

European Responsible Care® Award 2011

Celanese Contractor Safety Improvements

About Celanese

Celanese Corporation is a leading, global integrated producer of chemicals and advanced materials used in consumer products and industrial applications. Our products are essential building blocks in the conveniences and components that make up modern life – everything from cell phones to food ingredients, to medical products, packaging and vehicle parts.

Summary:

Since Celanese became a US based publicly-traded company in 2005, leadership has purposefully transitioned the company's occupational and process safety approach from site-developed, site-specific processes, to a global approach emphasizing best practices and corporate-level guidelines and metrics via a multi-phase program called ALERT. ALERT is an acronym that stands for Accountability, Leadership, Employee Engagement, Requirements, and Tools, and includes manufacturing and non-manufacturing sites and was launched in 2005.

The ALERT (Accountability, Leadership, Employee Engagement, Requirements, Tools) program introduction in 2005 set the stage for a new era of safety expectations, standards and metrics and remains the foundation of our safety culture today. In 2008, we expanded this process to cover contractor safety with the philosophy of exporting our core values and systems to contractors working within our facilities. In the same year the ground breaking for the relocation of the Kelsterbach site took place; the so called TiGer-Project (*Ticona Germany*). Additional contractor safety requirements were globally implemented in 2010 to accelerate progress which included site specific programs, accountability and tracking tools as well as specific procurement and leadership support.

Particular focus on contractor safety was paid to the TiGer project in large part to due to the diverse workforce and unsatisfactory initial safety performance on the project. This included increased management focus and specific additional safety tools ("TiGer-Tools") to drive performance improvement. The

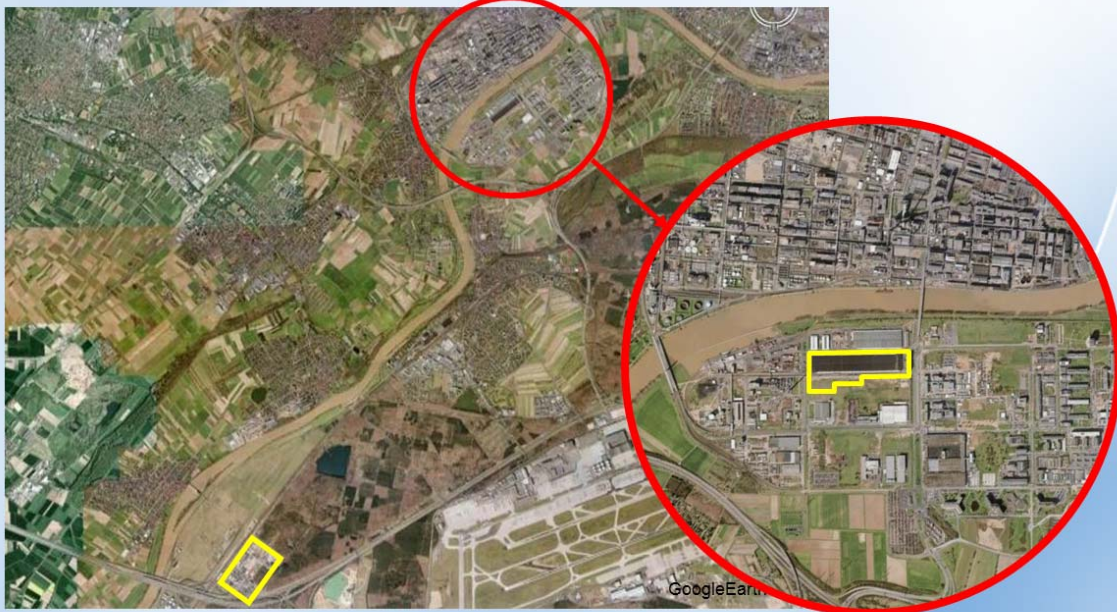
performance improvement is now evident; by the end of 2010 the global contractor injury rate was reduced by 50% compared to 2008 and the Tiger-Project was completed with over 3.000.000 work hours without a serious contractor injury.

Summary

- ▶ In 2005 Celanese started a project to dramatically reduce the injury rates of its own employees.
- ▶ Starting 2008 the approach had been expanded to also cover contractors.
- ▶ Additional contractor safety systems were implemented in 2010 to further improve contractor safety.
- ▶ In 2008 a major construction project started to relocate the Kelsterbach (Germany) site.
- ▶ Initial safety performance for this project was poor.
- ▶ In parallel to the 2010 contractor safety project additional “TiGer-Tools” have been implemented
- ▶ As a result the overall contractor safety performance dramatically increased and the TiGer project reached over 3.000.000 safe working hours

Contractor Safety @ TiGer Project

- ▶ TiGer = *Ticona Germany Project*
 - Because of a new runway for the Frankfurt airport the Kelsterbach site has to be relocated to the Industrial Park at Frankfurt



Why did Celanese start contractor safety improvement projects

For Celanese safety is a precondition for everything we are doing; therefore expanding safety initiatives also to contractors was a logical decision. The initial activities focused on making sure contractor companies are having certified safety systems. This led to initial improvements, but did not result in a performance expected from a zero injury culture.


