



Turning Around a **Problem Plant**

9 Ways to Change From Severe Violator to Safety Model

By Jean Ndana

According to Bureau of Labor Statistics (BLS, 2016), 4,836 fatal work injuries were recorded in the U.S. in 2015. Stated differently, 13 American workers are tragically and unnecessarily taken from their families every day. These statistics underscore the urgent need for safer workplaces.

When the author joined the safety and health department of his former employer, he knew the company was facing some tough OSH-related challenges. To say that the employer was in deep trouble was an understatement. A few weeks after the author's arrival at the Flint, MI, manufacturing plant, the trouble signs were too many to miss.

The 700-person, round-the-clock plant was operating at an anemic 49% efficiency, while corporate management expected a minimum efficiency of 85%. The plant also had an OSHA incidence rate of 12.6 (3.5 points higher than the industry average), high turnover, high workers' compensation costs and a strained relationship with Michigan-OSHA (MIOSHA).

Hourly workers voiced persistent criticism of virtually every aspect of the plant, and of safety and health in particular. No matter what plant management did, it could not shake the perception

that it was indifferent to employees' safety and

health. In addition, several OSHA citations originating from employee complaints led MIOSHA to put the plant on its radar. The persistent OSH-related problems (e.g., ergonomics, machine guarding, housekeeping, lockout/tagout) not only were detrimental to productivity, quality and employee morale, but also had resulted in turnover of OSH professionals. The author was the plant's third OSH professional in less than a year.

During his first 2 years on the job, the author developed and implemented initiatives to turn things around, and the company began making progress toward achieving safety excellence. The company worked the initiatives into all phases of manufacturing, and saw positive effects on efficiency, quality, housekeeping and morale, as well as the bottom line.

Two years after beginning implementation, the company's safety performance went from the fourth quartile for its industry into the first quartile. The facility's OSHA incidence rate dropped dramatically to 3.2, half of the then industry average. In other words, in 2 years, the company reduced its injury rate by 75%. Workers' compensation costs dropped from \$1.5 million to \$300,000, an 80% reduction. The previously strained relationship with MIOSHA became a cooperative one with more openness, respect and trust. Management and employees had a better understanding of each other's viewpoints, and workers began showing initiative instead of mutely waiting for orders. They grew more at ease to engage their minds before their hands.

How can an OSH professional help make such a dramatic turnaround in a unionized manufacturing plant whose safety performance nearly landed it on OSHA's severe violators list? This article presents nine leadership tactics that the author used to reverse the course at this facility: 1) See the plant from the employees' perspective; 2) Garner management buy-in; 3) Build trusting relationships, and strong workplace alliances; 4) Use the daily

IN BRIEF

- **Successful OSH professionals are more than coaches and advisors, they are also trainers, teachers and learners.**
- **Dedicating time to shadow supervisors and to learn employees' jobs helps OSH professionals speak their language and build trusting relationships and strong alliances.**
- **Treating frontline employees like company owners, allowing outside companies to tour the facility/organization and making before-and-after videos of safety improvements are examples of meaningful and tested ways that OSH professionals can create greater employee buy-in to safety initiatives.**

Jean Ndana, CSP, PMP, ASQ-CQE, ASQ-SSBB, is an HSE engineer for a multinational automotive supplier with experience in manufacturing, quality and continuous improvement management. He has experience in the oil and gas, food and automotive industries in Africa and Europe. He holds an M.S. in Environmental Health and Safety Management from Oakland University, and an M.S. in Industrial Engineering from National Advanced School of Engineering. Ndana is a member of ASSE's Greater Detroit Chapter.



production meeting creatively;
5) Implement a walking suggestion box; 6) Be more than an advisor or coach: Be a CATTLE; 7) Allow outside companies to tour the plant;
8) Treat employees like owners;
9) Make before-and-after videos of safety improvements.

See the Plant From the Employees' Perspective

Choosing a suitable description for this leadership technique was a challenge. Other options were: "be an active listener," "be a good questioner," and "seek first to understand, not to be understood." As the reader will discover, the difficulty lies in the fact that all four attributes are required to successfully apply this technique.

When trying to improve performance, one must determine and understand the current status to map the road to the solution. In this case, finding the best intervention started with making an accurate, thorough and precise diagnosis of the situation. The plant needed to be closely examined at all angles with a critical, noncomplacent eye. Reviewing past poorly maintained records such as injuries, incident records, employee complaints and OSHA citations alone or in addition to an off-the-shelf perception survey would have been insufficient. To make an accurate diagnosis and develop solutions that employees will own, the OSH professional must see things through the employees' eyes, which requires getting their vision. The way to get employees' vision is to assertively listen to what they say.

