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Labor-Management Cooperation in Illinois: How a joint union-company team is improving facility safety

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Abstract

This study of Afton Chemical Corporation's Sauget facility and its International Chemical Workers Union Council (ICWUC) Local 871C demonstrates how significant safety improvements can be made when committed leadership from both management and union work together, build trust, train the entire work force in OSHA ten-hour classes and communicate with their work force, both salaried and hourly. A key finding is that listening to the workers closest to production can lead to solutions, many of them more cost-efficient than top-down decision-making. Another is that making safety and health an authentic value is hard work, requiring time, money, and commitment. Third, union and management must both have leadership willing to take chances and learn to trust one another. Fourth, training must be for everyone and on-going. Finally, health and safety improvements require dedicated funding. The result was resolution of more than one hundred safety concerns and an on-going institutionalized process for continuing improvement.

Keywords

Labor-management cooperation; occupational safety and health; OSHA training

Introduction

A strong commitment to a safe and healthful workplace permeates the culture at Afton Chemical Corporation ("Afton"), and is evident through its labor-management cooperation, joint decision-making, and action. While always having a focus on safety, an OSHA-10 training class in 2012 -- which included everyone from the plant manager to her entire management staff and all hourly workers -- stimulated a whole new way to discuss and resolve safety and health issues. This study illustrates the benefits of strong labor-management cooperation in the quest for quality safety and health programs and safe and healthy workers.

This study of Afton's Sauget facility (located in Sauget, IL, just outside of St. Louis, MO) demonstrates how significant improvements in safety can be made when committed leadership from both management and union leadership work together, build trust, and communicate with their work force, both salaried and hourly. A key finding of this study is that listening to the workers closest to production can lead to solutions, many of them more cost-efficient than top-down decision-making. Another is that making safety and health an authentic value is hard work, requiring time, money, and commitment. Third, union and management must both have leadership willing to take chances and learn to trust one another. Fourth, training must be for everyone and it must be on-going. Finally, health and safety improvements require dedicated funding.

Afton is a global manufacturer of metal-working and petroleum additives, with manufacturing facilities in Asia, Europe, North America, and South America. The Sauget facility ("Sauget") began manufacturing chemical products in 1939 and by the late 1940s transitioned to producing lubricant additives. In 1975, Ethyl Corporation purchased the facility and, in 2004, the company transitioned its petroleum additive business to a newly formed corporation, Afton Chemical Corporation. Afton's Sauget facility is located on 23 acres containing nine batch process units supported by labs, a shop, engineering, and administration departments. Primary products manufactured at Afton are lubricant additives – detergents, dispersants, rust and wear inhibitors, friction reducing and extreme pressure agents, and specialty blends. Production is approximately 826 million pounds per year.

Sauget employs approximately 164 hourly workers, 149 salaried workers, 13 casual workers, and 62 contractors. Hourly workers are represented by the International Chemical Workers Union Council (ICWUC), Local 871C of the United Food and Commercial Workers.

Health and safety is an Afton Chemical Corporation core value and Sauget has always considered it part of its work culture. In the early 1980s, the U.S. Occupational Safety and Health Administration (OSHA) established a Voluntary Protection Program (VPP) initiative aimed at establishing management, labor, and OSHA cooperation to establish and meet/exceed worksite-based health and safety objectives. Afton initiated a VPP in 1995, earned OSHA's VPP Merit Site status in 1998, and in 2001, OSHA's VPP STAR site status. To maintain and reinforce health and safety goals, in August 2012 all employees at Sauget, both hourly and salaried, completed the OSHA 10-Hour Awareness Training course. A common baseline of knowledge was developed from this training. After the OSHA course, Sauget conducted its own follow-up group discussion sessions in which participants articulated 104 health and safety concerns needing attention around the plant. Union and management, as well as national staff from the ICWUC, and members of the Safety Liaison Team (SLT) all played leadership roles in improving plant-wide safety. This paper is the story of the successful and on-going process, beginning with OSHA-10 training for all Sauget employees, which in just two years resolved nearly every articulated concern and created a streamlined process to identify and resolve new concerns as they arose. This article is usefully read in conjunction with a labor-management study of Merck Chemical in Elkton, Virginia¹ for lessons on how to maximize labor-management cooperation to save lives and health in the workplace.

