# **CATERPILLAR SAFETY SERVICES**

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Coaching leaders - Training supervisors - Engaging employees



# **EXPEDITION TO EXCELLENCE:**

When Caterpillar acquired CleanAIR Systems the Santa Fe, NM, company was embraced as a leader in manufacturing products that remove pollution from diesel engine exhaust. Its safety culture, however, was no match for its engineering expertise. With the acquisition, CleanAIR got a new name — Caterpillar Santa Fe — and a new outlook on safety.

#### Call to Action

Hand injuries, cuts, burns and close calls with forklifts were common occurrences accepted as part of the normal workday at CleanAIR Systems, considered unfortunate consequences of the welding, sandblasting and grinding required to get the job done. It wasn't that employees were purposefully negligent or reckless; they were simply focused on the priorities set by management.

"Safety wasn't a major part of the dialogue at CleanAIR," said Randy McGuire, General Manager of Caterpillar Emissions Solutions. "The message from management to the employees could have been interpreted as, 'Get product built fast, get it out the door and get the check from the customer,' and that led to risky behavior and injuries."

When CleanAIR Systems was acquired and re-named Caterpillar Santa Fe, the facility began to record safety metrics for the first time in its history. A rash of nine incidents shortly after the acquisition signaled the need for immediate action on the culture front.

## Beginning the Journey

Setting out to improve safety culture without first identifying what's wrong with the current culture is like embarking on a road trip to a new destination with no map — the driver is apt to start out in the wrong direction. Caterpillar Safety Services set Caterpillar Santa Fe on the right path to safety excellence by starting with the statistically validated Safety Perception Survey, which gave every employee a voice in the safety improvement process.

All hourly, supervisory and management employees answered 73, yes-no questions that cover 21 categories influencing safety culture. Composite scores for each employee level revealed areas where perception gaps existed.

"The survey forced us to confront our existing culture and really examine it, because it was always just — this is just how we are," said Donovan Pena, Caterpillar Santa Fe Facility Manager. "When you're working in that environment all the time, you don't necessarily realize how far off the culture is."

Though managers and supervisors believed they emphasized the importance of safety, the SPS results revealed that employees saw things differently. The SPS provided quantitative evidence that safety wasn't valued as strongly as productivity. Qualitative proof that workers were getting the wrong message emerged when a Caterpillar Safety Services consultant conducted onsite interviews with employees throughout the Santa Fe facility.

"Our employees reported that safety was just a check box to be marked," said Pena. "What they were telling us was that they weren't getting real, genuine direction or feedback about how to work safely and prevent incidents."

With the SPS diagnosis, a safety steering team committed to a formula for safety excellence: continuous improvement driven by visible leadership, universal accountability and employee engagement. The work began with teams of employee volunteers who tackled areas of weakness through four-day rapid improvement workshops.



## **Developing Solutions**

The first continuous improvement team built a new near-miss reporting system, a leading indicator tool that has made safety a part of daily dialogue throughout the facility. In just one week, the team of six employees learned the formula for culture change and then crafted an action plan for improved performance.

The employees designed and created new near-miss report forms, identified locations to stage the forms throughout the facility, acquired plastic holders for keeping the forms visible and accessible and developed a structure for the near-miss process. Most importantly, the team built activities into its plan to be completed at every level of the organization, starting with the employee who reports the near miss and advancing up to the general manager of Caterpillar's Customer Services Support division.

Clearly defined requirements were listed for each of the 14 steps in the reporting and resolution process. The team mandated that the first nine steps must be completed within 24 hours of the near-miss incident. The remaining five steps must be completed within 30 days of the incident.

"Before, we were always working on the back end, telling people after the fact — don't do that, you should have done this," Pena said. "Now employees know that each near miss will be followed up by an investigation and corrective action within 30 days, and we report our near-miss resolution metric at every safety meeting."

With a near-miss process outlined, it wasn't long before Caterpillar Santa Fe began seeing positive results. Within one year, more than 95 percent of all near-miss incidents were addressed with corrective action within 30 days of the initial report. This year, the facility is already surpassing their previous record with a completion rate of 100 percent.

The steering committee agreed that equipment and work environment inspections could also be positively influenced by error-proofing routine processes. In a second rapid improvement workshop, a different group of employee volunteers gathered to learn the components of an effective inspections process.

Comparing the existing inspections protocol with an example of a successful process, the employees discovered they were lacking a standard of frequency, an accountability system and didn't have mechanisms in place to ensure adequate communication or recognition for work well done.

"The team did a great job of getting engaged and generating plans for identifying inspection zones, recruiting volunteer inspectors, and training inspectors," Pena said. "I even noticed them doing offline problem-solving during workshop lunch breaks."

By combining successful inspections protocol with existing Caterpillar Production System principles, they built a more robust inspections process, now called a safety walk. In this process, leaders are held accountable to complete more than 95 safety walks per month. This year, in just a five-month time frame, the Caterpillar Santa Fe leadership team has successfully completed 493 safety walks. "Safety has become a part of the job expectation for our leaders, and it's another way to visibly demonstrate that we are focusing on the factory. We are able to address things more actively because of it," said Pena.

#### Realizing Results

The work to error-proof processes and integrate safety into every activity has just begun, but glimmers of hope are already emerging, manifesting in both attitudes and quantifiable results. After one year of engagement with Caterpillar Safety Services, the facility's Recordable Injury Frequency (RIF) rate improved by 70 percent.

"The validating proof for me is this year — 2014. Not only have our RIF and lost time frequency numbers improved, but we also have a 100 percent safety walk completion rate," Pena said. "Running CI teams and promoting employee engagement increased the awareness of safety and helped accelerate the program success by placing advocates throughout the facility." Driven from a commitment by Caterpillar Santa Fe leadership to zero-incident performance, supervisors and front-line employees have taken hold of their safety journey, an expedition to excellence that never ends.

"Safety Services is holding our feet to the fire, really asking the questions to make sure we have a repeatable process and constant focus on safety," McGuire said. "I don't want this to be a one-and-done exercise; I want it to be front of mind on an ongoing basis, something that we all own."

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