashmir	NA	NA	NA	NA	NA
Jharkhand	NA	NA	0.78(0.07)	0.92(0.09)	0.42(0.07)
Karnataka	2.01(0.05)	1.34(0.05)	1.53(0.04)	3.06(0.03)	2.04(0.02)
Kerala	NA	0.75(0.02)	5.54(0.10)	3.84(0.08)	NA
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	4.96 (0.12)	3.22(0.06)	2.58(0.09)	2.68(0.08)	3.62(0.12)
Maharashtra	5.28(0.13)	4.44(0.13)	3.60(0.11)	3.43(0.30)	5.37(0.25)

Total:	3.33(0.11)	2.21(0.08)	2.06(0.09)	2.41(0.130	1.91(0.10)
West Bengal	NA	NA	NA	NA	0.05(0.00)
Uttaranchal	NA	NA	NA	NA	NA
Uttar Pradesh	NA	NA	NA	NA	NA
Tripura	0.12 (0.03)	0.09(-)	0.15(0.06)	0.15(-)	0.07(0.02)
Tamil Nadu	NA	1.50(0.03)	1.22(0.04)	0.94(0.04)	NA
Sikkim	NA	NA	NA	NA	NA
Rajasthan	4.68 (0.16)	3.33(0.13)	3.33(0.13)	3.02(0.16)	2.58(0.13)
Punjab	0.88 (0.02)	0.41(0.01)	0.63(0.01)	0.74(0.01)	NA
Pondicherry	10.51(0.14)	NA	NA	NA	NA
Orissa	5.34 (0.37)	5.32(0.31)	4.41(0.27)	3.68(0.49)	3.34(0.49)
Nagaland	NA	NA	NA	NA	NA
Mizoram	NA	NA	NA	NA	NA
Meghalaya	NA	2.01(-)	0.23(0.00)	NA	-(-)
Manipur	NA	NA	NA	NA	NA

Note: (i) I.R. = Incidence Rate per 1000 workers employed, (ii) NA = Not Available,(iii) (-) = Nil or Negligible, (iv) 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 7.1

Source: Data received from Labour Bureau through correspondence dated 25.1.2011

Table 7.5 Industrial Injuries and their Incidence Rate (IR) per Thousand Workers Employed by Important Industries

Sl.	Industry	NIC	200	13	200)4	200)5	200	06	2007	(P)
No.	·	Code	Total Injuries	IR								
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	All Textiles	17,18	5332	6.53	4172	3.22	3862	2.74	5808	3.57	3582	2.52
			(39)	(0.05)	(66)	(0.05)	(36)	(0.03)	(68)	(0.04)	(50)	(0.04)
2.	Mfg of Paper & paper products & printing,	21,22	976	4.92	617	2.40	493	2.02	510	1.80	496	1.76
	publishing & allied products		(23)	(0.12)	(19)	(0.07)	(17)	(0.07)	(25)	(0.09)	(26)	(0.09)
3.	Mfg of Chemicals & Chemical products	24	944	2.50	982	1.67	1159	1.91	1560	1.97	991	1.87
	(Except Petroleum and coal products)		(78)	(0.21)	(54)	(0.09)	(91)	(0.15)	(155)	(0.20)	(68)	(0.13)
4.	Manufacture of Non-metallic mineral	26	799	2.50	821	1.87	742	1.51	896	1.63	1038	1.70
••	products	20	(46)	(0.14)	(52)	(0.12)	(47)	(0.10)	(73)	(0.13)	(68)	(0.11)
5.	Basic metal and alloys Industries	27	1370	3.97	1130	2.84	1543	3.06	1842	3.16	1822	2.61
	,		(79)	(0.23)	(78)	(0.20)	(102)	(0.20)	(166)	(0.28)	(179)	(0.26)
6.	Mfg of metal products & Parts (except	28	659	2.32	723	1.85	688	1.91	1151	2.64	1209	2.55
	machinery & transport equipment)		(16)	(0.06)	(37)	(0.09)	(36)	(0.10)	(38)	(0.09)	(21)	(0.04)
7.	Manufacture of machinery, machine tools &	29.30	993	3.26	923	2.49	953	2.21	1522	3.26	999	1.86
	parts (except electrical machinery)		(19)	(0.06)	(25)	(0.07)	(17)	(0.04)	(59)	(0.13)	(27)	(0.05)
8.	Manufacture of transport equipment and	34.35	1184	3.93	1399	3.57	1250	3.00	1312	5.42	1043	2.29
	parts		(12)	(0.04)	(36)	(0.09)	(38)	(0.09)	(80)	(0.33)	(15)	(0.03)
9.	Electricity, Gas and Steam	40	274	3.17	699	6.27	520	4.10	392	2.79	119	0.70
	•		(31)	(0.36)	(32)	(0.29)	(32)	(0.25)	(23)	(0.16)	(12)	(0.07)
Total of (Sl. No. 1 to 9 Industries):		12531	4.13	11466	2.70	11210	2.44	13767	2.69	11299	2.18	
			(343)	(0.11)	(399)	(0.09)	(416)	(0.09)	(609)	(0.13)	(466)	(0.09)
* Tot	cal of All Industries :	•	16432	3.33	15020	2.21	14776	2.06	9912	2.41	15290	1.91
			(525)	(0.11)	(562)	(0.08)	(613)	(0.09)	(1068)	(0.13)	(821)	(0.10)

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 7.1

Source: Data received from Labour Bureau through correspondence dated 25.1.2011.

Table 7.6 Frequency Rate of Total Injuries by Important Industries

Sl.	Industry	NIC	2005	2006	2007(P)
No.	·	Code			
1.	All Textiles	17,18	1.87	2.11	2.48
2.	Manufacture of Paper & paper products & printing, publishing	21,22	1.18	1.04	1.64
	& allied products				
3.	Manufacture of Chemicals & Chemical products (Except	24	0.96	1.20	1.34
	products of Petroleum and coal)				
4.	Manufacture of Non-metallic mineral products	26	1.25	1.33	2.11
5.	Basic metal and alloys Industries	27	1.47	1.49	1.73
6.	Manufacture of metal products & Parts(except machinery &	28	1.05	1.68	2.38
	transport equipment)				
7.	Manufacture of machinery, machine tools & parts (except	29,30	1.37	2.09	1.80
	electrical machinery)				
8.	Manufacture of transport equipment and parts	34,35	1.22	1.25	1.52
9.	Electricity, Gas and Steam	40	1.91	1.32	0.51
	Total of (Sl. No. 1 to 9 Industries):		1.42	1.50	1.88
	* Total of All Industries :		1.27	1.42	1.81

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

For Limitations of data refer footnote of table 7.1

Source: Data received from Labour Bureau through correspondence dated 25.1.2011.

⁽ii) P = Provisional

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

Table 7.7 Industrial injuries in Factories by causes

Causation	2005		2006		2007(P)	
	Total	Fatal	Total	Fatal	Total	Fatal
Prime movers	39	5	192	6	47	2
Machinery moved by Mechanical Power	2168	68	2459	135	691	61
Machinery not moved by Mechanical Power	314	2	249	7	110	8
Transport whether moved by Power or not	300	23	263	13	72	26
Electricity	226	42	262	57	111	40
Explosions	91	31	71	23	28	11
Fires	202	37	134	39	84	12
Gassing	68	8	86	11	24	7
Molten Metals & other Hot or Corrosive Substances	354	26	385	26	188	22
Hand Tools	596	6	504	0	478	0
Falling Bodies	1139	45	1345	43	1234	50
Persons Falling	1179	112	2035	376	1579	131
Stepping on or Striking against Objects	1300	10	1369	18	894	25
Handling Goods or Articles	1516	20	2091	18	956	19
Others	3209	63	3616	121	6455	340
Total	12701	498	15061	893	12951	754

Note: (i) P = Provisional

(ii) For Limitations of data refer footnote of table 7.1

Source: Data received from Labour Bureau through correspondence dated 25.1.2011

Chart 7.1

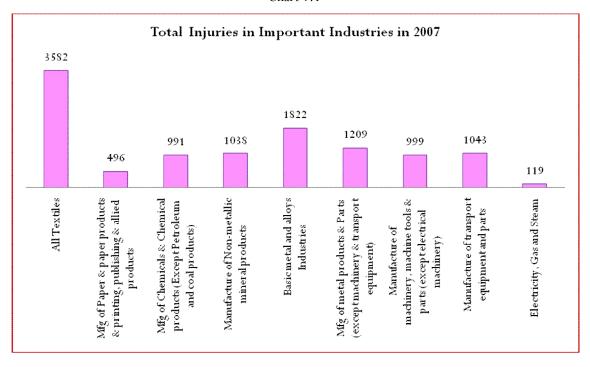
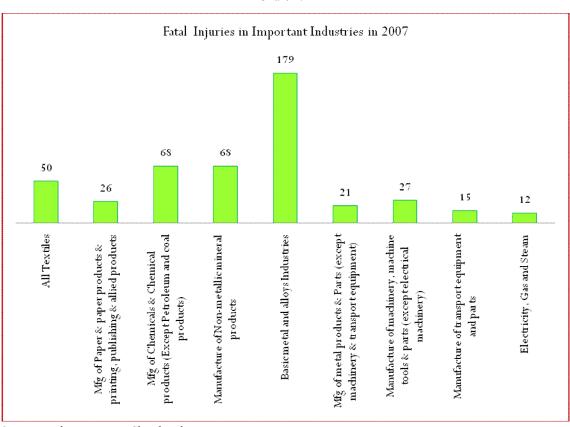


Chart 7.2



Source: Labour Bureau, Chandigarh.

