

MTI Safety Program Successful Elements

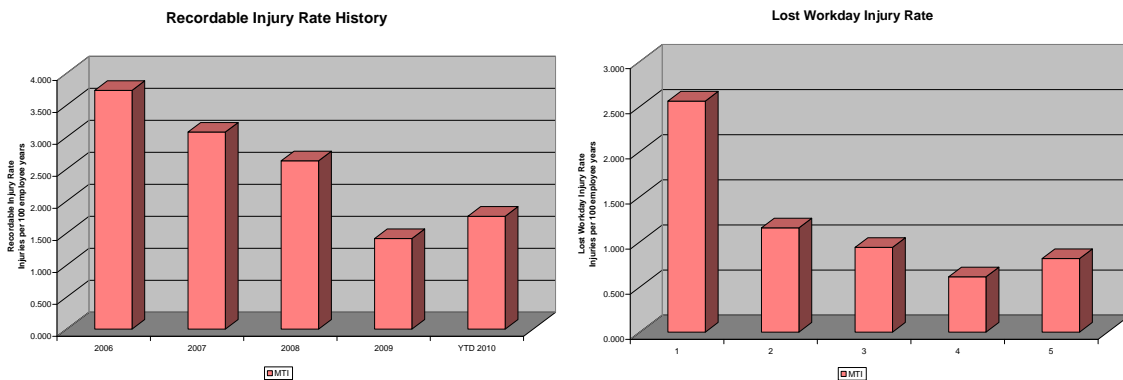
Introduction

Since 2006, the effectiveness of the MTI safety program has dramatically improved due to a significant change in the culture of the company. This change is a result of the focus on safety as a number one priority at all levels of the company combined with the use of specific tools that identify and reduce risks throughout the company.

The four key elements that have been the drivers of this change are reviewed below. These are:

- Management commitment
- Assigning responsibility for safety to business units
- Goals and Milestones
- Tools to identify and reduce risk
- Communications

The following figures demonstrate the dramatic safety improvements that have occurred in the past five years. However, we are committed to continuous improvement to build upon the success of the program.



As we move forward to become a world-class leader in safety, our efforts are directed towards incorporating safety as a routine aspect of all company activities rather than being considered a separate task. This is being accomplished by incorporating the safety tools into lean work practices such as standard work, 5S and Kaizen events. This integration is discussed in the final section of this report.

Management Commitment

In early 2007, MTI's management made a public commitment to improving the overall safety performance of the company. This commitment and the resulting expectation for improved safety performance from all employees provided the basis for a strong safety program.

Responsibility for Safety

EHS Lead Team

In 2007, the EHS Lead Team was established to develop and direct the company safety program and initiatives. The Team meets monthly and consists of the CEO, senior level managers from each business unit and the Corporate EHS Manager. The Team reviews the safety and environmental experience of the previous month and develops programs that are implemented throughout the company.

Resource Allocation

Prior to 2007, the EHS Department was the primary group responsible for safety. This Department was expected to develop and implement programs, training and policies that would drive safety at the operating and steel mill service locations. However, by keeping safety outside of the Business Unit teams, the Business Units were not held directly accountable or responsible for injuries.

This changed in 2007 when two members of the EHS Department were reassigned as Safety Managers to the MINTEQ and Satellite Business Units¹. Placing a safety manager on the Business Unit Team allowed each Business to focus greater attention to the issues and concerns that affected their operations.

Setting Goals

Prior to the establishment of the EHS Lead Team, the company had no specific safety goals. In 2008, the Team established Company injury rate milestones for a three year period. Each Business Unit was asked to establish their own injury rate milestones to support the overall Company injury rate goals. Progress against these milestones is measured on a weekly basis to gauge the effectiveness of the safety initiatives. An example of the injury rate scorecard, which is distributed to all employees on a weekly basis, is provided below:

	Reportable Injury Rate					
	YTD					2-May
	YTD Rec Inj Rate	2010 Rec Inj Rate Milestone	2007 Rec Inj Rate	2008 Rec Inj Rate	2009 Rec Inj Rate	2007 - 09 Average
MTI	1.741	1.000	3.079	2.630	1.414	2.374
MINTEQ	2.770	1.250	4.227	3.576	1.407	3.070
PM	0.487	0.000	2.568	2.339	1.150	2.019
Satellites	1.228	0.000	3.145	1.378	1.940	2.154

