

### भारत सरकार, श्रम एवं रोजगार मंत्रालय

GOVERNMENT OF INDIA, MINISTRY OF LABOUR & EMPLOYMENT

# कारखाना सलाह सेवा और श्रम संस्थान महानिदेशालय

DIRECTORATE GENERAL FACTORY ADVICE SERVICE & LABOUR INSTITUTES

# मानक संदर्भ नोट - 2012

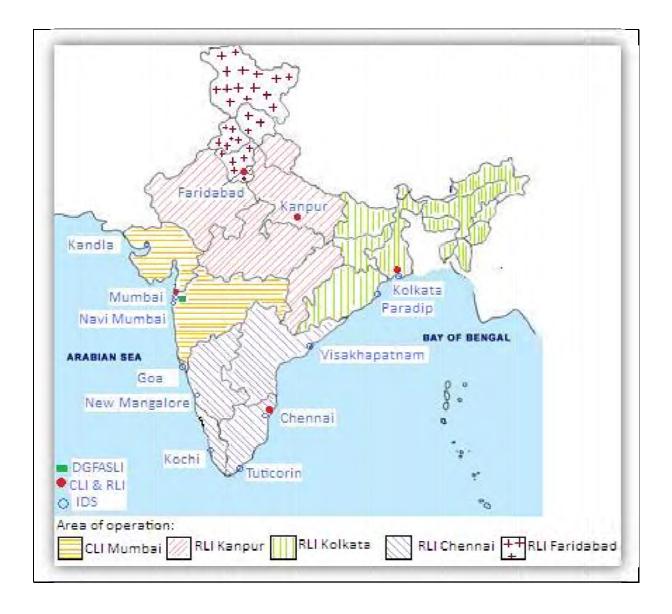
## **STANDARD REFERENCE NOTE -2012**

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### PREFACE

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

The Standard Reference Note 2012 provides comprehensive information on the objectives, functions, important activities and budget of the organisation. It contains details of studies/surveys, audits, support services, training programmes, promotional and other activities carried out by DGFASLI in its effort to prevent accidents and occupational diseases in Factories, Ports and Docks. This Standard Reference Note also contains information on targets and achievement of the Plan schemes.

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

(S.B.Mathur) Director General

Mumbai November 2013

### **Chapter 1: General Information**

#### 1.1 DGFASLI

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

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

The Dock Workers (Safety, Health and Welfare) Act 1986 and the Regulations 1990 provide 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 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 (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 the 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 Organization

DGFASLI organization comprises of the headquarters, Central Labour Institute, 4 Regional Labour Institutes and 11 Inspectorates of Dock Safety.

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

In 1959, the Central Labour Institute, Mumbai was established under UNDP Project as a socio-economic laboratory and as a national institute dealing with scientific study of human aspects of industrial development. Subsequently, Regional Labour Institutes (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 Central Labour Institute and Regional 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 Centers are also established at these Labour Institutes. Training Centres and Safety Exhibition Centers 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. & 1.2

Units	Technical		Administrative		Total	
	Sanctioned	In Position	Sanctioned	In Position	Sanctioned	In Position
Headquarters	12	11	46	37	58	48
CLI Mumbai	47	43	70	54	117	97
4 RLIs	61	42	80	46	141	88
11 IDSs	28	17	28	20	56	37
Total:	148	113	224	157	372	270

Tuble III - Munpower strength of the orgunization us on 111.2010	Table 1.1	Manpower strength of the organization as on 1.1.2013
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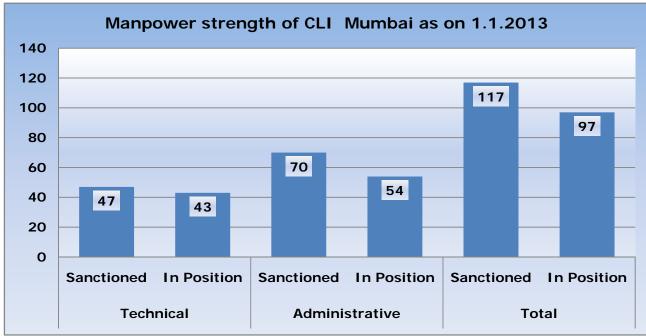
 Table 1.2
 Manpower strength of the organization in Group wise as on 1.1.2013

Group	Sanctioned	In Position
Group "A"	92	50
Group "B"	63	56
Group "C" + MTS	107+110=217	74+90=164
Total	372	270

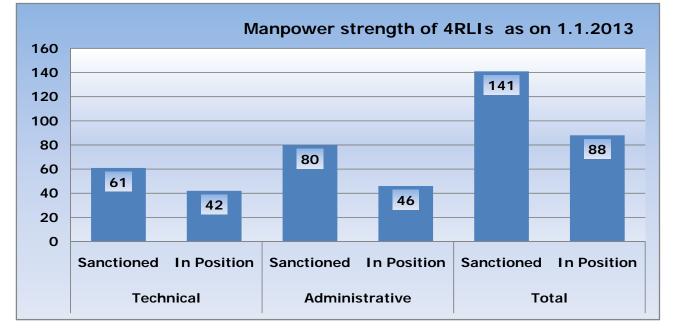
### <u>Chart 1.1</u>



### **Chart 1.2**

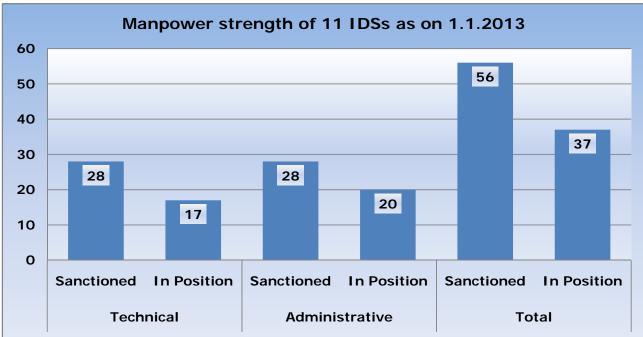


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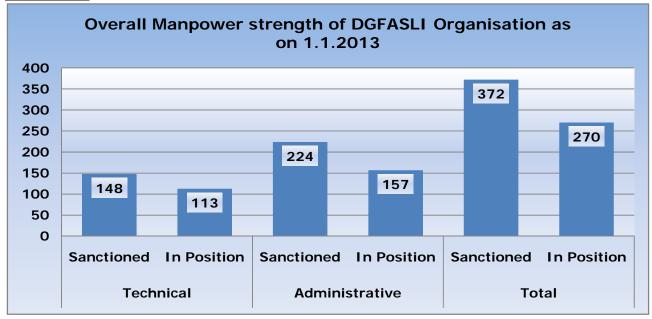


### <u>Chart 1.3</u>

### **Chart 1.4**

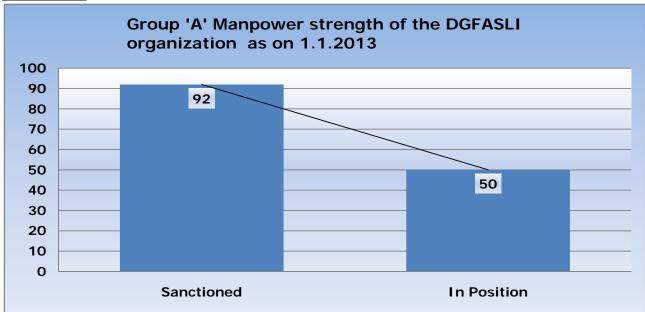


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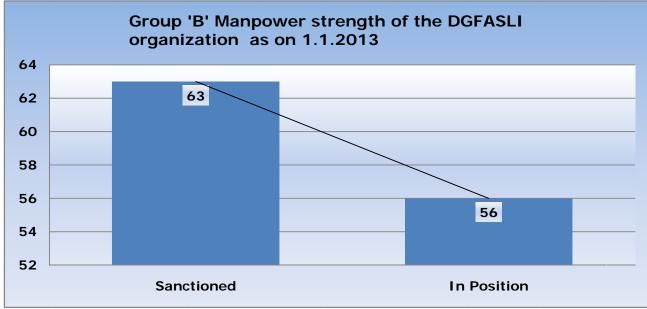


### **Chart 1.5**

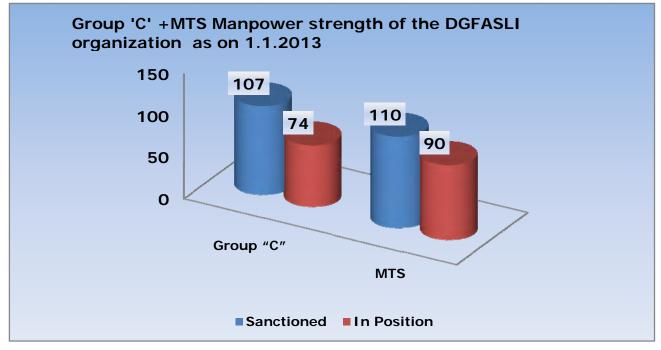
### <u>Chart 1.6</u>







### <u>Chart 1.8</u>



# Chapter 2: Budget

The allocation of funds for the various constituents and plan schemes of the organisation for 2012-2013 and 2013-2014 of the XI<sup>th</sup> Five year plan is given below:

			(Rs. in Lakhs)
Sl. No.	SCHEMES	Revised Estimates 2012-2013	Budget Estimates 2013-2014
A. NON	-PLAN		
1	DGFASLI & IDS	620.70	693.00
2	Research & Training (CLI & RLIs)	1055.30	1130.00
	Total: (NON-PLAN)	1676.00	1823.00
<b>B. PLA</b> 1	N Establishment of Regional Labour Institute at Faridabad	250.00	300.00
<b>B. PLA</b>	Establishment of Regional Labour Institute at	250.00	300.00
2	Strengthening of DGFASLI Organisation and OSH in Factories, Ports and Docks	700.00	610.00
3	Identification and Elimination of Silicosis & Asbestosis in India	10.00	120.00
4	Development of RLI, Shillong	30.00	10.00
	5&8 Four scheme yet to be has not be Approved	40.00	00.00
Total:	(PLAN)	1030.00	1040.00
GRANI	D TOTAL:	2706.00	2863.00

### **Chapter 3: Plan Schemes**

During 2011-2012, two Plan Schemes under the XI<sup>th</sup> Five Year Plan are taken up by DGFASLI for implementation, namely:

- (1) Establishment of Regional Labour Institute at Faridabad
- (2) Strengthening of DGFASLI organization and OSH in Factories & Ports.

#### 3.1 Plan Scheme I:

#### Development of Regional Labour Institute, Faridabad as National Center of Excellence.

Objectives:

- 1. The objective of the Scheme is to develop Regional Labour Institute, Faridabad as an advanced center of Safety Systems to meet the specialized needs of MSMEs and Chemical Process Industry.
- 2. Development of Advance Training Center, Advance Research Center and Awareness Center for carrying out the Technical activities of the Center of Excellence.
- 3. To develop wide spectrum Door-step Facility to impart knowledge, skills and develop awareness among the work-force and owner-managers of MSMEs.

Sl. No.	Activities	Targets	Achievements
1.	Creation of Various Posts	-	-
2.	Setting up of Laboratories	-	-
3.	Short duration training programmes	5	4
4.	Training programme for Target Groups i.e. Factory Inspectors/Safety Officers etc.	1	1
5.	One year post Diploma Course in Industrial Safety for Safety Officers	1	1
6.	One month specialized course – Construction Safety in Thermal Power Plants	1	1
7.	Training programme for small and medium enterprises	2	1
8.	Research/Studies / Surveys / Safety Audits	6	4
9.	National Seminar /Workshops	2	3
10.	Publication	-	2 posters published
11.	Production of films	2	2

#### Table 3.1 Targets & Achievements (January to December 2012)

#### 3.2 Plan Scheme II:

#### Strengthening of DGFASLI Organization and OSH in Factories, Ports & Docks

#### **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.

Sl. No.	Activities	Targets	Achievement
1.	a) Development of National Inventory on OSH information and follow up	*	-
	b) Upgradation and development of databases	*	16
	c) Development of Application Programmes	*	8
	d) Material Safety Data Sheet (MSDS) on request	*	4
	e) Industry-wise safety and health information	*	86
	f) INDOSHNEWS Publication	4	4
	g) Publication of Manuals, brochures, etc	*	51
2.	Conduction of specialized training programmes, seminars, workshops	25	30
3.	Conduction of studies/surveys/audits	25	26
4.	Enforcement activities in major ports (inspection of ships, container ship, loose gears, docks, container yards, hazardous installations, etc.)	1500	1579
5.	Testing of Respiratory & Non Respiratory PPE	700	629

#### Table 3.2 Targets & Achievements (January to December 2012)

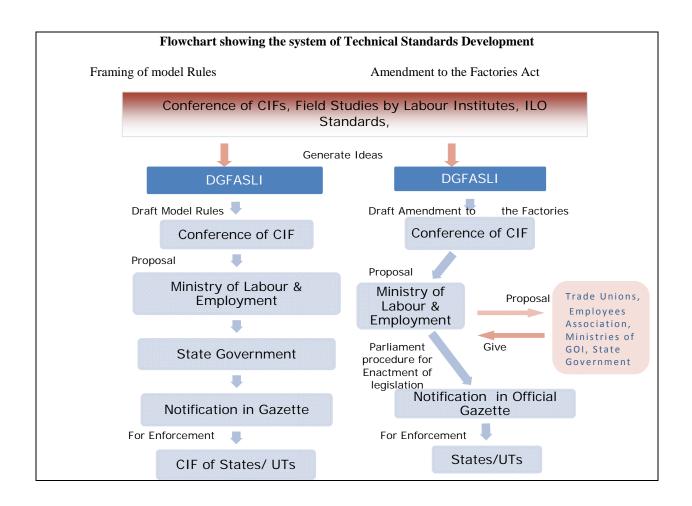
\*Can't be quantified

### Chapter 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 legislation 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. under Section 2(cb)

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 the State/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 2012 comments/clarifications / replies/ materials were prepared on the following matters:

Sl. No.	Comments/ Clarifications / Replies/ Materials	No.
1.	Matters regarding Factories Act,1948	19
2.	Matters regarding ILO Conventions/ILO meetings	10
3.	Matters relating to Parliament Questions and Parliamentary Standing Committee on Labour Meetings	42
4.	Matters regarding Court Cases	5
5.	Other Important Matters	39

Table:	4.1

### **4.3** The 52<sup>nd</sup> Conference of Chief Inspectors of Factories

The 52<sup>nd</sup> Conference of Chief Inspectors of Factories was organized by the Directorate General Factory Advice Service & Labour Institutes, Mumbai and hosted by the Govt. of Gujarat at Jamnagar from 23<sup>rd</sup> to 25<sup>th</sup> May 2012. An altogether 18 participants from various States Directorates/Inspectorates of Factories, along with seven officials from the DGFASLI in the Conference.