For Limitations of data refer footnote of table 7.1

- 8 Statistics on Status of compliance with statutory provisions based on data collected by DGFASLI
- 8.1 The DGFASLI receives information relating to factories covered under 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. 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. The information can be used for estimation of various trends. It is emphasized here, that for ascertaining the correctness or the updated information given in the following pages/tables, the State Governments/Union Territory Administration concerned may be contacted.

Statistics of Factories at a Glance:	2009
Registered Factories	324,761
Working Factories	270,294
Employment	
Total	13,100,129
Men	11,340,366
Women	1,759,763
Safety Officers	2,642
Welfare Officers	3,096
Factory Med. Officers	6,809
Safety Policy	14,681
Safety Committees	12,995
MAH Factories	1,920
On-site Emergency Plans	1,920
Canteens	6,351
Creches	5,326
Total Injuries	33,093
Fatal Injuries	1,509

Table 8.1 Fatal and Non-fatal Injuries in Factories (P)

States/ Union	2008		2009		2010	
Territories	Fatal	Non	Fatal	Non	Fatal	Non
	Injuries	Fatal	Injuries	Fatal	Injuries	Fatal
		Injuries		Injuries		Injuries
Andaman & Nicobar Islands	0	66	0	49		
Andhra Pradesh	162	1525	165	927	188	923
Assam	15	65	4	48	6	46
Bihar	6	48	14	34	1	15
Chandigarh	2	7	0	8	0	2
Chhattisgarh	103	343	114	342	84	341
Daman & Diu & Dadra & Nagar Haveli	12	44	14	13	14	31
National Capital of Delhi	7	54	14	26	15	39
Goa	7	161	10	134	12	97
Gujarat	195	2725	173	2984	221	2430
Haryana	45	128	51	104	38	51
Himachal Pradesh	6	5	19	32	5	11
Jammu & Kashmir	4	247	2	52	Nil	99
Jharkhand	23	214	36	180	43	149
Karnataka	91	1052	80	927	92	779
Kerala	15	158	41	106	7	79
Madhya Pradesh	41	1093	51	1173	68	848
Maharashtra	218	3094	217	2911	225	2540
Manipur						
Meghalaya	0	6	0	14	2	12
Nagaland	0	0	0	0	0	0
Orissa	81	483	122	426	103	457
Pondicherry	1	235	8	102	10	46
Punjab	39	135	35	248	14	212
Rajasthan	49	607	56	699	65	534
Tamil Nadu	67	1252	137	826	75	860
Tripura	0	1	0	4	1	5
Uttar Pradesh	87	142	61	235	64	152
Uttaranchal	15	65	20	33	9	24
West Bengal	78	18615	65	18947	97	19264
Total	1369	32570	1509	31584	1459	30046

P : Provisional

.. : Not Available

Table 8.2 State-wise Status of Employment in Factories during 2009(P)

SI.	States/ Union Territories	Registered	Working	Total	Female
		Factories	Factories	Employment	Workers
	Andaman & Nicobar Islands	37	37	5239	160
2.	Andhra Pradesh	42924	30654	909957	190700*
3.	Assam	3946	2759	137432	3229
4.	Bihar	7212	6437	98465	89
5.	Chandigarh	817	471	7538	391
6.	Chhattisgarh	4010	3388	213968	14081
7.	Daman & Diu & Dadra & Nagar Haveli	5217	4009	104234	31000
8.	Delhi	11302	7237	340465	22647
9.	Goa	732	714	53500	9200
10.	Gujarat	34860	24453	1257957	47977
11.	Haryana*	10100	9955	522493	35797
12.	Himachal Pradesh*	3357	3357	194019	7085
13.	Jammu & Kashmir	1329	962	43149	3641
14.	Jharkhand	11540	7966	263351	7238
15.	Karnataka	12633	12157	1200404	404380
16.	Kerala	18740	17465	624388	293734
17.	Madhya Pradesh	7100	6700	290155	7470
18.	Maharashtra	39963	35904	1779254	134513
19.	Manipur	-	-	-	-
20.	Meghalaya	133	121	7261	419
21.	Nagaland	798	398	29460	2853
22.	Orissa	3238	2462	240303	8967
23.	Pondicherry	2945	2351	79750	10980
24.	Punjab	17609	17214	587644	3645
25.	Rajasthan	10741	10648	402827	7550
26.	Tamil Nadu	40515	30386	1486290	444405
27.	Tripura	1626	1626	57101	9750
28.	Uttar Pradesh	14026	13661	1005000	21500
29.	Uttaranchal	2423	2413	182356	17130
30.	West Bengal	14888	14389	976169	19232
	Total	324761	270294	13100129	1759763

P : Provisional

^{* :} Estimated figures

Table 8.3 State-wise Hazardous Factories under 2(cb) as on 2009 (P)

States/ Union Territories	No. of Hazardous Factories	No. of Workers
1. Andaman & Nicobar Islands	3	197
2. Andhra Pradesh	0	0
3. Assam	12	7387
4. Bihar	43	15817
5. Chandigarh	0	0
6. Chhattisgarh	619	115858
7. Daman & Diu & Dadra & Nagar Haveli	47	1500
8. Delhi	271	11813
9. Goa	219	27006
10. Gujarat	5871	300884
11. Haryana		
12. Himachal Pradesh		
13. Jammu & Kashmir	19	1361
14. Jharkhand	284	91611
15. Karnataka	1109	159896
16. Kerala	800	37278
17. Madhya Pradesh	828	73622
18. Maharashtra	4944	247200
19. Manipur		
20. Meghalaya	51	4418
21. Nagaland	1	75
22. Orissa	374	69265
23. Pondicherry	204	17963
24. Punjab	375	61615
25. Rajasthan	965	110060
26. Tamil Nadu	812	26591
27. Tripura	14	1013
28. Uttar Pradesh	2338	289469
29. Uttaranchal	554	60699
30. West Bengal	3289	217379
Total	24046	1949977

 $P \ : Provisional \\$

.. : Not Available

Table 8.4 Inspectors of Factories for the year 2009 (P)

SI.	States/ Union Territories	Sanctioned	In-position
1.	Andaman & Nicobar Islands	2	2
2.	Andhra Pradesh	76	54
3.	Assam	29	25
4.	Bihar	23	10
5.	Chandigarh	0	6
6.	Chhattisgarh	15	7
7.	Daman & Diu & Dadra & Nagar Haveli	1	1
8.	Delhi	15	12
9.	Goa	8	5
10.	Gujarat	124	46
11.	Haryana		
12.	Himachal Pradesh		
13.	Jammu & Kashmir	5	4
14.	Jharkhand	25	19
15.	Karnataka	46	46
16.	Kerala	55	55
17.	Madhya Pradesh	39	30
18.	Maharashtra	131	69
19.	Manipur		
20.	Meghalaya	3	3
21.	Nagaland	3	3
22.	Orissa	27	23
23.	Pondicherry	9	8
24.	Punjab	26	11
25.	Rajasthan	39	27
26.	Tamil Nadu	132	100
27.	Tripura	5	5
28.	Uttar Pradesh	45	18
29.	Uttaranchal	2	2
30.	West Bengal	53	13
31.	Total	938	604

P : Provisional

^{.. :} Not Available

Table 8.5 State-wise Specialist Inspectors of Factories for the year 2009 (P)

Sl States/Union			edical		emical	Hygien	e Inspector	О	thers
	Territories		pectors		pector	0 .	т	0 .	Τ.
		Sanct-	In-	Sanct-	In-	Sanct-	In-	Sanct-	In-
	A 1 0	ioned	position	ioned	position	ioned	position	ioned	position
1.	Andaman & Nicobar	0	0	0	0	0	0	0	0
	Islands								
2	Andhra	3	1	1	0	0	0	0	0
2.	Pradesh	3	1	1	U	U	U	U	U
3.	Assam	1	0	0	0	0	0	0	0
3. 4.	Bihar	2	2	2	1	0	0	0	0
5.	Chandigarh	0	0	0	0	0	0	0	0
6.	Chhattisgarh	0	0	0	0	0	0	0	0
7.	Daman & Diu	0	0	0	0	0	0	0	0
	& Dadra &	Ŭ	v	Ŭ	· ·			v	
	Nagar Haveli								
8.	Delhi	1	1	1	0	0	0	0	0
9.	Goa	1	1	0	0	0	0	2	1
	Gujarat	2	0	1	0	0	0	11	6
	Haryana								
	Himachal								
	Pradesh								
13.	Jammu &	0	0	0	0	0	0	0	0
	Kashmir								
14.	Jharkhand	0	0	0	0	0	0	0	0
15.	Karnataka	1	1	0	0	0	0	1	1
16.	Kerala	4	2	5	5	0	0	2	2
17.	Madhya	1	1	0	0	0	0	0	0
	Pradesh								
	Maharashtra	2	0	0	0	0	0	0	0
19.	Manipur	••	••	••	••	••	••	••	••
20.	Meghalaya	0	0	0	0	0	0	0	0
	Nagaland	0	0	0	0	0	0	0	0
	Orissa	1	0	1	0	0	0	0	0
	Pondicherry	1	1	1	0	0	0	1	1
	Punjab	3	3	2	0	0	0	0	0
25.	*	1	1	2	2	1	1	1	1
26.		0	0	0	0	0	0	0	0
27.	Tripura	0	0	0	0	0	0	0	0
28.	Uttar Pradesh	2	0	0	0	0	0	0	0
29.		0	0	0	0	0	0	0	0
30.	West Bengal Total	<u>0</u> 26	0 14	18	0 8	0 1	0 1	18	0 12

