The second issue of Helmet highlights the Safety Month Celebrations held across various projects sites. We also bring to you an insight on safety measures across IC’s from the EHS Heads. The detailed insight elucidates on IC specific safety initiatives implemented across projects. In addition to this, the other features include a colourful array of important safety events, training programmes, CSR initiatives, recognitions and awards.

We hope that you find this issue interesting and educative. Let’s wear the right attitude. Stay safe and ensure to protect our environment and lives.

Happy reading

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Every year, January is celebrated as safety month to rededicate our commitment to continually improve Environment, Health & Safety. With this commitment, January 2012 was celebrated as “Safety Month” at headquarters, project sites, offices and factories of L&T Construction.

The month-long series of activities helps us to focus on EHS issues and to bring in behavioural change in implementing EHS. During this month, various safety promotional activities were conducted by all the IC’s which includes: Safety Flag Hoisting; Administration of Safety Pledge; First Aid Training programme; Fire-fighting Demos; Safety Exhibition; Safety Poster Competition; Tree Plantation; Blood Donation Camp; Medical Camp; Safety Slogan Competition; Safety Essay Competition; Safety Quiz, etc.

The celebrations concluded at the end of January with a valedictory function in which the winners of the safety competitions were awarded with prizes and certificates. Staff members, workmen, contractors and clients took part in the celebration enthusiastically.

**Buildings & Factories IC**
Buildings & Factories IC

- Delhi ONE Project
- Bangalore International Airport Project
- DLF Capital Green Project, Delhi
- M3M Project, Gurgaon
- MIAL Project
- TCS Project, Kochi
Infrastructure IC

Kakrapar Atomic Power Project

DMRC CMC1 Project

Nashik Elevated Corridor Project

Srinagar Hydel Project

CMRL Elevated Project

Ganjbasoda Sanchi RC Project

TSL Jamshedpur RC Project

Ahmedabad Viramgam Road Project
The month of January 2012 was celebrated as Safety Month across all the Project Sites and Offices of MMH IC. The month started with flag hoisting and pledge taking in the 1st week followed by various awareness and training programs during the 2nd week, EHS Competitions like quiz, slogan & essay were conducted in 3rd week and finally the celebrations concluded with a valedictory function.
Power Transmission & Distribution IC

Safety Month celebrations were organised at PT&D IC's project sites and offices during January 2012. The objective of the month long event was to promote awareness on Environment, Health and Safety Culture at respective work locations.
PT&D (I) offices and sites celebrated Safety Month during January 2012. Employees, Workmen and Sub-Contractors took the safety pledge and participated in various events like EHS Training, Blood Donation Camps, Clean-up Campaign etc.
Many of B&F IC projects have won prestigious international safety awards from Royal Society for Prevention of Accidents (RoSPA) & British Safety Council U.K. The awards have been given under the distinction category as our projects have scored 60 out of 60 in the evaluation. This is a testimony to our EHS management & implementation standards at international level.

Also many of our customers have appreciated our safety performance during the year and projects have crossed significant milestones in safe man-hour achievement.

**Learning’s from accidents & focus on critical areas:**

Detailed analysis of incidents in the last financial year has revealed that significant improvement is required in the following focus areas:

- Lift Shaft & Floor Opening Protection
- Working on Peripheral Platforms
- Builders Hoist Operation
- Temporary Electrical Distribution System
- Barricades for Excavation

It may be noted that most of the above hazards are not new to our operations and established control measures are available for effectively control these risks. But renewed efforts from all quarters are needed to manage these risks.

To enable uniform implementation of precautionary measures across all project sites, related to the above focus areas, standard operating procedures (SOP’s) with standard drawings & requirements are circulated. Cluster wise committees are formed to monitor & evaluate the implementation level.

**Key points for improving standards in focus area:**

- Zero tolerance policy in the implementation of SOPs for critical area.
- Active involvement in EHS implementation, campaign & competitions.
- Continuous monitoring through leading EHS indicators.
- Following the set benchmark EHS standards for implementation & evaluating.

Request all concerned to put joint efforts in implementing the above points for improving the safety standards and performance of B&F IC.

P. Nagarajan

*DGM & Head - EHS, Buildings & Factories IC*
Helmet Congratulates the following sites for achieving THREE Million and more LTI Free Safe Man-Hours

**20**

ITC Grand Chola Hotel Project, Chennai
Million Safe Man Hours, October 2007 to February 2012

**19**

MUD Project, Chandigarh
Million Safe Man Hours, November 2010 to March 2012

**15**

TCS Phase- II, Siruseri
Million Safe Man Hours, April 2010 to March 2012

**15**

The Grand Arch Project, Gurgaon
Million Safe Man Hours, February 2011 to March 2012

**13**

The Address - Wadhwa Housing Project, Ghatkopar
Million Safe Man Hours, January 2010 to March 2012

**12**

Heidelberg Project, Damoh
Million Safe Man Hours, July 2010 to March 2012

**11**

RLICD - Khurja Project
Million Safe Man Hours, February 2010 to March 2012

**11**

BARC Phase-I Project, Mysore
Million Safe Man Hours, August 2009 to March 2012

**11**

Kohinoor Square Project, Mumbai
Million Safe Man Hours, June 2009 to March 2012

**10**

Vicat Sagar Project
Million Safe Man Hours, July 2010 to March 2012

**10**

Lafarge Jojobera Project
Million Safe Man Hours, March 2009 to March 2012

**10**

Vedanta Housing Project, Jharsuguda
Million Safe Man Hours, June 2010 to March 2012

**9**

JIPMER Phase – II Project, Pondicherry
Million Safe Man Hours, August 2010 to March 2012

**8**

Ahuja Tower project, Prabhadevi
Million Safe Man Hours, February 2010 to March 2012

**7**

Godrej SIMOCO Project, Kolkata
Million Safe Man Hours, February 2009 to March 2012

**7**

ESIC Hospital Project, Kovai
Million Safe Man Hours, March 2011 to March 2012

**7**

Oberoi Exquisite phase-I Project, Goregaon
Million Safe Man Hours, December 2009 to March 2012