Assertive listening is multifold. First, it means listening to not only the facts but the employee expressing them and his/her body language. Second, it means listening with the end result in mind, which in this case was creating an organization where safety is the most important product. Third, it means listening widely, broadly and deeply with the intention to pick up any suggestion, comment or idea employees may express, either directly or indirectly. Finally, listening assertively means giving the worker one's full attention.

After obtaining the required approvals, employee interviews began. The process started with production floor employees, with a goal of 10 employees per shift a day, one at a time. These interviews used a similar script, with the goal of explaining who the author was and the purpose of

the interview in a nonthreatening, reliable manner:

My name is Jean. I am the plant's new safety and health coach. Because I would like you to give honest answers to my questions, it is not necessary for me to know your name. I can assure you that at the end of day or the whole process no one in the company, not even I, will be able to identify how individual employees have responded. So, feel free to speak out about perceived hazards, unsafe acts, conditions, procedures, tools or equipment. Do not fear any retribution for doing so because your answers, thoughts, suggestions and ideas are not only wanted, but needed.

Simply stated, my job can be summarized as follows: to make sure you and all your coworkers go home at the end of your shift the way you all came in to work, that is, in good health and with all your fingers and toes. I cannot achieve this without your help. I cannot be all-seeing and all-knowing. You know your job better than anyone else. Since you spend almost your entire shift on the production floor where the action takes place, you know where hazards may come from, you know what tasks are most dangerous, you see things that I cannot or do not see, and you hear things that I do not or cannot hear. In short, you have vital information that I need.

Because of all this, you can play a significant role in improving safety and health, and even production and quality within our plant. People like you who work every day where the plant's policies and procedures are put into practice get the true sense of what's going on and, in that respect, can play a pivotal role both in spotting hazards, unsafe acts and conditions, and in making suggestions about how to fix them.

Please bring to my attention or your supervisor's attention, or both of us, any act, condition, situation, tool, equipment or process you think is not safe. I promise, once I am aware of it, not only will I move heaven and earth to have it fixed, but also I will keep you updated throughout this process.

Nearly every worker expressed excitement and enthusiasm to share honest answers, thoughts,

ideas and suggestions because they felt comfortable to speak with someone who was new and, therefore, had no knowledge of the plant personalities, politics or history. The dialogue began with a series of questions relative to the worker's professional background, previous job functions and responsibilities.

Before coming here, where were you working? What were you doing there? What trainings did you go through? Was safety taken seriously at your last job?

For the last question, if the answer was "yes," there was a follow-up question:

If you are asked to say one safety-related thing your former employer did in an excellent way, what would it be?

If the worker answered "no," the follow-up question was:

What were they supposed to be doing that failed or what were they not doing?

The interviews effectively engaged workers and resulted in the reporting of a significant number of conditions and practices detrimental to safety performance. Examples of deficiencies reported by employees during or after the interviews included driving a forklift without wearing a seat belt, using one's hand as a hammer, disabling safety devices, damaged storage racks, ambiguous work instructions, torn cables, malfunctioning equipment, screwdrivers with broken handles, worn cart wheels and a lack of maintenance.

The next series of questions were about the plant. These questions were asked to assess how comfortable employees felt working at the plant, to understand their perspective on the plant's difficulties and, if possible, to gather ideas and suggestions.

What do you like the most here? What do you like the least? Are you treated with dignity and respect every day by everyone you encounter? Are you provided all the tools, training, encouragement, feedback, coaching and equipment you need? Is your job valued and recognized? Are you utilized at your full potential?

If the individual answered "no," the follow-up question was:

In which role or position do you think you will better serve the plant? If you were the plant manager and you were to do one thing that you know or think would have positive effects on the safety and health of the plant, what would it be?

The last series of questions were relative to the employees' off-the-job activities. The author tried to discover the things outside of the work environment about which employees were most passionate. The goal of these questions was to harness workers' passion and leverage it through the safety committee's activities.

What are you passionate about when you're not busy with a job, kids and other responsibilities?

During the closing phase of the interview and before thanking the person for his/her responses

and suggestions, the employee was asked whether s/he would like to say anything else.