Note: There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim

P : Provisional
.. : Not Available

Table 8.6 Certifying Surgeons of Factories for the year 2009 (P)

sl	States/UTs	Employed		Notified		Remarks
		Sanctioned	In	Sanctioned	In	-
_	4 1 0 N 1 1 1 1		position		position	
1.	Andaman & Nicobar Islands	0	0	4	4	
2.	Andhra Pradesh	0	0	0	0	
3.	Assam	3	0	0	0	
4.	Bihar	0	0	0	0	
5.	Chandigarh	0	0	0	0	!
6.	Chhattisgarh	0	0	0	0	
7.	Daman & Diu & Dadra & Nagar Haveli	0	0	0	1	
8.	Delhi	1	1	0	0	
9.	Goa	1	0	0	0	
10.	Gujarat	12	4	0	0	
11.	Haryana	••		••		
12.	Himachal Pradesh					
13.	Jammu & Kashmir	0	0	0	0	
14.	Jharkhand	0	0	0	0	
15.	Karnataka	0	0	0	0	
16.	Kerala	1	1	1	1	
17.	Madhya Pradesh	0	0	0	0	
18.	Maharashtra	1	1	46	0	
19.	Manipur					
20.	Meghalaya	0	0	0	0	
21.	Nagaland	0	0	0	0	
22.	Orissa	0	0	0	0	
23.	Pondicherry	0	1	0	0	#
24.	Punjab	0	0	0	0	
25.	Rajasthan	1	0	0	0	
26.	Tamil Nadu	9	6	0	0	
27.	Tripura	0	0	14	14	
28.	Uttar Pradesh	0	0	0	0	
29.	Uttaranchal	0	0	0	0	
30.	West Bengal	0	0	0	0	#
	Total	29	14	65	20	

Remark: '#' All Medical Inspector is also the Certifying Surgeon,

 $Note: There \ are \ no \ registered \ factories \ in \ Arunachal \ Pradesh, \ Lakshadweep, \ Mizoram \ and \ Sikkim$

P : Provisional .. : Not Available

^{&#}x27;! ' Medical officer of Health has been declared Certifying officer,

Table 8.7 No of Factories Inspected in the year 2009 (P)

	States/ Union Territories	All Factories	Hazardous Factories
1.	Andaman & Nicobar Islands	19	0
2.	Andhra Pradesh	5504	0
3.	Assam	749	16
4.	Bihar	2070	29
5.	Chandigarh	25	25
6.	Chhattisgarh	499	157
7.	Daman & Diu & Dadra & Nagar Haveli	190	25
8.	Delhi	730	136
9.	Goa	82	10
10.	Gujarat	12002	4406
11.	Haryana		
12.	Himachal Pradesh		
13.	Jammu & Kashmir	858	4
14.	Jharkhand	3106	432
15.	Karnataka	7362	1002
16.	Kerala	14149	666
17.	Madhya Pradesh	3084	550
18.	Maharashtra	11950	1940
19.	Manipur		
20.	Meghalaya	18	7
21.	Nagaland	247	1
22.	Orissa	1926	374
23.	Pondicherry	1208	176
24.	Punjab	0	0
25.	Rajasthan	5619	0
26.	Tamil Nadu	25022	1113
27.	Tripura	1313	14
28.	Uttar Pradesh	2733	1937
29.	Uttaranchal	65	21
30.	West Bengal	3198	427
	Total	103728	13468

P : Provisional

^{.. :} Not Available

Table 8.8 State-wise Prosecution and Convictions under Section 92 & Section 96A for the year 2009 (P)

SI	States/	Pending	Launched	Decided	Convi-	Imprison-	Total fine
	UTs	fromPrev-	during the	during	ctions	ment	Imposed
		ious year	year	the year		(Person)	(Rs.)
1.	Andaman &	0	0	0	0	0	0
	Nicobar						
2	Islands Andhra	3280	1551	644	432	0	5804300
2.	Pradesh	3280	1331	044	432	U	3604300
3.	Assam	0	7	0	19	0	0
4.	Bihar	31	10	0	0	0	0
5.	Chandigarh	6	0	2	2	0	27000
6.	Chattisgarh	673	273	229	199	82	4862900
7.	Daman & Diu	0/3	0	0	0	0	0
7.	& Dadra &	· ·	Ü	O	O	O	O
	Nagar Hawelli						
8.	Delhi (NCT)	334	96	93	93	0	1580000
9.	Goa	23	14	8	4	0	80000
10.	Gujarat	24866	1344	942	690	0	3764400
11.	Haryana	0	0	0	0	0	0
12.	Himachal	0	0	0	0	0	0
	Pradesh						
13.	Jammu & Kashmir	110	0	1	0	0	0
14.	Jharkhand	153	14	3	2	1	0
15.	Karnataka	438	290	142	94	0	1864750
16.	Kerala	169	50	68	46	0	622440
17.	Madhya	3205	163	146	0	0	1156200
	Pradesh						
18.	Maharashtra	1074	538	350	350	39	132500
19.	Manipur	0	0	0	0	0	0
20.	Meghalaya	0	0	0	0	0	0
21.	Nagaland	0	0	0	0	0	0
22.	Orissa	1132	78	21	21	0	398000
23.	Pondicherry	2	8	9	8	0	190000
24.	Punjab	510	74	36	4	0	368000
25.	Rajasthan	914	131	89	33	0	398000
26.	Tamil Nadu	11459	5434	4069	2077	0	12527535
27.	Tripura	26	24	25	25	0	150000
28.	Uttar Pradesh	2136	109	164	146	0	260210000
29.	Uttaranchal	139	16	0	0	0	80000
30.	West Bengal	437	104	34	34	0	1111700
	Total	51117	10328	7075	4279	122	295327725

 $P \quad : Provisional \\$

.. : Not Available

Table 8.9 State-wise Status of Safety Officers (SO) under 40-B(1) in factories during 2009(P)

	States/ Union Territories	Factories Requiring SO	Factories who Appointed SO	SO Required	SO Appointed
1.	Andaman & Nicobar Islands	0	0	0	0
2.	Andhra Pradesh	110	91	114	94
3.	Assam	2	2	5	64
4.	Bihar	18	17	24	21
5.	Chandigarh	2	2	2	2
6.	Chhattisgarh	79	74	83	74
7.	Daman & Diu & Dadra & Nagar Haveli	16	18	18	18
8.	Delhi	9	4	9	4
9.	Goa	4	61	4	73
10.	Gujarat	285	318	334	393
11.	Haryana	••	••	••	••
12.	Himachal Pradesh	••	••	••	
13.	Jammu & Kashmir	2	2	2	2
14.	Jharkhand	49	45	153	145
15.	Karnataka	169	145	187	183
16.	Kerala	82	56	83	60
17.	Madhya Pradesh	91	82	109	96
18.	Maharashtra	579	387	481	537
19.	Manipur				
20.	Meghalaya	0	0	0	0
21.	Nagaland	3	3	3	3
22.	Orissa	68	65	165	157
23.	Pondicherry	9	8	9	8
24.	Punjab	46	37	46	37
25.	Rajasthan	45	45	45	45
26.	Tamil Nadu	291	230	291	230
27.	Tripura	1	0	1	0
28.	Uttar Pradesh	185	95	198	101
29.	Uttaranchal	34	27	31	29
30.	West Bengal	252	252	278	266
	Total	2431	2066	2675	2642

P : Provisional

^{.. :} Not Available

Table 8.10 State-wise status of Declaration of Safety Policy for the year 2009 (P)

Sl	States/ Union Territories	Factories	Factories Having
		Requiring	
1.	Andaman & Nicobar Islands	0	0
2.	Andhra Pradesh	0	0
3.	Assam	12	12
4.	Bihar	3	3
5.	Chandigarh	2	2
6.	Chhattisgarh	1213	1144
7.	Daman & Diu & Dadra & Nagar Haveli	50	60
8.	Delhi	0	0
9.	Goa	95	105
10.	Gujarat	3553	3412
11.	Haryana		
12.	Himachal Pradesh		
13.	Jammu & Kashmir	33	35
14.	Jharkhand	83	89
15.	Karnataka	1175	988
16.	Kerala	697	596
17.	Madhya Pradesh	986	937
18.	Maharashtra	2665	1545
19.	Manipur		
20.	Meghalaya	46	32
21.	Nagaland	0	0
22.	Orissa	454	396
23.	Pondicherry	27	27
24.	Punjab	705	554
25.	Rajasthan	497	411
26.	Tamil Nadu	1994	1574
27.	Tripura	19	10
28.	Uttar Pradesh	4444	1904
29.	Uttaranchal	409	349
30.	West Bengal	496	496
	Total	19658	14681