**6**

ITC Sonar Project, Kolkata
Million Safe Man Hours, August 2009 to March 2012

**6**

Heidelberg Project, Jhansi
Million Safe Man Hours, August 2010 to March 2012

**6**

Godrej Housing Project, Kolkata
Million Safe Man Hours, July 2009 to March 2012

**6**

Maruti C-line Project, Manesar
Million Safe Man Hours, October 2010 to March 2012
<table>
<thead>
<tr>
<th>Projects</th>
<th>Location</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIOT International Project, Chennai</td>
<td>Chennai</td>
<td>Million Safe Man Hours, March 2010 to March 2012</td>
</tr>
<tr>
<td>ESIC Hospital Project, Joka</td>
<td>Joka</td>
<td>Million Safe Man Hours, November 2009 to March 2012</td>
</tr>
<tr>
<td>SMS Forging Shop, Hazira</td>
<td>Hazira</td>
<td>Million Safe Man Hours, August 2011 to March 2012</td>
</tr>
<tr>
<td>Birla Surya Project, Satara</td>
<td>Satara</td>
<td>Million Safe Man Hours, July 2010 to March 2012</td>
</tr>
<tr>
<td>CESC Shopping Mall Project, Kolkata</td>
<td>Kolkata</td>
<td>Million Safe Man Hours, July 2010 to March 2012</td>
</tr>
<tr>
<td>Godrej Eternia Project, Chandigarh</td>
<td>Chandigarh</td>
<td>Million Safe Man Hours, June 2010 to March 2012</td>
</tr>
<tr>
<td>Orchid Crown Project, Prabhadevi</td>
<td>Prabhadevi</td>
<td>Million Safe Man Hours, February 2010 to March 2012</td>
</tr>
<tr>
<td>ESIC Hospital Project, Kollam</td>
<td>Kollam</td>
<td>Million Safe Man Hours, April 2010 to March 2012</td>
</tr>
<tr>
<td>Century Bhavan Project, Mumbai</td>
<td>Mumbai</td>
<td>Million Safe Man Hours, May 2009 to March 2012</td>
</tr>
<tr>
<td>BMRCL R3-P1 Project, Bangalore</td>
<td>Bangalore</td>
<td>Million Safe Man Hours, July 2009 to March 2012</td>
</tr>
<tr>
<td>P&amp;G - Baby Care unit Project, Bhopal</td>
<td>Bhopal</td>
<td>Million Safe Man Hours, April 2010 to March 2012</td>
</tr>
<tr>
<td>Godrej garden city ph I &amp; II project, Ahmedabad</td>
<td>Ahmedabad</td>
<td>Million Safe Man Hours, September 2011 to March 2012</td>
</tr>
<tr>
<td>Bengal NRI Housing Project</td>
<td></td>
<td>Million Safe Man Hours, July 2011 to March 2012</td>
</tr>
<tr>
<td>NISER Project, Bhubaneswar</td>
<td></td>
<td>Million Safe Man Hours, July 2009 to March 2012</td>
</tr>
<tr>
<td>Godrej One Project, Vikhroli</td>
<td>Vikhroli</td>
<td>Million Safe Man Hours, February 2011 to March 2012</td>
</tr>
<tr>
<td>Mall of India Project, Noida</td>
<td>Noida</td>
<td>Million Safe Man Hours, September 2011 to March 2012</td>
</tr>
<tr>
<td>South City Project, Bangalore</td>
<td>Bangalore</td>
<td>Million Safe Man Hours, October 2009 to March 2012</td>
</tr>
<tr>
<td>BMRCL R4-P2 Project, Bangalore</td>
<td>Bangalore</td>
<td>Million Safe Man Hours, May 2009 to March 2012</td>
</tr>
<tr>
<td>EBG Factory Project, Vadodara</td>
<td>Vadodara</td>
<td>Million Safe Man Hours, March 2010 to February 2012</td>
</tr>
<tr>
<td>Torrent Pharmaceuticals Project, Dahej</td>
<td>Dahej</td>
<td>Million Safe Man Hours, September 2011 to March 2012</td>
</tr>
<tr>
<td>Imperial Heights Project, Oshiwara</td>
<td>Oshiwara</td>
<td>Million Safe Man Hours, August 2010 to March 2012</td>
</tr>
<tr>
<td>Salalah Airport Project</td>
<td></td>
<td>Million Safe Man Hours, April 2011 to March 2012</td>
</tr>
<tr>
<td>Manikgarh cement Plant Project, Chandrapur</td>
<td>Chandrapur</td>
<td>Million Safe Man Hours, April 2011 to March 2012</td>
</tr>
<tr>
<td>Boeing MRO Project, Nagpur</td>
<td>Nagpur</td>
<td>Million Safe Man Hours, March 2011 to March 2012</td>
</tr>
<tr>
<td>BKC Wadhwa Project, Mumbai</td>
<td>Mumbai</td>
<td>Million Safe Man Hours, December 2010 to March 2012</td>
</tr>
<tr>
<td>BVSM Project, Delhi</td>
<td></td>
<td>Million Safe Man Hours, December 2010 to March 2012</td>
</tr>
</tbody>
</table>
ITC Grand Chola Hotel Project, Chennai – Chennai Cluster

B&F’s ITC Grand Chola Hotel Project, Chennai has received a certificate of appreciation from client M/s ITC Limited for achieving 20 million safe man-hours during the period October 2007 to January 2012.

The Address Project, Wadhwa Group – Mumbai Cluster

B&F’s The Address Project has received a certificate of appreciation from client M/s The Wadhwa Group for achieving 13 million safe man-hours during the period January 2010 to March 2012.

JIPMER Phase-II Project – Chennai Cluster

B&F’s JIPMER Phase-II Project has received a certificate of appreciation from client M/s. Jawaharlal Institute of Post - Graduate Medical Education & Research, Puducherry for achieving 9 million safe man-hours during the period July 2010 to March 2012.
Barc Project, Mysore - Bengaluru Cluster

B&F’s Barc Project, Mysore has received a certificate of appreciation from client M/s Bhabha Atomic research Centre for achieving 10 million safe man-hours.

Ahuja Project - Mumbai Cluster

B&F’s Ahuja Project has received a certificate of appreciation from client M/s DTZ for achieving 8 million safe man-hours during the period July 2010 to March 2012.

Vicat Sagar Project – Hyderabad Cluster

B&F’s Vicat Sagar Project has received a certificate of appreciation from client M/s. Vicat Sagar for achieving 10 million safe man-hours during the period July 2010 to March 2012.

Heidelberg Project, Damoh – Hyderabad Cluster

B&F’s Heidelberg Project, Damoh has received a certificate of appreciation from client M/s. Heidelberg for achieving 11 million safe man-hours during the period July 2010 to December 2011.
Maruti C-line Project, Manesar – Delhi Cluster

B&F’s Maruti C-line Project, Manesar has received a certificate of appreciation from client M/s. Maruti Suzuki for achieving 6.06 million safe man-hours during the period October 2010 to March 2012.

Orchid Crown Project, Prabhadevi – Mumbai Cluster

B&F’s Orchid Crown Project has received a certificate of appreciation from client M/s. DB Realty Pvt limited for achieving 5 million safe man-hours.

Century Bhavan Project – Mumbai Cluster

B&F’s Century Bhavan Project has received a certificate of appreciation from client M/s. Century International for achieving 5 million safe man-hours during the period April 2009 to December 2011.

Wadhwa BKC Project – Mumbai Cluster

B&F’s Wadhwa BKC Project has received a certificate of appreciation from client M/s. The Wadhwa Group for achieving 3 million safe man-hours during the period November 2010 to January 2012.
Birla Surya Project – Mumbai Cluster

B&F’s Birla Surya Project has received a certificate of appreciation from client M/s Birla Surya Limited for achieving 6.5 million safe man-hours during the period October 2010 to February 2012.

Kohinoor Square Project, Mumbai – Mumbai Cluster

B&F’s Kohinoor Square Project, Mumbai has received a certificate of appreciation from client for achieving 10 million safe man-hours.

Godrej Eternia Project, Chandigarh – Delhi Cluster

B&F’s Godrej Eternia Project, Chandigarh has received a certificate of appreciation from client M/s Godrej for achieving 4 million safe man-hours during the period May 2010 to March 2012.

Godrej One Project, Vikhroli – Mumbai Cluster

B&F’s Godrej One Project, Vikhroli has received a certificate of appreciation from client M/s Godrej for achieving 3 million safe man-hours during the period February 2011 to February 2012.
BMRCL R3-P1 Project – Bengaluru Cluster

B&F’s BMRCL R3-P1 Project has received a certificate of appreciation from client M/s Bangalore Metro Rail Corporation for achieving 4 million safe man-hours.

BMRCL R4-P2 Project – Bengaluru Cluster

B&F’s BMRCL R4-P2 Project has received a certificate of appreciation from client M/s Bangalore Metro Rail Corporation for achieving 3 million safe man-hours.

MIOT International Hospital Project – Chennai Cluster

B&F’s MIOT International Hospital Project, Chennai has received a certificate of appreciation from client M/s MIOT Hospitals for achieving 6 million safe man-hours during the period March 2010 to January 2012.

NISER Project – Kolkata Cluster

B&F’s NISER Project – Kolkata Cluster has received a certificate of appreciation from client for achieving 3 million safe man-hours during the period July 2011 to March 2012.

Grasim Project – Ahmedabad Cluster

B&F’s Grasim Project has received a certificate of appreciation from client M/s Aditya Birla for best safety practices at project.
Manikgarh cement Plant Project, Chandrapur – Hyderabad Cluster
B&F’s Manikgarh cement Plant Project, Chandrapur has received a certificate of appreciation from client M/s Manikgarh Cement Unit – II for achieving 3 million safe man-hours during the period February 2011 to March 2012.

Minerva Project, Mumbai – Mumbai Cluster
B&F’s Minerva Project, Mumbai has received a certificate of appreciation from client M/s Lokhandwala Kataria Constructions Pvt Ltd. for achieving 1 million safe man-hours during the period July 2011 to February 2012.

Delhi ONE Project, Delhi – Delhi Cluster
B&F’s Delhi ONE Project, Delhi has received a certificate of appreciation from client M/s The 3C Company for achieving 1 million safe man-hours.

Godrej Garden City Phase I & II Project, Ahmedabad – Ahmedabad Cluster
B&F’s Godrej Garden City Phase I & II Project, Ahmedabad has received a certificate of appreciation from client M/s Godrej for achieving 4 million safe man-hours during the period September 2011 to March 2012.

Godrej Garden City Phase III Project, Ahmedabad – Ahmedabad Cluster
B&F’s Godrej Garden City Phase III Project, Ahmedabad has received a certificate of appreciation from client M/s Godrej for achieving 2 million safe man-hours during the period May 2011 to March 2012.
SEVEN projects of B&F IC have won the prestigious “International Safety Award” with **distinction** from British Safety Council (BSC), one of the world’s leading professional bodies in Occupational Health, Safety & Environment (OHSE) for the year 2012.