The next stage of the interview process involved managers. The interview protocol format was almost the same. Management staff were asked various questions to gauge their understanding of the plant's nature and circumstances of the troubled situation as perceived by hourly workers, and to identify remedial actions that could turn the situation around. Questions included (in no particular order):

How long have you worked for the plant? What do you like the most here? What do you like the least? Describe in one word or phrase the plant's current safety situation. How far back can you trace the plant's current safety issues? Of the plant's 700 employees, how many do you think are responsible for safety and health? What do you believe are the main root causes of the plant's safety situation? Does the plant's current safety culture contribute to the troubles the plant is currently facing, and to what extent? What does a positive safety culture mean to you in terms of productivity, job satisfaction, lost-time injuries? In your opinion, what is the role of management in building a strong, positive safety culture? What are examples of concrete practices that can develop a strong safety culture? In your opinion, why did the previous OSH professionals not stay longer? If you had a piece of advice for me, what would it be? If you were the plant manager and you were to do one thing that you know or think would have positive effects on the safety and health of the plant, what would it be?

The author gleaned a wealth of relevant information after almost 5 weeks of conversations with hourly employees and management. The insights gained helped in crafting a detailed, comprehensive action plan that was submitted to the plant manager one week later. This step was the first action necessary to begin turning things around.

Gain Management Buy-In

A basic tenet of safety management is that commitment at the highest organizational level is paramount. The foundational interviews made it clear that traditional techniques used to gain management buy-in for safety program improvements would not work. Techniques such as safety-related sales pitches, presentations showing direct and indirect costs of incidents, correlation between employee safety and employee morale and productivity, and graphic charts showing skyrocketing workers' compensation costs would not suffice. Management and the workforce were in opposition. Management was under the impression that whatever it did, it could not change employee perceptions regarding safety; just as polarized were shop-floor employees who believed that the plant's management was indifferent to their safety.

Persuading plant management that the situation could be corrected began with the plant manager. During a face-to-face meeting with the plant manager, the author described how Paul O'Neill, CEO

of Alcoa Inc. from 1987 to 2000, made Alcoa a great company by focusing on worker safety. The following excerpts from an article on the topic punctuated the conversation.

The emphasis on safety made an impact. Over O'Neill's tenure, Alcoa dropped from 1.86 lost workdays to injury per 100 workers to 0.2. By 2012, the rate had fallen to 0.125. Surprisingly, that impact extended beyond worker health. One year after O'Neill's speech, the company's profits hit a record high. Focusing on that one critical metric, or what [Charles] Duhigg refers to as a "keystone habit," created a change that rippled through the whole culture. Duhigg says the focus on worker safety led to an examination of an inefficient manufacturing process—one that made for suboptimal aluminum and danger for workers. By changing the safety habits, O'Neill improved several processes in the organization. When he retired, 13 years later, Alcoa's annual net income was five times higher than when he started. (Baer, 2014)

After sharing the article, the author suggested that the plant manager read Duhigg's book, *The Power of Habit: Why We Do What We Do in Life and Business*, one chapter of which is devoted to O'Neill and his safety campaign. The author then handed the book to the plant manager who took it without hesitation.

A few days later, the plant manager called a management meeting and uncharacteristically did not disclose the agenda in advance. He opened the meeting by saying:

I felt heartsick, just heartsick by this article and this book. We're not doing the things we need to do to be viable in the long term. Trying to achieve profit at the expense of our employees' safety is not a sustainable business strategy. Also, safety-and-health-related issues that are brought to management by employees should never be viewed as complaints but rather as opportunities for improvement in disguise.

After my reading, I realized that not only is there a good deal of truth in the old and tired saying that "the fish rots from the head," which is sometimes used to express the idea that all problems in a company or country can be traced back to its leadership, but more importantly, we can turn around this plant provided we truly care about our employees' safety. Making worker safety the plant's top goal is not only a moral and legal obligation, but it is sound business. Workplace safety impacts every aspect of our plant: production, quality, human resources, finance and others.

Therefore, if we focus on it, I am convinced that will affect large-scale change, which in turn will bring striking improvements in all other core company values, which in turn will ultimately put an end to the current opposition we have between management and hourly employees, turning "us versus them" into "we."

From now on, not only will managers be held accountable for employees' safety through words and visible and tangible actions, we as

management must be able to inspire and motivate others within the organization to practice safe behavior. Knowing that management is constantly on close and continuous watch by workers, our actions must visibly demonstrate an unwavering belief in our people's safety. As soon as anything that could get someone hurt is identified, we should fix it as quickly as possible. Also, safety must be the first item during the daily production meeting and internal management meetings.

The plant manager warned managers against giving employees the impression that management was switching priorities as a flavor-of-the-month approach to safety improvement. He was committed to turning the plant around and expected the management team to do the same.