P : Provisional

.. : Not Available

Table 8.11 State-wise Constitution of Safety Committee for the year 2009(P)

	States/ Union Territories	Factories Requiring	Factories Having
		Safety Committee	Safety Committee
1.	Andaman & Nicobar Islands	0	0
2.	Andhra Pradesh	802	695
3.	Assam	12	12
4.	Bihar	3	3
5.	Chandigarh	2	2
6.	Chhattisgarh	357	228
7.	Daman & Diu & Dadra & Nagar Haveli	54	62
8.	Delhi	0	0
9.	Goa	42	158
10.	Gujarat	3452	3383
11.	Haryana		
12.	Himachal Pradesh		
13.	Jammu & Kashmir	33	35
14.	Jharkhand	95	95
15.	Karnataka	959	768
16.	Kerala	429	315
17.	Madhya Pradesh	586	552
18.	Maharashtra	1495	997
19.	Manipur		••
20.	Meghalaya	21	11
21.	Nagaland	0	0
22.	Orissa	139	139
23.	Pondicherry	29	29
24.	Punjab	388	331
25.	Rajasthan	347	302
26.	Tamil Nadu	2371	2091
27.	Tripura	19	10
28.	Uttar Pradesh	2861	1935
29.	Uttaranchal	409	349
30.	West Bengal	493	493
	Total	15398	12995

 $P \ : Provisional \\$

^{.. :} Not Available

Table 8.12 State-wise On-site Emergency Plan (in respect of MAH Units) as on 2009(P)

	States/ Union Territories	Factories Requiring	Factories Having		
		On-site Emergency Plan	On-site Emergency Plan		
1.	Andaman & Nicobar Islands	3	1		
2.	Andhra Pradesh	156	152		
3.	Assam	12	12		
4.	Bihar	3	3		
5.	Chandigarh	0	0		
6.	Chhattisgarh	20	20		
7.	Daman & Diu & Dadra & Nagar Haveli	0	15		
8.	Delhi	19	15		
9.	Goa	16	16		
10.	Gujarat	366	353		
11.	Haryana		••		
12.	Himachal Pradesh		••		
13.	Jammu & Kashmir	6	6		
14.	Jharkhand	57	45		
15.	Karnataka	316	274		
16.	Kerala	46	45		
17.	Madhya Pradesh	71	71		
18.	Maharashtra	348	348		
19.	Manipur		••		
20.	Meghalaya	4	4		
21.	Nagaland	2	2		
22.	Orissa	31	31		
23.	Pondicherry	3	3		
24.	Punjab	50	48		
25.	Rajasthan	108	108		
26.	Tamil Nadu	122	119		
27.	Tripura	2	2		
28.	Uttar Pradesh	118	112		
29.	Uttaranchal	30	30		
30.	West Bengal	85	85		
	Total	1994	1920		

P : Provisional

^{.. :} Not Available

Table 8.13 State-wise Medical Facilities in factories for the year 2009(P)

	States/Union	Full	time	Retair	nership	Fact	ories	Factorie	s having
	Territories	N	Ol	(or	hav	ing	Ambu	ılance
				part-ti	me MO	Ambı	ulance	Rooms	
						V	an		
		Req	App	Req	App	Req	App	Req	App
1.	Andaman & Nicobar Islands	0	0	0	0	0	2	0	2
2.	Andhra Pradesh	200	188	0	0	0	0	206	169
3.	Assam	0	0	0	0	0	0	9	62
4.	Bihar	15	16	7	7	15	15	15	15
5.	Chandigarh	1	1	1	1	1	1	1	1
6.	Chhattisgarh	106	71	310	227	94	61	79	64
7.	Daman & Diu &	1	1	0	40	0	10	0	15
	Dadra & Nagar Haveli								
8.	Delhi	9	9	262	60	24	19	24	19
9.	Goa	15	17	30	79	3	59	3	15
10.	Gujarat	207	142	1839	1747	174	158	201	193
11.	Haryana	••	••	••	••		••	••	••
12.	Himachal Pradesh		••	••		••	••	••	••
13.	Jammu & Kashmir	14	10	2	2	12	8	12	6
14.	Jharkhand	87	84	38	31	58	58	47	45
15.	Karnataka	334	237	330	266	406	289	398	331
16.	Kerala	40	36	63	66	42	34	61	54
17.	Madhya Pradesh	120	111	243	240	99	98	111	110
18.	Maharashtra	409	230	423	376	299	243	262	243
19.	Manipur	••					••		••
20.	Meghalaya	4	3	18	15	17	7	1	1
21.	Nagaland	0	0	0	0	0	0	0	0
22.	Orissa	77	62	0	26	77	61	77	62
23.	Pondicherry	10	8	28	22	9	9	9	9
24.	Punjab	64	54	0	0	0	0	86	71
25.	Rajasthan	93	93	0	0	0	0	93	93
26.	Tamil Nadu	164	110	431	365	166	160	371	348
27.	Tripura	1	1	1	1	0	0	1	1
28.	Uttar Pradesh	4436	778	1319	484	3987	672	637	230
29.	Uttaranchal	37	32	153	153	27	22	39	27
30.	West Bengal	292	292	15	15	303	287	303	295
	Total	6736	2586	5513	4223	5813	2273	3046	2481

Note: There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim

P: Provisional ...: Not Available Req: Required App: Appointed

Table 8.14 State-wise Canteens, Shelters, Rest Rooms and Creches for the year 2009 (P)

Sl	States/ Union Territories	Cant	teen	Shelter, Re Lunch		Cred	ches
		Factories Requiring	Factories Having	Factories Requiring	Factories Having	Factories Requiring	Factories Having
1.	Andaman & Nicobar Islands	3	3	8	8	0	0
2.	Andhra Pradesh	392	354	506	485	377	339
3.	Assam	24	100	66	125	20	31
4.	Bihar	27	27	0	0	0	0
5.	Chandigarh	5	5	5	5	2	2
6.	Chhattisgarh	155	133	323	323	32	28
7.	Daman & Diu & Dadra & Nagar Haveli	57	72	110	132	90	90
8.	Delhi	77	59	93	49	21	8
9.	Goa	34	106	30	190	2	38
10.	Gujarat	370	367	607	594	171	163
11.	Haryana						
12.	Himachal Pradesh						
13.	Jammu & Kashmir	42	38	54	50	2	2
14.	Jharkhand	85	55	100	82	10	9
15.	Karnataka	723	675	874	836	1191	959
16.	Kerala	467	439	1106	1087	7 4 2	716
17.	Madhya Pradesh	190	188	386	382	50	47
18.	Maharashtra	841	807	1470	1490	235	213
19.	Manipur		••				
20.	Meghalaya	5	4	15	10	4	1
21.	Nagaland	13	13	15	15	0	0
22.	Orissa	139	139	175	175	42	42
23.	Pondicherry	35	28	55	41	5	4
24.	Punjab	292	279	428	399	34	33
25.	Rajasthan	147	147	402	402	23	23
26.	Tripura	1559	1519	2860	2813	2587	2444
27.	Tamil Nadu	3	2	3	2	1	0
28.	Uttar Pradesh	549	273	877	582	182	43
29.	Uttaranchal	118	118	204	204	63	63
30.	West Bengal	401	401	668	708	28	28
	Total	6753	6351	11440	11189	5914	5326

P : Provisional .. :Not Available

Table 8.15 State-wise Welfare Officers for the year 2009(P)

	State/UTs	Factories	Factories	Officers	Officers
		Requiring	Having	Required	Appointed
1.	Andaman & Nicobar Islands	2	1	1	0
2.	Andhra Pradesh	175	140	154	132
3.	Assam	9	9	9	67
4.	Bihar	27	27	27	27
5.	Chandigarh	2	2	2	2
6.	Chhattisgarh	101	101	109	111
7.	Daman & Diu & Dadra & Nagar Haveli	10	10	10	10
8.	Delhi	24	24	25	24
9.	Goa	14	15	14	21
10.	Gujarat	176	169	189	182
11.	Haryana			••	
12.	Himachal Pradesh			••	
13.	Jammu & Kashmir	11	9	11	9
14.	Jharkhand	92	56	81	70
15.	Karnataka	379	367	409	399
16.	Kerala	168	129	167	129
17.	Madhya Pradesh	117	114	137	136
18.	Maharashtra	533	454	537	512
19.	Manipur				
20.	Meghalaya	1	1	1	1
21.	Nagaland	3	3	3	3
22.	Orissa	77	77	128	128
23.	Pondicherry	10	7	10	7
24.	Punjab	89	69	89	69
25.	Rajasthan	94	94	99	100
26.	Tamil Nadu	457	403	457	403
27.	Tripura	1	1	1	1
28.	Uttar Pradesh	238	191	248	198
29.	Uttaranchal	44	37	40	31
30.	West Bengal	220	220	324	324
	Total	3074	2730	3282	3096

P: Provisional, ...: Not Available

Table 8.16 Notification of Model Rules framed under the Factories (Amendment) Act, 1987