The Hon'ble Minister for Finance, Labour and Employment and Transport, Govt. of Gujarat, Shri Vajubhai Vala, inaugurated the Conference at Jamnagar, on 23<sup>rd May</sup> 2012. Shri P. Pannervel, Principal Secretary, Labour and Employment, Govt. of Gujarat, delivered the Presidential Address. The Director General, DGFASLI, while giving the keynote address and gave a brief about the previous CIF conference and also the OSH initiatives through the National Policy. He also highlighted the important issues/agenda to be discussed and deliberated in the Conference:-

- 1. Review of the Model Factories Rules
- 2. Simplification of the Forms and Returns
- 3. Amendment proposed to the term "occupier"
- 4. Amendment proposed to Section 59-Extra Wages for overtime
- 5. Number of factories to be inspected during the year
- 6. Review of the Third Schedule-Notifiable Diseases

After the two-day deliberations, a workshop on "Preparedness levels for Preventing and Reducing the Consequences of Chemical Accidents by the States of Gujarat, Maharashtra and Andhra Pradesh" was organized on the 25<sup>th</sup> May 2012. Dr. (Mrs.) Chhanda Chowdhary, Director, Ministry of Environment & Forests, Govt. of India was also present in the workshop. In the workshop the emergency preparedness by the State Crisis Group of Gujarat, Maharashtra and Andhra Pradesh were discussed and deliberated, followed by visits to two factories to familiarize the participants on the *best practices* being adopted.



(Shri Vaju bhai Vala, the Hon'ble Minister for Finance, Labour & Employment and Transport,Government of Gujrat delivering inaugural speech in the 52<sup>nd</sup> CIF Conference at Jamnagar,Gujrat.)





(Officials of DGFASLI and CIFs from various states discussing and deliberating in the 52<sup>nd</sup> CIFs Conference.)

#### **Comprehensive Amendments to the Factories Act, 1948**

The proposal for Comprehensive Amendments to the Factories Act, 1948 has been circulated to various Ministries / Departments and State Governments for their specific recommendations/comments/suggestions. The proposal has also been sent to the Legislative Department, Ministry of Law and Justice for their approval. We have yet to receive their reply in the matter.

#### Visit of the U.S Delegation

Visit of the U.S Delegation including the visit by the US Department of Labour (USDOL) officials on 27<sup>th</sup> April, 2012 to the Ministry of Labour and Employment, New Delhi to discuss and finalize the areas of technical cooperation in the field of Skill Development, Youth Employment, Occupational Safety and Health and Mines Safety & Health.

#### EU Seminar at New Delhi:

The India-EU Sub-commission of Economic Cooperation was held between the senior officers of the Ministry of Labour and Employment (including one officer from DGFASLI) and European Union in the Department of Commerce, Ministry of Commerce & Industries, Udyog Bhawan, New Delhi on 19<sup>th</sup> October, 2012.

#### 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 116 applications during the period January to December, 2012 out of which 63 applications were received under 6(3) of the RTI Act. 5 applications were brought forward from the 3<sup>rd</sup> quarter of 2011 12 (Oct. Dec., 2011) Information was provided within the stipulated time frame to 103 applications and 1 applications were transferred to other public authorities under Section 6(3) of the RTI Act. The remaining applications were carried forward to next year or rejected. An amount of Rs. 1278/- was received during the said period as application fees and cost of providing information in material form.
- The Appellate Authority of DGFASLI received a total number of 5 appeals during the period and all were replied within stipulated time frame.

#### 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.

# 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.

**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 Important Developments in Dock Safety

 The 28<sup>th</sup> Conference of Inspectors of Dock Safety was held at New Manglaore Port on 30<sup>th</sup> & 31<sup>st</sup> January 2012. The conference was inaugurated by Dr. P. Tamizvanan, Chairman, New Mangalore Port Trust. The function was presided by Dr. M. Rajaram, DDG & HOD, Directorate General Factory Advice Service & Labour Institutes. The keynote address was delivered by Shri S. B. Mathur, DDG, Directorate General Factory Advice Service & Labour Institutes, Mumbai. Shri T. S. N. Murthy, IRS, Dy. Chairman, New Mangalore Port Trust delivered special address. The conference was attended by all the Inspectors of Dock Safety from all the Major Ports of India.



(Shri G.P. Nijalingappa, Deputy Director Dock Safety delivering welcome address in Conference of Inspectors of Dock Safety at New Manglaore Port .Shri S.N. Borkar ,Director Incharge, DGFASLI,Shri T.S.N. Murthy,IRS Deputy Chairman,NMPT,Dr. P.Tamizvanan Chairman,NMPT, Dr. M. Rajaram,DDG & HOD,DGFASLI and Shri S. B. Mathur, DDG, DGFASLI are seen on the dais (Left-Right))

2. Organised and conducted 11<sup>th</sup> Advisory Committee Meeting on 9<sup>th</sup> & 10<sup>th</sup> February 2012 at Tuticorin. The meeting was inaugurated by Shri A. Subbiah IAS, Chairman, VOC Port Trust, Tuticorin. The Keynote address was delivered by Dr. M. Rajaram, DDG & HOD, Directorate General Factory Advice Service & Labour Institutes & Chief Inspector of Dock Safety, Mumbai. The meeting was attended by advisory committee members representing employer of Dock Workers (such as Port authorities, Stevedores Associations etc.) Representatives from ship owners (such as Shipping Corporation of India) representatives from employees (leader of recognized National level Trade Union) and Ministry of Labour & Employment. Various national level issues such as amendment to the Dock Workers (Safety, Health & Welfare) Act, 1986 and Regulations 1990. Safety performance report of the employer in the light of the new stevedoring Policy declared by the Ministry of Shipping, Training and Medical Examination of dock workers etc. were deliberated in the Meeting.



(Dr. M. Rajaram, DDG & HOD, DGFASLI delivering Keynote address in the 11<sup>th</sup> Advisory Committee Meeting at Tuticorin. Shri S.N. Borkar , Director Incharge, DGFASLI, Shri A. Subbiah IAS, Chairman, VOC Port Trust, Tuticorin are seen on the dais (Left- Right) ).

#### 4.8 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.

#### 4.9 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.

(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.

Sl. No.	Title	Date	Participants	Organisations
1.	Workshop on Safety Engineering and Management	17/09/2012	11	6
2.	Emergency use and maintenance of fire extinguishers with practical demonstration and training	14/02/2012	56	5
3.	Productivity and Innovation Enablers for emerging economy	17/02/2012	29	4
4.	Seminar on "Role & Strategy of Safety Professional for Effective Implementation of National Policy on Safety, Health & Environment at Workplace"	21/03/2012	201	141
5.	Symposium on "Humanisation of Working Conditions-Safety Health & Welfare on the occasion of May Day i.e., 1 <sup>st</sup> May 2012	01/05/2012	71	56
	Total		368	212

### Table 4.2 Professional Interaction & Update Seminar (PIUS) 2012

#### Table 4.3 National Studies and Surveys undertaken during 2012

Sl. No.	State level Studies and Surveys	No. of Studies & Surveys(Completed)
1.	ILO Project on "Elimination of Silicosis	1
2.	Improvement in Working Conditions and Higher Productivity at Work Place	1

Tuble 4.4 State level States and Surveys under taken during 2012	Table 4.4	State level Studies and Surveys undertaken during 2012
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Sl. No.	State level Studies and Surveys	No. of Studies & Surveys (Completed)
1.	A study of Hygiene and Environmental factors,	1
2.	A study of Psycho-social and Ergonomic factors	1
3.	Study of Impact of Glass Wool in Ship Recycling Activities	1
4.	A study of safety and health condition	1
5.	Survey of Occupational Safety & Health System in the Industries of the State of Sikkim	1
6.	Fatal Accident due to Gas Release on 28/29 Jan., 2011	1

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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.

Sl. No.	Area	No. of Consultancy Studies (Completed)
1	Safety Audit	18
2	Safety Audit Risk Analysis of LPG Bullets	1
3	Industrial Hygiene Survey	1
4	Risk Analysis study	1
5	Assessment of Work Environmental	6
6	HAZOP study	1
7	Noise Assessment Study	5
8	Ventilation Study	1
9	Illumination study	2
10	Testing Quality Compressor Breathing Air	3
11	Construction Safety Audit	1
12	Ergonomic Evaluation Study	3
13	Environmental Study	1
14	Testing of Compressor Air Purity Test	1
15	Ventilation & Heat Stress Evaluation study	2
16	Occupational Health Audit	1
17	Quantitative Risk Assessment	-
18	Workplace Environment Air Monitoring	-
	Total:	48

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Sl. No.	Title	Venue	Date	Participants	Organisations
1.	One day National Seminar on "Challenges and Strategies in Effective Implementation of the National Policy on Safety, Health and Environment at Workplace"	RLI, Chennai	20/1/2012	250	97
2.	Professional Interaction Updated Seminar on "Emerging Use and Maintenance of Fire Extinguisher" with demonstration & practical training	CLI, Mumbai	14/2/2012	58	5
3.	Professional Interaction Updated Seminar on "Productivity Innovations - Enablers in the Emerging Economy".	CLI, Mumbai	17/2/2012	29	3
4.	One day Seminar on "Occupational Safety and Health in Factories"	District Library at Tezpur, Assam (RLI, Chennai)	24/2/2012	151	143
5.	Seminar on "OSH Awareness in Tea Manufacturing Industires" for the Managerial Staff and Workers of Tea Manufacturing	Hotel Natarang, Dilbrugarh, Assam	27/2/2012	155	81
6.	Seminar on "OSH Awareness in Tea Manufacturing Industires" for the Managerial Staff and Workers of Tea Manufacturing	Hotel Nikita, Jorhat, Assam(RLI , Ko)	29/2/2012	158	84
7.	"Avenue for Achievement of Excellence in OSH" for the Executive/Management of Industries, Inspector of Factories,	Hotel Agnideep Continental , Guwahati, Assam	17/3/2012	156	90
8.	Seminar on "Role & Strategy of Safety Professionals for Effective Implementation of National Policy on Safety, Health & Environment at Workplace"	RLI, Kanpur	21/3/2012	201	141

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Sl. No.	Title	Venue	Date	Participants	Organisations
9.	A Seminar on Effective Implementation of the National Policy on SHEW Sharing the Best Practices and Innovations conducted by DGFASLI in association with the Chief Inspector of Factories abd Boilers, Goa	Jai Kissan Hall, Zuari Industries Ltd., Zuari Nagar, Goa	27/4/2012	110	66
10.	Seminar on Managing Safety and health at industrial Site	PHD chamber New Delhi	27/4/2012	150	100
11.	Seminar on Symposium on "Humanisation of Working Conditions- Safety, Health & Welfare on the occasion of May Day i.e.1st May 2012	RLI, Kanpur	1/5/2012	71	56
12.	National Seminar on Enhancing Occupational Safety and Health - Effective Implementation of Safety, Health and Environment (SHE) Culture in association with Madras Management Association	RLI, Chennai	15/6/2012	176	145
13.	National Seminar on Sensitizing the Faculties of Engineering and Polytechnic Colleges on Safety, Health and Environment	K.S.Rengasam y College of Technology, Tiruchengode, Tamilnadu (RLI, Chennai)	27/8/2012	110	45
	Total	1	1	1775	1056

Sl. No.	Title	Venue	Date	Participants	Orgnisations
1.	Workshop on CNG Safety Challenges in CGD	RLI, Faridabad	12/1/2012	195	19
2.	Workshop on Safety Engineering	RLI, Kanpur	17/1/2012	6	11
	& Management		to		
			19/1 2012		
3.	National workshop On Occupational Safety, Health and Environment – Imbibing in Indian Education System	RLI, Faridabad	10/2/2012	105	9
4.	Selection & Quality Assurance for	CLI, Mumbai	22/2/2012	16	7
	Effective use of PPE		to		
			24/2/2012		
5.	Workshop on Hazard &	CLI, Mumbai	22/2/2012	9	7
	Operability Study		to		
			24/2/2012		
6.	Workshop on Internal Safety	CLI, Mumbai	5/3/2012 to	17	5
	Audit		7/3/2012		
7.	Special Training Programme on	CLI, Mumbai	14/3/2012	12	1
	Safety & Health Environment Management in Fertilizer Industry		to		
			16/3/2012		
8.	Workshop on Dispersion	CLI, Mumbai	11/4/2012	7	5
	modeling and its Impact Assessment of toxic and		to		
	flammable Releases		13/4/2012		
9.	Training Workshop on "Higher Productivity and a better place to work" for small and medium industries from Baddi Industrial	Training Centre of M/s Dabar India Ltd. Baddi H.P.	12/10/2012	44	16
10.	Training Workshop on "Higher Productivity and a better place to work" for small and medium industries from Baddi Industrial	Training Centre of M/s Dabar India Ltd. Baddi H.P.	11/10/2012	44	16

### Table 4.7Workshops conducted during 2012

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Sl. No.	Title	Venue	Date	Participants	Orgnisations
11.	Workshop on Hazard & Operability Study	CLI, Mumbai	17/10/2012 to	29	10
12.	Training Workshop on Selection and Quality Assurance for Effective Use of PPE	CLI, Mumbai	19/10/2012 3/10/2012 to 5/10/2012	17	6
13.	National Workshop on Current Concepts and Tools in Occupational Health and Safety Risk Assessment in collaboration with Sri Ramchandra University, Chennai	Sri Ramchandra University, Chennai	2/11/2012 to 3/11/2012	50	48
14.	One day Workshop on "Enhancing Occupational Safety and Health: Effective Implementation of SHE Culture" jointly organised with MMA at Sivakasi	Bell Hotel, Sivakasi	8/12/2012	165	155
15.	Training Workshop on "Higher Productivity and a better place to work" for small and medium industries from Baddi Industrial	Training Centre of M/s Dabar India Ltd. Baddi H.P.	12/10/2012	44	16
16.	Training Workshop on "Higher Productivity and a better place to work" for small and medium industries from Baddi Industrial	Training Centre of M/s Dabar India Ltd. Baddi H.P.	11/10/2012	44	16
	Tota	al	1	804	347

Table 4.6 Longer Duration Training Programmes conducted during 2012	Table 4.8	Longer Duration Training Programmes conducted during 2012	
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Sl. No.	Area and Participant	Programmes	Participants	Organisations		
1.	Professional Programmes					
	Advance Diploma in Industrial Safety	5	200	143		
	AFIH	1	50	50		
	One-month Certificate Course for Supervisory Personnel in hazardous processes factories	2	30	19		
2.	Inspectors of Factories					
	Basic course	2	46	6		
	Refresher course	1	6	3		
	Chemical Safety	3	29	15		
	Construction Safety	1	26	11		
3.	Management Personnel	· ·		•		
	Refresher course for Medical Officer	1	35	22		
	Industrial Safety	9	212	96		
	Industrial Hygiene	4	85	34		
	Occupational Health	2	74	57		
	Industrial Physiology	1	17	5		
	МАНС	5	67	34		
	Hazardous Substances	1	19	12		
	Construction Safety	1	19	10		
	Environmental Pollutants	2	51	20		
	Industrial Productivity	4	93	19		
4.	Supervisors					
	Safety & Health	4	133	66		
	Construction Safety	2	22	8		
	Hazardous Substances	1	41	9		
	Industrial Productivity	1	26	1		
5.	Trade Union Leaders/Workers/Joint Participation					
	Industrial Safety	4	84	25		
	Chemical Safety	1	13	5		
	Occupational Health	2	51	47		
	Industrial Productivity	4	87	18		
6.	Educational Institution	11		1		
	Industrial Safety	3	55	5		
	Industrial Health	3	5	3		
	Total:	70	1576	743		

Table 4.9   Need b	ased in- company	Training Programm	nes conducted during 2012
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Sl. No.	Level of Participants	Programmes	Participants	Organisations
1.	Management Personnel	12	342	13
2.	Supervisors	3	76	3
3.	Trade Union Leader/Workers Joint	1	20	1
	Participation			
Total		16	438	17

#### Table 4.10 Short Duration Training Programmes conducted in 2012

Sl. No.	Level of Participants	Programmes	Participants	Organisations
1.	Management Personnel	9	325	120
3.	Supervisors	4	126	14
4.	Trade Union Leader/Workers.Joint Participation	7	165	16
5.	Students of Educational Institutions	9	325	9
	Total	29	941	159

 Table 4.11
 Appreciation and Promotional Programmes conducted in 2012

Sl. No.	Visits to	Programmes	Beneficiaries	Organisations
1.	Appreciation Programmes	217	6359	1525
2.	Safety Health Welfare Centre	89	2671	387

#### 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.

**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.

**4.10.3** Details of some of the seminars and workshops are given below:

**1.** The Workshop was conducted at RLI, Faridabad on CNG safety-Challenges in CSD on 12.1.2012 in collaboration with Petroleum & Explosives safety organisation (PESO), north circle, Faridabad.