While passing out copies of Baer's article to every attendee, the plant manager concluded his speech by saying, "I have ordered this book, *The Power of Habit*, for each of you. They will be here in a week or so. In the meantime, I would like you to read this article and meditate about it. I would like us to meet again and discuss it."

The 45-minute speech captivated everyone with a central theme and message: Things will never be same again. The worker safety crusade has just been launched.

Two days after this pivotal meeting, the author convinced the plant manager to make a cross-industry field trip to another plant. A few years prior, that plant was in bad shape profit- and safety-wise, and the plant's leadership managed to turn things around.

During the visit, the host plant manager used clear descriptions and riveting examples to explain how worker safety has been his plant's most transformative element, and that by placing employees' safety at the heart of everything, productivity and creativity flourished. The approach provided a disciplined framework for not only safety but also production excellence.

The two plant managers agreed to be accountability partners. At the beginning of each week, they spoke on the phone and each manager detailed his goals for the week. One week later, they discussed each other's progress toward the goals and the challenges each faced, which led to brainstorming possible solutions. Connecting the plant manager with a peer who understood how workplace safety can transform a plant was a giant leap forward.

A few days after this field trip, the plant manager began implementing elements of the action plan developed based on the plant-wide interviews. An initial task required the plant manager to rally the whole plant around a new vision for safety excellence. After being introduced to Paul O'Neill's story, the plant's vision for safety excellence meant adopting a paradigm shift from thinking that workplace injuries are to be expected to thinking and believing that a goal of zero injuries is not only possible, but also necessary.

During the meetings held with workers and supervisors on each shift, the plant manager con-

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veyed that their safety was now the plant's top goal, and that the plant was resolute to create a system aimed at achieving employee safety that continuously improved. He said:

The plant will start encouraging and rewarding safe behaviors. We cannot be successful without your buy-in and participation. As management, we are open to new ways we can identify and fix safety issues in our plant. Bring safety and health issues to our attention, we will take them as our mandate and strive to correct them, and we will never compromise your safety. After bringing an issue to your supervisor, if you do not have feedback from your supervisor or your supervisor's boss within a week, or you think it is taking forever to be fixed, come directly to me.

Such a change in perspective opened the plant to new attitudes, behaviors and fresh ideas. Managers, supervisors, engineers, technicians, hourly workers—everyone bought into the new vision and the plant manager matched his words with actions. Safety was the first item discussed during daily production meetings and internal meetings. Correction of identified hazards was systematically tracked weekly. Managers were graded not only on a financial scorecard, but also on their ability to integrate safety into the business process.

More precisely, managers were reporting hazards, and unsafe acts or conditions. Managers, supervisors and the plant manager alongside workers were participating in safety activities, monthly safety meetings, safety trainings and more. A striking illustration of the plant manager's commitment to worker safety was the institution of a stop work policy, wherein any worker could call for a work stoppage if s/he viewed a coworker performing an unsafe act.

Reduce Plant Response Time

One opportunity for improvement identified by many employees was the plant's response time to safety and health issues. This is the time between the moment the issue is spotted and reported, and the moment an issue is fixed. Nearly every interviewed worker felt that the plant management was, at best, taking far too long to fix even relatively simple issues. Some workers felt management ignored those issues. To reduce the plant's response time, the following two-step approach was implemented.

1) Build Trusting Relationships & Strong Workplace Alliances

OSH professionals are in a unique position compared to colleagues from other fields. Typically when a safety-and-health-related nonconformity or issue is reported, and a solution to fix it has been devised, OSH professionals rely on coworkers from other departments to implement the solution. This situation is not experienced in other fields such as accounting or purchasing, and it can both present challenges and be a major strength. Three examples help illustrate this point.

1) An assembly line operator reports to the OSH professional that the light curtain of his cell does

not work. The OSH professional will ultimately rely on the production technician or a manufacturing engineer to fix the faulty light curtain.

2) If during a planned inspection, an inspector uncovers that a guard for a vertical band saw does not exist, the OSH professional will rely on maintenance personnel to guard the entire blade except at the point of operation.

3) If an audit reveals a leak in a bathroom that has caused increased moisture in tile, the OSH professional will rely on facility management personnel to fix the leak and remove the mold.

These simple examples show that maintenance, engineering and facility management departments have a direct impact on safety and response time. Therefore, no matter how competent the OSH professional, to reduce the plant's response time, s/he needs to build and nurture trusting relationships and strong workplace alliances with coworkers from maintenance, engineering, facility management, purchasing and shipping/receiving.