States/ Union Territories Model Rules 1. Andaman & Nicobar Islands No hazardous unit, hence Rules Not applicable 2. Andhra Pradesh Notified 3. Assam Notified 4. Bihar Notified 5. Chandigarh Notified In Punjab Factories Rules 6. Chhattisgarh Under Progress 7. Daman, Diu, Dadra & Nagar Haveli Under process 8. National Capital Territory of Delhi Notified 9. Goa Notified 10. Gujarat Notified 11. Haryana Notified 12. Himachal Pradesh Not Notified 13. Jammu & Kashmir Not Notified 14. Jharkhand Notified 15. Karnataka Notified 16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manjur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified 20. West Bengal Notified 20. West Bengal	1707						
applicable Andhra Pradesh Assam Notified Assam Notified Chandigarh Chandigarh Chattisgarh Daman, Diu, Dadra & Nagar Haveli Mational Capital Territory of Delhi Goa Notified Notified Notified Notified Notified Notified Notified Notified Ill Haryana Notified Himachal Pradesh Jammu & Kashmir Not Notified Notified Kerala Karnataka Notified Notified		States/ Union Territories	Model Rules				
3. Assam Notified 4. Bihar Notified 5. Chandigarh Notified in Punjab Factories Rules 6. Chhattisgarh Under Progress 7. Daman, Diu, Dadra & Nagar Haveli Under process 8. National Capital Territory of Delhi Notified 9. Goa Notified 10. Gujarat Notified 11. Haryana Notified 12. Himachal Pradesh Not Notified 13. Jammu & Kashmir Not Notified 14. Jharkhand Notified 15. Karnataka Notified 16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal	1.	Andaman & Nicobar Islands					
4. Bihar Notified 5. Chandigarh Notified in Punjab Factories Rules 6. Chhattisgarh Under Progress 7. Daman, Diu, Dadra & Nagar Haveli Under process 8. National Capital Territory of Delhi Notified 9. Goa Notified 10. Gujarat Notified 11. Haryana Notified 12. Himachal Pradesh Not Notified 13. Jammu & Kashmir Not Notified 14. Jharkhand Notified 15. Karnataka Notified 16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Notified 29. Uttaranchal	2.	Andhra Pradesh	Notified				
5. Chandigarh 6. Chhattisgarh 7. Daman, Diu, Dadra & Nagar Haveli 8. National Capital Territory of Delhi 9. Goa 10. Gujarat 11. Haryana 12. Himachal Pradesh 13. Jammu & Kashmir 14. Jharkhand 15. Karnataka 16. Kerala 17. Madhya Pradesh 18. Maharashtra 19. Manipur 20. Meghalaya 21. Nagaland 22. Orissa 23. Pondicherry 24. Punjab 25. Rajasthan 26. Tamil Nadu 27. Tripura 28. Uttar Pradesh 28. Uttar Pradesh 29. Uttaranchal 20. Meghalaya 20. Uttaranchal 20. Uttaranchal 21. Notified 22. Orisea 23. Votified 24. Punjura 25. Rajasthan 26. Tamil Nadu 27. Tripura 28. Uttar Pradesh Notified Not Notified Not Notified Not Notified	3.	Assam	Notified				
6. Chhattisgarh 7. Daman, Diu, Dadra & Nagar Haveli 8. National Capital Territory of Delhi 9. Goa Notified 10. Gujarat 11. Haryana Notified 12. Himachal Pradesh 13. Jammu & Kashmir 14. Jharkhand 15. Karnataka Notified 16. Kerala 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified	4.	Bihar	Notified				
7. Daman, Diu, Dadra & Nagar Haveli 8. National Capital Territory of Delhi 9. Goa Notified 10. Gujarat Notified 11. Haryana 12. Himachal Pradesh 13. Jammu & Kashmir Not Notified 14. Jharkhand 15. Karnataka Notified 16. Kerala 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya 21. Nagaland 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu 27. Tripura Notified	5.	Chandigarh	Notified in Punjab Factories Rules				
8. National Capital Territory of Delhi 9. Goa Notified 10. Gujarat Notified 11. Haryana Notified 12. Himachal Pradesh Not Notified 13. Jammu & Kashmir Not Notified 14. Jharkhand Notified 15. Karnataka Notified 16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	6.	Chhattisgarh	Under Progress				
9. Goa Notified 10. Gujarat Notified 11. Haryana Notified 12. Himachal Pradesh Not Notified 13. Jammu & Kashmir Not Notified 14. Jharkhand Notified 15. Karnataka Notified 16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	7.	Daman, Diu, Dadra & Nagar Haveli	Under process				
10. Gujarat Notified 11. Haryana Notified 12. Himachal Pradesh Not Notified 13. Jammu & Kashmir Not Notified 14. Jharkhand Notified 15. Karnataka Notified 16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	8.	National Capital Territory of Delhi	Notified				
11. Haryana Notified 12. Himachal Pradesh Not Notified 13. Jammu & Kashmir Not Notified 14. Jharkhand Notified 15. Karnataka Notified 16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Notified	9.	Goa	Notified				
12. Himachal Pradesh 13. Jammu & Kashmir 14. Jharkhand 15. Karnataka 16. Kerala 17. Madhya Pradesh 18. Maharashtra 19. Manipur 20. Meghalaya 21. Nagaland 22. Orissa 23. Pondicherry 24. Punjab 25. Rajasthan 26. Tamil Nadu 27. Tripura 28. Uttar Pradesh Not Notified Not Notified Not Notified	10.	Gujarat	Notified				
13. Jammu & Kashmir 14. Jharkhand 15. Karnataka 16. Kerala 17. Madhya Pradesh 18. Maharashtra 19. Manipur 20. Meghalaya 21. Nagaland 22. Orissa 23. Pondicherry 24. Punjab 25. Rajasthan 26. Tamil Nadu 27. Tripura 28. Uttar Pradesh 29. Uttar anchal 20. Notified 20. Notified 21. Notified 22. Orissa 23. Pondicherry 24. Punjab 25. Rajasthan 26. Tamil Nadu 27. Tripura 28. Uttar Pradesh 29. Uttar anchal Notified Notified Notified Notified Notified Notified Notified	11.	Haryana	Notified				
14.JharkhandNotified15.KarnatakaNotified16.KeralaNotified17.Madhya PradeshNotified18.MaharashtraNotified19.ManipurDraft submitted for Govt. approval20.MeghalayaNotified21.NagalandDraft submitted for Govt. approval22.OrissaNotified23.PondicherryNotified24.PunjabNotified25.RajasthanNotified26.Tamil NaduNotified27.TripuraNotified28.Uttar PradeshNotified29.UttaranchalNot Notified	12.	Himachal Pradesh	Not Notified				
15. Karnataka Notified 16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	13.	Jammu & Kashmir	Not Notified				
16. Kerala Notified 17. Madhya Pradesh Notified 18. Maharashtra Notified 19. Manipur Draft submitted for Govt. approval 20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	14.	Jharkhand	Notified				
17. Madhya Pradesh 18. Maharashtra 19. Manipur 20. Meghalaya 21. Nagaland 22. Orissa 23. Pondicherry 24. Punjab 25. Rajasthan 26. Tamil Nadu 27. Tripura 28. Uttar Pradesh 29. Uttaranchal Notified	15.	Karnataka	Notified				
18. Maharashtra 19. Manipur 20. Meghalaya 21. Nagaland 22. Orissa 23. Pondicherry 24. Punjab 25. Rajasthan 26. Tamil Nadu 27. Tripura 28. Uttar Pradesh 29. Uttaranchal Notified	16.	Kerala	Notified				
19. Manipur 20. Meghalaya 21. Nagaland 22. Orissa 23. Pondicherry 24. Punjab 25. Rajasthan 26. Tamil Nadu 27. Tripura 28. Uttar Pradesh 29. Uttaranchal Draft submitted for Govt. approval Notified Notified Notified Notified Notified Notified Notified	17.	Madhya Pradesh	Notified				
20. Meghalaya Notified 21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	18.	Maharashtra	Notified				
21. Nagaland Draft submitted for Govt. approval 22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	19.	Manipur	Draft submitted for Govt. approval				
22. Orissa Notified 23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	20.	Meghalaya	Notified				
23. Pondicherry Notified 24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	21.	Nagaland	Draft submitted for Govt. approval				
24. Punjab Notified 25. Rajasthan Notified 26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	22.	Orissa	Notified				
 Rajasthan Rotified Tamil Nadu Notified Tripura Uttar Pradesh Uttaranchal Not Notified Not Notified 	23.	Pondicherry	Notified				
26. Tamil Nadu Notified 27. Tripura Notified 28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	24.	Punjab	Notified				
27.TripuraNotified28.Uttar PradeshNotified29.UttaranchalNot Notified	25.	Rajasthan	Notified				
28. Uttar Pradesh Notified 29. Uttaranchal Not Notified	26.	Tamil Nadu	Notified				
29. Uttaranchal Not Notified	27.	Tripura	Notified				
	28.	Uttar Pradesh	Notified				
30. West Bengal Notified	29.	Uttaranchal	Not Notified				
	30.	West Bengal	Notified				

P : Provisional

.. : Not Available

"*": Newly created States.