**2.** A 3-days training Workshops on 'Internal Safety Audit' was conducted for the benefit of Managers, Engineers, Safety Officers, etc. working in the factories. 17 participants from 5 organisations were attended the programme. During the 3-days of the Workshop, various aspects of the internal audit deliberated and mock exercises and reports were finalized

**3.** A one day National Seminar on "Challenges and Strategies in Effective Implementation of the National Policy on Safety, Health and Environment at Workplace" was conducted at RLI, Chennai on 20.01.2012. The Seminar was inaugurated by Shri Mohan Pyare IAS, Principal Secretary to the Government of Tamil Nadu Department of Labour and Employment.

Dr. R.K.Elangovan, Director (Safety) & In-charge Regional Labour Institute, Chennai delivered welcome address. Shri K.Balasubramanian, Director (Safety), RLI, Chennai delivered vote of thanks.

Dr. M.Rajaram, Deputy Director General and Head of Department, DGFASLI, Govt. of India, Ministry of Labour and Employment, Mumbai delivered Presidential Address. In his Presidential Address be highlighted the various aspects of National Policy and stressed the need for implementation of National Policy by the industries.

The Seminar was attended by 250 delegates from 97 organisations.

**4.** A one day Seminar on "Occupational Safety and Health in Factories" was organized by the Headquarters in collaboration with Inspectorate of Factories, Government of Assam, on 24.02.2012.

The main objectives of the Seminar were

- (i) To enlighten the factory personnel working in the North Eastern Region of the country on various provisions a contained in the National Policy on Occupational Safety, Health and Environment at work place and
- (ii) To discuss with the factory personnel on various OSH provisions contained in the Factories Act, 1948 and the State Rules.

The deliberation included presentation of papers by eminent speakers in the field of occupational safety and health from RLI, Chennai, Kolkata and Kanpur and Inspectorate of Factories, Assam on the various provisions contained in the National Policy and Standard on Safety, Health and Environment (SHE) at

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workplace. The Factories Act, 1948 and State Rules, Hazard and Environment monitoring at Workplace, Occupational health management, Hazard identification and Risk Management in industries, Emergency Preparedness and Planning and Safety in Material Handling.

The Seminar was attended by 151 delegates from 143 organisations.

**5.** One day seminar on "Avenue for Achievement of Excellence in OSH" for the Executive/Management of Industries, Inspector of Factories, Safety Officers, Safety Professionals at Guwahati, Assam at Hotel Agnideep Continental, Assam organised by DGFASLI, Mumbai in collaboration with Directorate of Factories, Government of Assam on 17.3.2012.

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. At the beginning Chief Inspector of Factories, Government of Assam welcomed all dignitaries, participants and delegates. Addl. Chief Inspector of Factories, Government of Assam explained the programme perspective.

Director (Safety), RLI Kolkata delivered speech on improtence of Occupational Safety, Health & Environment at Workplace for the employees and workers in light of National Policy on SHE at Workplace. He invited the attention of the delegates on health hazards, incidents of accidents with statistics and the need of preventive measures.

The programme was formally inaugurated by Smt. A. Talikdar, IAS, Jt.Secretary, Labour & Employment Department, Government of Assam by enlightening lamp followed by inaugural speech. The programme was attended by 156 delegates from 90 organisations and concluded with grand success in creating positive mindset and impact towards occupational safety, health & environment at workplace.

Regional Labour Institute, Kanpur organized a Seminar on "Role & Strategy of Safety 6. Professionals for Effective Implementation of National Policy on Safety, Health & Environment at Workplace" on 21st March 2012. Shri Sita Ram Meena, IAS, Labour Commissioner U.P was the Chief Guest and Shri S.B. Mathur Deputy Director General, DGFASLI presided over the inaugural Anand Swaroop, Principal, GSVM, Medical College was the ceremony of the seminar Prof. Dr. Guest of Honour. There were two technical sessions. National Policy on Safety, Health and Environment at Workplace – Philosophy, Statute & Standards and Strategy of Safety Professionals for Effective Implementation of National Policy on Safety, Health & environment at Workplace. The Expert/ safety professionals presented the papers on the theme of the seminar . Safety exhibition was the added attraction. The seminar was the congregation of 201 delegates from 141 different organisations & it got wide media attention.

**7.** Regional Labour Institute, Kanpur organised a Symposium on "Humanisation of Working Conditions-Safety, Health & Welfare on the occasion of May Day i.e. 1st May 2012. Shri P.S. Bajpai. Vice president INTUC, U.P., Shri Arvind Raj Swaroop, Joint General Secretary AITUC, Shri Vishnu Shukla Organising Secretary, Construction Majdoor Panchayat, Sangam U.P., Shri Mahendra Pratap Singh , BMS U.P. Shri H.N. Tiwari General Secretary INTUC presented their views on Safety, Health and welfare of workers involved in Manufacturing& Construction. Dr. Brij Mohan, Head of Office, Regional labour Institute, Kanpur presided the symposium. About 75 leaders of different trade unions, workers representatives of safety committee & safety professionals & delegates attended the symposium.

**8.** RLI, Kolkata organised a National seminar on "Implementation of National Policy on Safety,Health and Environment at Workplace" on 4<sup>th</sup> May 2012 .The seminar was inaugurated by the Dr R.B. Raidas,Deputy Director General ,DGFASLI, Mumbai. The seminar was attended by 200 dignitaries & delegates from 96 organisations.

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Chaired by Shri D.B.Deb, Ex. DDG, DGFASLI, Mumbai, Prof. Ranajit Kumar Goswami, Director, BIMFS, Kolkata and Dr.R.B.Raidas, DDG, DGFASLI, Mumbai.

**9.** A one day National Seminar on "Enhancing Occupational Safety and Health : Effective Implementation of Safety, Health and Environment (SHE) Culture" organized by the Regional Labour Institute, Chennai in association with the Madras Management Association on 15.06.2012. Dr. R.K.Elangovan, Director-in-Charge, RLI, Chennai welcomed the Chief Guest dignitaries and delegates of the Seminar.

The National Seminar was inaugurated by Shri Mohan Pyare IAS, Principal Secretary to the Department of Labour and Employment, Government of Tamilnadu.

Dr. Rajaram, Director General, Directorate General Factory Advice Service and Labour Institutes, Govt. of India, Ministry of Labour and Employment delivered keynote Address. He stressed the need for strict compliance of various Statutes for enhancing Safety Standards in Industries. He said that Government of India has proposed to set up Regional and National Risk Obervatory Cells.

Shri S. Gopal Managing Director, Chemplast Sanmar Ltd., and the past President of Madras Management Association delivered Special Address.

Shri S.B.Mathur, Dy, Director General, DGFASLI delivered a speech on that occasion.

Vote of thanks was proposed by Group Captain R.Vijayakumar Executive Director, Madras Management Association. The programme was attended by 250 delegates.

**10.** A one day National Seminar on "Sensitizing the Faculties of Engineering and Polytechnic Colleges on Safety, Health and Environment" was conducted at K.S.Rengasamy College of Techniology, Tiruchengode, Tamil Nadu by Regional Labour Institute, Chennai in association with K.S.Rengasamy College of Techniology, Tiruchengode on 27.08.2012.

The National Seminar was inaugurated by Dr.M.Rajaram, Director General, Directorate General Factory Advice Service and Labour Institutes, Govt. of India, Ministry of Labour and Employment, Mumbai.

The main objective of the National Seminar was to familiarize the engineering faculty to train in the areas of Occupational Safety, Health and Environment so as to enter into the industrial atmosphere with the right attitude and appropriate pursuit to serve skillfully and make them play a pivotal safe to perform and sensitizing the engineering students on SHE aspects for enhancing their knowledge for effective functioning at workplace. The National Seminar was attended by 110 delegates comprising of Faculties of Engineering and Polytechnic Colleges representing 45 Institutions.

**11.** A National Workshop on Current Concepts and Tools in Occupational Health and Safety Risk Assessments was organized by Regional Labour Institute, Chennai in association with the Department of Environmental Health Engineering, Sri Ramchandra University, Porur, Chennai on 2<sup>nd</sup> and 3<sup>rd</sup> November, 2012 at Sri Ramchandra University, Porur, Chennai.

The objective of the Workshop was to familiarize the participants with the recent trends and tools in occupational health and safety risk assessment through "hands on" problem-solving approaches with small group exercise in selected sectors. The focus of the workshop was to enable the participants to understand the latest advancement of science in risk assessment as well as apply it in routine chemical safety operations.

The Workshop was attended by 50 delegates comprising of Senior Executives, Supervisors and Academicians representing 48 Institutions.

**12.** A National Workshop on "Human Factors & Occupational Safety in Construction Industry was conducted" in association with the Indian Institute of Technology, Madras from 17<sup>th</sup> to 21<sup>st</sup> December, 2012. The objective of the Workshop is – Human factors engineering is the scientific discipline concerned with understanding of interactions among humen beings and other elements of a system. It applies theory, principles data and methods to design in order to optimize human well being and overall system performance. Ergonomics contribute to the design and evaluation of taks, jobs, products, environments and systems in order to make them compatible with the needs, abilities and limitations of people. Construction is one of the sectors where high risks are involved wherein propmpt and practicle safety measures are to be practiced constantly. The Occupational Safety and Health in construction industries is achieved through the combined efforts of management, employers, contractors and employees. Hence the Workshop was organized to focus on various safety and health issues in Construction Industries. The Workshop was attended by 15 delegates from 15 organisations.

#### 4.10.4 Longer Duration Training Programmes

- a) Professional Programmes: To fulfill the need of qualified Safety officers, and Factory Medical Officers in the industry, DGFASLI 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.** 

#### 4.10.5 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.** 

#### 4.10.6 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**.

#### 4.10.7 Appreciation and Promotional Programmes

Each of the Labour Institutes at Mumbai, Kolkata, Kanpur, Chennai and Faridabad has an Industrial Safety Health and Welfare Centre, and conducting half day appreciations programmes at various laboratories and divisions of the organization.

#### 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.

Sl. No.	Type of Equipment	No. of Equipments tested
1.	Non-Respiratory Equipment	370
2.	Respiratory Equipment	259
	Total:	629

Table 4.12Personnel Protective Equipment tested in 2012

#### 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 are 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 4.13Approval of Flameproof Electrical Enclosures during the year 2012

Approvals issued	5 manufacturers for 46 flame-proof electrical enclosures
Inspection visits	6 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.

Sl. No.	Institute –wise	No. of Talks	Participants	Organisations
1.	DGFASLI (HQ)*	19	484	19
2.	Central Labour Institute, Mumbai	6	445	5
3.	Regional Labour Institute, Kolkata	8	1006	512
4.	Regional Labour Institute, Chennai	23	5180	1697
5.	Regional Labour Institute, Kanpur	2	70	2
6.	Regional Labour Institute,	2	130	2
	Faridabad			
	Total:	60	7315	2237

Table 4.14 Institute –wise Talks delivered during 2012

\* 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.

Sl. No.	Paper/Article	Periodicals/Events	Date
1	Environment Monitoring at Work place	Seminar on Occupational Safety & Health in Factories at Tejpur, Assam organized by RLI,	24/02/2012
2.	Common causes of accident and use of PPE in accident prevention	Chennai & Inspectorate of Factories Assam One day seminar on "OSH Awareness in tea Manufacturing Industries" for the Managerial Staff and Workers of tea Manufacturing Industries organized by DGFASLI, Mumbai in collaboration with Chief Inspector of Factories, Assam at Hotel Nikita, Jorhat, Assam	29.03.2012
3.	SHE Management and Accident Prevention prgramme in Industry	One day seminar on "OSH Awareness in tea Manufacturing Industries" for the Managerial Staff and Workers of tea Manufacturing Industries organized by DGFASLI, Mumbai in collaboration with Chief Inspector of Factories, Assam at Hotel Nikita, Jorhat, Assam	29.03.2012
4.	Common causes of accident and use of PPE in accident prevention	One day seminar on "OSH Awareness in tea Manufacturing Industries" for the Managerial Staff and Workers of tea Manufacturing Industries organized by DGFASLI, Mumbai in collaboration with Chief Inspector of Factories, Assam at Hotel Nataraj, Dilbrugarth, Assam	27.03.2012

Table	4.15 Articles Presented in 20	12
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5.	SHE Management and	One day seminar on "OSH Awareness in tea	27.03.2012
	Accident Prevention	Manufacturing Industries" for the Managerial	
	prgramme in Industry	Staff and Workers of tea Manufacturing	
		Industries organized by DGFASLI, Mumbai in	
		collaboration with Chief Inspector of Factories,	
		Assam at Hotel Nikita, Jorhat, Assam	
6.	Hazard Identification and	One day seminar on "Avenue for Achievement	17.03.2012
	its Prevention and Control	of Excellence in OSH" for the	
		Executive/Management of Industries, Inspector	
		of Factories, Safety Officers, Safety	
		Professionals at Guwahari, Assam	
7.	Innovative Policy, Planning,	One day seminar on "Avenue for Achievement	17.03.2012
	Operation, Standardization	of Excellence in OSH" for the	
	and Statutory Compliance to	Executive/Management of Industries, Inspector	
	face the global challenges	of Factories, Safety Officers, Safety	
		Professionals at Guwahari, Assam	
8.	The accident problem in	Two days workshop on Construction Safety for	28/08/2012
	respect of constitution	Construction Workers on 28th & 29th August,	
	safety, principles of accident	2012 at State Labour Institute, Kolkata	
	prevention		
9.	Safety Audit with Special	National Seminar on "ZERO ACCIDENT AND	28/09/2012
	Reference to Steel and	TOTAL SAFETY IN STEEL AND POWER	
	Power plants	INDUSTRIES ON INDIA" at MIDC on SHE,	
	-	Bhubaneswar	

### 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.

Sl. No.	Papers/Articles Published	Periodical
1.	Challenges in OSH in 21 <sup>st</sup> Century & Accident Prevention and Role of Industrial Management.	INDOSHNEWS Vol. 17 No. 2
2.	Industrial Hygiene Practices for the Improvement Work Environment	INDOSHNEWS Vol. 17 No. 3

 Table 4.16
 Papers/Articles Published in 2012

### 4.18 DGFASLI website:

The DGFASLI website <u>www.dgfasli.nic.in</u> 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.

### **Chapter 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. (a) Applications ranked 1 to 5 (5 Awards) – Class "A" Awards Rs.75,000/- Each, (b) Applications ranked 6 to 13 (8 Awards) – Class "A" Awards Rs.50,000/- Each (c) Applications ranked 14 to 28 (15 Awards) – Class "A" Awards 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).