	Lost Workday Injury Rate					
	YTD					2-May
	YTD Lost WD Inj Rate	2010 Lost WD Inj Rate Milestone	2007 Lost WD Inj Rate	2008 Lost WD Inj Rate	2009 Lost WD Inj Rate	2007 - 09 Average
MTI	0.804	0.500	1.155	0.939	0.613	0.902
MINTEQ	1.385	0.500	1.676	1.416	0.603	1.232
PM	0.487	0.000	0.558	0.195	0.493	0.415
Satellites	0.000	0.000	1.677	0.787	0.647	1.037

	Achieving Milestone
	Not Achieving Milestone

¹ Due to the size of the Performance Minerals plants, a H/S manager was already present at each of the Minerals locations.

Benchmarking

As part of the process of setting safety goals, the EHS Lead Team gathered information from world-class leaders in safety. The Lead Team compared the MTI safety record with companies in our industries and those with sustained safety records. This comparison provides an incentive for MTI employees at all levels to go beyond what was considered acceptable and develop programs for continuous improvement.

Safety Programs

Safety Training

Historically, MTI's EHS Department provided training materials and set training guidelines for each of the business units. Although the responsibility for meeting the training goals has been transferred to the Business Units, EHS continues to offer web-based safety training to all employees. The web-based training consists of 8 specific training modules in 12 languages. Web-based training provides consistent training that is available at the convenience of each employee. The web-based training is also supplemented by group and hands-on training that covers location-specific topics.

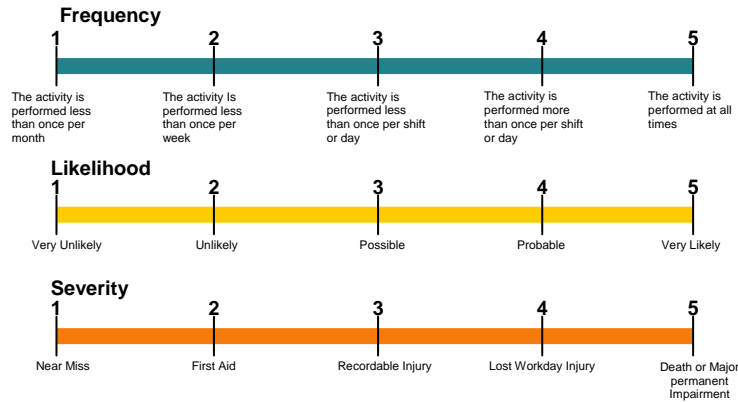
Self Assessments

In 2008, the company's safety and environmental policies were put into a format that allowed each location to evaluate site compliance with the policies. These self-assessments provided not only a tool for evaluating compliance; they broadened the understanding of site specific concerns within each location.

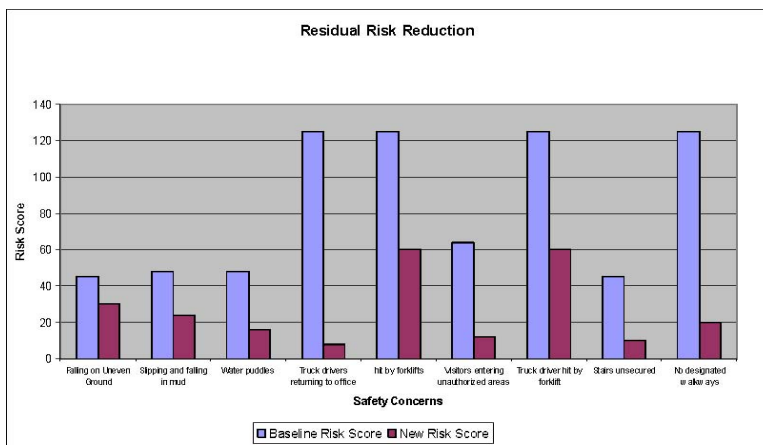
In 2009, a software program (Conformance Check) was purchased to generate and distribute scheduled EHS self-assessments and track assessment completion and non-conformances. Eight to ten specific EHS self-assessments are included in the annual set of goals and objectives for each location manager. The information now available from the assessments will be used to identify trends and develop future risk reduction programs.