Table 8.17: Notification of Major Accidents Hazard Control Rules

	States/ Union Territories	MAHC Rules, 1997
1.	Andaman & Nicobar Islands	No hazardous unit, hence Rules Not applicable
2.	Andhra Pradesh	Notified
3.	Assam	Notified
4.	Bihar	Notified
5.	Chandigarh	Notified
6.	Chhattisgarh	*
7.	Daman, Diu, Dadra & Nagar Haveli	Notified
8.	National Capital Territory of Delhi	Notified
9.	Goa	Notified
10.	Gujarat	Notified
11.	Haryana	Notified
12.	Himachal Pradesh	Not Notified
13.	Jammu & Kashmir	Not Notified
14.	Jharkhand	Notified
15.	Karnataka	Notified
16.	Kerala	Notified
17.	Madhya Pradesh	Notified
18.	Maharashtra	Notified
19.	Manipur	Draft Rules submitted for approval of state Govt.
20.	Meghalaya	Notified
21.	Nagaland	Not Notified
22.	Orissa	Notified
23.	Pondicherry	Draft notification under consideration of Govt.
24.	Punjab	Notified
25.	Rajasthan	Notified
26.	Tamil Nadu	Notified
27.	Tripura	Notified
28.	Uttar Pradesh	Notified
29.	Uttaranchal	Notified
30.	West Bengal	Draft sent for notification

 $P \ : Provisional \\$

.. : Not Available

^{*} Newly created States.

9 Statistics on Occupational Safety & Health 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 accounted for maximum injuries and Mumbai, Kandla and Chennai Ports accounted for maximum fatal injuries in 2010. Table 9.1 shows that Mumbai port accounted for maximum dangerous occurrences. However with the efforts of the Inspectorates by enforcing above statutes and in creating safety awareness among all personnel connected with dock work, Chart 9.1 shows that number of reportable accidents have decreased from 180 in 2001 to 126 in 2010. Among fatal injuries there is no significant change, as depicted in chart 9.1.

As per the analysis of reportable accidents depicted in Chart 9.2 and Chart 9.3, 'Unitized and Break Bulk Cargo' followed by 'Means of Transportation' is the major agency causing the accidents and 'Stepping on, striking against or struck by objects' followed by 'Fall of Persons' is the major type of Accident during the year 2010.

Table 9.1 Reportable Accidents & Dangerous Occurrences in the ports 2010

Sl.No.	Ports	Fatal	Total	Dangerous Occurrences
1.	Mumbai	04	40	04
2.	J.N.Port	02	11	01
3	Kandla	04	05	01
4.	Marmugao	03	09	01
5.	Kolkata	03	22	02
6.	Paradip	03	05	00
7.	Visakhapatnam	00	04	00
8.	Chennai	04	13	00
9.	Cochin	00	10	02
10.	New Mangalore	01	02	01
11.	Tuticorin	00	05	00
	TOTAL	24	126	12

Table 9.2 Statistics of Employment & Rates of Reportable Accidents in Ports during 2010

Sr. No.	Name of Port	Average daily Employment	*Frequer	•	*Incidence Rate of injuries per Thousand		
		. ,	Fatal	Total	Fatal	Total	
1.	Mumbai	1677	0.95	9.55	2.38	23.85	
2.	J.N.Port	6902	0.14	0.78	0.29	1.59	
3	Kandla	2943	0.54	0.68	1.36	1.69	
4.	Marmugao	989	2.86	8.60	3.03	9.10	
5.	Kolkata	11673	0.031	0.23	0.26	1.88	
6.	Paradip	373	2.76	4.59	8.04	13.40	
7.	Visakhapatnam	2374	-	5.61	-	1.96	
8.	Chennai	713	0.64	2.11	5.61	18.23	
9.	Cochin	328	-	10.52	-	30.48	
10.	New Mangalore	180	1.93	3.87	0.002	0.004	
11.	Tuticorn	566	-	3.09	-	8.83	
	TOTAL	28718	#0.096	#0.51	0.836	4.39	

^{*} Formula (As per IS 3786 of 1983)

Chart 9.1



^{1.} Frequency Rate – No. of Reportable Accidents X 1,000,000/Man hours worked.

^{2.} Incidence Rate- No. of Reportable Accidents X 1,000/Avg. No. of Persons Employed.

[#] Manhours worked are calculated on the basis of 362 working days in a year.

Chart 9.2

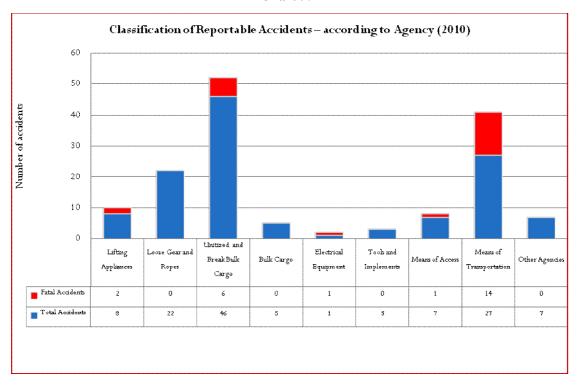


Chart: 9.3

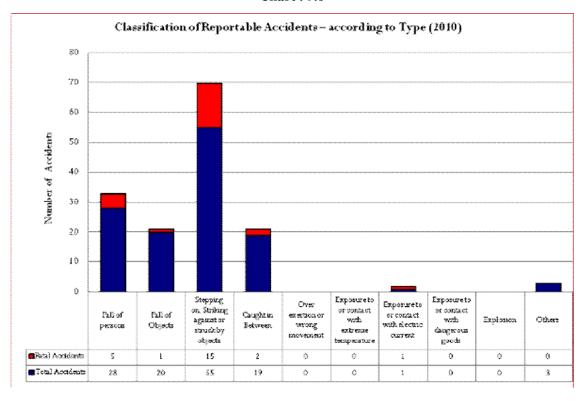


Table 9.3 CLASSIFICATION OF TO REPORTABLE ACCIDENTS – ACCORDING to AGENCY (2010)

Agency	Mum- bai	J.N. Port	Kandla	Marm- ugao	Kol- kata	Para- dip	Visakha- patnam	Chennai	Cochin	New Mangalore	Tuticorn	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
A. Lifting				01	04(1)			01(1)			02	08(2)
Appliances												
B. Loose Gear	13				08		01					22
and Ropes												
C. Unitized and	17(2)		04(3)		04		02	09	08	01(1)	01	46(6)
Break Bulk												
Cargo												
D. Bulk Cargo					01		01		01		02	05
E. Electrical								01(1)				01(1)
Equipment												
F. Tools and		02		01								03
Implements												
G. Means of	03(1)	01		01	02							07(1)
Access												
H. Means of	06(1)	08(2)	01(1)	03(3)	03(2)	04(3)		02(2)				27(14)
Transportation												
I. Other	01			03		01			01	01	-	07
Agencies												
TOTAL	40(4)	11(2)	05(4)	09(3)	22(3)	05(3)	04	13(4)	10	02(1)	05	126(24)

Table 9.4 Classification of Reportable Accidents – according to Type (2010)

Agency	Mum bai	J.N. Port	Kandla	Marmu gao	Kolkata	Paradip	Visakha patnam	Chenn ai	Cochi n	New Mangal ore	Tuticor n	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
A. Fall of persons	09(2)	01	01(1)	03	05		01	1(1)	04	01(1)	02	28 (5)
B.Fall of Objects	03	01	01	02	05	01	02	1(1)	02		02	20(1)
C. Stepping on, Striking against or struck by objects	19(2)	07(2)	03(3)	02(2)	09(2)	03(3)	01	10(1)			01	55(15)
D.Caught in Between	08	01		01(1)	03(1)	01			04	01		19(2)
E.Over exertion or wrong movement												
F.Exposure to or contact with extreme temperature												
G. Exposure to or contact with electric current								01(1)				01(1)
H. Exposure to or contact with dangerous goods												
I. Explosion												
J. Others	01	01		01								03
TOTAL	40(4)	11(2)	05(4)	09(3)	22(3)	05(3)	04	13(4)	10	02(1)	05	126 (24)

Table 9.5 Details of Inspections and other visits in Ports during 2010.