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(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. The Schemes/Schedule based on lowest frequency rate of accidents were deliberated in comparison with latest national Average Frequency Data of Accidents namely; for the period from 2005 to 2007 for manufacturing sector and for the period from 2007 – 08 to 2009 – 10 for the Port Sector.

Achievement in 2012: The Awards presentation function for Vishwakarma Rashtriya Puraskar and National Safety Awards for the performance year 2010 was held at Vigyan Bhawan, New Delhi and the awards were presented by the Hon'ble Minister of Labour & Employment, Shri Mallikarjun Kharge. The awards division received 162 applications under VRP from Factories and docks and 233 under NSA for the performance year 2010. Out of this 7 VRP and 66 NSA applications were rejected owing to various discrepancies and 155 VRP and 167 NSA applications were accepted for processing and assessment. Out of which 28 applications have to be selected as Winners of VRP for the performance year 2010 A total of 167 applications (58 Winners & 28 Runners-up) were recommended for NSA.

Performance Year	Applications	Awards
2005	221	28
2006	177	28
2007	146	28
2008	192	28
2009	234	28
2010	162	28

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

Performance Year	Savings in Indian	Currency in Rupees	Savings in Foreign Currency in Rupees			
	Recurring	Non-Recurring	Recurring	Non-Recurring		
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	-		
2009	1082,85,00,000	94,83,04,000	2173,14,500	2959,00,000		
2010	145,97,88,000	77,14,00,000	1,19,76,304	49,60,155		

Table 5.2Es	stimated annual savings resulting from the suggestions
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### Table 5.3 National Safety Awards under different schemes

Performance Year	National Safety	SCHEMES											
	Awards	Ι	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
2006	Applications Awards	73 33	36 18	26 24	27 12	32 26	34 8	31 24	29 7	1 1	1 1	-	-
2007	Applications Awards	66 26	32 17	31 10	29 11	30 7	32 7	45 8	48 8	7 2	9 3	1 1	1 1
2008	Applications Awards	25	21	13	11	9	9	8	8	3	4	1	2
2009	Applications Awards	100 27	50 21	38 16	30 15	18 9	19 10	20 8	20 9	4 2	4 2	4 2	4 2
2010	Applications Awards	55 22	32 19	16 08	19 09	09 06	11 07	10 05	11 05	02 02	02 02	01 -	02 01

## Chapter 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:

<b>Table: 6.1</b>	<b>International Programmes a</b>	attended by officers	of DGFASLI in 2012
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Sl. No.	International Programmes	Place	From	То	No. of officers trained
1.	The ILO / KOSHA Fellowship programme to "promote National Policy Frame Work on Occupational Safety & Health" in Asia Pacific	Incheon Korea	17/06/2012	29/06/2012	1
2.	OSH Symposium on Developing Preventive Culture at Singapore	Singapore	09/09/2012	12/09/2012	1

Sl. No.	National	Place	From	То	No. of officers
	Programmes				
1	Short term training programme on Documentation for Laboratory Quality Management System as per ISO- 17025:2005	NIFTEM, Kundli,Sonepat	24/05/2012	26/05/2012	2
2	Two day Workshop on Functional Safety and LOPA organized by Cholamandalam Risk Services and exido, Singaport	Mumbai	07/06/2012	08/06/2012	1
3	National Odisha State Conclave Emerging Trends in Safety issues and concerns	Bhubaneswar	14/09/2012	15/09/2012	1
4	Meeting of Cement Matrix Products Sectional Committee, CED 53 of BIS	BIS Bangalore Branch, 1 <sup>st</sup> stage Peenya Indl., Aream Bangluru	26/11/2012		1
5	Meeting of the Task Force under the Standing Committee on OSH of workers in Thermal Power Plants and site visit of CESC plant	Victoria House, Kolkata and CES Plant site Budge budge	26/11/2012	27/11/2012	2
6	International Meet on Climate, the Workplace & Environmental Health	New Delhi, MAMC	06/12/2012	08/12/2012	1

### Table: 6.2 National Programmes attended by officers of DGFASLI in 2012

### Chapter 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 2009.

Year	No. of Working Factories	Estimated Average daily Employment (in thousands)	Industria	l Injuries	Frequency Rate of injuries per lakh Man-days worked		Incidence Rate of injuries per thousand Workers Employed in Factories Submitting Return	
			Fatal	Total	Fatal	Total	Fatal	Total
1	2	3	4	5	6	7	8	9
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	163299	8015	821	15290	0.09	1.73	0.10	1.91
2008	137808	7421	478	5972	0.07	0.88	0.06	0.80
2009	143389	6488	668	6651	0.09	0.85	0.10	1.03

#### Table: 7.1 Statistics of Employment, Industrial Injuries, etc. in Factories

Source: Data received from Labour Bureau through correspondence dated 06.03.2013 **Note:** P: Provisional

#### Limitations of the data received from 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,

**4.** 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.

States/Union Territory	2005	2006	2007	2008	2009(P)
Andaman & Nicobar	NA	NA	38(-)	NA	40(-)
Andhra Pradesh	1822(139)	1569(177)	1755(162)	1770(170)	1200(139)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	51(5)	55(5)	76(11)	82(15)	52(5)
Bihar	42(7)	NA	162(11)	39(-)	156(27)
Chandigarh	2(1)	12(-)	6(2)	NA	8(-)
Chhattisgarh	NA	NA	NA	NA	NA
Dadra Nagar Haveli	NA	NA	NA	NA	NA
Delhi	NA	NA	NA	NA	NA
Goa	203(16)	204(8)	191(10)	168(7)	144(10)
Gujarat	NA	5002(160)	NA	NA	NA
Haryana	272(38)	203(27)	145(43)	123(33)	118(31)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu Kashmir	NA	NA	NA	NA	NA
Jharkhand	218(21)	270(27)	126(21)	237(23)	NA
Karnataka	1425(37)	2805(25)	2151(23)	555(22)	NA
Kerala	971(18)	631(13)	NA	NA	NA
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	1188(40)	1168(35)	1623(53)	1476(54)	NA
Maharashtra	4680(143)	4547(403)	7216(342)	NA	3249(217)
Manipur	NA	NA	NA	NA	-
Meghalaya	1(-)	NA	-(-)	18(1)	28(-)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Odisha	615(37)	553(74)	550(81)	564(81)	548(122)
Puducherry	NA	NA	NA	NA	NA
Punjab	331(7)	408(4)	NA	229(3)	283(35)
Rajasthan	1326(52)	1190(61)	1205(60)	656(49)	755(56)
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	1624(50)	1290(49)	NA	NA	NA
Tripura	5(2)	5(-)	3(1)	1(-)	6(2)
Uttar Pradesh	NA	NA	NA	NA	NA
Uttaranchal	NA	NA	NA	54(20)	64(24)
West Bengal	NA	NA	43(1)	NA	NA
Total:	14734(606)	19912(1068)	15290(821)	5972(478)	6651(668)

### Table 7.2 State-Wise Total Number of Industrial Injuries in Factories

Note: (i) NA = Not Available,

(ii) - = Nil, (iv) P = Provisional.

(iii) Figures in brackets pertain to "Fatalities" and are included in the total,(v) For limitations of data refer note of Table 7.1

Source: Data received from Labour Bureau through correspondence dated 06.03.2013

Standard Reference Note 2012

State/UTs	2005	2006	2007	2008	2009(P)
Andaman & Nicobar	NA	NA	2.85(-)	NA	3.45(-)
Andhra Pradesh	1.61(0.12)	1.34(0.15)	1.40(0.13)	1.30(0.13)	0.80(0.09)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	0.46(0.04)	0.56(0.05)	0.86(0.12)	0.76(0.14)	1.83(0.18)
Bihar	1.28(0.21)	NA	4.41(0.30)	0.95(-)	6.15(1.06)
Chandigarh	0.07(0.03)	0.44(-)	0.23(0.08)	NA	0.34(-)
Chhattisgarh	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA
Delhi	NA	NA	NA	NA	NA
Goa	2.03(0.16)	1.69(0.07)	1.37(0.07)	1.12(0.05)	0.67(0.05)
Gujarat	NA	5.78(0.18)	NA	NA	NA
Haryana	0.43(0.06)	0.22(0.03)	0.32(0.09)	0.29(0.08)	0.20(0.05)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu & Kashmir	NA	NA	NA	NA	NA
Jharkhand	0.26(0.03)	0.32(0.03)	0.20(0.03)	0.22(0.02)	NA
Karnataka	1.18(0.03)	1.82(0.02)	1.53(0.02)	0.65(0.03)	NA
Kerala	3.67(0.07)	1.40(0.03)	NA	NA	NA
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	3.27(0.11)	1.20(0.04)	4.65(0.15)	5.23(0.19)	NA
Maharashtra	2.04(0.06)	2.10(0.19)	3.21(0.15)	NA	1.11(0.07)
Manipur	NA	NA	NA	NA	-(-)
Meghalaya	0.06(0.00)	NA	NA	0.91(0.05)	5.96(-)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Odisha	1.76(0.11)	1.48(0.20)	1.26(0.18)	1.23(0.18)	1.00(0.22)
Puducherry	NA	NA	NA	NA	NA
Punjab	1.15(0.02)	1.32(0.01)	-(-)	0.73(0.01)	1.01(0.12)
Rajasthan	3.26(0.13)	2.54(0.13)	2.38(0.12)	1.48(0.11)	1.53(0.11)
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	0.45(0.01)	0.35(0.01)	NA	NA	NA
Tripura	0.19(0.08)	0.14(-)	0.13(0.04)	0.07(-)	0.19(0.06)
Uttar Pradesh	NA	NA	NA	NA	NA
Uttaranchal	NA	NA	NA	0.24(0.09)	0.22(0.08)
West Bengal	NA	NA	0.46(0.01)	NA	NA
Total:	1.27(0.05)	1.42(0.08)	1.73(0.09)	0.88(0.07)	0.85(0.09)

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

Note: (i) **F.R**. = Frequency Rate per lakh man-days worked (iii) (-) = Nil or Negligible, (ii) NA = Not Available,

(iv)Figures in bracket pertain to "Fatalities" and are included in the total,

(v)  $\mathbf{P}$  = Provisional. For limitations of the data please refer note under table 7.1

Source: Data received from Labour Bureau through correspondence dated 06.03.2013

State/UTs	2005	2006	2007	2008	2009(P)
Andaman & Nicobar	NA	NA	7.39(-)	NA	7.33(-)
Andhra Pradesh	2.36(0.18)	1.98(0.22)	2.11(0.19)	2.03(0.19)	1.26(0.15)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	0.48(0.05)	0.48(0.04)	0.63(0.09)	0.76(0.14)	0.38(0.04)
Bihar	0.47(0.08)	NA	1.56(0.11)	0.34(-)	1.27(0.22)
Chandigarh	0.16(0.08)	0.92(-)	0.50(0.17)	NA	0.72(-)
Chhattisgarh	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA
Delhi	NA	NA	NA	NA	NA
Goa	4.54(0.36)	4.19(0.16)	3.63(0.19)	3.04(0.13)	2.23(0.15)
Gujarat	NA	4.95(0.16)	NA	NA	NA
Haryana	0.47(0.07)	0.32(0.04)	0.21(0.06)	0.18(0.05)	0.16(0.04)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu & Kashmir	NA	NA	NA	NA	NA
Jharkhand	0.78(0.07)	0.92(0.09)	0.42(0.07)	0.76(0.07)	NA
Karnataka	1.53(0.04)	3.06(0.03)	2.04(0.02)	0.49(0.02)	NA
Kerala	5.54(0.10)	3.84(0.08)	NA	NA	NA
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	2.58(0.09)	2.68(0.08)	3.62(0.12)	3.29(0.12)	NA
Maharashtra	3.60(0.11)	3.43(0.30)	5.37(0.25)	NA	2.12(0.14)
Manipur	NA	NA	NA	-(-)	-(-)
Meghalaya	0.23(0.00)	NA	NA	2.84(0.16)	4.64(-)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Odisha	4.41(0.27)	3.68(0.49)	3.34(0.49)	3.22(0.46)	2.51(0.56)
Puducherry	NA	NA	NA	NA	NA
Punjab	0.63(0.01)	0.74(0.01)	NA	0.39(0.01)	0.48(0.06)
Rajasthan	3.33(0.13)	3.02(0.16)	2.58(0.13)	1.10(0.08)	1.25(0.09)
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	1.22(0.04)	0.94(0.04)	NA	NA	NA
Tripura	0.15(0.06)	0.15(-)	0.07(0.02)	0.02(-)	0.12(0.04)
Uttar Pradesh	NA	NA	NA	NA	NA
Uttaranchal	NA	NA	NA	0.52(0.19)	0.39(0.15)
West Bengal	NA	NA	0.05(0.00)	NA	NA
Total:	2.06(0.09)	2.41(0.13)	1.91(0.10)	0.80(0.06)	1.03(0.10)

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

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 06.03.2013.

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Sl. No.	Industry	NIC Code	2005		2006		2007		2008		2009(P)	
110.		couc	Total Injuries	IR								
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	All Textiles	17,18	3862 (36)	2.74 (0.03)	5808 (68)	3.57 (0.04)	3582 (50)	2.52 (0.04)	1740 (37)	1.21 (0.03)	1326 (59)	1.52 (0.07)
2.	Mfg of Paper & paper products & printing, publishing & allied products	21,22	493 (17)	2.02 (0.07)	510 (25)	1.80 (0.09)	496 (26)	1.76 (0.09)	231 (22)	0.97 (0.09)	108 (21)	0.38 (0.07)
3.	Mfg of Chemicals & Chemical products (Except Petroleum and coal products)	24	1159 (91)	1.91 (0.15)	1560 (155)	1.97 (0.20)	991 (68)	1.87 (0.13)	206 (42)	0.50 (0.10)	186 (35)	0.40 (0.08)
4.	Manufacture of Non-metallic mineral products	26	742 (47)	1.51 (0.10)	896 (73)	1.63 (0.13)	1038 (68)	1.70 (0.11)	717 (65)	1.14 (0.10)	291 (63)	0.52 (0.11)
5.	Basic metal and alloys Industries	27	1543 (102)	3.06 (0.20)	1842 (166)	3.16 (0.28)	1822 (179)	2.61 (0.26)	664 (121)	1.06 (0.19)	1042 (189)	2.19 (0.40)
6.	Mfg of metal products & Parts (except machinery & transport equipment)	28	688 (36)	1.91 (0.10)	1151 (38)	2.64 (0.09)	1209 (21)	2.55 (0.04)	297 (8)	0.75 (0.02)	365 (19)	0.87 (0.05)
7.	Manufacture of machinery, machine tools & parts (except electrical machinery)	29.30	953 (17)	2.21 (0.04)	1522 (59)	3.26 (0.13)	999 (27)	1.86 (0.05)	144(11)	0.24 (0.02)	317 (17)	0.80 (0.04)

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

#### Standard Reference Note 2012

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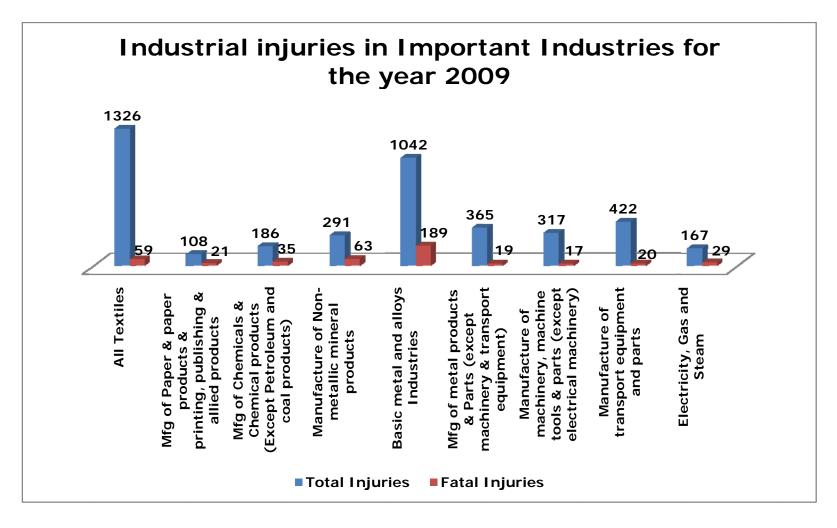
8.	Manufacture of transport	34.3	1250	3.00	1312	2.99	1043	2.29	320	0.89	422	0.91
	equipment and parts	5	(38)	(0.09)	(80)	(0.18)	(15)	(0.03)	(12)	(0.03)	(20)	(0.04)
9.	Electricity, Gas and Steam	40	520 (32)	4.10 (0.25)	392 (23)	2.79 (0.16)	119 (12)	0.70 (0.07)	145 (26)	0.96 (0.17)	167 (29)	1.30 (0.23)
Total	of (Sl. No. 1 to 9 Industries) :		11210 (416)	2.44 (0.09)	14993 (687)	2.82 (0.13)	11299 (466)	2.18 (0.09)	4464 (344)	0.92 (0.07)	4224 (452)	1.04 (0.11)
* Total of All Industries :		14776	2.06	19912	2.41	15290	1.91	5972	0.80	6651	1.03	
		(613)	(0.09)	(1068)	(0.13)	(821)	(0.10)	(478)	(0.06)	(668)	(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 06.03.2013.