The Literature

Occupational health and safety training is an important component of occupational health and safety programs, and there is strong evidence that training workers has a positive effect on their safety and health behaviors.² According to Chip Hughes, director of the National Institute of Environmental Health Sciences' (NIEHS) Worker Education and Training Program, "The training of workers plays a critical role in the prevention of injury and disease in the workplace."³ Then director of the National Institute for Occupational Safety and Health, Linda Rosenstock, in the forward to a comprehensive literature review of 80 studies on health and safety training, emphasized that "occupational safety and health training remains a fundamental element in workplace hazard control programs – important in meeting the objectives of job hazard recognition, learning safe practices, and appreciating preventive measures."⁴ Burke, et al. concluded that when training methods are more engaging (i.e., requiring trainees' active participation), workers show greater knowledge acquisition, and there are reductions in accidents, illnesses, and injuries.⁵

Likewise, a review of health and safety committees found that committees with more worker involvement, like the one at Afton, are associated with fewer reported illnesses and injuries.⁶ Those health and safety committees with timely resolution of action items, a focus on ergonomics, and planning for safety training were associated with lower injury rates.⁷ A review of thirty-one studies found that empowerment mechanisms were important to the health and safety committee success. The mechanisms included: provision of adequate information, education and training, appropriate committee composition, senior management commitment, and "a clear mandate with a broad scope and corresponding empowerment."⁸

OSHA 10 Training for Everyone, and More

In 2012, the entire work force at Sauget, both hourly workers and salaried management, received OSHA 10-Hour Awareness Training for General Industry funded by Afton Chemical through the ICWUC's Cincinnati training center, which is supported through grants from the Worker Education and Training Program of NIEHS. The training center developed site-specific modules that would not only meet OSHA requirements but that also would be more relevant to the targeted audience. Examples of the customizing of the OSHA-10 training, by the ICWUC staff, for Afton employers, included site visits, needs analysis and operation-specific curriculum that meets the OSHA 10-Hour General Industry Outreach requirements. At the conclusion of each class, the participants submitted, in writing, any safety concerns in the work place. The lists of concerns and issues were compiled and prioritized and open to adding new concerns. Quarterly meetings were held three, six, nine, and twelve months after all initial training had been delivered. Each identified concern was assigned an "owner," not a department or a group, but a single, individual who would be responsible to report on, and "own" and report on the progress at these quarterly meetings. The end result was that Sauget's management team and ICWUC Local 871C, working together, identified and resolved one hundred and four safety concerns from throughout the plant.

Additionally, at the initial follow-up meeting the groups developed a flow chart so that anyone who reports a safety concern can follow his/her concern through the system. If the concern is rejected, the person knows exactly who rejected it and the reason it was rejected. If the concern is in engineering, requiring design or retrofit work, the person is aware and given an estimated time frame for moving to the next step. If the concern has been approved but waiting on parts to be delivered, the person is aware of this progress. All employees are trained on how to access, use and understand this chart through computers available in every work area, and then how to track a concern from the time it is reported through the time it is either fully implemented or rejected. Safety messages are also transmitted through this computer system. The chart has been named the “Idea Management Chart” and was developed by the SLT, which is described below.

The key element of the “Idea Management Chart” is having every concern assigned a specific employee owner, who is responsible to either see it through to implementation or document on the chart when and why it was rejected. The idea for the chart was developed in the first evaluation meeting and was verified by following a safety concern through the process. Management has embraced these improvements in communication. The experience of the health and safety community members is that employees can easily become discouraged and disconnected if they do not see their concerns addressed and could easily assume that management is just not listening to and/or acting on their ideas. The Idea Management Chart has improved morale and communication throughout the plant.

According to Sauget’s plant manager, Carolyn Garrett, it was a superb idea to have the ICWUC come in and do the training. She was particularly impressed with the site-specific training and plant-wide discussion following the training: “It seems that resolution of concerns happened faster and there has been more effort and more progress because the national union was present, acting as a catalyst in moving the plant toward important safety improvements.”^a

Resolving safety and health concerns identified as a result of OSHA-10 training

Some concerns identified by labor and management participants in the OSHA 10-Hour Awareness Training and the after-training discussions were relatively easy to identify and fix. For example: One of the docks needed a light for night unloading, so the light was installed. Someone suggested efficiency would be increased if a small HVAC system were installed in an unconditioned storage space so that materials could be stored in the space where the materials were actually used. A new pad was installed for storage.

Other concerns were more complicated. One concern involved problems with manually lifting pumps, a safety issue that after discussion was resolved in-house, by maintenance mechanics. Some mechanics had sustained injuries while manually lifting pumps that needed servicing. While a small crane was able to be used to lift the pumps, the space in some areas was too small for a crane to access. In those cases, mechanics had to manually

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^a.Quotes and opinions from participants came from on-site visits by authors.

lift the pumps. However, as part of the solution, this team found a portable lifting device that was rated to be able to perform those lifts. The portable device is able to sit on a base mounted in concrete near the pump. The mechanics installed numerous bases in areas of poor access, allowing the portable device to be moved to areas that could not use the crane, thus significantly limiting the possibility of back injuries associated with manual lifting.

The number one concern identified during the training was dust on the roads of the facility. This concern was also able to be solved. The concern originated from a gravel parking lot at the north end of the facility. In rainy weather truck traffic disperses the gravel mixture and when it dries, dust is left all over the facility. In dry weather this dust blows and creates issues. For a number of years the plant applied an anti-dusting solution in an attempt to control the dust, but that approach was met with only varying degrees of success. With the effectiveness of the dust control solution being less workable and requiring more applications, a different solution was needed. Looking at the economics of the frequency at which the dust control solution would need to be applied, engineering, maintenance, and the SLT worked together to identify a company that would be able to oil and chip the lot at a cost that the SLT could approve.