Sl. No.	Ports	Ship	Dock	Gear	Isolated Storage/Pipelines	Other visits
1.	Mumbai	156	35	156	02	270
2.	J.N.Port	30	49	00	00	62
3	Kandla	126	69	159	00	141
4.	Marmugao	72	77	75	03	77
5.	Kolkota	168	62	168	02	148
6.	Paradip	79	26	79	11	71
7.	Visakhapatnam	100	30	100	00	96
8.	Chennai	237	218	240	01	158
9.	Cochin	23	17	37	05	71
10.	New Mangalore	113	04	113	16	176
11.	Tuticorin	138	47	119	00	42
	TOTAL	1242	634	1246	40	1312

Table 9.6 Details of Prosecution in Ports during 2010

Sl.No.	Ports	Pending from previous year	Launched during the year	Decided during the year	Convicted
1.	Mumbai	03	00	00	00
2.	J.N.Port	01	00	00	00
3	Kandla	15	02	03	03
4.	Marmugao	00	00	00	00
5.	Kolkata	03	00	00	00
6.	Paradip	03	00	00	00
7.	Visakhapatnam	02	01	03	00
8.	Chennai	07	01	00	00
9.	Cochin	01	00	00	00
10.	New Mangalore	02	01	01	01
11.	Tuticorn	00	01	01	01
	TOTAL	37	06	08	05

Table 9.7 Details of Investigation into Reportable Fatal Accidents/Dangerous Occurrences in 2010

Sl.No.	Ports	Pending from	Initiated during the	Concluded during the
		previous year	year	year
1.	Mumbai	00	04	00
2.	J.N.Port	02	02	01
3	Kandla	06	05	05
4.	Mormugao	02	03	02
5.	Kolkata	06	04	08
6.	Paradip	03	03	00
7.	Visakhapatnam	01	00	00
8.	Chennai	11	06	10
9.	Cochin	02	00	01
10.	New Mangalore	03	01	01
11.	Tuticorin	04	00	03
	TOTAL	40	28	31

Table 9.8 Dock Safety Committee Meetings conducted/Safety Weeks celebrated in 2010

Sl.No.	Ports	Committee Meetings	Safety Weeks
1.	Mumbai	04	01
2.	J.N.Port	04	02
3	Kandla	04	01
4.	Marmugao	03	00
5.	Kolkata	06	02
6.	Paradip	03	00
7.	Visakhapatnam	02	01
8.	Chennai	02	01
9.	Cochin	04	01
10.	New Mangalore	03	01
11.	Tuticorn	04	01
	TOTAL	39	11

Table 9.9 Total Number of Ships Called in the Major Port during 2009 and 2010 $\,$

Sr.	Port	О	il Tankers		Others
No.		2009	2010	2009	2010
1	Mumbai	1123	1190	4730	4396
2	J.N. Port	498	480	2519	2611
3	Kandla	1287	935	1237	1317
4	Mormugao	159	163	688	805
5	Kolkata	1157	1257	2242	2294
6	Paradip	304	312	1257	1237
7	Visakhapatnam	697	768	2380	1670
8	Chennai	281	299	1826	1868
9	Cochin	760	618	58	38
10	New Mangalore	688	696	526	421
11	Tuticorin	174	175	1246	1239
	Total	7128	6893	18709	17896

Table	e 9.10 Cargo Han	dled in the Ma	ajor Port dı	uring 2009 aı	nd 2010	(In Toni	nes)
Sr.	Port	Containers	in TUE'S	P()L	Oth	ers
No.		2009	2010	2009	2010	2009	2010
1	Mumbai	56305	70663	34808000	33884000	18848000	20289000
2	J.N. Port	3857566	7743222	6762541	6794353	999028	1102814
3	Kandla	130073	155887	52755142	10520000	23471146	23640000
4	Mormugao	17297	17019	963833	942777	47883064	49074199
5	Kolkata	468308	514435	12863	11063	35296	36037
6	Paradip	3718	4103	10054328	11853781	45586914	44424368
7	Visakhapatnam	94908	126800	20346011	19992061	51290000	64990000
8	Chennai	1134303	1447082	13774587	13260144	45755889	47660637
9	Cochin	286984	296150	12541953	13172152	6852374	5793047
10	New Mangalore	28956	38496	18040000	21228000	18050000	10711000
11	Tuticorin	426448	452950	542764	1380665	16552882	22405982
	Total	6504866	10866807	170602022	133038995	275324593	290127084

Table 9.11 Safety Facilities in the Major Port during 2010

Sr. No.	Port	No. of Safety Officers	No. of Visits to Safety Exhibition Centers	No. of Competent Persons
1	Mumbai	04	00	31
2	J.N. Port	09	00	04
3	Kandla	01	00	03
4	Mormugao	01	03	02
5	Kolkata	03	00	21
6	Paradip	01	00	02
7	Visakhapatnam	01	00	14
8	Chennai	01	00	07
9	Cochin	01	00	02
10	New Mangalore	01	00	03
11	Tuticorin	03	00	03
	Total	26	03	92

Table 9.12 Health Facilities in the Major Port during 2010

	D			E: A:.1	E
Sr. No.	Port	OSH Centers	Ambulance	First Aid	Empanelled
			Rooms		Doctors
1	Mumbai	01	04	104	03
2	J.N. Port	03	02	32	03
3	Kandla	00	01	01	00
4	Mormugao	03	02	03	03
5	Kolkata	02	04	16	03
6	Paradip	01	00	07	00
7	Visakhapatnam	03	03	04	03
8	Chennai	01	05	06	01
9	Cochin	01	01	04	01
10	New Mangalore	01	02	02	00
11	Tuticorin	01	04	03	00
	Total	17	28	182	17

Table 9.13 Welfare Facilities in the Major Port during 2010

Sr. No.	Port	No. of Welfare Officers	Canteens	Drinking Water	Washing Facilities	Urinals
1	Mumbai	04	09	13	17	132
2	J.N. Port	02	05	80	62	241
3	Kandla	01	02	11	08	08
4	Mormugao	01	06	09	06	15
5	Kolkata	02	14	203	110	150
6	Paradip	01	04	04	03	03
7	Visakhapatnam	02	05	11	05	12
8	Chennai	08	12	171	50	50
9	Cochin	01	04	19	63	60
10	New Mangalore	00	05	07	08	13
11	Tuticorin	00	03	12	05	10
	Total	22	69	540	337	694

ANNEXURE- I

UNIT LEVEL CONSULTANCY STUDIES – 2010

Sl. No.	Area	CLI I	MUMBAI	RLI I	KOLKATA	RLI (CHENNAI	RLI F	KANPUR	RLI FA	RIDABAD
		Comp- leted	Under Progress								
1	2	3	4	5	6	7	8	9	10	11	12
1	Safety Audit	-	3	5	1	3	2	3	1	1	1
2	Occupational Health	-	-	-	1	-	-	1	-	-	-
3	Airborne Contaminants	16	5	-	-	-	-	-	-	-	-
4	Noise Level	1	1	-	-	-	-	-	-	-	-
5	Ventilation study	1	1	-	-	-	-	-	_	-	-
6	Maximum Credible Loss Scenario	-	-	-	-	-	-	-	-	-	-
7	HAZOP	2	-	-	-	-	-	-	-	-	-
8	Safety Audit-MAHC	2	1	-	-	-	-	-	-	-	-
9	Transport hazards study	-	-	-	-	1	-	-	-	-	-
10	Ergonomic Evaluation	1	-	-	-	-	-	-	-	-	-
11	Heat Stress	-	-	-	-	-	-	-	-	-	-
12	Hazard Identification	1	-	-	-	2	1	-	-	-	-
13	Dispersion Modeling	2	-	-	-	-	-	-	-	-	-
14	Environmental Study	-	-	2	-	5	2	2	-	-	-
15	Illumination Study	2	1	-	-	-	-	-	-	-	-
16	Vibration study	-	-	-	-	-	-	-	-	-	-
	Total:	28	12	7	2	11	5	6	1	1	1

ANNEXURE- II

LONGER DURATION TRAINING PROGRAMMES - 2010

Sl.	Participants and Area	CLI	MUMBAI	RLI KOLI	KATA	RLI C	HENNAI	RLI K	ANPUR	RLI FARII	DABAD	IDS OF	FICES
		Prgs	Partici- pants	Prgs	Partici -pants	Prgs	Partic i- pants	Prgs	Partici- pants	Prgs	Partici- pants	Prgs	Partici
Pro	fessional Programmes											-	
Α.	ADIS	1	34(33)	1	10(8)	1	40(31)	1	43(34)	1	35(26)		
В.	AFIH	1	45(41)	1	10(8)								
C.	Hazardous Processes	1	9(5)	1	7(5)								
Spe	cialised Training Program	mes	•				•	•		•		-	
A.	Inspectors of Factories												
	Basic course	1	24(5)	-	-	-	-	-	-	-	-	-	-
	Refresher course	1	4(3)	-	-	-	-	-	-	-	-	-	-
	Chemical Safety	-	-	1	17(10)	1	23(10)	1	9(8)	-	-	-	-
	Construction Safety	-	-	1	17(6)	-	-	-	-	-	-	-	-
В.	Management Personnel											-	
	Refresher Course for Safety Officers	1	11(10)	-	-	-	-	-	-	-	-	-	-
	Refresher Course for factory medical officers	-	-	1	23(17)	-	-	-	-	-	-	-	-
	Industrial Safety	2	26(7)	1	12(8)	-	-	-	-	-	-	-	-
	Industrial Hygiene	3	12(8)	-	-	-	-	-	-	-	-	-	-
	Occupational Health	-	-	2	38(28)	-	-	1	20(2)	1	21(8)	-	-
	Ergonomics	3	31(11)	-	-	-	-	-	-	-	-	-	-
	Staff Training	2	37(18)	-	-	-	-	-	-	-	-	-	-
	MAHC	3	46(13)	-	-	-	-	-	-	-	-	-	-
	Hazardous substances	-	-	1	13(7)	-	-	-	-	1	12(6)	-	-
	Construction Safety	-	-	1	16(5)	-	-	-	-	-	-	-	-
	Environmental Pollutants	2	19(11)	-	-	-	-	-	-	-	-	-	-

C.	Supervisors												
	Safety & Health	3	64(39)	-	-	1	64(38)	3	54(27)	1	7(2)	2	82(23)
	Environment	1	6(4)	-	-	-	-	-	-	-	-	-	-
	Industrial Psychology	3	45(10)	-	-	-	-	-	-	-	-	-	-
	Hazardous substances	2	21(11)	-	-	-	-	-	-	1	4(2)	-	-
	Productivity	5	175(22)	-	-	-	-	-	-	-	-	-	-
D.	Trade Union Leaders/w	orkers	/ Joint Parti	cipati	on								
	Industrial Safety	-	-	4	99(11)	-	-	-	-	-	-	-	-
	Staff Training	4	65(18)	-	-	-	-	-	-	-	-	-	-
	Indl. Psychology	1	16(1)	-	-	-	-	-	-	-	-	-	-
	Total:	40	690(270)	15	262(113)	3	127(79)	6	126(71)	5	79(44)	2	82(23)

Note: Figures in bracket indicate number of organisations.