### <u>Chart 7.1</u>



Sl.	Industry	NIC Code	2007	2008	2009(P)
No.					
1.	All Textiles	17,18	2.48	1.57	1.63
2.	Manufacture of Paper & paper products & printing, publishing & allied products	21,22	1.64	0.96	0.33
3.	Manufacture of Chemicals & Chemical products (Except products of Petroleum and coal)	24	1.34	0.36	0.22
4.	Manufacture of Non-metallic mineral products	26	2.11	1.57	0.68
5.	Basic metal and alloys Industries	27	1.73	0.55	1.26
6.	Manufacture of metal products & Parts(except machinery & transport equipment)	28	2.38	1.19	0.87
7.	Manufacture of machinery, machine tools & parts (except electrical machinery)	29,30	1.80	0.35	0.62
8.	Manufacture of transport equipment and parts	34,35	1.52	0.67	0.53
9.	Electricity, Gas and Steam	40	0.51	0.77	0.70
Tota	l of (Sl. No. 1 to 9 Industries) :		1.88	0.91	0.81
* To	tal of All Industries :		1.73	0.88	0.85

**Note:** (i) P = Provisional

(ii)\* 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 06.03.2013

Table 7.7 Industrial injuries in Factories by causes							
Causation	2007		2008		2009(P)		
	Total	Fatal	Total	Fatal	Total	Fatal	
Prime movers	47	2	41	3	66	8	
Machinery moved by Mechanical Power	691	61	599	66	768	68	
Machinery not moved by Mechanical Power	110	8	77	7	93	5	
Transport whether moved by Power or not	72	26	68	19	125	23	
Electricity	111	40	84	31	128	45	
Explosions	28	11	32	11	179	46	
Fires	84	12	56	4	146	46	
Gassing	24	7	38	13	21	9	
Molten Metals & other Hot or Corrosive Substances	188	22	95	14	169	17	
Hand Tools	478	0	262	4	243	3	
Falling Bodies	1234	50	516	24	482	22	
Persons Falling	1579	131	680	69	588	97	
Stepping on or Striking against Objects	894	25	398	9	402	13	
Handling Goods or Articles	956	19	275	9	692	24	
Others	6455	340	1491	58	1834	70	
Total	12951	754	4712	341	5936	496	

Standard Reference Note 2012

**Note :** (i) P = Provisional

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

Source: Data received from Labour Bureau through correspondence dated 06.03.2013

### Chapter 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 Factor	ries at a Glance: 2011	
Registered Factories	3	325209	
Working Factories		271085	
Employment	Total	11634070	
	Men	9826210	
	Women	1807860	
Safety Officers		3587	
Welfare Officers		3228	
Factory Med. Officers		7464	
Safety Policy		13458	
Safety Committees		12292	
MAH Factories		1599	
On-site Emergency	Plans	1537	
Canteens		8083	
Creches		5334	
Total Injuries		29837	
Fatal Injuries		1433	

	States/ Union Territories	2010		2	011	2012(P)		
SI. No.		Fatal Injuries	Non Fatal Injuries	Fatal Injuries	Non Fatal Injuries	Fatal Injuries	Non Fatal Injuries	
1.	Andaman & Nicobar Islands	••		••		Nil	Nil	
2.	Andhra Pradesh	188	923	154	898	156	526	
3.	Assam	6	46	8	69	8	70	
4.	Bihar	1	15	3	91	9	126	
5.	Chandigarh	0	2	8	6	1	1	
6.	Chhattisgarh	84	341	92	308	110	321	
7.	Daman & Diu & Dadra & Nagar Haveli	14	31	17	38	14	31	
8.	National Capital of Delhi	15	39	29	43	6	18	
9.	Goa	12	97	11	92	8	85	
10.	Gujarat	221	2430	249	3014	216	2781	
11.	Haryana	38	51	64	62	15	28	
12.	Himachal Pradesh	5	11	17	25	10	11	
13.	Jammu & Kashmir	Nil	99	4	4	8	5	
14.	Jharkhand	43	149	••		33	149	
15.	Karnataka	92	779	86	813	76	682	
16.	Kerala	7	79	19	73	29	87	
17.	Madhya Pradesh	68	848	53	1264	45	791	
18.	Maharashtra	225	2540	183	2266	215	2333	
19.	Manipur	••	••	••	••	••	••	
20.	Meghalaya	2	12	Nil	1	1	Nil	
21.	Nagaland	0	0	Nil	Nil	Nil	Nil	
22.	Odisha	103	457	60	418	78	335	
23.	Pudduchery	10	46	10	45	8	30	
24.	Punjab	14	212	22	198	34	142	
25.	Rajasthan	65	534	59	531	34	699	
26.	Tamil Nadu	75	860	117	624	110	314	
27.	Tripura	1	5	Nil	1	2	5	
28.	Uttar Pradesh	64	152	63	78	72	102	
29.	Uttarakhand	9	24	19	78	23	76	
30.	West Bengal	97	19264	86	17364	62	18693	
	Total	1459	30046	1433	28404	1383	28441	

Tuble of Tutul and Toh futur injuries in Fuctories (1)	Table 8.1	Fatal and Non-fatal Injuries in Factories (P)
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**Note:** (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii) .. : Not Available

SI. No.	States/ Union Territories	Registered Factories	Working Factories	Total Employment	Female Workers
1.	Andaman & Nicobar Islands	35	35	4299	194
2.	Andhra Pradesh	43881	31926	1107668	210616
3.	Assam	4498	3331	41383	3759
4.	Bihar	8321	8127	150004	96
5.	Chandigarh	822	457	7005	373
6.	Chhattisgarh	4224	3610	277271	29665
7.	Daman & Diu & Dadra & Nagar Haveli	5601	4200	147000	48510
8.	Delhi	11714	8219	362270	24098
9.	Goa	1287	665	65966	8771
10.	Gujarat	37546	26088	1387157	50291
11.	Haryana	12809	12568	600000	43650
12.	Himachal Pradesh	4230	4230	268994	7928
13.	Jammu & Kashmir	1475	1042	42623	3322
14.	Jharkhand	11608	7511	279939	3013
15.	Karnataka	13683	13192	1374212	455726
16.	Kerala	19676	19676	644606	297502
17.	Madhya Pradesh	7638	7310	307010	8270
18.	Maharashtra	42863	36066	973782	68165
19.	Manipur	1000	1000	10357	1980
20.	Meghalaya	139	131	9067	514
21.	Nagaland	456	305	29416	5325
22.	Odisha	3494	2523	275028	9236
23.	Puducherry	2747	2153	79862	9840
24.	Punjab	17786	17453	611838	3390
25.	Rajasthan	12244	12226	444232	9780
26.	Tamil Nadu	38379	30457	1048400	474991
27.	Tripura	1486	1486	63976	9985
28.	Uttar Pradesh				
29.	Uttarakhand				
30.	West Bengal	15567	15098	1020705	18870
	Total	325209	271085	11634070	1807860

### Table 8.2State-wise Status of Employment in Factories during 2011(P)

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii) .. : Not Available

SI.	States/ Union Territories	No. of Hazardous	No. of Workers
No.		Factories	
1.	Andaman & Nicobar Islands	2	177
2.	Andhra Pradesh	0	0
3.	Assam	12	8385
4.	Bihar	45	16157
5.	Chandigarh	0	0
6.	Chhattisgarh	560	138327
7.	Daman & Diu & Dadra & Nagar Haveli	47	1500
8.	Delhi	326	14210
9.	Goa	133	26168
10.	Gujarat	6456	323471
11.	Haryana	828	29924
12.	Himachal Pradesh	83	13208
13.	Jammu & Kashmir	24	1713
14.	Jharkhand	284	91612
15.	Karnataka	1188	185458
16.	Kerala	826	30443
17.	Madhya Pradesh	995	79628
18.	Maharashtra	4162	216424
19.	Manipur	6	967
20.	Meghalaya	59	4041
21.	Nagaland	0	0
22.	Odisha	389	167689
23.	Puducherry	202	17790
24.	Punjab	423	35144
25.	Rajasthan	1056	112200
26.	Tamil Nadu	2592	217408
27.	Tripura	19	1133
28.	Uttar Pradesh		
29.	Uttarakhand		
30.	West Bengal	4973	268379
	Total	25690	2001556

 Table 8.3
 State-wise Hazardous Factories under 2(cb) as on 2011 (P)

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim. (ii) P : Provisional (iii) ... : Not Available

Table 8.4

**Inspectors of Factories for the year 2011 (P)** 

SI. N0.	States/ Union Territories	Sanctioned	In-position
1.	Andaman & Nicobar Islands	2	2
2.	Andhra Pradesh	76	62
3.	Assam	29	25
4.	Bihar	21	8
5.	Chandigarh	0	6
6.	Chhattisgarh	27	10
7.	Daman & Diu & Dadra & Nagar Haveli	1	1
8.	Delhi	15	10
9.	Goa	7	4
10.	Gujarat	124	81
11.	Haryana	36	33
12.	Himachal Pradesh	2	50
13.	Jammu & Kashmir	5	5
14.	Jharkhand	25	18
15.	Karnataka	46	46
16.	Kerala	57	58
17.	Madhya Pradesh	41	28
18.	Maharashtra	131	72
19.	Manipur	2	3
20.	Meghalaya	4	4
21.	Nagaland	3	3
22.	Odisha	34	30
23.	Puducherry	10	8
24.	Punjab	25	8
25.	Rajasthan	40	21
26.	Tamil Nadu	132	102
27.	Tripura	5	4
28.	Uttar Pradesh		
29.	Uttarakhand		
30.	West Bengal	72	41
	Total	972	743

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii).. : Not Available

Sl. N0.	States/ Union Territories	Medical Inspecto		Chemi Inspec		Hygie Inspec		Others	5
		Sanctioned	In-Position	Sanctioned	In-Position	Sanctioned	In-Position	Sanctioned	In-position
1.	Andaman & Nicobar Islands	0	0	0	0	0	0	0	0
2.	Andhra Pradesh	3	1	1	0	0	0	0	0
3.	Assam	1	0	0	0	0	0	0	0
4.	Bihar	2	1	2	0	0	0	0	0
5.	Chandigarh	0	0	0	0	0	0	0	0
6.	Chhattisgarh	1	0	0	0	0	0	0	0
7.	Daman & Diu & Dadra & Nagar Haveli	0	0	0	0	0	0	0	0
8.	Delhi	1	1	1	0	0	0	0	0
9.	Goa	1	1	0	0	0	0	0	0
10.	Gujarat	5	2	1	1	0	0	11	5
11.	Haryana	5	3	5	5	0	0	0	0
12.	Himachal Pradesh	0	0	1	0	0	0	0	0
13.	Jammu & Kashmir	0	0	0	0	0	0	0	0
14.	Jharkhand	0	0	0	0	0	0	0	0
15.	Karnataka	1	1	0	0	0	0	1	1
16.	Kerala	4	2	4	4	0	0	2	2
17.	Madhya Pradesh	1	0	0	0	0	0	0	0
18.	Maharashtra	2	0	0	0	0	0	0	0
19.	Manipur	0	0	0	0	0	0	0	0
20.	Meghalaya	0	0	0	0	0	0	0	0
21.	Nagaland	0	0	0	0	0	0	0	0
22.	Odisha	1	1	0	0	0	0	0	0
23.	Puducherry	1	1	1	0	0	0	1	0
24.	Punjab	0	0	3	2	0	0	0	0
25.	Rajasthan	1	1	2	2	1	1	2	1
26.	Tamil Nadu	0	0	0	0	0	0	0	0
27.	Tripura	0	0	0	0	0	0	0	0
28.	Uttar Pradesh	••	••	••	••	••	••	••	••
29.	Uttarakhand	••	••	••	••	••	••	••	••
30.	West Bengal	9	4	12	5	0	0	0	0
	Total	39	19	33	19	1	1	17	9

### Table 8.5 State-wise Specialist Inspectors of Factories for the year 2011 (P)

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii).. : Not Available

Table 8.6 No. of Certifying Surgeons of Factories for the year	2011 (P)
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S1.	States/UTs	Emplo	oyed	Notif	fied
No.		Sanctioned	In position	Sanctioned	In 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	0	0	1	0
10.	Gujarat	21	9	0	0
11.	Haryana	0	0	0	0
12.	Himachal Pradesh	0	0	0	12
13.	Jammu & Kashmir	0	0	0	0
14.	Jharkhand	0	0	0	0
15.	Karnataka	0	2	0	562
16.	Kerala	0	0	0	0
17.	Madhya Pradesh	0	0	0	0
18.	Maharashtra	1	1	0	58
19.	Manipur	0	0	0	0
20.	Meghalaya	0	0	0	0
21.	Nagaland	8	0	0	0
22.	Odisha	0	0	0	0
23.	Puducherry	1	1	0	0
24.	Punjab	0	0	0	0
25.	Rajasthan	1	1	0	0
26.	Tamil Nadu	8	6	0	0
27.	Tripura	0	0	13	13
28.	Uttar Pradesh		••		••
29.	Uttarakhand	••	••	••	••
30.	West Bengal	0	0	0	0
	Total	44	21	18	650

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim. (ii) P : Provisional (iii).. : Not Available

