Challenge

Tata Chemicals Limited (TCL) has long considered the safety and health of its people as a top priority in its policies and business strategy development. The Tata Business Excellence Model (TBEM) accords a high priority to safety excellence and considers it as a precursor to business excellence.

Over the years, TCL has continuously strived to improve its safety performance by adopting the best safety standards and practices. Prior to 2004 when TCL Mithapur embarked on the safety journey with DuPont, its primary measurement of safety performance was the number of “Reportable Accidents” reported every year. As can be seen from the graph on reportable accidents between 2000 and 2003, maintaining a consistent level of reduction was a challenge.

Besides the variations in safety performance, fatalities and near-fatality incidents were occurring indicating that the results were also not sustainable. There was also a serious process safety incident in 2001 that caused the plant to remain shut for nearly three weeks.

Until 2004 when DuPont was appointed to assist TCL embark on a more sustainable and accountable safety program, TCL’s safety culture had been mainly reactive and dependent. The safety performance measurement system was not consistent with international standards and with those used by companies with world-class safety performance.

Safety was considered to be the sole responsibility of the Safety Department. The line organization was not given any safety-related goals or responsibility for safety, thus “buy-in” was minimal and impossible for one group to achieve on its own.

“Reportable Accidents” were defined as injuries that resulted in lost-time of two days or more, as per the legal requirement in India during the years before DuPont was appointed in 2004.
How it all started

In 2004, TCL appointed DuPont with the aim of instilling a safety culture transformation that would eliminate sporadic incidents by changing the mindset and behavior of the people involved with setting safety requirements and those who were implementing the requirements.

DuPont developed a safety roadmap for TCL Mithapur based on the results of the safety management assessment followed by an action planning workshop conducted by DuPont which encouraged TCL to assist in developing safe alternatives in the workplace.

In the safety roadmap, Mr Prasad Menon, Managing Director, Tata Power Limited (formerly MD, TCL), committed to the following objective: “To create a management culture that demonstrates SAFETY as Missionary Zeal and a safety culture that permeates through the organization and onto our families.

The early days of safety culture transformation journey

One of the first priorities of the safety culture transformation was for DuPont to conduct a safety management assessment at the TCL Mithapur site. The assessment was conducted in September 2004 and indentified the key safety leadership, structure and action elements that needed to be put in place or strengthened to bring about a safety culture transformation.

Following the safety assessment, an action planning workshop was conducted to help TCL Mithapur develop and establish a roadmap for implementation. The roadmap included a series of training for enhancing TCL senior leaders’ demonstration of their commitment to safety and their plan and to get line organization and safety professionals’ buy-in and accountability. Great emphasis was laid on strengthening line management’s responsibility and accountability. A key focus emphasized the need to engage all TCL employees in the safety effort. TCL also started working on establishing systems for tracking of trailing, current and leading safety indicators. The training series was followed with on-site implementation assistance through one-on-one coaching and hands-on experiences.

In addition to training and the implementation assistance, DuPont also facilitated the visit of about 15 TCL leaders and employees to the DuPont Savli plant in Gujarat, India. The visit and training opportunity helped TCL gain insights into the DuPont safety management philosophy and enabled TCL to see DuPont’s system in action in India.

Challenges encountered - Going beyond on-the-Job injuries

From the beginning of the safety culture transformation, TCL had set a clear direction on safety priorities. Mr DK Thakur, Head, Safety & Health, TCL Mithapur said: “Our approach and efforts are focused on continuously strengthening safety culture in the organization through behavior-based safety observation; prevention of incidents through incident reporting (including near-miss); investigation and communication of learning; developing and implementing rules and procedures; and identifying training needs and imparting training.

“It also includes deploying Contractor Safety Management, Office Safety and Process Safety and Risk Management systems. We extend the emphasis on safety of the families of our workforce with an ‘off-the-Job Safety’ program,” Mr Thakur added.

On average, 4,000 TCL employees and contractors work on the TCL Mithapur site each day. A major challenge was to bring about a behavior and mindset change amongst these people. Changing mindset in the words of Mr Mammen Jacob, VP Manufacturing, TCL Mithapur was “a tall order” due to a wide gap in safety behavior expectations when an employee or contractor is inside the company premises versus when he or she is outside the company premises.