**Details of the winning projects are:**

**British Safety Council Awards**

<table>
<thead>
<tr>
<th>Name of the Project</th>
<th>Business Unit</th>
<th>Project Manager</th>
<th>EHS Incharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business &amp; Exhibition Centre Project, Gujarat</td>
<td>IT &amp; IS BU</td>
<td>Mr. Harish Makwana</td>
<td>Mr. Govind Mahajan</td>
</tr>
<tr>
<td>Ahuja Tower Project, Mumbai</td>
<td>Residential Buildings BU</td>
<td>Mr. Dinesh Kumar Khatri</td>
<td>Mr. Satrughan P Agarwal</td>
</tr>
<tr>
<td>Vedanta Housing Project, Jharsuguda</td>
<td>Residential Buildings BU</td>
<td>Mr. Rakesh Kumar Choudhary</td>
<td>Mr. Manoj Kumar Bhadra</td>
</tr>
<tr>
<td>Vicat Sagar Project</td>
<td>Factories BU</td>
<td>Mr. Srinivasarao Ragothaman</td>
<td>Mr. Ganduri Bhaskar</td>
</tr>
<tr>
<td>Baby care unit-P&amp;G Project, Bhopal</td>
<td>Factories BU</td>
<td>Mr. Suresh Kumar Gill</td>
<td>Mr. Debabrata Bhattacharya</td>
</tr>
<tr>
<td>Mixed Use Development Project, Chandigarh</td>
<td>Health &amp; Leisure BU</td>
<td>Mr. V. Ramesh</td>
<td>Mr. Ajendra Kumar Verma</td>
</tr>
<tr>
<td>Spencer's Galleria Project, Kolkata</td>
<td>Health &amp; Leisure BU</td>
<td>Mr. M. P. Chauhan</td>
<td>Mr. Debasish Mazumdar</td>
</tr>
</tbody>
</table>

These awards are considered special as British Safety Council has introduced a new and a stringent scoring based awards scheme since last year. All the projects have been honoured with **distinction** category award as they have scored 60 out of 60 marks (category of award: Pass 36 - 47; Merit 48 – 59 & Distinction 60).

The key areas of evaluation include significant continual improvement achieved during the award period, effective implementation of EHS Management Systems, Risk assessment, EHS performance monitoring system, EHS objectives etc.

The awards were presented during a presentation banquet at London on 18th May 2012.
The Royal Society for the Prevention of Accidents (RoSPA) has adjudged the prestigious RoSPA Gold Award for Occupational Health & Safety to FOUR projects of Buildings & Factories Independent Company under the Safety Health Awards Scheme 2012.

Details of award-winning projects are:

<table>
<thead>
<tr>
<th>Name of the Project</th>
<th>Business Unit</th>
<th>Project Manager</th>
<th>EHS Incharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oberoi Exquisite Phase - I Project, Mumbai</td>
<td>Residential Buildings BU</td>
<td>Mr. Samuel Arokiaraj</td>
<td>Mr. Jude BJ</td>
</tr>
<tr>
<td>Kohinoor CTNL Project, Mumbai</td>
<td>IT &amp; IS BU</td>
<td>Mr. Srinivas Samudrala</td>
<td>Mr. Umesh Chandra Swain</td>
</tr>
<tr>
<td>Century Bhavan Project, Mumbai</td>
<td>Health &amp; Leisure</td>
<td>Mr. S. Majumdar</td>
<td>Mr. Rafat Shaikh</td>
</tr>
<tr>
<td>Heidelberg Cement Expansion Project, Damoh</td>
<td>Factories BU</td>
<td>Mr. M.R. Manickam</td>
<td>Mr. A. Sureshkumar</td>
</tr>
</tbody>
</table>

The awards are given in recognition of efforts to develop and implement highly effective Environment, Health & Safety (EHS) systems & procedures and achieve outstanding performance in construction projects across the country.

The Royal Society for the Prevention of Accidents is a registered charity and has been at the heart of accident prevention in the UK and around the world for more than 90 years.

The awards were presented during a presentation ceremony on 16th May 2012 at Birmingham, London.
“Construction safety programs” were conducted at various clusters of B&F IC during the Period January to March 2012. These were a structured two day program that covered close to 160 staff totally.

This program is specially designed for execution engineers to impart the training related to EHS Management and technical requirements during construction. The session of the program includes work at height, EHS Management systems, Material handling, P&M safety, Excavation & etc.

**Training program details are given below:**

<table>
<thead>
<tr>
<th>Cluster</th>
<th>No of Participants</th>
<th>Date &amp; Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangalore</td>
<td>20</td>
<td>30th &amp; 31st March 2012 at Bangalore</td>
</tr>
<tr>
<td>Chennai</td>
<td>20</td>
<td>19th &amp; 20th March 2012</td>
</tr>
<tr>
<td>Kolkata</td>
<td>68</td>
<td>1st &amp; 2nd, 3rd &amp; 4th February and 22nd &amp; 23rd March 2012</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>25</td>
<td>11th &amp; 12th January 2012</td>
</tr>
<tr>
<td>Mumbai</td>
<td>26</td>
<td>20th &amp; 21th January 2012 at MIAL</td>
</tr>
</tbody>
</table>
Occupational Health & Safety (OHS) in construction is a major concern across the world. International Labor Organization (ILO) estimates that the accident rate in construction is four to five times higher than that of the manufacturing sector on the global scale. From an organizational viewpoint, the construction division has a transient, highly mobile workforce carrying out work that is constantly changing and where the risks are generally higher. The workforce is correspondingly more difficult to train, motivate and involve in corporate safety efforts.

Infrastructure IC is having a wider range of OH&S issues due to its diversified operations which are not confined to boundary walls. The operations extend from working close to running traffic in Road and Metro projects to the cold climatic conditions in the Himalayan Hydel projects.

While acknowledging the diversified operations, the company has an integrated approach to the OHSE issues in line with the Integrated Management system implemented that conforms to international standards – OHSAS 18001 and ISO 14001.

The key associated hazards include working in close proximity to live traffic (road and metro projects) and risks involved in activities like blasting and tunneling. It is important to carry out EHS Risk assessment for all activities, which involves the ongoing identification of OHS hazards, assessment of associated OHS risks and determination of necessary control measures. Few significant areas worth noting include:

Traffic Management Plan:

Implementing a traffic management plan involves providing safe and clearly marked lanes, providing adequate buffer and work zones, and implementing measures to control driver behavior through construction zones.

e-TICS:

As an initiative to enhance EHS compliance at projects, online system: e-TICS (Tracking of Inspections Compliance Status) was launched recently. This online system, developed in EIP Vidhya, would serve as a good platform for tracking the compliance status of Environment, Health & Safety issues observed at projects.

Daily EHS Messages:

Relevant EHS information is disseminated to all employees – one message a day through e-mail. These messages cover a wide range of information pertaining to construction safety, road safety, environment issues, occupational health information and legal requirements.

Road Safety Campaigns:

Regular road safety campaigns, in collaboration with traffic police and civil police authorities, are organised to raise public awareness. The campaigns include distributing pamphlets to road users and also affixing triangular retroreflectors on public vehicles.

S. Sathyanarayana
Head – EHS, Infrastructure IC
Helmet Congratulates the following sites for achieving
THREE Million and more LTI Free Safe Man-Hours

Kakrapar Atomic Power Project
Million Safe Man Hours, February 2010 to Mar 2012

Ahmedabad Viramgam Road Project
Million Safe Man Hours, Feb 2011 to Mar 2012

Nashik Elevated Corridor Project
Million Safe Man Hours, January 2010 to Mar 2012

Tapovan Vishnugad Hydel Project
Million Safe Man Hours, May 2010 to Mar 2012

Subansiri Hydel Project
Million Safe Man Hours, May 2011 to Mar 2012

Halol Godhra Shamlaji Road Project
Million Safe Man Hours, April 2011 to Mar 2012

Bharuch Dahej RC Project
Million Safe Man Hours, June 2009 to Mar 2012

DMRC – CMC1 Project
Million Safe Man Hours, July 2010 to Mar 2012

Singoli Bhatwari Hydel Project
Million Safe Man Hours, June 2011 to Mar 2012

Kattupalli Shipyard Project
Million Safe Man Hours, Oct 2011 to Mar 2012

Samakhiali Gandhidham Road Project
Million Safe Man Hours, Sep 2011 to Mar 2012

Ganibasoda Sanchi RC Project
Million Safe Man Hours, April 2010 to Mar 2012

Panskura-Kharagpur RC Project
Million Safe Man Hours, May 2009 to Mar 2012

NPCIL Award

Kakrapar Atomic Power Project Infra IC received the Safe Contractor (Consecutive 2nd year) & Best House Keeping Contractor (Consecutive 3rd year). awards from prestigious client Nuclear Power Corporation of India Limited (NPCIL) for the financial year 2011 – 2012.
Two day in-house training programme on Construction EHS Requirements

A two day in-house training programme on Construction EHS Requirements was conducted at Mumbai Monorail project on 6th & 7th March 2012, inaugurated by Mr. Arvind Nerurkar, Project Manager.