ANNEXURE- III

IN- COMPANY TRAINING PROGRAMMES - 2010

Sl.	Participants and Area	CLI N	ИUMBAI	RLI K	OLKATA	RLI C	HENNAI	RLI I	KANPUR	RLI FA	ARIDABAD
No.		Progra- mmes	Partici- pants								
A.	Management Pers	sonnel									
	a) Industrial Safety	1	15(1)	-	-	3	69(3)	-	-	1	90(1)
	b) Productivity	3	138(3)	-	-	-	-	-	-	-	-
	c)Sstaff Training	1	21(1)	-	-	-	-	-	-	-	-
	d) Industrial Psychology	5	140(5)	-	-	-	-	-	-	-	-
	e) Construction Safety	1	50(1)	-	-	-	-	-	-	-	-
	f) MAHCA	1	30(1)	-	-	-	-	-	-	-	-
В.	Supervisor		- 1			-	•	-			•
	a) Chemical Safety	4	96(4)	-	-	-	-	-	-	1	28(1)
	b) Industrial Psychology	1	32(1)								
	c) Industrial Safety	5	128(5)	-	-	-	-	-	-	-	-
C.	Trade Union										
	a) Industrial Safety	-	_	-	_	4	80(4)	-	-	-	_
	b) Occupational Health	2	75(2)	-	-	-	-	-	-	-	-
	c) Industrial Psychology	2	66(2)								
	Total										

Note: Figures in bracket indicate number of organisations.

ANNEXURE- IV

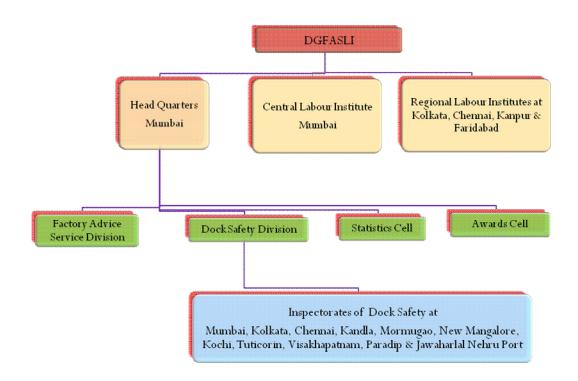
SHORT DURATION (1-2days) TRAINING PROGRAMMES - 2010

Sl No.	Participants and Area	CLI M	UMBAI	RLI KOLKATA		RLI CHE	NNAI	RLI KAN	PUR	RLI FARID	ABAD	INSPECTORATE OF DOCK SAFETY	
		Progra- mmes	Partici- pants	Programmes	Partici- pants	Programmes	Partici- pants	Programmes	Partici- pants	Programmes	Partici- pants	Progra- mmes	Partici- pants
	Management											<u> </u>	<u> </u>
ľ	Safety					1	20(1)						
•	Hazardous Industries					1	11(8)						
,	Construction Safety					1	19(10)						
	Trade Union Lea	ader/ Work	ers/ Joint I	Participation		•	•	•		•	•	•	•
	Construction Safety									1	49(6)		
	Students of Educ	cational Insti	tutions		L		Į.	•					ı
	Industrial Safety			5	164(5)								
	Industrial Ergonomics	1	21(1)										
	Industrial Physiology	1	29(1)										
	Other Enforcem	ent officers		•		•		•		•			
	Industrial Safety					1	4(1)						
	Total:	2	50(2)	5	164(5)	4	54(20)			1	49(6)		

Note: Figures in bracket indicate number of organisations

APPENDIX - I

ORGANISATION CHART



APPENDIX - II

te Offices

Address of DGFASLI and its Subordina				
Directorate General Factory	Regional Labour Institute,	I		
Advice Service & Labour	Chennai	(
Institutes, Mumbai	Sardar Patel Road, Adyar, TTTI	1		
N.S.Mankikar Marg, Sion,	PO, Chennai-600113	(
Mumbai-400 022.	Tel: 22350737, 22351569,	7		
PBX No.91-22-24092203	22355690	F		
Fax: 022-24071986	FAX: 044-22352457	ϵ		
e-mail: <u>fasli@dgfasli.nic.in</u>	e-mail: rlic@vsnl.net			
Central Labour Institute, Mumbai	Regional Labour Institute, Faridabad	I		
N.S.Mankikar Marg, Sion,	Sector 47, Haryana - 121003	ľ		
Mumbai-400 022.		F		
PBX No.91-22-24092203	Tel: 0129-2468022	5		
Fax: 022-24071986	FAX: 0129-2437064	-		
e-mail: cli <u>@dgfasli.nic.in</u>	e-mail:	F		
	rlifaridabad@yahoo.co.in	ϵ		
Regional Labour Institute,	Inspectorate of Dock	I		
Kanpur	Safety, Mumbai	I		
Sarvodya Nagar,	Operation Service Centre, 3rd	ľ		
Kanpur-208 005	Floor, P.D'mello Rd.,	ľ		
Tel: 2218691,2218692, 2218745	Mumbai-400 038	7		
	Tel: 22613391, 22692180	F		
Fax: 0512-2215112	Fax: 022 – 22613391	ϵ		
e-mail: rlikanpur5@gmail.com	e-mail: idsmumbai@vsnl.net			
rlik@indiatimes.com				
Regional Labour Institute, Kolkata	Inspectorate Dock Safety, J. N. Port	(
Lake Town, Kolkata-700 089	POC Canteen Bldg., J.NPort,	(
Tel: 25342732, 25342735,	Sheva, Navi Mumbai – 400 707	(
25343254	Tel: 27471584, 27470201	I		
Fax: 033 – 25348182]		
email: rlikol@vsnl.net		F		

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, Visakhapatnam

Old D.L.B. Building, 1st Floor, Port Area, Opp. Harbour Main Gate Building, Visakhapatnam-530 035

Tel: 2563857 Fax: 0891-2563857

e-mail: idsvizag@sancharnet.in

Inspectorate Dock Safety, Goa

108, Neogi Mansion, 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, Kandla

Near Bunder Gate, New Kandla -370210

Tel: 270249

Fax: 02836 - 270249

e-mail: idskandla@sancharnet.in

Inspectorate Dock Safety, Cochin

C.D.L.B. Dispensary Building, Willington G.V.Ayyar Rd, Island, Cochin-682003

Tel: 2666532

Fax : 0484 - 2666532

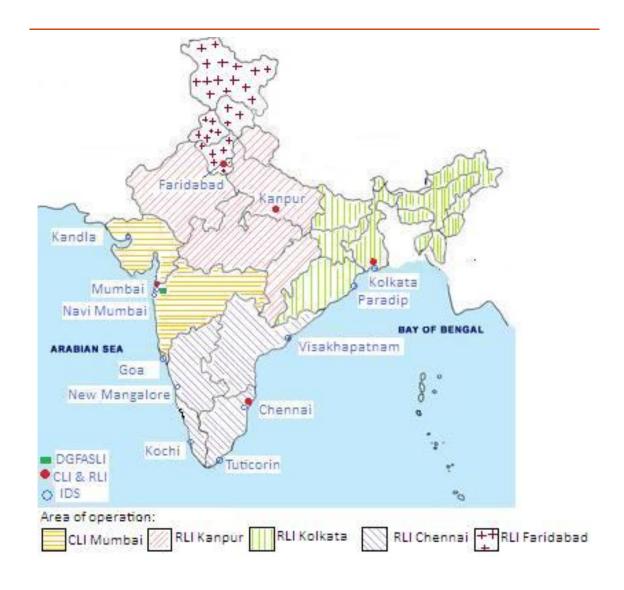
e-mail: idscochin@sancharnet.in

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 - 22830718e-mail: idskol@vsnl.net

Inspectorate Dock Safety,	Inspectorate Dock Safety,	Inspectorate of Dock
Chennai	Paradip	Safety, Ennore
3 rd Floor, Anchor Gate Building,	P.B. No.126, Dist. Paradip,	(Being setup)
Rajaji Salai, Chennai - 600 001.	Jagatsinghpur, Orissa – 754142.	Operated from Inspectorate
Tel: 25220888, 25246419	Tel: 222413	Dock Safety, Chennai
Fax: 044 – 25220888	Fax: 06722 – 222413	
e-mail: idschn@vsnl.net	e-mail: idsparadip@sify.com	



Jurisdiction Map of DGFASLI Offices