TCL Mithapur took various safety initiatives to change employee behavior within the company premises, including
putting in place a Behavioral Safety Observation process. TCL also recognized the need to take specific steps that address the employees’ behavior ‘off-the-job’ including setting up a Township Safety Committee. This promotes off-the-job safety through several community initiatives. One example was the distribution of safety crash helmets at less than half-the-market value to all employees using two-wheelers. Other initiatives included involving school children to introduce them to safety at an early age so they could assist their parents at home with making wise safety decisions.

**Spreading the safety message to contractors**

The other challenge faced by TCL Mithapur was to improve the contractor safety performance. Mithapur is considered a remote location and the availability of contractors is limited. There is also a high illiteracy rate and turnover among contractors. To address these challenges, TCL Mithapur developed a Contractor Management System with a coordinated safety training program to improve the contractors’ overall safety performance.

The effort was further expanded in January 2008 with the launch of “Contractor Safety Stewards” to involve contractors’ employees in the safety drive. Each month, a “Safety Steward” was selected from a group of 50 contractors. The Safety Steward’s main responsibility was to ensure that his/her team worked safely, and the team adhered to all safety rules and regulations. The role is rotated within the contractor group, and about 600 contractor employees have been trained as Safety Stewards as of April 2009. The goal is to cover all contractor employees.

Looking at the success of the contractor safety steward initiative, TCL is also evaluating the possibility of a similar program for their own employees, such as ‘Safety Stars’.

**Sustaining the momentum**

By 2005, TCL had put in place an integrated safety organization including an Apex Safety Council and six standing sub-committees. The six standing sub-committees addressed Safety Observation, Incident Investigations, Safety Rules and Procedures (Standards), Safety Training, Contractor Management, and Process Safety Management. Eleven ad-hoc Task Teams were also established to address and resolve plant-wide safety issues. In February 2009, an “off-the-job” safety sub-committee was established to complement the efforts of the Township Safety Committee.

Multiple communication avenues from electronic communication channels to newsletter and billboards are currently used to keep the organization engaged on the council and sub-committees’ safety goals and programs. Several face-to-face forums/platforms have also been created for more effective communication, in particular, during Safety Observation rounds by the site leadership.

Several other programs are also in place to build capability, motivate, involve and provide awareness about the safety initiatives. “Near-miss” reporting is encouraged. Suggestion and reward schemes have been introduced. Two safety awards have been constituted to recognize outstanding “group safety performance”. The awards are: the Managing Director’s Award for the department with best safety performance and Managing Director’s Award for the contractor with best safety performance. TCL has also put in place schemes to recognize individual safety performance. The awards are very important to boost employee morale and provide motivation to improve safety performance.

*I liked the systematic approach towards improving safety performance. The upfront, frank approach of the DuPont consultants is also good. The consultants with their long years in line function were easily accepted and could gain respect and belief.*

*I felt great when an employee recently commented at the Tata Business Excellence Model forum that senior leaders are teaching us good safety practices with their arms around our shoulders!*

Mr Mammen Jacob
VP Manufacturing, TCL Mithapur
Results

TCL Mithapur has come a long way since it embarked on the safety leadership and excellence journey with DuPont in 2004. The Total Recordable Injury Frequency Rate (TRIFR) showed a steady reduction from 12.55 per million man-hours to 1.67 per million man-hours between 2004 and 2009 as can be seen from the graph below.

These improvement milestones demonstrate the fact that when safety is incorporated as a strategic business value it serves as a catalyst for achieving excellence in business performance. The key to success is commitment from the highest levels of the organization to value safety on the same level as cost, productivity and human resources, and wholly integrating safety into the full spectrum of business decisions and activities. TCL is on a mission and continuous journey to achieve the goal of zero harm.

“DuPont brought about a paradigm shift in the minds of the leaders and employees to the understanding of safety as a line responsibility. The Safety Observation process also helped in changing behaviors. Incident investigation, training and regular communication are other key steps taken to improve safety performance.”

Mr T Radhakrishnan
General Manager, Operations
TCL Mithapur

Tata Chemicals Limited Profile

Tata Chemicals Limited (TCL) is a part of the TATA Group, which is an Indian business conglomerate operating around the globe. TCL owns and operates the largest and most integrated inorganic chemicals complex in India.

TCL today is the second largest producer of soda ash in the world with manufacturing facilities in India, UK, Kenya and USA. It has the largest share of the domestic market in India.

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