One way for an OSH professional to show appreciation is to follow the advice of Girard (2013): At regular intervals, one department at a time, engineers, maintenance, production and facility technicians, purchase and shipping/receiving clerks can be taken out for lunch or dinner. It is a powerful way to thank them for a job well and swiftly done. Another way to show appreciation is to post throughout the plant, particularly near time clocks, before-and-after pictures with the names of the employees who fixed the issues, as well as those who spotted the issues.

2) Use Daily Production Meetings Creatively

The plant held daily production meetings at 8:30 a.m. attended by the plant manager, all the other managers, engineers, production, quality, maintenance, facility management and shipping/receiving supervisors. These 15- to 20-minute meetings took place in the main break room and all attendees stood in a half circle in front of a big production board. The purpose of these meetings was to communicate production schedules and to review production and quality issues. Safety was not part of the agenda unless a serious incident occurred. The author asked the plant manager to allow the safety department to speak briefly during the daily production meeting about safety-related activities, actions, progress, accomplishments, inspections and findings. The plant manager agreed, especially because the request was in line with his promises.

The daily production meeting was used creatively. At the end of each month, the nonconformities or issues uncovered during daily rounds, planned inspections, or brought to management's attention by employees and, later, by supervisors and managers, were compiled in a presentation that was delivered at the next meeting. When possible, photos of the issues were taken. Nonconformities that were deemed immediate dangers were tackled as soon as they were uncovered. For each projected photo, a brief and concise explanation was given on: 1) where in the plant the picture was taken; 2) why it is a non-

FIGURE 1
Corrective Actions Tracking System

% completion:		33		Open issues		4		
Date:		11/11/2014		Closed issues		2		
				Total issues		6		
Issue No.	Inspection month	Actions	Owner(s)	Planned completion	Status	Comments	Actual completion	Done
Last month (Sept.) carried over item								
	Sept.	NA	NA			NA		
Inspection month findings								
1	Oct.	An extension cord used as permanent installation	Ken L.	11/4/2014	On track	Extension cord removed	11/4/2015	Yes
2		WC 1034 Poor housekeeping: tripping hazards	Safety com.	11/4/2014	On track	55 campaign has been done	11/4/2015	Yes
3		Exit door cannot be opened; it is stuck closed	Ken C.	11/15/2014	Progress but experiencing challenges	Contractor has received the SOW		No
4		The platform where the operator stands is shorter than parts white platform	Jim W.	11/28/2014	On track			No
5		Some tool belt numbers are missing	Kim G.	11/28/2014	Progress but experiencing challenges	Numbers have been ordered		No
6		WC 800 part washer guard is broken	Alvin P.	11/15/2014	On track			No
Other safety and health topics discussed								
Certain Hilo drivers do not systematically conduct prestart inspection. A refresher training will be conducted on that subject.								
Legend								
100% complete		Progress but experiencing challenges						
On track		Not on track/urgent issues						

conformity; 3) possible negative consequences if unchanged; and 4) possible positive consequences if the issue is addressed in a timely manner.

For each projected issue, an owner (the person responsible for making sure the issue will be fixed) was designated. Generally, it was either a supervisor or an engineer. Once designated, the owner was asked to estimate how much time was needed to fix the issue. After that, it was time to shop for the most suitable solution, as the audience was asked to suggest resolutions.

At the end of that meeting, the presentation capturing all the previous month's nonconformities was sent out via e-mail to all employees and posted throughout the plant. Also, a corrective actions tracking system (CATS) entry was made for each nonconformity, indicating the owner, status (open or closed), target completion date, actual completion date, percentage of accomplishment and comments, and was sent out via e-mail and posted throughout the plant.

One week later, the presentation was then divided into closed issues and open issues. The follow-up began with closed issues. The before picture appeared on the left side of the slide and the after picture appeared on the right. For each open issue, the owner was asked to provide the latest status and was asked questions such as: Where are we with this? Are we still on track? Are we experiencing some difficulties? Have we ordered the material? If yes, what is the delivery date?

At the end of the meeting, the updated versions of the CATS spreadsheet (Figure 1) and the presentation were sent out via e-mail and posted throughout the plant.

This two-step strategy worked well. The plant manager approved safety-and-health-related purchase requests more quickly than in the past be-

cause he expected them and knew about the need based on discussion during the daily meeting. The purchasing department turned purchase requests into purchase orders more quickly. Supervisors and engineers worked smarter and harder to close issues under their responsibilities as quickly as possible. Those who had been labeled by most shop-floor employees as dragging their feet were now working diligently to close safety-related issues.

What changed? Why did this approach work? There are three primary reasons the new approach produced positive results.

1) OSH built meaningful, personal relationships and strong mutually beneficial alliances with key departments that had direct impact on the plant's safety response.