In the next step efforts were centered on ensuring contractor leadership fully understands the safety requirements at Celanese and supports these. As a first step alignment meetings are held with potential contractors and a commitment letter has to be signed by their management.

To assess the safety performance and systems all contractors have to submit a Business Contractor Qualification Form.

For selected contractors a Celanese sponsor makes sure safety improvement plans will be developed and implemented to close potential gaps. To measure

the performance and the improvement activities the contractors submit monthly scorecards.

Regular discussion and experience exchange is guaranteed via contractor safety committees and contractor alliance councils.



Contractor Safety at Celanese

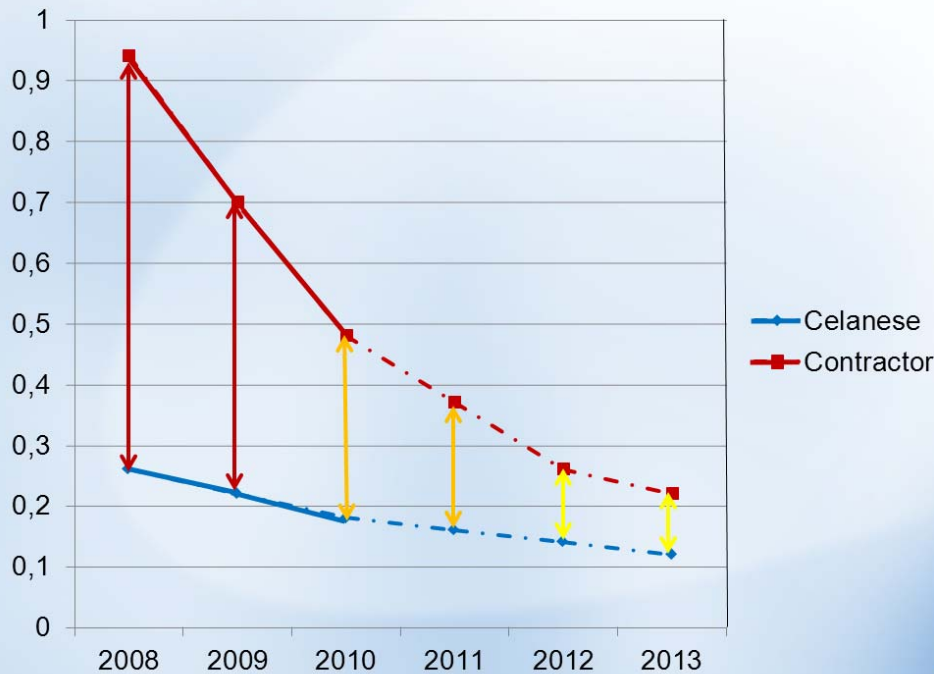
- ▶ Contractor Selection
 - Alignment meeting with potential contractors
 - Management safety commitment
 - Business Contractor Qualification Form (BCQ)
- ▶ Contractor Improvement
 - CE Involvement category
 - Contractor sponsor
 - Safety improvement plan
 - Monthly scorecard
 - Regular review
 - Contractor Safety Committee / Alliance council

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All these activities resulted in less contractor injuries and in closing the gap between the Celanese and the contractor safety performance. The target is to have the same improved safety culture at Celanese and the contractor organisations to achieve Zero Injuries.

Results

Serious injuries / 200.000 work hours



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TiGer-Project and Contractor Safety

When the TiGer-Project started contractor selection was still focused on certifications and technical abilities of the companies. The safety team was not fully integrated and it was recognized that management leadership visibility and contractor trust in the systems and procedures needed improvements. Initial safety performance was poor; the serious injury rate (OSHA reportable incidents per 200.000h) was 2,8 compared to 0,7 for all contractors working for Celanese and 0,22 for own Celanese employees.

Contractor Safety @ TiGer Project

The Learning Curve



- ▶ Contractor selection based on certification (e.g. SCC)
- ▶ Safety was one priority among others
- ▶ Safety persons perceived as policemen by contractor employees

- ▶ 14 serious injuries within the first 18 months of the project
- ▶ OSHA rate: 2,8

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Starting in 2010 the more stringent contractor safety requirements were also implemented at TiGer and an own Celanese / Ticona safety team was assigned to the Project.

Open and honest communication and a strong presence in the field had been the key to gain trust from the contractors and to form an overall team approach. In addition the so called "TiGer-Tools" were developed to align activities at the construction site.