34 participants from Mumbai Cluster, Infra IC were exposed to topics like EHS management systems, Material handling, Excavation, work at height, Formwork, Electrical, Traffic management, Environment requirements, P&M safety, Fire prevention, Welding, Grinding along with case studies during this programme.

The programme was led by faculties including Mr. V. Karuna Gopal, CEHSM (Mumbai), Mr. S. Maitra, CEHSM (Chennai), Mr. R. Kohli, Manager – P&M, Mr. K.L. Soni, Manager – EHS, Mr. Chandrasekar Rao, CEHSM (Ahmedabad) and Mr. Raman Kumar, Sr. Engineer – EHS.

Mr. I. Chandran (Project Manager) and Mr. R. Sudharsan, EHS In-Charge received the Best Housekeeping Contractor Award on behalf of L&T from Mr. Lokesh Kumar, NPCIL Project Director

Mr. Lokesh Kumar Project Director, NPCIL, presented the Best Safe Contractor Award to Mr. I Chandran, Project manager, R. Sudharsan (EHS incharge), Mr. A. Rajamanickam (Section Manager NB 3), Mr. K.V. Sureshbabu (Section Manager NB 4), Mr. H.M. Bhadri (Section In-charge, Aux Bldgs), Mr. T.M. Urankar (Supply Chain Manager) & KAPP Project Team of L&T Infra IC.

KAPP 3&$ Project team posing with the awards and certificates
Chennai Metro Tunneling Project certified to International Standards - OHSAS & EMS

Chennai Metro Tunneling Project (L&T SUCG JV) has been certified to international standards – OHSAS 18001:2007 (Occupational Health & Safety Management System) and ISO 14001:2004 (Environment Management System).

The certificates were awarded by the certification body - M/s BSI (British Standard Institution) effective from March 27, 2012, valid for three years. It is significant to note that Chennai Metro Tunneling Project is the first amongst all 23 CMRL contractors to get the ISO & OHSAS accreditation for EHS Management System incorporating CMRL scope of work.

Eight Occupational Health and Safety Award from RoSPA

L&T Construction’s Infrastructure IC bagged 5 Gold Awards, 3 Silver Awards from “The Royal Society for the Prevention of Accidents” (RoSPA), United Kingdom for maintaining high standards in Occupational Health and Safety. These awards are given in recognition of efforts to develop and implement highly effective Environment, Health and Safety (EHS) systems and procedures and achieve outstanding performance in construction projects across the country. This demonstrates L&T’s deep commitment to Environment, Health & Safety. The award winning sites are:

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Manager</th>
<th>EHS Incharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kakrapar Atomic Power Project</td>
<td>I.Chandran</td>
<td>R.Sudarshan</td>
</tr>
<tr>
<td>Nashik Elevated Corridor project</td>
<td>M.V.Srinivasa Rao</td>
<td>Sajay Mishra</td>
</tr>
<tr>
<td>Tapovan Hydel project</td>
<td>Sunildutt Vats</td>
<td>Dayanand Singh</td>
</tr>
<tr>
<td>KKNPP Kudankulam project</td>
<td>N.P.Varadharajan</td>
<td>Suresh Mondi</td>
</tr>
<tr>
<td>Halol Godhra Road project</td>
<td>A.K Tripathi</td>
<td>Y.Shivanand</td>
</tr>
</tbody>
</table>
L&T Construction's Infrastructure IC bagged 5 International Safety Awards from British Safety Council (BSC). BSC is one of the world's leading professional bodies in Occupational Health, Safety & Environment (OHSE). The award is special as British Safety Council has introduced a new and stringent scoring based awards scheme this year. The key areas of evaluation include significant continual improvements achieved during the award period, effective implementation of EHS Management Systems etc. The International Safety Award recognises and rewards L&T's commitment towards improving corporate health and safety. This award is imperative towards enhancing reputation with customers and stakeholders. Following are the award wining projects:

### RoSPA Awards

<table>
<thead>
<tr>
<th>Project</th>
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<th>EHS Incharge</th>
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</thead>
<tbody>
<tr>
<td>Chennai Metro Tunneling Project</td>
<td>Ram Gopal Saini</td>
<td>N.Radhakrishnan</td>
</tr>
<tr>
<td>Ahmedabad Viramgam Road</td>
<td>Rajesh Kumar Jha</td>
<td>A.Chandrasekhara Rao</td>
</tr>
<tr>
<td>Punatsangchhu HEP, Bhutan</td>
<td>V.Mahadevan</td>
<td>Prakash Sharma</td>
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</table>

### Five International Safety Awards from British Safety Council

#### SILVER

<table>
<thead>
<tr>
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#### DISTINCTION

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<td>Tapovan Hydel project</td>
<td>Sunildutt Vats</td>
<td>Dayanand Singh</td>
</tr>
<tr>
<td>DISTINCTION</td>
<td>10 MTPA Electrified Rail Corridor</td>
<td>M.P. Saradhi</td>
<td>Swapneswar Nayak</td>
</tr>
</tbody>
</table>

#### MERIT

<table>
<thead>
<tr>
<th>Award</th>
<th>Project</th>
<th>Project Manager</th>
<th>EHS Incharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>MERIT</td>
<td>Nashik Elevated Corridor</td>
<td>M.V Srinivasa Rao</td>
<td>Sajay Mishra</td>
</tr>
</tbody>
</table>
In MMH IC, safety initiatives and practices are implemented in a systematic manner for the safe execution of the projects. Composite projects encompass the following major activities which require stringent safety measures for the safe execution:

- Excavation
- Blasting
- Material Handling
- Fabrication works
- Usage of Plant & Machinery
- Gas cutting, welding & grinding
- Structural & equipment erection
- Working at height etc.

**Working at height**

This is one of the major activities which involves the hazards like collapse of scaffoldings, fall of persons from height, fall of materials from height etc. In the construction industry, most of the fatal & serious accidents are caused while working at height. In our company, we have well established systems & procedures starting from the screening of the workmen till their deployment for working at height with safety measures.

**Screening & EHS Induction:** The Execution Engineer and The Time Office personnel in co-ordination with the EHS Officer carry out the Screening to assess the suitability of the workmen for the height work. The workers having previous experience in height work are also checked before engaging them. After the screening process, the selected workers attend the EHS induction training. Selected workers after the screening & EHS induction undergo the physical fitness test for working at height.

In the physical fitness test, the workers walk on a specially designed height pass structure with all the fall protection devices and the workers stamina is also checked through rope climbing. The height pass is issued to the workers on successful completion of the physical fitness test. The height pass contains the name, designation of the worker along with the working at height guidelines. The workers with height pass only are allowed to work at height. Height work demos are conducted periodically to educate the workers and the refresher training programmes are also conducted on a regular basis.

The safe work methods are prepared through GRA (Group Risk Assessment) for all the activities at height and circulated to all concerned for the implementation under the effective supervision.

The Work Permit Systems are designed and intended to specify adequate safety measures in advance against the identified hazards and stipulate implementation of the said safety measures by the permittee to ensure safe execution of work in the designated workplace. Scaffoldings made for the height work are periodically inspected by the competent person and will be declared safe/unsafe for use. Scaffolding tagging system is implemented in all project sites. The competent person inspects the scaffolding & displays a green tag in case the scaffolding is safe for use or a red tag if the scaffolding is unsafe for use. Red tag indicates that the scaffolding is unsafe for use and the same shall not be used till the rectification. Fall prevention & protection measures are implemented strictly in all our project sites to provide safe working conditions to all the employees.

The fall prevention measures include the safe access & egress, floor edge protection, covered floor openings, safe working platforms etc. As a fall protection measure the employees are provided with the personal protective equipment i.e., the full body harnesses and other safety devices like the lifelines, the fall arrestors, the safety nets etc. Daily “pep talks” are conducted to brief the concerned workers before the commencement of the job on its Potential Hazards so as to caution them on the associated risks and prepare them to take adequate precautions, usage of required PPEs, Safety devices and protect themselves & others from the impact of the anticipated risks.