R3 – Residual Risk Reduction

With the help of the company's worker's compensation Insurance carrier, MTI developed a Residual Risk Reduction (R3) process to allow employees to reduce risks in their workplace. The R3 process identifies and quantifies each risk associated with an activity by focusing on the Frequency of the activity, the Likelihood that an error will occur during the activity and the Severity of potential injuries resulting from each error (see the FLS assessment guide, below).



The FLS scores are calculated for the existing situation, after which the team conducting the R3 brainstorms opportunities for reducing the risk by targeting any of the FLS components. Once new controls are identified, the reduced risk is quantified and compared to the original risk to obtain a percent reduction. An example of the improvements resulting from an R3 review is provided below:



Job Safety Analysis

A basic tool that is related to the R3 process is Job Safety Analysis (JSA). JSAs are used to ensure that the instructions for each routine task identify the risks and precautions that are specific to that task. During a JSA review, the risks associated with a task are paired with the methods used to manage the risk. These methods include the individual task steps, the use of engineering and administrative controls and the mandatory personal protective equipment identified for the task. MTI has had a JSA standard in place for a number of years; however, each location is now tasked with the completion and regular review of a specific number of JSAs as an annual goal. Note that the R3 process is often used to develop or improve JSAs.

Fatality Prevention Program

While traditional safety programs focus on eliminating or controlling individual risks, fatalities and serious injuries often result from a series of errors or situations. As such,

many of the tools used to control individual risks are not effective at reducing the potential for a fatality. In 2008, MTI developed and implemented a specific Fatality Prevention Program to assist locations in identifying those areas at their site that have the highest potential to cause a fatality. The sites use this tool to identify activities that pose a risk of fatality and then implement specific corrections to reduce this potential.

Safe Workplace Action Teams (SWAT)

In 2008, MTI began conducting focused visits at sites with relatively higher injury rates or high risk potential. These locations are visited by an ad hoc team comprised of Safety, Operations and Human Resource members. The team works directly with the site to identify root causes that contribute to the areas of concern and jointly develop measures to improve the site's safety program. The recommendations resulting from these visits are presented to the local site manager, the Business Unit Head, and the EHS Lead Team. The recommendations are also summarized and provided to all MTI locations.

Communications

Weekly Safety Emails

A weekly summary of the Company and business unit injury rate is distributed electronically to all employees by the EHS Director. This report includes details of all recordable and lost workday injuries as well as any significant situations or achievements (safety awards, plant records, inspections, etc). The reports are also available for review on the company intranet as well as summarized on the company's external website (<http://www.mineralstech.com/corporate-responsibility/environmental-health-and-safety-ehs/safety-at-mti/>).

Monthly Safety Presentations to Business Units

Each month, the EHS Director presents an update of safety statistics and progress on Safety initiatives to the MTI Lead Council. The Council is composed of the CEO and his direct reports, including the heads of the business units. This discussion provides an opportunity for the business leaders and the EHS Director to evaluate the effectiveness of the safety programs and to review any injuries that occurred in the previous month. This monthly discussion also points out the importance of safety throughout the organization, in that safety review occurs at the start of the meeting and the business heads, not just the EHS staff, are held accountable for the safety results in their areas of responsibility.

Quarterly Safety Presentations to Board of Directors

Among the points of routine discussion at the quarterly Board of Directors' meetings is an update of the safety program. MTI's CEO reviews current safety statistics and the progress on Safety initiatives with the Board. Again, this scrutiny emphasizes the importance that safety receives at all levels of the company.

Continuing Improvement - Integration of Safety and Lean

MTI is implementing a number of Lean manufacturing tools to drive continuous improvement and eliminate waste. This effort is providing remarkable gains in production efficiency, process improvements and consistent operating standards. Beginning in 2010, the safety programs are being melded into the Lean efforts to drive

safety deeper into the organization. The ultimate goal of combining Safety and Lean processes is to reach world-class standards throughout the organization.

Kaizen reviews (focused activities designed to bring about rapid and significant improvements in a specific activity) now incorporate the R3 process to advance safety. The Kaizen process is also being used to enhance the SWAT visits. JSAs are now a part of the Standard Work processes – a system of doing routine activities in an efficient and consistent manner. Five S – a process of identifying and eliminating waste, now incorporates specific safety issues as part of the routine inspection process.