2) As Cialdini (1993) says, we are more likely to achieve our goals if we commit to them publicly. If your peers do not see or hear progress from you in the morning meetings, you may lose credibility. No one wanted that.

3) The daily production meeting was transformed into a weekly safety and health brainstorming session, full of creative suggestions. Showing pictures of nonconformities and explaining why they were unsafe became informal OSH training sessions for plant management. Managers, engineers and supervisors not only acquired new knowledge but also honed their skills and abilities in spotting safety concerns. A few weeks after launching these sessions, attendees began using cell phones to take pictures of nonconformities they saw while on the shop floor. During each weekly meeting, attendees eagerly awaited the pictures.

Implement a Walking Suggestion Box

One outcome from the worker interviews is something many already know: The best, most

OSH professionals must play many roles and constantly shift between them, relying on experience, knowledge and expertise to match the situation.

transformational ideas often come from individuals who work on the shop floor every day. They see the organization from a different perspective, which can be valuable.

Most production floor employees were not only knowledgeable of plant safety and health issues but also had creative ideas about fixing them. One challenge was then to find practical, workable ways to encourage production floor employees to come forward with potential safety issues and share suggestions about how to correct them. Empowering employees, especially shop-floor workers, transformed the safety program.

Like many organizations, the plant had an employee suggestion box: A locked box mounted on the wall of each break room. It was not working. Suggestion boxes collected only layers of dust and the occasional idea. In most modern workplaces, traditional suggestions boxes are obsolete, and they are passive and impractical for most shop-floor workers who do not like to write down their ideas on paper. Traditional suggestion boxes are also not practical for employees who by nature are shy, and do not easily share ideas, suggestions and concerns.

In today's competitive environment, what practical and workable approach can an organization implement to leverage employees' creative contributions? What practical and workable system can a company adopt to proactively solicit ideas, suggestions, issues and concerns from every employee? How can a plant's top management show concretely and tangibly to all employees, especially shop-floor workers, that their ideas, suggestions, concerns, complaints and issues are not only wanted but also needed?

This is where the walking suggestion box system, detailed by Japan Human Relations Association (1992), becomes handy. The plant successfully implemented this system. Every day during a 2.5-hour plant tour, the author stopped at as many work stations as possible and talked to people. Each conversation started the same way:

Hi, my name is Jean. In case you don't remember, I am the new safety and health coach. You and I had a fruitful discussion a few weeks ago and I am stopping by to say hello and see whether you have any safety-related issues, concerns, complaints you would like to share with me. Any unsafe area, faulty equipment or tool? Any procedure you don't understand, that is not clear or not practical? Any work instruction you have found difficult to follow, seems unclear or does not make sense?

Each time the employee spoke, the author listened aggressively, asking follow-up questions to let the worker know that what s/he was explaining was important to him, but also to make sure he understood the issue.

After the first series of questions on issues, the next set elicited suggestions and ideas for improvement. Before moving to the next workstation, the author thanked the employee for his/her insights and promised to update the worker on progress. Also, the author told every employee that coming

forward with issues and participating in finding solutions is the best way to positively impact safety and health.

As safety issues were uncovered and corrected, the plant tour became shorter in duration. When management began seeing positive results, the supervisors and managers began conducting their own safety tours. As a continuous improvement tool, managers and supervisors were required to reach out monthly to at least five employees, hear their concerns and learn directly from them about new ideas, suggestions and proposals for innovation.

Be More Than an Advisor or Coach: Be a CATTLE

Many OSH professionals see their role as that of an advisor or coach. In today's dynamic business environment, to be competitive and successful OSH professionals must play many roles and constantly shift between them, relying on experience, knowledge and expertise to match the situation.

In addition to being a coach and advisor, an OSH professional should be a teacher, trainer and a learner. A mnemonic tool that can help OSH professionals remember these different roles is CATTLE (coach, advisor, teacher, trainer, learner). For an OSH professional to be a successful coach, advisor, teacher and trainer, s/he must first be a good learner. S/he needs to learn the people, the environment and how the plant operates. From every angle, s/he needs to know the plant's capabilities, strengths, struggles, weaknesses and current levels of safety performance.

This learning phase is important for several reasons. An OSH professional cannot improve an activity with which s/he is not familiar. It is difficult to provide proper technical guidance if one has never experienced an activity. In the author's experience, hourly employees tend not to follow guidance that they know was written without their input and/or by someone who has never performed the activity. Finally, knowing how the plant operates will help an OSH professional provide examples and illustrations that are tailored to the specific workplace hazards during coaching, teaching and training sessions.