**R.N.Tripathy**  
Head – EHS, MMH IC
Helmet Congratulates the following sites for achieving THREE Million and more LTI Free Safe Man-Hours

<table>
<thead>
<tr>
<th>Rank</th>
<th>Site Description</th>
<th>Safe Man Hours Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Bhushan Steel Limited Site - Angul (M&amp;M)</td>
<td>Million Safe Man Hours, January 2011 to February 2012</td>
</tr>
<tr>
<td>36</td>
<td>JSW Steel - Blast Furnace 3 and BOF-CCP 2</td>
<td>Million Safe Man Hours, May 2009 to February 2012</td>
</tr>
<tr>
<td>31</td>
<td>Vizag Steel Plant Expansion Project - BF # 3</td>
<td>Million Safe Man Hours, April 2009 to February 2012</td>
</tr>
<tr>
<td>21</td>
<td>Mahan Aluminum Plant (HINDALCO) - Singrauli</td>
<td>Million Safe Man Hours, December 2006 to February 2012</td>
</tr>
<tr>
<td>17</td>
<td>Sri SatyaSai Water Supply Scheme (O&amp;M) - Ananthapur</td>
<td>Million Safe Man Hours, March 2000 to February 2012</td>
</tr>
<tr>
<td>17</td>
<td>Dhamra Port Project</td>
<td>Million Safe Man Hours, April 2007 to February 2012</td>
</tr>
<tr>
<td>16</td>
<td>Wheel Manufacturing plant at Chhapra</td>
<td>Million Safe Man Hours, February 2009 to February 2012</td>
</tr>
<tr>
<td>15</td>
<td>Coal Handling plant for NTPC - Barh</td>
<td>Million Safe Man Hours, August 2006 to February 2012</td>
</tr>
<tr>
<td>12</td>
<td>Bisalpur Water Supply Project - Jaipur</td>
<td>Million Safe Man Hours, June 2006 to February 2012</td>
</tr>
<tr>
<td>12</td>
<td>SAIL-Burnpur Site</td>
<td>Million Safe Man Hours, February 2010 to February 2012</td>
</tr>
<tr>
<td>12</td>
<td>Vizag Steel Plant Expansion Project - WRM # 2</td>
<td>Million Safe Man Hours, April 2007 to February 2012</td>
</tr>
<tr>
<td>12</td>
<td>Can Mill Project Hirakud Site</td>
<td>Million Safe Man Hours, July 2010 to February 2012</td>
</tr>
<tr>
<td>9</td>
<td>Coal Handling plant, DVC – Koderma</td>
<td>Million Safe Man Hours, March 2008 to February 2012</td>
</tr>
<tr>
<td>9</td>
<td>Coal Handling Plant for NTPC - Kahalgaon</td>
<td>Million Safe Man Hours, December 2006 to February 2012</td>
</tr>
<tr>
<td>8</td>
<td>UAIL – Rayagada</td>
<td>Million Safe Man Hours, July 2011 to February 2012</td>
</tr>
<tr>
<td>8</td>
<td>NTPC – Simhadri (Vizag) Coal Handling Plant</td>
<td>Million Safe Man Hours, May 2009 to February 2012</td>
</tr>
<tr>
<td>7</td>
<td>50 MGD Water Supply Scheme, Narayanapura to JSW</td>
<td>Million Safe Man Hours, July 2009 to February 2012</td>
</tr>
<tr>
<td>6</td>
<td>CHP-Mahan (HINDALCO), Singrauli</td>
<td>Million Safe Man Hours, January 2011 to February 2012</td>
</tr>
<tr>
<td>6</td>
<td>SSTPL (CHP)-Khandwa Site (MP)</td>
<td>Million Safe Man Hours, December 2009 to February 2012</td>
</tr>
<tr>
<td>5</td>
<td>Sri SatyaSai Water Supply Scheme (O&amp;M) – Medak</td>
<td>Million Safe Man Hours, September 2005 to February 2012</td>
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<tr>
<td>5</td>
<td>Barmer Lift Water Supply Project, SPR-I, Jaisalmer</td>
<td>Million Safe Man Hours, April 2008 to February 2012</td>
</tr>
<tr>
<td>5</td>
<td>Bhushan Steel Limited Site – Angul (BMH)</td>
<td>Million Safe Man Hours, January 2011 to February 2012</td>
</tr>
<tr>
<td>5</td>
<td>Coal Handling Plant for Anpara TPP Stage – D</td>
<td>Million Safe Man Hours, May 2009 to February 2012</td>
</tr>
<tr>
<td>4</td>
<td>Sri Satya Sai Water Supply Scheme (O&amp;M)-Mehboobnagar</td>
<td>Million Safe Man Hours, September 2005 to February 2012</td>
</tr>
<tr>
<td>4</td>
<td>NLC Thermal Plant Site, Tuticorin</td>
<td>Million Safe Man Hours, September 2009 to February 2012</td>
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<tr>
<td>4</td>
<td>Storm Water Drainage &amp; Reservoir – Paradip</td>
<td>Million Safe Man Hours, July 2010 to February 2012</td>
</tr>
<tr>
<td>4</td>
<td>Adani Power Maharashtra Limited (CHP-Tiroda)</td>
<td>Million Safe Man Hours, August 2007 to February 2012</td>
</tr>
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<td>4</td>
<td>Kerala Water Supply Project (2A)</td>
<td>Million Safe Man Hours, April 2008 to February 2012</td>
</tr>
<tr>
<td>4</td>
<td>Kerala Water Supply Project (2B)</td>
<td>Million Safe Man Hours, April 2008 to February 2012</td>
</tr>
<tr>
<td>3</td>
<td>GNSS – Tadipatri Lift Irrigation Scheme</td>
<td>Million Safe Man Hours, August 2007 to February 2012</td>
</tr>
<tr>
<td>3</td>
<td>Underground Drainage &amp; Water Supply Improvement Scheme - Nizamabad</td>
<td>Million Safe Man Hours, March 2008 to February 2012</td>
</tr>
<tr>
<td>3</td>
<td>Wagon tippler Site, NTPC-Farakka</td>
<td>Million Safe Man Hours, August 2006 to February 2012</td>
</tr>
<tr>
<td>3</td>
<td>Water Supply Scheme to Tumkur City</td>
<td>Million Safe Man Hours, June 2010 to February 2012</td>
</tr>
<tr>
<td>3</td>
<td>Underground Drainage Project Bengaluru</td>
<td>Million Safe Man Hours, May 2011 to February 2012</td>
</tr>
<tr>
<td>3</td>
<td>Engineering Workshop Limited, Kanchipuram</td>
<td>Million Safe Man Hours, September 2011 to February 2012</td>
</tr>
<tr>
<td>3</td>
<td>Nellore Water Supply Improvement Scheme – Nellore</td>
<td>Million Safe Man Hours, February 2008 to February 2012</td>
</tr>
<tr>
<td>3</td>
<td>Storm Water Drainage Project – Jabalpur</td>
<td>Million Safe Man Hours, September 2010 to February 2012</td>
</tr>
</tbody>
</table>
We believe in system and its compliance. The important procedures in the system are imparting training to the staff, sub-contractor supervisors & the workmen, getting innovative ideas for adding value to the standards, organizing & conducting EHS awareness programmes. The “SHINE” - Safety Occupational Health & Environment Integrated Training Initiative was introduced to train every employee engaged for the project activities.

Mr. D.R. Ray, EVP & Head - MMH IC inaugurated and launched the Safety e-learning course on 28th July at the Headquarters in Chennai.

MMH IC has partnered with M/S DuPont, USA in setting up the e-Learning package for staff members. The course covers 16 e-Learning modules on safety in construction. To begin with, the course has been made mandatory for selected trainees and lateral recruits at project sites.

To involve workmen during their training programs a thought provoking Question & Answer session called “Kaun Banega Safetypati” was initiated and the workmen giving correct answers were rewarded. Through this the workers come to know the techniques to eliminate hazards and safeguard themselves and do a safe work. To support the system, various awareness programmes were conducted such as safety month celebrations, world Environment day celebrations, National Safety Day celebrations, Road safety campaigns, safety corners & exhibitions in all the job sites.

The system compliance attracts the clients to recognize our safe way of doing work for which various accolades are received from them including the National & International Safety Awards. We look forward for maintaining a consistency in the system and system compliance with continual improvement and excellence in the areas of EHS.
EHS in Construction Industry

A two day “EHS in Construction” training programme was conducted at BSL Angul site during January 17-18 and 20-21. The programme was inaugurated by Mr. Tinanjan Mitra. Around 48 staff participated in the programme.

The same programme was conducted at SWD Paradip Site during January 20-21, 2012. Mr. S. Banerjee welcomed the gathering and Mr. G. Somasundaram inaugurated the programme. 17 staff participated in the program.