Sl. No.	States/ Union Territories	All Factories	Hazardous Factories
1.	Andaman & Nicobar Islands	21	2
2.	Andhra Pradesh	7643	1179
3.	Assam	1169	0
4.	Bihar	2055	40
5.	Chandigarh	38	4
6.	Chhattisgarh	836	208
7.	Daman & Diu & Dadra & Nagar Haveli	180	22
8.	Delhi	1830	161
9.	Goa	161	54
10.	Gujarat	11202	4574
11.	Haryana	2744	479
12.	Himachal Pradesh	1750	83
13.	Jammu & Kashmir	1052	24
14.	Jharkhand	15973	38
15.	Karnataka	8542	1056
16.	Kerala	15894	726
17.	Madhya Pradesh	3324	885
18.	Maharashtra	8113	1548
19.	Manipur	205	6
20.	Meghalaya	42	6
21.	Nagaland	0	0
22.	Odisha	2472	389
23.	Pudduchery	1345	160
24.	Punjab	1304	96
25.	Rajasthan	4103	0
26.	Tamil Nadu	25335	4584
27.	Tripura	1001	19
28.	Uttar Pradesh	••	••
29.	Uttarakhand	••	••
30.	West Bengal	3418	578
	Total	121752	16921

### Table 8.7 No of Factories Inspected in the year 2011 (P)

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim. (ii) P : Provisional (iii).. : Not Available

# Table 8.8 State-wise Prosecution and Convictions under Section 92 & Section 96A for theyear 2011 (P)

SI. NO.	States/ UTs	Pending from Previous year	Launched during the year	Decided during the year	Convi -ctions	Imprison- ment (Person)	Total fine Imposed (Rs.)
1.	Andaman & Nicobar Islands	0	0	0	0	0	0
2.	Andhra Pradesh	4164	1357	844	434	0	5658660
3.	Assam	7	6	0	1	0	0
4.	Bihar	53	12	0	0	0	0
5.	Chandigarh	0	0	0	0	0	0
6.	Chhattisgarh	722	428	314	226	16	10226100
7.	Daman & Diu & Dadra & Nagar Hawelli	0	0	0	0	0	0
8.	Delhi	394	398	107	107	0	1377000
9.	Goa	27	12	9	9	0	175500
10.	Gujarat	25268	2359	1319	829	0	3798750
11.	Haryana	5760	4249	1565	1477	0	4921000
12.	Himachal Pradesh	160	86	69	69	0	728500
13.	Jammu & Kashmir	96	66	25	0	0	83000
14.	Jharkhand	185	45	0	0	0	0
15.	Karnataka	557	227	191	101	0	4756700
16.	Kerala	71	27	26	25	0	323000
17.	Madhya Pradesh	3272	156	147	0	0	2786550
18.	Maharashtra	1237	652	713	713	0	11836350
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.	Odisha	1312	291	8	0	0	52600
23.	Puducherry	2	10	10	8	0	393000
24.	Punjab	1348	89	267	57	0	2069700
25.	Rajasthan	921	121	31	31	1	227825
26.	Tamil Nadu	12403	3477	2693	1733	0	23256125
27.	Tripura	25	3	14	14	0	81000
28.	Uttar Pradesh	••	••	••	••	••	••
29.	Uttarakhand	••	••	••	••	••	••
30.	West Bengal	516	518	25	25	0	632550
Total	l	58500	14589	8377	5859	17	73383910

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii) .. : Not Available

### Standard Reference Note 2012

Sl. No.	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	120	104	120	104
3.	Assam	4	0	4	58
4.	Bihar	20	18	26	23
5.	Chandigarh	4	4	4	4
6.	Chhattisgarh	79	87	124	122
7.	Daman & Diu & Dadra & Nagar Haveli	45	48	48	48
8.	Delhi	9	4	9	4
9.	Goa	56	49	57	50
10.	Gujarat	317	340	379	411
11.	Haryana	90	86	99	92
12.	Himachal Pradesh	14	14	14	14
13.	Jammu & Kashmir	14	6	14	6
14.	Jharkhand	49	45	152	145
15.	Karnataka	186	155	228	203
16.	Kerala	46	41	46	44
17.	Madhya Pradesh	96	89	114	104
18.	Maharashtra	1203	987	1203	1429
19.	Manipur	3	3	3	3
20.	Meghalaya	0	1	0	1
21.	Nagaland	0	0	0	0
22.	Odisha	82	75	249	228
23.	Puducherry	9	8	9	8
24.	Punjab	56	43	56	43
25.	Rajasthan	79	75	73	81
26.	Tamil Nadu	312	271	318	254
27.	Tripura	1	0	1	0
28.	Uttar Pradesh	••	••	••	
29.	Uttarakhand	••		••	
30.	West Bengal	252	108	278	108
	Total	3146	2661	3628	3587

#### Table 8.9 State-wise Status of Safety Officers (SO) under 40-B (1) in factories during 2011(P)

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim. (ii) P : Provisional (iii).. : Not Available

Sl. No.	States/ Union Territories	Factories Requiring	Factories Having
1.	Andaman & Nicobar Islands	0	0
2.	Andhra Pradesh	0	0
3.	Assam	12	12
4.	Bihar	5	5
5.	Chandigarh	0	1
6.	Chhattisgarh	1267	1198
7.	Daman & Diu & Dadra & Nagar Haveli	55	69
8.	Delhi	471	394
9.	Goa	295	136
10.	Gujarat	3795	3657
11.	Haryana	1838	1601
12.	Himachal Pradesh	83	83
13.	Jammu & Kashmir	36	36
14.	Jharkhand	83	89
15.	Karnataka	1396	1142
16.	Kerala	612	563
17.	Madhya Pradesh	1080	1048
18.	Maharashtra	306	297
19.	Manipur	6	6
20.	Meghalaya	48	33
21.	Nagaland	0	0
22.	Odisha	650	590
23.	Pudduchery	27	27
24.	Punjab	584	459
25.	Rajasthan	161	149
26.	Tamil Nadu	1646	1367
27.	Tripura	0	0
28.	Uttar Pradesh		
29.	Uttarakhand		
30.	West Bengal	496	496
	Total	14952	13458

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii)... : Not Available

Sl. No.	States/ Union Territories	Factories Requiring Safety Committee	Factories Having Safety Committee
1.	Andaman & Nicobar Islands	0	0
2.	Andhra Pradesh	946	771
3.	Assam	12	12
4.	Bihar	5	5
5.	Chandigarh	0	1
6.	Chhattisgarh	469	400
7.	Daman & Diu & Dadra & Nagar Haveli	58	75
8.	Delhi	118	96
9.	Goa	245	136
10.	Gujarat	3666	3608
11.	Haryana	954	870
12.	Himachal Pradesh	83	83
13.	Jammu & Kashmir	17	17
14.	Jharkhand	95	84
15.	Karnataka	1231	990
16.	Kerala	374	307
17.	Madhya Pradesh	652	635
18.	Maharashtra	1674	1232
19.	Manipur	6	6
20.	Meghalaya	24	14
21.	Nagaland	0	0
22.	Odisha	153	153
23.	Puducherry	29	29
24.	Punjab	226	203
25.	Rajasthan	156	146
26.	Tamil Nadu	2175	1925
27.	Tripura	19	1
28.	Uttar Pradesh	••	••
29.	Uttarakhand	••	••
30.	West Bengal	493	493
	Total	13880	12292

### Table 8.11 State-wise Constitution of Safety Committee for the year 2011(P)

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii) ... : Not Available

Table 8.12 State-wise On-site Emergency Plan (in respect of MAH Units) as	on 2011(P)
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Sl. No.	States/ Union Territories	Factories Requiring	Factories Having	
		On-site Emergency Plan	On-site Emergency Plan	
1.	Andaman & Nicobar Islands	3	3	
2.	Andhra Pradesh	158	151	
3.	Assam	12	12	
4.	Bihar	3	3	
5.	Chandigarh	0	0	
6.	Chhattisgarh	21	21	
7.	Daman & Diu & Dadra & Nagar Haveli	0	20	
8.	Delhi	17	17	
9.	Goa	17	17	
10.	Gujarat	384	370	
11.	Haryana	57	57	
12.	Himachal Pradesh	8	8	
13.	Jammu & Kashmir	5	11	
14.	Jharkhand	9	9	
15.	Karnataka	77	77	
16.	Kerala 47		47	
17.	Madhya Pradesh	71	71	
18.	Maharashtra	365	305	
19.	Manipur	6	6	
20.	Meghalaya	4	4	
21.	Nagaland	0	0	
22.	Odisha	23	23	
23.	Puducherry	3	3	
24.	Punjab	36	36	
25.	Rajasthan	71	71	
26.	Tamil Nadu	115	108	
27.	Tripura	2	2	
28.	Uttar Pradesh		••	
29.	Uttarakhand			
30.	West Bengal	85	85	
	Total	1599	1537	

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii).. : Not Available

Sl. No.	States/Union Territories	Full tim			Retainership or part-time MO		Factories having Ambulance Van		Factories having Ambulance Rooms	
		Req.	App.	Req.	App.	Req.	App.	Req.	App.	
1.	Andaman & Nicobar Islands	1	0	0	0	2	2	2	2	
2.	Andhra Pradesh`	275	251	0	0	0	0	232	196	
3.	Assam	0	0	0	0	0	0	10	55	
4.	Bihar	15	14	0	0	15	15	15	15	
5.	Chandigarh	1	1	0	0	1	1	1	1	
6.	Chhattisgarh	135	85	365	266	176	144	162	147	
7.	Daman & Diu and Dadra & Nagar Haveli	1	1	0	60	0	20	0	25	
8.	Delhi	9	9	263	61	25	19	25	19	
9.	Goa	41	33	141	79	182	77	25	18	
10.	Gujarat	259	189	1937	1805	224	198	235	230	
11.	Haryana	63	65	74	71	100	90	93	85	
12.	Himachal Pradesh	254	254	1721	1721	178	178	178	178	
13.	Jammu & Kashmir	9	12	0	0	9	12	9	10	
14.	Jharkhand	87	82	38	31	58	58	47	45	
15.	Karnataka	379	301	208	189	423	325	409	393	
16.	Kerala	46	40	62	58	46	61	67	63	
17.	Madhya Pradesh	124	116	265	258	104	99	117	114	
18.	Maharashtra	425	278	334	243	156	248	156	248	
19.	Manipur	1	6	0	0	2	1	2	2	
20.	Meghalaya	5	4	18	15	17	7	1	1	
21.	Nagaland	0	0	0	0	0	0	0	0	
22.	Odisha	88	78	65	64	88	88	88	88	
23.	Puducherry	10	8	28	22	9	9	9	9	
24.	Punjab	0	0	0	0	0	0	105	88	
25.	Rajasthan	78	68	43	43	109	91	126	121	
26.	Tamil Nadu	134	98	233	176	284	190	336	252	
27.	Tripura	1	1	1	1	0	0	1	1	
28.	Uttar Pradesh	••								
29.	Uttarakhand	••								
30.	West Bengal	292	292	15	15	303	287	303	295	
	Total	2733	2286	5811	5178	2511	2220	2754	2701	

### Table 8.13 State-wise Medical Facilities in factories for the year 2011(P)

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

P : Provisional. .. : Not Available

Req: RequiredApp: AppointedSource:Data collected byDGFASLI through correspondence with Chief Inspector of Factories of States/UTs.

#### Standard Reference Note 2012

Sl. States/ Union Territories No.		Canteen		Shelter, R Lunch Roo		Creches		
		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	425	369	578	531	440	376	
3.	Assam	28	92	62	138	35	32	
4.	Bihar	30	30	28	28	0	0	
5.	Chandigarh	5	5	5	5	1	1	
6.	Chhattisgarh	164	142	360	330	32	28	
7.	Daman & Diu & Dadra & Nagar Haveli	70	85	125	150	97	97	
8.	Delhi	81	63	131	70	25	12	
9.	Goa	52	46	91	85	81	0	
10.	Gujarat	514	506	875	862	180	170	
11.	Haryana	366	318	724	639	102	70	
12.	Himachal Pradesh	280	280	85	85	41	41	
13.	Jammu & Kashmir	39	38	60	59	2	2	
14.	Jharkhand	85	55	100	82	10	19	
15.	Karnataka	743	714	943	903	1236	1024	
16.	Kerala	525	477	1141	1125	774	749	
17.	Madhya Pradesh	202	194	434	430	52	49	
18.	Maharashtra	1130	2338	3203	6038	713	258	
19.	Manipur	6	6	10	10	25	25	
20.	Meghalaya	10	9	22	17	5	2	
21.	Nagaland	1	1	0	0	0	0	
22.	Odisha	153	153	201	201	46	45	
23.	Puducherry	32	27	53	40	5	4	
24.	Punjab	314	267	467	424	136	123	
25.	Rajasthan	337	322	528	529	34	34	
26.	Tripura	3	2	3	2	1	0	
27.	Tamil Nadu	1463	1392	2841	2775	2817	2141	
28.	Uttar Pradesh							
29.	Uttarakhand							
30.	West Bengal	465	149	679	169	34	32	
	Total	7526	8083	13757	15735	6924	5334	

**Note:** (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii).. : Not Available

Sl. No.	State/UTs	Factories Requiring	Factories Having	Officers Required	Officers Appointed	
1.	Andaman & Nicobar Islands	2	1	2	1	
2.	Andhra Pradesh	180	145	180	145	
3.	Assam	17	107	17	175	
4.	Bihar	28	28	27	27	
5.	Chandigarh	4	4	4	4	
6.	Chhattisgarh	105	105	108	110	
7.	Daman & Diu & Dadra & Nagar Haveli	25	25	25	25	
8.	Delhi	25	25	26	25	
9.	Goa	16	16	16	16	
10.	Gujarat	213	198	226	220	
11.	Haryana	138	125	146	132	
12.	Himachal Pradesh	66	66	66	66	
13.	Jammu & Kashmir	14	13	4	4	
14.	Jharkhand	92	56	81	70	
15.	Karnataka	406	406	446	446	
16.	Kerala	56	55	62	60	
17.	Madhya Pradesh	121	117	141	140	
18.	Maharashtra	526	526	708	705	
19.	Manipur	1	1	1	1	
20.	Meghalaya	1	1	1	1	
21.	Nagaland	0	0	0	0	
22.	Odisha	88	88	126	126	
23.	Puducherry	10	7	10	7	
24.	Punjab	102	80	102	80	
25.	Rajasthan	161	142	152	146	
26.	Tamil Nadu	433	365	442	373	
27.	Tripura	1	1	1	1	
28.	Uttar Pradesh	••			••	
29.	Uttarakhand	••				
30.	West Bengal	324	122	324	122	
	Total	3155	2825	3444	3228	

### Table 8.15 State-wise Welfare Officers for the year 2011(P)

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii).. : Not Available

#### Standard Reference Note 2012

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

Sl. No.	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.	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		
30.	West Bengal	Notified		

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii).. : Not Available

Table 8.17: Notification of Major Accidents Hazard Control Rules
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Sl. No. States/ Union Territories		MAHC Rules, 1997		
1.	Andaman & Nicobar Islands	No hazardous unit, hence Rules Not applicable		
2.	Andhra Pradesh	Notified		
3.	Assam	Notified		
<u> </u>	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		

Note: (i) There are no registered factories in Arunachal Pradesh, Lakshadweep, Mizoram and Sikkim.

(ii) P : Provisional (iii).. : Not Available

### Chapter 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 Kandla Ports accounted for maximum fatal injuries in 2012. Table 9.1 shows that Kandla 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 198 in 2002 to 91 in 2012, whereas fatal injuries have decreased from 31 in 2002 to 14 in 2012, 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 2012.