In this case, the author visited all the plant's departments, from production to finance, logistics, maintenance, quality, engineering, manufacturing and facility management. Supervisors, engineers, maintenance and production technicians were shadowed for half a day to several days. Shadowing these people was an ideal opportunity to learn to a certain extent about their jobs, daily difficulties, constraints and hazards they face.

Because most people learn best by doing, the author worked alongside frontline employees to learn and understand, to a certain degree, their work, struggles and hazards they face. Knowing that while we teach, we learn, managers, supervisors and employees learned about MIOSHA laws and regulations applicable to the plant, workers' compensation law, experience modification rate and how managers and supervisors can help influence

it by keeping employees safe, what a hazard is, the hierarchy of controls, direct and indirect costs of an incident, how workplace incidents negatively affect not only the plant's bottom line, but also the injured person's life, family, community and the country as a whole.

Managers, supervisors and shop-floor employees were trained on hazards identification, hazards and near-hit reporting, data gathering, group dynamics, meeting participation, lockout/tagout, how to constructively approach coworkers with a safety concern, and PPE and its limitations. Managers, line supervisors and some hourly workers were trained on how to provide safety trainings. More importantly, hourly workers were trained to notice exceptions, things that seem odd or out of place, to pay attention to details, and to look for the meaning behind what they observe.

This approach paid major dividends. Not only did it help the author learn, to some extent, what supervisors and workers do, to understand the main aspects of their job, to see where and how safety failures can occur, but also showed empathy for the workers from the OSH specialist. More importantly, the approach improved communication channels between the author and employees at all levels.

The author recognized that safety and health cannot be managed from an office or a cubicle, rather it is in the trenches, where OSH professionals can exercise the greatest influence. Furthermore, the more an OSH professional knows about supervisors', engineers' and workers' jobs, the better s/he will speak their language. A shared language is a critical element in building trusting relationships and strong alliances. Workers will have greater respect for an OSH professional who talks to them on their own terms.

Employee Engagement & Involvement Strategies

A common theme in many world-class organizations is a management system that engages employees from various levels in meaningful ways. This usually occurs through a series of activities. The following employee involvement activities were successfully conceived and implemented at the plant.

Allow Outside Companies to Tour the Plant

Inviting external companies to tour a plant and having frontline employees guide these tours can improve an organization's performance in safety and health. When this idea was first suggested, the management team was skeptical, arguing that the plant was not yet performing at an exceptional level.

Too many organizations believe that they need to be world class in safety before allowing other companies to find value in their safety programs. The author believes that whatever a company's safety status, when the spotlight is turned on a plant all the time, that is, when other companies continuously assess the plant's safety programs to identify ways they can improve their own pro-

grams, the plant's employees will naturally want to live up to that expectation.

Allowing outside companies to tour the plant proved to be a powerful catalyst for meaningful employee involvement and engagement. Safety champions from employee ranks were identified across all shifts and per workstation. When visiting companies arrived for a plant tour, the plant manager met them in the front office. He provided a succinct overview of important facts about the plant and the tour, including OSH. Then the plant manager escorted visitors to the first workstation where the safety champion took over.

The safety champion introduced visitors to production associates and showed visitors how material was processed, the safety challenges faced and specific safety improvements. When that workstation tour was complete, the safety champion escorted visitors to the next workstation.

At the end of the tour, the plant manager gave a brief presentation of the plant's journey toward safety excellence, focusing on practices rather than numbers, general safety improvements and, more importantly, the fundamental beliefs through which the plant operated: Worker safety is at the core of the plant's vigor and fundamental to operational excellence and financial performance. The tour concluded with a question-and-answer discussion with the plant manager and the author.

This approach worked well and provided the expected benefits. By inviting outside companies to tour the facility, the plant not only demonstrated faith in workers doing a terrific job, but more importantly it gave workers public recognition. This simple action changed the way many employees felt about the company. People whose hard work is publicly recognized are more positive, productive and innovative. They are motivated to maintain or improve their good work to gain more recognition. Hazards identification and safety improvement ideas quickly began pouring in. Almost everyone on the shop floor wanted to serve as workstation safety champion so s/he could present to visitors the hazard s/he spotted and his/her safety improvement ideas.

Because plant tours were not held at night, third-shift workers were cutting short their sleep or rest time and without extra pay, just because they wanted to serve as tour guides during the day. Visitors touring the plant expressed gratitude for what they learned. Questions from visitors enhanced employees' knowledge about hazards. Frontline workers became great salespeople for a strong safety program.