EHS in Construction Industry

A two day “EHS in Construction Industry” training programme was organised at Raipur during January 24-25 2012, for various project sites of MMH IC - Hyderabad Cluster staff. Mr. R. Suresh Kumar - Chief Project Manager - Bhilai Steel Plant Expansion Project, inaugurated the programme and Mr. Ajendra Agrawal - Cluster EHS Manager, Hyderabad was the faculty and Mr. S.K. Dey, Project Manager, GMR CHP Project, Tilda addressed the participants on January 25, 2012. HIRA exercise was conducted and prizes were distributed to the winners. A total of 46 staff participated in the programme.
AAP Lapanga Site

AAP Lapanga site, Smelter team organized a massive tree plantation program at the HIL Project Office premises, Lapanga on February 27, 2012. Mr. S. N. Jenna (COO & President AAP) inaugurated the programme in the presence of Mr. A. Chugh (Sr. VP, AAP Smelter), Mr. S. K. Guru (Sr. VP, AAP CPP) & the PM, Mr. K. K. Bhattacharya. All the staff of L&T and HIL participated in this green drive and planted over 500 saplings.

Mass Plantation Conducted at SWDP-Jabalpur Project Site (MMH IC, Ahmedabad)

SWDP-Jabalpur, Project Site of MMH IC, Ahmedabad organised a mass plantation drive on March 17, 2012. Mr. M.K. Mishra, Project Manager, Mr. T.C. Sunil Kumar, Construction Manager, staff and workmen took part in this drive and planted over 350 saplings at various locations in Jabalpur city and nearby villages. Mr. S. Chittal, Accounts and Administration Manager and Mr. D. Sinha, EHSO played a vital role in this campaign for building a pollution free tomorrow.

23rd National Road Safety Week Celebration at Utkal Alumina Rayagada Site (MMH IC)

23rd Road Safety Week was celebrated at Utkal Alumina Rayagada site from January 1 - 7, 2012. The programme was inaugurated by Mr. A.K. Dalui, Project Manager. During the week long celebration, banners were displayed at different locations of the site, road safety awareness leaflets were distributed, rallies and training programmes were conducted. This road safety campaign was aimed at creating awareness on following road safety rules and defensive driving.
Utkal Alumina Rayagada Site conducts Eye Check up camp for all Drivers & Operators

Utkal Alumina Rayagada Project site, Odisha of MMH IC organised free eye check-up camp for drivers & operators by a medical team led by Dr. B.K. Misra, Eye Specialist, Rayagada Government Hospital. Mr. S. Biswas, VP (HR & Safety), UAIL inaugurated the camp. Mr. Ashim Dalui, Project Manager, Mr. P.K. Das, Site Accounts & Administrative in-charge and Mr. N.K. Dhal, EHS In-Charge led the initiative. About 104 people were benefitted through this camp.

Tree Plantation Program at HIL MAP - Mahan Project on 23rd February 2012

L&T Construction's HIL Mahan Site (MMH IC) in association with HINDALCO organised a tree plantation a program at Saraswati Sishu Mandir, Primary School, Majgawan, Suingrauli, MP.

Officials and family members of HIDALCO Industries Limited (Mahn Project & Renukut Plant), MMH IC’s Staff and Workmen, Teachers and Students from Swarasati Sish Mandir Primary School along with local villagers planted 200 nos of saplings in the school premises. Mr. S. Annamalai, Accounts and Admin In-Charge and Mr. Sabyasachi Sengupta, EHS In-charge made this drive successful along with staff and workmen and local villagers made this drive successful.
HZL Dariba received award for achieving 1.3 Million Safe Man-Hours

During 41st National Safety Day HZL Dariba Project site, Roaster-05 has received a Merit Certificate from M/s. Hindustan Zinc Limited (Vendata Group) for achieving 1.3 Million Safe Man-Hours during the period July 4, 2011 to March 3, 2012

CHP-Tiroda Project has received Best Housekeeping Award from Adani Power Maharashtra Limited

As part of the 40th NATIONAL SAFETY DAY CELEBRATIONS various events spanning a fortnight was conducted by Adani Power Maharashtra Limited at Tiroda from 04.03.2011 to 19.03.2011. As part of the programme various events were organized and all the Agencies working inside the plant area were invited to participate in the fortnight event.

L&T site & office establishment was adjudged the BEST HOUSEKEEPING AREA among the 17 Agencies engaged in construction of power plant. Mr. Mr.O.P. Bharadwaj – Vice President (Civil) & MR.D.K. Sinha- Head of Safety Department - APML Tiroda appreciated the effort of L&T in following the Safety Standards and mentioned L&T as the role model in the entire plant.

Apart from the Best Housekeeping Area Award, our Staff & workmen were also adjudged prizes in different safety competitions organized by APML during National Safety Day Celebration.
GMR CHP Project - Raipur

GMR CHP Project, Raipur – MMH IC – Hyderabad Cluster received the “GCEL Best Safety Performance Award” from the Client for its best Safety Practices in the site. The Construction Manager Mr.P.V.H. Satyanarayana received the trophy on behalf of Mr.S.K.Dey, Project Manager.

CHP - DB Power - Site

Mr. Karthikeyan Project Manager – receiving appreciation certificate from NRR (Head Project) for “Best Safety Conscious Package Manager”
Mr. Ramalingam P EHS Engineer – receiving appreciation certificate from Mr. Sanga Srinivas (Head EHS) for “Outstanding EHS Performance”

**State Level Award**

State level Award received by Mr.T.Shivamoorthy and Mr.S.N.Patra on March 4, 2012 during National Safety Day celebration and presented by Mr. B.N.Bachegowda, Hon’ble Minister for Labour & Sericulture, Government of Karnataka & Mr. A.S.Lakshmanan, Chairman, National Safety Council, Karnataka Chapter, Bengaluru

From Left to Right:
DHAMRA PORT (MMH IC) has successfully achieved 15 million safe man-hours since the inception of the project. Cdr. A.K. Kar, Vice President (Projects) – Dhamra Port Company Limited presented an appreciation certificate for this commendable achievement and congratulated the project team for their efforts.

Our Clients at Vizag Steel Plant (RINL) celebrated the National Safety Day on March 4, 2012 in a grand manner and organised various competitions for all Contractors. 04 workmen from L&T won the prizes in separate categories viz. Slogan, Debate, Song and Poster.

Mr. Ajendra Agrawal – Cluster EHS Manager – MMH IC – Hyderabad Cluster was invited to handle a session on Safety in Construction Equipment, at a two days “SHE CONFLUENCE – 2012” Bengaluru Karnataka, organised by Dept. of Factories, Boilers, Industrial Safety & Health (KSSI), on the occasion of National Safety Day. The gathering (250) comprised of elite group of people from various reputed Companies.
UAIL Rayagada site bagged the “Best safety performance 2012” winner award amongst all the agencies working under UAIL.

Mr. K.K. Bhattacharya, Project Manager-Aditya Alumina Lapanga site, receiving award for Best Safety Conscious Project Manager from HIL.

Mr. K.V. Vipin, EHS Incharge-Aditya Alumina Lapanga site, receiving award for Best Safety Officer from HIL.
Coal Handling Plant of DVC Koderma Project Site bagged the prestigious RoSPA Gold Award.

Aditya Alumina Lapanga site bagged the safety award from HIL for best Safety conscious contractor.

UIL Rayagada site was awarded as “The Winners for Best Safety Performance- 2012” by our Client Utkal Alumina during the 41st National Safety Day celebration.
Importance of Safety in Construction Industry

Construction work is tough and the people who work in construction need to be tough, but there is no reason for them to be careless. Accidents can kill or permanently injure the tough as easily as anyone - "H.R.H. Prince Philip, Duke of Edinburge, London"

In any profession, the need for safety is paramount, because of the following factors:

- Humanitarian concerns
- Professional, institutional, and social concerns
- Legal and regulatory concerns
- Economic concerns

In construction industry, safety is even more critical than in other industries. Every Project team must take construction health and safety quite seriously, because the accident and fatality (death) rates in this industry are among the highest in most countries around the world.

It is also not true that a larger workforce attracts more accidents. Accident and fatality rates depend more on the safety culture of the Industry and the safety management system of the organization.

Many Industries and Contractors still believe the myth that safety concerns will lead to greater cost and reduced productivity. The reality is that safety evaluation and control save money. The delays and total expenses following an accident are usually much higher than the original cost of establishing and maintaining safety standards. The costs associated with accidents and fatalities are as follows:

(a) Direct Costs (Insured):
- Human ill-health, injury, death, medical and hospital expenses
- Transportation for first aid and for medical treatment, Property damage, destruction
- Liability insurance costs (after workers compensation), Repair and replacement expenses

(b) Administrative Costs:
- Budget allocations must be made for Safety director / coordinator
- Equipment and supplies Time (meetings, inspections, etc.)