Sl. No.	Port	Fatal	Total	Dangerous Occurrences
1	Mumbai	02	31	02
2	JNPT	01	03	00
3	Kandla	04	07	03
4	Mormugao	01	02	01
5	Kolkata	01	18	02
6	Paradip	01	06	00
7	Vishakhapattanam	00	03	00
8	Chennai	02	07	00
9	Kochi	01	07	00
10	New Mangalore	00	02	00
11	Tuticorin	01	05	00
	Total	14	91	09

 Table 9.1 Reportable Accidents & Dangerous Occurrences in the ports during 2012

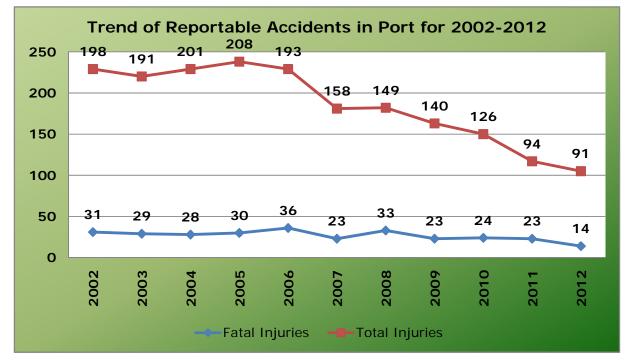
Port	t Avg. Daily *Frequency Rate Employment		*Incidence Rate of injuries per Thousand		
		Fatal	Total	Fatal	Total
Mumbai	4458	0.160	2.400	0.450	6.950
JNPT	5863	0.073	0.218	0.171	0.512
Kandla	3970	0.350	0.610	1.010	1.760
Mormugao	0975	1.030	2.070	1.020	2.050
Kolkata	8636	0.399	0.719	0.116	2.084
Paradip	0333	1.040	6.210	3.003	18.010
Vishakhapattanam	2197	0.000	5.810	0.000	1.290
Chennai	1268	0.540	1.900	0.004	0.015
Kochi	0253	1.360	9.550	3.950	26.670
New Mangalore	0058	0.000	4.240	0.000	0.034
Tuticorin	0789	0.560	1.690	1.270	3.800
Total	28800	5.512	35.417	10.994	63.175
	Mumbai JNPT Kandla Mormugao Kolkata Paradip Vishakhapattanam Chennai Kochi New Mangalore Tuticorin	EmploymentMumbai4458JNPT5863Kandla3970Mormugao0975Kolkata8636Paradip0333Vishakhapattanam2197Chennai1268Kochi0253New Mangalore0058Tuticorin0789	Employment         Fatal           Mumbai         4458         0.160           JNPT         5863         0.073           Kandla         3970         0.350           Mormugao         0975         1.030           Kolkata         8636         0.399           Paradip         0333         1.040           Vishakhapattanam         2197         0.000           Kochi         0253         1.360           New Mangalore         0058         0.000           Tuticorin         0789         0.560	EmploymentFatalTotalMumbai4458 $0.160$ $2.400$ JNPT5863 $0.073$ $0.218$ Kandla3970 $0.350$ $0.610$ Mormugao0975 $1.030$ $2.070$ Kolkata8636 $0.399$ $0.719$ Paradip $0333$ $1.040$ $6.210$ Vishakhapattanam $2197$ $0.000$ $5.810$ Chennai $1268$ $0.540$ $1.900$ Kochi $0253$ $1.360$ $9.550$ New Mangalore $0058$ $0.000$ $4.240$ Tuticorin $0789$ $0.560$ $1.690$	Employment         Fatal         Total         Fatal           Mumbai         4458         0.160         2.400         0.450           JNPT         5863         0.073         0.218         0.171           Kandla         3970         0.350         0.610         1.010           Mormugao         0975         1.030         2.070         1.020           Kolkata         8636         0.399         0.719         0.116           Paradip         0333         1.040         6.210         3.003           Vishakhapattanam         2197         0.000         5.810         0.004           Kochi         0253         1.360         9.550         3.950           New Mangalore         0058         0.000         4.240         0.000

Table 9.2	Statistics of Employment & Rates of	f Reportable Accidents in Ports during 2012
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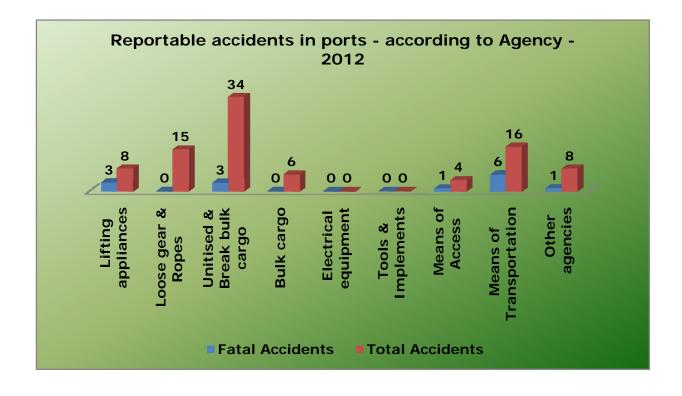
\* Formula (As per IS: 3786 of 1983)

Frequency Rate= No. of Reportable Accidents X 1,000,000/Man-hours Worked#.Incidence Rate= No. of Reportable Accidents X 1000/ Avg. No. of Persons Employed.# Man-hours worked are calculated on the basis of 362 working days in a year

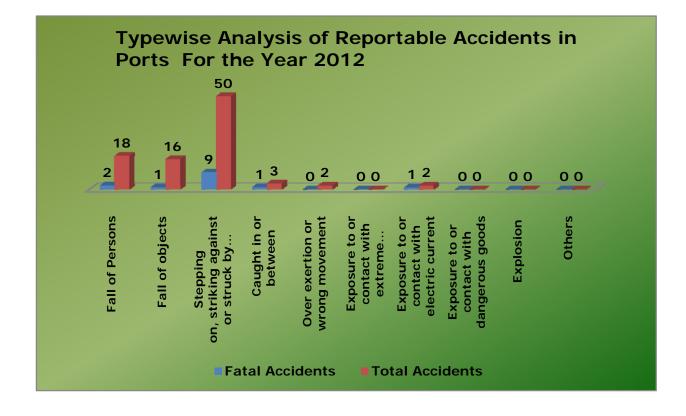
#### <u>Chart 9.1</u>



#### Chart 9.2



### <u>Chart 9.3</u>



AGENCY	Mumbai	JNPT	Kandla	Mormugao	Kolkata	Paradip	Vishakha- pattanam	Chennai	Kochi	New Mangalore	Tuticorin	Total
A. Lifting appliances	01	01	01(1)	01(1)	01	00	00	00	01	00	02(1)	08(3)
B. Loose gear & Ropes	08	00	00	00	04	01	00	00	02	00	00	15
C. Unitised & Break bulk cargo	12	02(1)	00	00	07	01	00	05(1)	3(1)	02	02	34(3)
D. Bulk cargo	01	00	00	00	02	01	02	00	00	00	00	06
E. Electrical equipment	00	00	00	00	00	00	00	00	00	00	00	00
F. Tools & Implements	00	00	00	00	00	00	00	00	00	00	00	00
G. Means of Access	01	00	00	00	02	00	00	01(1)	00	00	00	04(1)
H. Means of Transportati on	07(2)	00	03(2)	00	1(1)	2(1)	01	01	00	00	01	16(6)
I. Other agencies	01	00	03(1)	01	01	01	00	00	1	00	00	08(1)
TOTAL	31(2)	03(1)	07(4)	02(1)	18(1)	06(1)	3	07(2)	7(1)	02	05(1)	91(14)

#### Table 9.3 CLASSIFICATION OF TO REPORTABLE ACCIDENTS – ACCORDING to AGENCY (2012)

Note: Figures in brackets indicate Fatal accidents for Table 9.3 & Table 9.4.

ТҮРЕ	Mumbai	JNPT	Kandla	Mormugao	Kolkata	Paradip	Vishakha pattanam	Chennai	Kochi	New Mangalore	Tuticorin	Total
A. Fall of persons	04	00	01(1)	01	05	00	01	00	02	01	03(1)	18(2)
B. Fall of objects	05	01	00	00	05	00	01	01	3(1)	00	00	16(1)
C. Stepping on, striking against or struck by objects exclud-ing falling objects.	21(2)	01	06(3)	00	8(1)	3(1)	01	06(2)	01	01	02	50(9)
D. Caught in or between	00	00	00	01(1)	00	2	00	00	00	00	00	3(1)
E. Over exertion or wrong movement	01	00	00	00	00	00	00	00	01	00	00	02
F. Exposure to or contact with extreme temperature	00	00	00	00	00	00	00	00	00	00	00	00
G. Exposure to or contact with electric current	00	01(1)	00	00	00	01	00	00	00	00	00	02(1)
H. Exposure to or contact with dangerous goods	00	00	00	00	00	00	00	00	00	00	00	00
I. Explosion	00	00	00	00	00	00	00	00	00	00	00	00
J. Others	00	00	00	00	00	00	00	00	00	00	00	00
TOTAL	31(2)	03(1)	07(4)	02(1)	18(1)	6(1)	3	07(2)	7(1)	02	05(1)	91(14)

# Table 9.4 Classification of Reportable Accidents – according to Type (2012)

S1.	Port	Ship	Docks	Gear	Isolated	Other
No.		1			Storage/Pipelines	Visits
1	Mumbai	157	026	157	01	301
2	JNPT	048	034	00	00	068
3	Kandla	102	063	102	00	107
4	Mormugao	072	072	068	03	057
5	Kolkata	141	072	108	06	123
6	Paradip	079	023	079	07	051
7	Vishakhapattanam	079	017	079	02	071
8	Chennai	239	194	235	02	214
9	Kochi	031	029	032	02	067
10	N. Mangalore	063	005	063	02	211
11	Tuticorin	167	031	107	00	016
	Total	1178	566	1030	25	1286

# Table 9.5 Details of Inspections and other visits in Ports during 2012

# Table 9.6 Details of Details of Prosecution in Ports during 2012

Sl. No.	Port	Pending From Previous Year	Launched during the year	Decided during the year	Convicted
1	Mumbai	02	00	01	00
2	JNPT	01	00	01	00
3	Kandla	09	02	01	01
4	Mormugao	00	00	00	00
5	Kolkata	03	00	00	00
6	Paradip	02	00	00	00
7	Vishakhapattanam	03	00	00	00
8	Chennai	06	00	00	00
9	Kochi	01	00	00	00
10	New Mangalore	01	00	01	01
11	Tuticorin	00	00	00	00
	Total	28	02	04	02

Sl. No.	Port	Pending from Previous Year	Initiated during the year	Concluded during the year
1	Mumbai	04	02	05
2	JNPT	02	01	02
3	Kandla	09	07	11
4	Mormugao	00	02	00
5	Kolkata	01	04	02
6	Paradip	00	01	01
7	Vishakhapattanam	00	00	00
8	Chennai	06	02	03
9	Kochi	00	01	00
10	New Mangalore	00	00	00
11	Tuticorin	00	02	00
	Total	22	22	24

 Table 9.7 Details of Investigation into Reportable Fatal Accidents/Dangerous Occurrences in 2012

 Table 9.8
 Dock Safety Committee Meetings conducted/Safety Weeks celebrated in 2012

Sl. No.	Port	Committee Meeting	Safety Weeks
1	Mumbai	04	Nil
2	JNPT	04	01
3	Kandla	04	01
4	Mormugao	01	Nil
5	Kolkata	06	02
6	Paradip	02	Nil
7	Vishakhapattanam	03	01
8	Chennai	02	Nil
9	Kochi	03	01
10	N. Mangalore	02	01
11	Tuticorin	04	01
	Total	34	08

Sl. No.	Port	Total Nos. of Ships Called							
		Oil Ta	ankers	Oth	ners				
		2011	2012	2011	2012				
1	Mumbai	1035	1124	4796	0971				
2	JNPT	0459	0456	2533	2181				
3	Kandla	0912	0866	1379	1374				
4	Mormugao	0152	0140	0724	0702				
5	Kolkata	1092	1085	2073	2024				
6	Paradip	0198	0304	1201	0954				
7	Vishakhapattanam	0624	0544	1883	1926				
8	Chennai	0317	0313	1767	1625				
9	Kochi	0519	0356	0029	1035				
10	New Mangalore	0720	0675	0426	0415				
11	Tuticorin	0226	0225	1242	1142				
Total		6254	6088	18053	14349				

# Table 9.9 Total Number of Ships Called in the Major Port during 2011 and 2012

# Table 9.10Cargo Handled in the Major Port during 2010 and 2011

(In Tonnes)

Sl.No.	Port	Cargo Handled							
		Container	in TUE's	POL (	Tons)	Others	<b>Others (Tons)</b>		
		2011	2012	2011	2012	2011	2012		
1	Mumbai	62292	58196	32743759	35254047	21394750	24806245		
2	JNPT	4307727	4246768	69532111	3887230	168451	2544540		
3	Kandla	2770000	2090000	9790000	9910000	25630000	28750000		
4	Mormugao	21012	22109	881322	938535	45039911	24590111		
5	Kolkata	699469	741712	9407	7108	36501	31517		
6	Paradip	5218	12716	14532197	16366806	40990255	38135813		
7	Vishakhapattanam	72437	113920	2204815	2262024	6450000	63120000		
8	Chennai	1582633	1548797	13100082	13412572	44406925	40167528		
9	Kochi	345982	328736	16746452	14169953	2955256	5946270		
10	N. Mangalore	45926	45219	23140000	24190000	9050000	11550000		
11	Tuticorin	483707	473641	856338	805204	26399955	27398976		
	Total	10396403	9681814	183536483	121203479	222522004	267041000		

	<b>Table 9.11</b>	Safety Facilities	s in the Major Port during	<u>;</u> 2012				
Sl. No.	Port	Safety Facilities						
	-	No. of Safety Officers	No. of Visits to Safety Exhibition Centers	No. of Competent persons				
1	Mumbai	04	Nil	37				
2	JNPT	09	Nil	06				
3	Kandla	01	Nil	08				
4	Mormugao	01	Nil	03				
5	Kolkata	02	Nil	21				
6	Paradip	01	Nil	04				
7	Vishakhapattanam	01	Nil	13				
8	Chennai	01	Nil	07				
9	Kochi	01	Nil	04				
10	New Mangalore	01	Nil	04				
11	Tuticorin	02	Nil	04				
	Total	24	Nil	111				

 Table 9.12
 Health Facilities in the Major Port during 2012

Sl. No.	Port		Health	Facilities	
		OSH Centers	Ambulance Rooms	First Aid Centers	Empanelled Doctors
1	Mumbai	01	02	102	04
2	JNPT	02	02	035	03
3	Kandla	00	04	001	01
4	Mormugao	01	01	010	01
5	Kolkata	02	04	016	01
6	Paradip	01	02	003	00
7	Vishakhapattanam	00	01	001	03
8	Chennai	01	02	005	01
9	Kochi	01	01	004	04
10	New Mangalore	01	02	003	02
11	Tuticorin	01	03	003	00
	Total	11	24	174	20