A totally unexpected effect of this approach, however, was improving shop-floor employees' confidence. People who would never have spoken in front of a group before became proficient and comfortable as tour guides.

Treat All Employees Like Company Owners

One action plan item required the plant manager to treat workers like owners. One concrete way to achieve this is to hold a quarterly state-of-the-

business address during which the plant manager would share most of the business numbers: plant profits, OSHA recordable rates, near-hits, lost workdays due to work injuries and illnesses, workers' compensation costs, quality defect rate, production rate and finance, not only with department heads or supervisors, but also with every hourly and temporary employee.

At first, the plant manager was reluctant to do this, arguing that sensitive information might be shared outside the plant, and that employees may be discouraged that the plant was not doing well. The author told the plant manager that his apprehensions were legitimate but that, in the author's experience, sharing the numbers shows employees that they are an important part of the business. Also, one way to empower and motivate people is to show them how their daily actions positively or negatively affect the plant's goals. Knowing what is going on in their business is the only way workers can do their jobs best. The numbers were the feedback of employees' day-to-day actions, and helped identify what employees were doing right and where change was needed.

The plant manager agreed to try the idea. Sharing information with every employee empowered and motivated frontline workers, which in turn had a positive effect on safety and the bottom line. People who are trusted with sensitive information usually respect the trust placed in them. Even if there are a few leaks, the value of sharing the information with all employees is much greater than the loss from any leak. A good example is when the plant manager started explaining that the financial section titled *safety supplies* is related to things such as earplugs, the plant gradually saw fewer earplugs littering the parking lot. Workers clearly began to see how actions such as throwing away earplugs were negatively affecting the bottom line.

Make Before & After Videos of All Improvements

It is generally agreed that a safety management system cannot reach its full potential without active employee participation. One such activity that proved successful was making before-and-after videos. When a nonconformity or improvement opportunity was identified, the employee who identified the situation was video-recorded explaining why the situation was a nonconformity or improvement opportunity, and the possible negative consequences if nothing was done. After the required actions were implemented, the employee was recorded a second time explaining the benefits of the new situation.

The videos were powerful marketing tools. The videos were broadcast throughout the plant and shown during the quarterly state-of-the-business address. They concretely showed small, early wins, demonstrating that the process was working. The videos also became great training tools, especially for new hires. Employees were seeing specific examples of unsafe acts, workplace hazards and unsafe conditions. By simply watching these customized videos, employees sharpened

their hazard perception skills and trained their eyes and ears to identify potential hazards. Workers were also exposed to the creative ideas others used to mitigate hazards.

The videos were also great public rewards. Knowing that recognition is a critical component of employee engagement, the videos were used by plant management to celebrate employees' hard work and creativity, and to show touring visitors how laser-focused and imaginative the plant's workers were.

The results achieved in 2 years created ripple effects on other operations within the group: other manufacturing plants came to learn this plant's approach. The region president lauded the plant for harnessing the passion, power and creativity of employees at all levels to accomplish what he called "highly acclaimed results."

Conclusion

Workplace statistics are chilling and undeniable: 13 workers are killed tragically and unnecessarily on the job every day in the U.S. This rate underscores an urgent call to action to employers. More than ever, employers must find creative, efficient ways to identify and solve workplace safety and health issues that cost U.S. workers their lives. Identifying these issues and devising solutions require employer willingness to apply proven techniques and ideas.

This article shares practical, workable approaches used to turn a manufacturing plant besieged with chronic safety and health issues into a bastion for safety. Although every manufacturing plant or organization is different, the techniques discussed are transferable to any organization facing similar challenges. These simple approaches for making workplaces safer and better can help any manufacturing plant accomplish great things in the safety and health. **PS**

References

- Baer, D. (2014, April 9). How changing one habit helped quintuple Alcoa's income. *Business Insider*. Retrieved from www.businessinsider.com/how-changing-one-habit-quintupled-alcoas-income-2014-4
- Bureau of Labor Statistics (BLS). (2016). 2015 census of fatal occupational injuries (final data). Retrieved from www.bls.gov/iif/oshcfoi1.htm#2015
- Cialdini, R.B. (1993). *Influence: The psychology of persuasion*. New York, NY: William Morrow.
- Duhigg, C. (2012). *The power of habit: Why we do what we do in life and business*. New York, NY: Random House.
- Girard, J. (2013). *Joe Girard's 13 essential rules of selling: How to be a top achiever and lead a great life*. New York, NY: McGraw-Hill.
- Japan Human Relations Association. (1992). *Kaizen Teian 1: Developing systems for continuous improvement through employee suggestions*. Cambridge, MA: Productivity Press.