(c) Indirect Costs (Uninsured):
- Impact on public, neighborhood, Delay due to accidents, investigations

- Wages to injured worker for time not worked, Loss of crew efficiency
- Training new/substitute worker, Clean-up, equipment repair, stand-by
- Rescheduling work, Post-accident extra safety supervision
- Construction authority and civil fines, Legal fees
- Impact on profession, industry, Reputation of government

Causes of Accidents

Apart from structural failure other causes of accidents must be understood and evaluated. Accidents may be caused by

(a) Unsafe Acts:
- Use of defective equipment, Failure to use personal protective equipment
- Unsafe material handling, Failure to follow safety procedures
- Poor housekeeping, Attitude problems (horseplay etc.)

(b) Unsafe Conditions
- Improper guarding of equipment, platform, Improper illumination, ventilation
- Hazardous chemicals, explosives, etc., Improper dress
- Poor site layout, housekeeping, Defective tools and equipment
- Poor tag-out and lock-out practices, Poor maintenance
- Unsanitary conditions, Unsafe design and construction

Factors Contributing to Accidents

(a) Human Factors: (b) Job Factors
- Attitude (towards self, others) - Task
- Limitations (medical, physical) - Tools and equipment
- Training Materials / structural safety

(c) Environment Factors
- Physical (terrain, site, climate) - Social, political, legal
- Technological (new technology) - Economical (insufficient fees)
- Managerial (communications) - Time (early finish pressure)

All Employees of the company have legal, personal and economic reasons for reducing the accidents at their work place.

Kumar Shailendra
Chief EHS Manager
PT&D
Helmet Congratulates the following sites for achieving TWO Million and more LTI Free Safe Man-Hours

**23**

400 kV D/C Karcham Wangtoo- Abdullpur Transmission Line Project, TL BU
Million Safe Man Hours, July 2010 and February 2012

**8**

400 kV WRSS Project, TL BU
Million Safe Man Hours, February 2011 to February 2012

**7**

765 kV S/C Anta Phagi TL Project, TL BU
Million Safe Man Hours, January 2011 to February 2012

**3**

765 KV Substation Project, Unnao, SS BU
Million Safe Man Hours, February 2010 to January 2012

**3**

400/132 kV BPRS Project, SS BU
Million Safe Man Hours, January 2011 to February 2012

**3**

KSTL-Siliguri Project, TL BU
Million Safe Man Hours, November 09 to February 2012

**3**

RE-Howrah Project (Package - 15A), SS BU
Million Safe Man Hours, December 2010 to February 2012

**3**

Agra Jattikalan TL, TL BU
Million Safe Man Hours, January 2010 to February 2012

**2**

MVPDS & SCADA, RSP-SAIL, IE BU
Million Safe Man Hours, July 2011 to November 2011

**765/400 kV Sub-Station Ballia, SS BU**
Million Safe Man Hours, May 2009 to December 2011

**2**

ITC GC Hotel Project, IE BU
Million Safe Man Hours, May 2009 to December 2011

**2**

220 kV Substation & Electrical Packages at L&T HZMC, Hazira, SS BU
Million Safe Man Hours, August 2009 to March 2012

**2**

BTTL-Tezpur, Assam (PGCIL) Project, TL BU
Million Safe Man Hours, February 2010 to February 2012

**2**

MPL Job Site- Maithon, Jharkhand, SS BU
Million Safe Man Hours, May 2008 to February 2012

**2**

400 kV BPRS TL-TSL Project, JSR, TL BU
Million Safe Man Hours, August 2010 to February 2012
ESKOM (South African Agency) visited 765 kV S/C Anta Phagi TL Project (Rajasthan) and 765 kV Substation Unnao (UP) project sites for the assessment of safety awareness and implementation of safety Standards at project site.

A one day BBS Training was organized by EHS department in co-ordination with P & OD on February 29, 2012 at Floatel Hotel, Kolkata. The faculty was Dr. H. L. Kaila. Mr. Kumar Shailendra (Head-EHS) was co-faculty from HQ.

A one day BBS Training was organized at Jamshedpur by EHSD in co-ordination with P & OD on February 28, 2012. The program was inaugurated by Mr. Moloy Mukherjee, Project Manager-IE-TSL Project. Mr. Kumar Shailendra (Head-EHS) was co-faculty from HQ.
Two days In-House Training Programme on EHS was conducted on January 12-13, 2012 for Substation Staff of Lucknow cluster.

The faculty was Mr. Kumar Shailendra (Chief EHSM-HQ), Mr. S K Saxena (SPM S/s) – Lucknow Cluster) & Mr. Krishna Kumar (REHSM-DLRO). The training program covered the topics of EHS Management System & Safety in Construction. 22 candidates participated in the training programme.

A Two day in-house training programme on Industrial Electrification was conducted on February 16-17, 2012 at Bilaspur. The programme was inaugurated by Mr. S.Subramanian, Project Manager – NTPC Sipat. The faculty was Mr. G.R.Soundarraj (REHSM – HYRO). The sessions included work at height, EHS Management Systems, Material Handling, P&M Safety, Fire Safety etc. 21 staff participated in the programme.

Two days In-House Training Programme on EHS was conducted on February 3-4, 2012 for Substation Staff at CSTI Pilkhua.

The programme was inaugurated by Mr. A K Rajput (Cluster Operation Head-EI&SS, Delhi). The faculty was Mr. Shailendra Kumar (Chief EHSM-HQ & Mr. Krishna Kumar (REHSM-DLRO). The training programme covered the topics of EHS Management System, Behavior Based Safety. 17 candidates participated in the training programme.

Safety in Transmission Line Program was organized at Nagpur on February 3-4, 2012. Mr.V.V.Chaphekar- Regional HR Manager – (Mumbai Region) was the Program Co-ordinator. Mr.Johnson David – REHSM (Mumbai Region) & Mr.G.R.Soundar Raj – REHSM (Hyderabad Region) were the Faculty members. 16 staff members participated in the programme.
41st National Safety Day/Week was celebrated at different projects across PT&D during February 27th to 4th March, 2012.

Various programs such as Safety Rally, Safety Awareness Show, Safety Drama (Nukkad Natak), Safety Competition, Emergency Mock drill (fall from Height/Fire fighting/Emergency evacuation) etc. were organized and prizes were distributed to winners.
The Royal Society for the Prevention of Accidents (RoSPA) has adjudged the prestigious RoSPA Gold and Silver Awards for Occupational Health & Safety to THIRTEEN projects of Power Transmission & Distribution Independent Company under the Safety Health Awards Scheme 2012.

The RoSPA Safety Awards have been recognizing health and safety success since 1956. This key fixture in the health and safety calendar offers organizations a prime opportunity to prove their ongoing commitment to raising health and safety standards.

<table>
<thead>
<tr>
<th>GOLD</th>
<th>RoSPA Awards</th>
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<tbody>
<tr>
<td>3x660 MW APL Thermal Power Project, Mundra</td>
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<td>220 kV Hazira Package At HZMC</td>
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<tr>
<th>SILVER</th>
<th>RoSPA Awards</th>
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<tr>
<td>132/33 Hybrid GIS Projects at Jodhpur for RRVPNCL</td>
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<tr>
<td>220/132/33 KV SubStation Paranda &amp; Tuljapur</td>
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<td>400kV Western Region Strengthening System - II Transmission Line</td>
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<td>Bulk Power Receiving Station for Tata Steel Ltd, Jamshedpur,</td>
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<td>MVPDS &amp; SCADA Projects at RSP, SAIL,</td>
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<td>220KV S/C &amp; D/C KSTL Project</td>
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<td>Rural Electrification Project- Jalpaiguri</td>
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<td>765 KV Ranchi to Sipat Transmission Line</td>
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<td>400 KV Korba to Bhilai Transmission Line</td>
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<tr>
<td>400/220/66 kV GIS Substation,Harsh Vihar, Delhi</td>
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<td>MRPL Phase-III,DHDT Unit, Mangalore</td>
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British Safety Council “International Safety Awards 2012” for
Power Transmission & Distribution IC


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<tr>
<th>Distinction</th>
<th>British Safety Council Awards</th>
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<tr>
<td></td>
<td>400kV D/C Karcham Wangtoo-Abdullapur, Transmission Line, Delhi Cluster</td>
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<td>GGSR Bhatinda, Industrial Electrification, Delhi Cluster</td>
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<tr>
<td></td>
<td>765kV Substation, Unnao, Sub-Station, Delhi Cluster</td>
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<th>Merit</th>
<th>British Safety Council Awards</th>
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<tr>
<td></td>
<td>BSL Project Site, BSL-Angul, Odisha, Industrial Electrification, Kolkata Cluster</td>
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<td>IE-Projects, Tata Steel Limited, JSR, Jharkhand, Industrial Electrification, Kolkata Cluster</td>
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<td></td>
<td>400kV MC/DC Transmission Line from Kadmato , BPR5, TSL, JSR, Jharkhand, Transmission Line, Kolkata Cluster</td>
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<td>145 kV Construction of GIS building and associate structures at Powai Hiranandani, Sub-Station, Mumbai Cluster</td>
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<td>765 KV D/C Jabalpur Pool-Bina TL, Saugor, Transmission Line, Mumbai Cluster</td>
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<td>400kV KSK TL packages-6x600 MW KSK, Transmission Line, Mumbai Cluster</td>
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The British Safety Council (BSC) is one of the world’s leading health and safety organizations with its mission to keep people healthy and safe at work.