Sl.	Port		Wel	fare Facilities		
No.		No. of Welfare Officers	Canteens	Drinking Water	Washing	Urinals
1	Mumbai	04	16	010	112	548
2	JNPT	05	06	080	137	251
3	Kandla	01	02	008	032	032
4	Mormugao	01	07	009	006	015
5	Kolkata	02	14	220	162	174
6	Paradip	01	04	028	008	020
7	Vishakhapattanam	01	02	005	005	010
8	Chennai	06	12	171	050	050
9	Kochi	01	04	018	019	052
10	New Mangalore	00	03	007	008	013
11	Tuticorin	00	06	007	005	010
	Total	22	76	563	544	1175

# Table 9.13 Welfare Facilities in the Major Port during 2012

# ANNEXURE- I

#### UNIT LEVEL CONSULTANCY STUDIES – 2012

Sl. No.	Area	CLI MUM		RLI KOL		RLI CHE		RLI KA		RLI FARID	
		Comp- leted	Under Progress								
1	2	3	4	5	6	7	8	9	10	11	12
1.	Safety Audit	8	4	-	-	8	2	2	-	-	1
2.	Safety Audit Risk Analysis of LPG Bullets	-	-	-	-	-	-	-	-	1	-
3.	Industrial Hygiene Survey	-	-	-	-	1	-	-	-	-	-
4.	Risk Analysis study	-	-	-	-	1	-	-	-	-	-
5.	Assessment work Environmental	6	-	-	-	-	-	-	-	-	-
6.	HAZOP study	1	-	-	-	-	2	-	-	-	-
7.	Noise Assessment Study	4	-	-	-	1	-	-	-	-	-
8.	Ventilation study	1	-	-	-	-	-	-	-	-	-
9.	Illumination Study	2	-	-	-	-	-	-	-	-	-
10.	Testing Quality Compressor Breathing Air	3	-	-	-	-	-	-	-	-	-
11.	Construction Safety Audit	-	-	-	-	1	-	-	-	-	-
12.	Ergonomic Evaluation Study	3	-	-	-	-	-	-	-	-	-
13.	Environmental Study	-	-	-	-	1	-	-	-	-	-
14.	Testing of Compressor Air Purity Test	1	-	-	-	-	-	-	-	-	-
15.	Ventilation & Heat Stress Evaluation Study	2	-	-	-	-	-	-	-	-	-
16.	Occupational Health Audit	-	-	1	-	-	-	-	-	-	-
17.	Quantitative Risk Assessment (QRA)	-	-	-	-	-	1	-	-	-	-
18.	Workplace Environment Air Monitoring	-	3	-	-	-	-	-	-	-	-
	Total:	31	7	1	-	13	5	2	-	1	1

# ANNEXURE- II

Sl.	Participants and	CLI		RLI		RLI		RLI ]	KANPUR	RLI		IDS OFFICES	
No.	Area	MUMBAI		KOL	LKATA	CHI	ENNAI			FAR	IDABAD		
		Prgs	Partici- pants	Prgs	Partici -pants	Prg s	Partici- pants	Prgs	Partici- pants	Prgs	Partici- pants	Prgs	Partici
Profe	essional Programmes												
A.	ADIS	1	18(13)	1	39(8)	1	49(47)	1	46(41)	1	48(34)	-	-
	AFIH	1	50(50)	-	-	-	-	-	-	-	-	-	-
	Hazardous Processes	1	15(10)	-	-	1	15(9)	-	-	-	-	-	-
Speci	alised Training Progra	mmes										•	
B.	Inspectors of Factori	es											
	Basic course	2	46(6)	-	-	-	-	-	-	-	-	-	-
	Refresher course	1	6(3)	-	-	-	-	-	-	-	-	-	-
	Chemical Safety	-	-	1	14(6)	1	10(6)	1	5(3)	-	-	-	-
	Construction Safety	-	-	1	26(11)	-	-	-	-	-	-	-	-
C.	Management Person	nel									•	•	
	Refresher Course for	-	-	1	35(22)	-	-	-	-	-	-	-	-
	factory medical												
	Officers												
	Industrial Safety	2	41(21)	3	88(30)	3	57(32)	1	26(13)	-	-	-	-
	Industrial Hygiene	3	50(22)	1	35(12)	-	-	-	-	-	-	-	-
	Occupational Health	1	33(33)	1	41(24)	-	-	-	-	-	-	-	-
	Industrial	1	17(5)	-	-	-	-	-	-	-	-	-	-
	Physiology												
	MH & CS	2	23(13)	-	-	1	17(11)	-	-	2	27(10)	-	-
	Hazardous	-	-	-	-	1	19(12)	-	-	-	-	-	-
	substances												
	Construction Safety	-	-	-	-	-	-	-	-	1	19(10)	-	-
	Environmental	2	51(20)	-	-	-	-	-	-	-	-	-	-
	Pollutants												
	Industrial	4	93(19)	-	-	-	-	-	-	-	-	-	-
	Productivity												

#### LONGER DURATION TRAINING PROGRAMMES - 2012

D.	Supervisors												
	Safety & Health	-	-	2	87(33)	-	-	2	46(33)	-	-	-	-
	Construction Safety	1	15(1)	1	7(7)	-	-	-	-	-	-	-	-
	Hazardous substances	-	-	1	41(9)	-	-	-	-	-	-	-	-
	Productivity	-	-	1	26(1)	-	-	-	-	-	-	-	-
Е.	Trade Union Leaders/workers/ Joint Participation												
	Industrial Safety	-	-	2	46(9)	-	-	1	26(7)	-	-	1	12(9)
	Chemical Safety	-	-	-	-	-	-	1	13(5)	-	-	-	-
	Occupational Health	1	40(40)	-	-	-	-	1	11(7)	-	-	-	
	Industrial Productivity	4	87(18)	-	-	-	-	-	-	-	-	-	-
F.	<b>Educational Institution</b>	IS											
	Industrial Safety	1	5(3)	2	50(2)	-	-	-	-	-	-	-	-
	Industrial Health	3	5(3)	-	-	-	-	-	-	-	-	-	-
	Total:	30	595(280)	18	535(174)	8	167(117)	8	173(109)	4	94(54)	1	12(9)

Note: Figures in bracket indicate number of organisations.

# ANNEXURE- III

#### **IN- COMPANY TRAINING PROGRAMMES - 2012**

SI. No.	Participants and Area	CLI MUMBAI		RLI KOI	LKATA	RLI CHE	NNAI	RLI KAN	PUR	RLI FARIDABAD	
		Progra- mmes	Partici- pants								
A.	Management Per	sonnel						•		•	
	a) Industrial Safety	1	25(1)	-	-	5	125(6)	-	-	-	-
	b) Productivity	2	29(2)	-	-	-	-	-	-	-	-
	c)Sstaff Training	-	-	-	-	-	-	-	-	-	-
	d) Industria Psychology	-	-	-	-	-	-	-	-	-	-
	e) Occupationa Health	-	-	-	-	1	60(1)	-	-	-	-
	f) MAHCA	1	28(1)	-	-	1	50(1)	-	-	-	-
B.	Supervisor						•	-	-	•	
	a) Chemical Safety	-	-	-	-	-	-	-	-	-	-
	b) Industria Psychology	-	-	-	-	-	-	-	-	-	-
	c) Industrial Safety	3	80(3)	-	-	1	21(1)	-	-	-	-
C.	Trade Union / W	orker	•		•		•				
	a) Industrial Safety	-	-	1	20(1)	-	-	-	-	-	-
	b) Occupational Health	-	-	-	-	-	-	-	-	-	-
	c) Industrial Psychology	-	-	-	-	-	-	-	-	-	-
	Total	7	162(7)	1	20(1)	8	256(9)				

Note: Figures in bracket indicate number of organisations.

#### **ANNEXURE-IV**

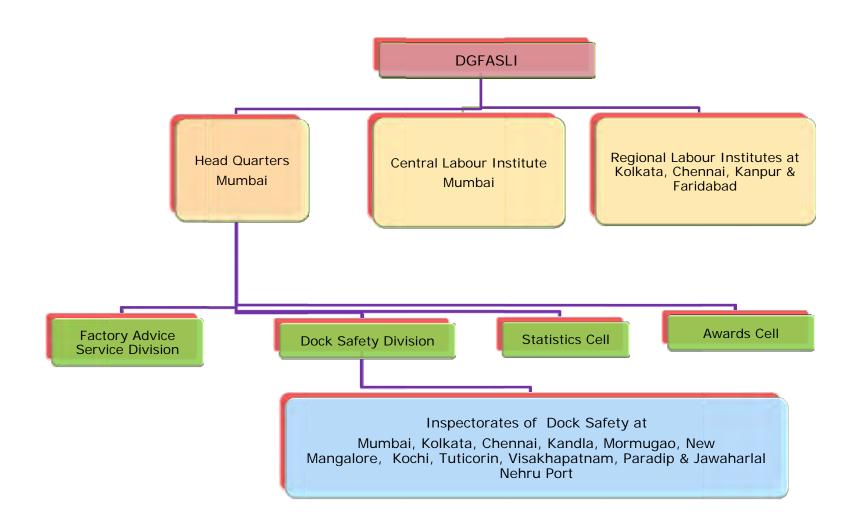
## SHORT DURATION (1-2days) TRAINING PROGRAMMES – 2012

Sl. No.	Participants and Area	CLI MU	UMBAI	RLI KOLKA	RLI KOLKATA RLI		RLI CHENNAI RLI KANPUR			RLI FARID	ABAD	INSPECTORATE OF DOCK SAFETY	
		Programmes	Partici-pants	Programmes	Partici-pants	Programmes	Partici-pants	Programmes	Partici-pants	Programmes	Partici-pants	Progra- mmes	Partici-pants
Α	Management		•										
1.	Safety	-	-	-	-	1	44(20)	-	-	-	-	1	180(21)
2.	Hazardous Industries	-	-	-	-	-	-	-	-	-	-	-	-
3.	Constructio n Safety	-	-	-	-	1	20(12)	-	-	-	-	-	-
4.	Industrial Physiology	-	-	-	-	1	8(3)	-	-	-	-	-	-
B	Trade Union Lo	eader/ W	orkers/ Jo	oint Participat	tion					•		1	•
1	Safety	-	-	1	11(1)	-	-	-	-	-	-	6	120(9)
C St	tudents of Educ	ational I	nstitution	S		•	•				•	•	
1.	Industrial Safety	-	-	9	322(9)	-	-	-	-	3	77(62)	-	-
2.	Industrial Hygiene	1	3(1)	-	-	-	-	-	-	-	-	-	-
3.	Industrial Physiolog v	-	-	-	-	-	-	-	-	-	-	-	-
D S	upervisors		1	1	1			1	I	1	1	1	1
1.	Dock Safety	-	-	-	-	-	-	-	-	-	-	5	156(21)
	Total:	1	3(1)	10	333(10)	3	72(35)			3	77(62)	12	456(51)

Note: Figures in bracket indicate number of organizations

#### **APPENDIX - I**

# **ORGANISATION CHART**



# **APPENDIX - II**

# Address of DGFASLI and its Subordinate Offices

Directorate General Factory Advice Service	Central Labour Institute, Mumbai
& Labour Institutes, Mumbai	N.S.Mankikar Marg, Sion,
N.S.Mankikar Marg, Sion,	Mumbai-400 022.
Mumbai-400 022.	PBX No.91-22-24092203
PBX No.91-22-24092203	Fax: 022-24071986
Fax: 022-24071986	e-mail: cli@dgfasli.nic.in
e-mail: <u>fasli@dgfasli.nic.in</u>	
Regional Labour Institute, Kanpur	Regional Labour Institute, Kolkata
Sarvodya Nagar,	Lake Town,
Kanpur-208 005	Kolkata-700 089
Tel: 2218691,2218692, 2218745	Tel: 25342732, 25342735, 25343254
Fax : 0512-2215112	Fax: 033 – 25348182
e-mail: rlikanpur5@gmail.com	e-mail: rlikol@vsnl.net
rlik@indiatimes.com	
Regional Labour Institute, Chennai	Regional Labour Institute, Faridabad
Sardar Patel Road, Adyar, TTTI PO, Chennai-	Sector 47, Faridabad- 121003
600113	Haryana .
Tel: 22350737, 22351569, 22355690	Tel: 0129-2468022
FAX : 044- 22352457	FAX: 0129-2437064
e-mail: rlic@vsnl.net	e-mail: rlifaridabad@yahoo.co.in
Inspectorate of Dock Safety, Mumbai	Inspectorate Dock Safety, J. N. Port
Operation Service Centre, 3rd Floor,	A 7/6 Sector 3, JNPT Township,
P.D' mello Rd., Mumbai-400 038	Navi Mumbai-400707
Tel: 22613391, 22692180	T 1 000 070 (5000
Fax : 022 – 22613391	Tel: 022-27245099,
1.1.1.2.6.1	0202-27240461
e-mail: idsmumbaigov@gmail.com	0202-27240401

Inspectorate Dock Safety, Kandla	Inspectorate Dock Safety, Goa
Near Bunder Gate, Kandla Port,	Civil Maintenance Office Building,
New Kandla ,Post Box No. 18	, i i i i i i i i i i i i i i i i i i i
District- Kutch—370210, Gujrat	Murmugao, Goa- 403804
Tel: 02836 - 270249	Tel: 0832-2520751
Fax: 02836 - 270249	Fax: 0832-2520752
e-mail: idskandla@sancharnet.in	e-mail: idsgoa@gmail.com
Inspectorate Dock Safety, Kolkata	Inspectorate Dock Safety, Paradip
Nizam Palace, 1 <sup>st</sup> floor, 2 <sup>nd</sup> M.S.O. Building,	Badapadia, P.B. No.126,
234/4, A.J.C. Bose Road,	District- Paradip,
Kolkata-700 020.	Jagatsinghpur, Odisha – 754142.
Tel: 22830718, 22830719	Tel : 06722-222413
Fax : 033 – 22830718	Fax : 06722- 222413
e-mail: idskol@rediffmail.com	e-mail: idsparadip@gmail.com
Inspectorate Dock Safety, Visakhapatnam	Inspectorate Dock Safety, Chennai
Old D.L.B. Building, 1st Floor,	3 <sup>rd</sup> Floor, Anchor Gate Building,
Opp. Harbour Main Gate Building, Port Area,	Rajaji Salai, Chennai - 600 001.
Visakhapatnam-530 035	Tel: 25220888, 25246419
Tel: 0891-2563857 Fax : 0891-2563857	Fax: 044 – 25220888
	e-mail: docksafetychennai@gmail.com
e-mail: idsvizag35@gmail.com	idschennai@yahoo.in
Inspectorate Dock Safety, Cochin	Inspectorate Dock Safety, New Mangalore
C.D.L.B. Dispensary Building,	New Mangalore Port, Panambur,
G.V. Ayyar Rd, Willington Island,	New Mangalore-575010
Cochin-682003	Tel: 0824-2407781
Tel: 0484 – 2666532	Fax: 0824-2407781
Fax : 0484 – 2666532	
e-mail: docksafety9@gmail.com	e-mail: docksafetymangalore@rediffmail.com
idscochin@dataone.in	
	Inspectorate of Dock Safety, Ennore
Inspectorate Dock Safety, Tuticorin	(Being setup)
Tuticorin Port Trust, Admn. Office Building,	Operated from Inspectorate Dock Safety, Chennai
Post. Box No.4, Harbour Estate,	
Tuticorin-628004	
Tel: 0461- 2352372	
Fax: 0461-2352372	
e-mail: docksafety559@gmail.com	