Contractor Safety @ TiGer Project The TiGer Tools

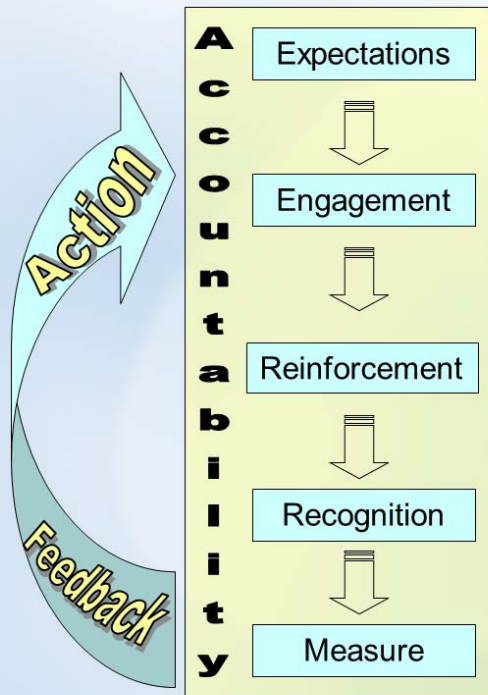


- ▶ Contractor re-qualification
- ▶ Solid safety performance and systems as precondition
- ▶ Own Celanese / Ticona safety team assigned to the TiGer project



The TiGer Tools are now an integral part of all major construction projects within Celanese and have been shared with all sites.

The TiGer Tools



- ▶ One Safety Team
- ▶ Training
- ▶ 06:45 Mass HSE Meeting
- ▶ STA Meetings
- ▶ Knowledge Centers
- ▶ Weekly One on One Contractor Management Dialog
- ▶ Awareness (Signage, Slogans, Posters)
- ▶ Field Safety Demonstrations (Safety Johnny)
- ▶ Spot recognition
- ▶ Monthly Lottery
- ▶ Weekly Mgt Walk-arounds
- ▶ Safety Observations Cards
- ▶ Adopt-a-crew lunches with Sr. Mgt

All Elements must be robust to be successful

Examples of the TiGer Tools are:

- Knowledge Centers located in the work areas and serving as a central point for information and communication

The TiGer Tools Knowledge Centers



- ▶ “Safety Haven” out on the site
- ▶ Photos and contact numbers for the area’s responsible Supervisors posted
- ▶ Permits are issued here
- ▶ Forms available – Permits, STA’s, Safety Observation cards
- ▶ Eye wash stations
- ▶ Ear plugs and eye glasses cleaners available
- ▶ Fresh drinking water is available
- ▶ Safety notices posted
- ▶ Safety posters posted



- Demonstrations in the field (Safety Johnny) to reinforce training and to give visual impressions. These demonstrations were especially successful to circumvent the language barriers at the construction site with up to 1.500 contractors from more than 10 countries.

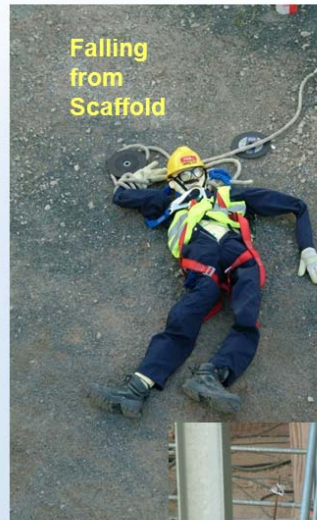
The TiGer Tools



Field Demonstrations “Safety Johnny” on-the-job



Encounter with Forklift



Falling from Scaffold



Harness can save your life



Falling on Stairway

- Monthly lottery to share the success with all the contractors at the site and to give positive recognitions.



The TiGer Tools

Monthly Lottery



- ▶ Monthly Safety Goals are near term and keep the workers attention
- ▶ Started out with Goal to have month with Zero LTI's
- ▶ Then after a few months reset goal to Zero OSHA Recordables
- ▶ Within 1 -- 2 days of the end of a successful month, lottery tickets are handed out to the workers as they arrive on site in the morning
- ▶ Lottery held at 16:30 that afternoon in canteen
- ▶ Drinks and candy bars are handed out to everyone coming to the lottery event so everyone gets something



As a result not only the safety performance increased but also the safety culture and the communication style developed in a very positive direction.

During regular authority inspections the high level of safety has been recognized and now the TiGer-project is used as a role model by the authorities.

The most positive recognition came from contractor employees that had worked at TiGer. When they met the inspectors from the authorities they asked them to make sure tools and systems from TiGer to be also implemented at all major projects outside of Celanese.



The Results

- ▶ 3.000.000 work hours without a serious injury
- ▶ Engaged contractors
- ▶ Recognition by the authorities and by contractors