The International Safety Award recognizes and rewards Organizations that show a real Commitment towards improving corporate health and safety.

Benefits include:

- International recognition for the Organization and its commitment to improving workplace health and safety.
- Enhanced reputation with customers and stakeholders.
The Annual EHS Rolling Trophy is accorded to deserving project sites to maintain and sustain high standards of Environment, Health and Safety. This year the following project site are adjudged as winners:

- TISCO IE Project, Jamshedpur
- 800kVHVD C Nidhaura Agra Transmission Line
- 765 kV Substation Project, Lucknow

Congratulations to all the teams for this successful achievement.

As new initiatives to enhance EHS compliance at project, Mr. J.S.Sudarsan, EVP & Head PT&D, launched an Online System in EIP-Vidya this system, would serve as a good platform for tracking the compliance status of Environment, Health & Safety Issues observed at site.

This system helps to track the observation made by EHSO at site and the compliance status thereafter. If observations are not complied within stipulated time, the same will be escalated to next level through email as well as SMS by the software.

In short it is a precise tool for ensuring EHS climate & EHS culture at site level religiously
400/220/66 kV GIS Substation at Harsh Vihar, New Delhi site received “CERTIFICATE OF APPRECIATION” from client - Delhi Transco Limited, for achieving “ZERO ACCIDENT RATE”.

Mr. S K Upadhyay (Project Manager – Harsh Vihar) received the “CERTIFICATE OF APPRECIATION” from Mr. M A Khan (DGM - Delhi Transco Limited).

765 kV S/C Anta Phagi Project received an appreciation certificate from client for achieving 4.5 Million Safe Man-hours at the safety valedictory function. Mr. A K Santhos (Project Manager) and Rakesh Singh (EHSO) received the award from Mr. S. S. Meena (Superintendent Engineer-RRVPNL).
6 x 600 MW SEPCO KMPCL Project, – Hyderabad Cluster received a Certificate of Appreciation and & Mobile Challenger Trophy from client M/s. SEPCO for outstanding safety performances during the year 2011.

400 kV D/C KSK MPCL Transmission Line site received an Appreciation Certificate from Client – M/s. KSK Mahanadi Power Company Limited for achieving 1 million safe man-hours without any injury during the period April’ 2011 to October’ 2011.

2 x 500 MW NTPC Mouda Electrical Works Project received an Appreciation Certificate from Client for best safety achievement during the month of February 12. The Project Manager, Mr. G. Anil Kumar received the trophy from client.
The APL Mundra (PT&D) achieved 6 Million Safe Man Hours without LTI between the period May 2009 & Dec 2011. The Mr. B.D. De Vice President & Site Head, ADANI POWER LIMITED awarded an achievement certificate in the presence of Mr. R.K Singh G.M (Safety), ADANI POWER LIMITED and other senior dignitaries on January 28, 2012. Mr. Jahangir Alam, Safety Supervisor was adjudged as Best Safety Supervisor among all the agencies available at APL Mundra Project.

**Power Transmission & Distribution**
2 x 600 MW DB Power Plant Project received an Appreciation Certificate from Client M/s. L&T Power for best safety achievement during the Year 2011. Mr. Sunil Kumar Yadav, Project Manager and Mr. Pradeep Kumar Guptha, EHS Engineer received the certificate from the client.

2 X 135 MW DCCP Jindal Power Plant Project, Raigarh received the Best Safety Contractor Award for the Year. Mr. Y. Syamala Roa, Construction Manager along with project team members received the award from Mr. Sanjay Garai, Senior DGM - JSPL
Appreciation Certificate for Rajpura project.

400 kV D/C Korba- Bilai Transmission Line has received Certificate of Appreciation from Client - Chhattisgarh State Power Transmission Company Limited for achieving One Million Safe Man-Hour during January-2011 to October-2011.
PT&D (International) wins SIX RoSPA awards for Occupational Health and Safety

Power Transmission & Distribution (International) won six international safety awards (one Gold and Five Silver) from the Royal Society for the Prevention of Accidents (RoSPA), United Kingdom for the high standards of Occupational Health and Safety maintained in its projects during the year 2011.

The RoSPA Safety Awards have been recognizing health and safety success since 1956.

**RoSPA Gold**

- Electrical and Telecom Utilities at SSA Phase 1&2 at RASLAFFAN West End Extension Project with Qatar Petroleum, Qatar

**RoSPA Silver**

- MV Power System Contract 1000 - 207 Project for ADPC, UAE
- 132 kV Cabling Project Contract No. CE/0096/2009 for DEWA, UAE
- 132/11 kV & 132/33/11 kV Substation works in Northern Emirates Contract No. E3 /09 (3) for FEWA, UAE
- Power Supply To Future ESPs and WIPs in Abqaiq area Contract No: 6600026593 Project for Saudi Aramco, Saudi Arabia
- 380 KV OHTL works associated with Power Plant #11 Integration Contract No. 11031092/00 project for SEC, Saudi Arabia
APPRECIATION

PT&D (INTERNATIONAL) - QATAR

RLQP Project of PT&D (International) - Qatar operation has received an “Appreciation certificate” from Ras Laffan Industrial City for achieving 3 million safe manhours without Lost Time injury from project start to Dec’11

PT&D (INTERNATIONAL) - UAE

A 3900.1 Project of PT&D (International) - UAE operation has received an “Appreciation certificate” from Al Ain Distribution Company for achieving 7 million safe manhours without Lost Time injury from project start to Dec’11
ADPC 1000 - 207 & 1001-272 Project of PT&D (International) - UAE operation received a 10th consecutive monthly Safety performance appreciation from its Client & PMC.

<table>
<thead>
<tr>
<th>Contract</th>
<th>1000 207 MV Power System (3 no's 33/11 kV SS and Associated cabling works)</th>
<th>1001-272 (5 No's 33/11 kV SS and associated cabling works)</th>
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<tbody>
<tr>
<td>Project</td>
<td>Khalifa Port and industrial Zone (KPIZ) Project</td>
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<tr>
<td>Client</td>
<td>Abu Dhabi Port Company (ADPC)</td>
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<td>Project Management Consultant</td>
<td>International Bechtel Company Limited</td>
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Other international EPC Contractors operating in the KPIZ Project are Al Habtoor Leighton, CCC, Ed Zublin / Al Jaber, Hyundai, Metito and Al Jaber GIS.

Every month ADPC and BECHTEL recognizes and rewards outstanding performance in safety. There is an award for the safest contractor of the month who has worked over 300,000 man hours and also to the safest contractor who has worked less than 300,000 man-hours.

L&T received 10 Consecutive Safest contractor of Month award in ADPC Project (May’11 to Jan’12 – Contract No. 1000 207 & Feb’12 – Contract No. 1001 272). This milestone is even more remarkable as it has been achieved in a difficult circumstances and a demanding schedule.
L&T secured the second position in the Best Contractor Category at Transco HSE Week Celebrations organised during January 22-26, 2012. The awards were presented at a function held in Abu Dhabi on February 16, 2012.

The Best Week from a Consultant/Contractor was selected based on the votes given by members of Transco Consultant and Contractor Forum. Overall winners include:

The human chain campaign by N 7133 project and blood donation camp by N 8033, N 5629.1 and N 6318 projects assured L&T of one of the top ranking in the Best Contractor category.
CROSSWORD PUZZLE

Please send your answers to HQSED@LNTECC.COM. Winners will be rewarded with attractive prizes. Answers will be published in next issue.