

A steel manufacturer solidifies a program of putting safety first.

Client:

A manufacturer of steel products for the oil and gas industry

Challenge:

After the manufacturer suffered a third fatality in ten years at its Midwestern plant, it asked USC Consulting Group to help it develop a comprehensive and effective safety program. The plant, which employed 800 people, had a less-than-satisfactory safety record that earned it an OSHA rating near 11, which meant that for every 200,000 hours worked it would experience eleven lost-time injuries requiring a hospital visit and a work stoppage. By comparison, an OSHA rating near 0.2 incidents per 200,000 work hours is considered the gold standard for industrial safety and health.

Process:

We performed a detailed review of existing information flows and manufacturing processes across the facility. Our team members worked alongside the client's management team to gain an in-depth understanding of processes and methodologies. Our objective was to identify opportunities to drive safety improvements that would result in a safer work environment with fewer accidents and a lower OSHA rating.

The study concluded that there were opportunities for improvement in safety data capture, process analysis, project management, prioritization of initiatives, planning disciplines and work center safety processes. It was also important to bring about cultural and behavioral changes to create a safer work environment.

A project plan was developed to address identified safety shortcomings. The project started immediately in the finishing department, the most dangerous area in the plant. Based on our previous experience, we helped the client's team successfully install a safety management system in designated areas.

Together, we constructed and implemented an action item database that contained over 250 items, identified by the managers and operators as safety improvement opportunities. This database made it easier to prioritize which opportunities to pursue, refine safety initiative planning, bring better visibility to the progress of current safety initiatives and encourage completion of corrective action assignments.

We then jointly developed a safety resource capacity plan to define training resource needs based on the training population and timeline, critical items and intermediate and

long-term solutions. A detailed estimate for capital and associated IT costs was also prepared.

In addition, alongside the client team we examined key safety performance metrics used throughout the organization to ensure that the right numbers were being monitored, reported, and reviewed systematically by appropriate levels of management. A baseline was established to develop a new “near miss” metric, which made it easier to understand and manage the steps to create and sustain a safer workplace environment. And lastly, we helped the client to implement 5S; to improve efficiency by eliminating waste and improving flow.

Performance Results:

- 27% overall reduction in near misses
- 50% reduction in lost time incidents
- Achieved a 96% compliance rate with 5S audits
- An overall safer work environment

Conclusion:

Since installation, many safety records have been broken and the joint USC Consulting Group/client team is justifiably proud of its effort. According to the VP of Steel Operations, “Ensuring the safest possible work environment for our employees is paramount to the company’s leadership team. To the degree we have succeeded, we have USC Consulting Group to thank.”