The Afton approach to safety and health

The Safety Liaison Team, or “SLT”

Key success factors to Afton’s health and safety program are management leadership and employee involvement, two factors strengthened by the joint training experience and its follow-up discussions. While the SLT has been part of plant operations for more than two decades, post-training its roles were expanded, helping to extend employee involvement initiated by the OSHA 10-Hour Awareness training and the plant’s after-training sessions.

Each year, the SLT is given 50 percent of all Authorization for Capital Expenditures (ACEs) dedicated to improve safety. All of the ACEs to improve safety must be approved by the SLT. Because the hourly members of the SLT are elected by their union body, technically every worker has input on how ACE money is spent. Workers routinely submit suggestions for alternative solutions (even some that require no spending) giving union members a say in where and how far the money goes towards improvements in safety. The relationship created by these communications instills the type of trust required to have healthy labor-management relations at Sauget. Further, educating these employees on plant procedures and government regulations allows them to make informed decisions.

The SLT is made up of half company and half union members. Company members are selected by the staff and union members are elected by the local. Hourly SLT members are elected annually by the membership and so can be voted out if the membership is unhappy with their efforts. For a company to allow its hourly workers to have equal input on how the safety money is spent exemplifies a trust in hourly workers that is exceptional in labor relations.

The eight major functions of the SLT and how each is implemented

1. Safety procedures are reviewed regularly to ensure that procedures match actual practice—Previously, this function had been only a management function, but now it is done jointly with labor. This review process addresses the concern that workers' felt that the plant managers did not care or did not want to fix problems. One example of the concerns addressed by the SLT was a concern submitted by an Afton worker who complained that:

“...[a] dust issue during filter cleaning plus accumulation is only being addressed by [worker's name withheld].... This problem needs a larger solution.... Management seems to be pretending there is no problem. Anyone working in the plant (or outside) are [sic] exposed to this dust not just filter operators.”

These types of concerns now receive attention by both union and management SLT members. Each concern goes into the Idea Management Chart and is able to be tracked by everyone in the plant.

2. Weekly housekeeping inspections—Inspections are conducted randomly and always include a union member of the SLT.

3. Members of the SLT investigate reported incidents—The SLT gathers facts and together analyzes data to identify the root cause. They are also involved in offering suggestions to help insure that incidents are not repeated.

4. Safety messages generated by injury, near misses, property damage, fire, or observed safety concerns are reviewed monthly and safety concerns are sent to the relevant departments in the plant—For example, of the 27 concerns reviewed between January 4, 2014 and March 26, 2014, all 27 concerns were fixed, and only three concerns took longer than seven days to resolve. The average number of days between reporting and resolving the concern was five. Concerns ranged from minor/easy to fix (e.g. the stockroom should start carrying dust filters) to major, expensive and time consuming (e.g. ergonomic issues and ventilation in the welding bay).

5. The SLT maintains a top ten safety concern list—A top ten list exists for both the plant and for each individual unit. These lists were created and are maintained through worker engagement. When the SLT heard that a typically active employee no longer wanted to attend training sessions or SLT meetings, the SLT contacted him and inquired why he was no longer coming to the sessions. During their conversations, the SLT found out that he had a safety concern that had not been addressed and his disappointment had led him to disengage. SLT went to his area that day and asked him about his issue. Because the issue was important and needed to be addressed promptly, the SLT fast-tracked it to the top ten and monitored every step needed to solve the problem. This show of management confidence in employee ideas and concerns has led to a solved problem and a new safety leader.

6. Adopt-a-Unit/Rookie—Union SLT members have three to four units they check in with regularly. Additionally, union SLT members are assigned new employees to check in with for the first few months of their employment, to reinforce the safety focus at the Sauget Facility.

7. The SLT's three main financial functions are (1) to manage the plant safety project budget, (2) to recover funds on projects that come in under budget, and (3) to save money by finding alternative solutions—Tens of thousands of dollars are budgeted for the SLT to use in addressing safety concerns. Simply the existence of a “safety concerns budget” demonstrates Afton’s commitment to both identifying and solving concerns of all personnel, establishing Afton’s sincere commitment to the SLT.

Any pilot project that costs less than \$75,000 is done through an Authorization for Capital Expenditures (ACE). The ACE projects are then divided into two different categories, either general or safety. All safety-specific ACEs must be approved by the SLT. So essentially, all decisions on ACE safety spending are equally decided by the company and the workers. While this teamwork often raises eyebrows when explained to people outside of the facility, it is one of the most critical parts of this successful labor-management relationship.

Additionally, financial savings have been impressive when SLT alternative solutions and ideas were followed. For instance, an acetic acid drum warmer was overheating the drums. The concern was brought to the SLT and addressed as a safety concern. Initially, the engineering department estimated that the cost would be \$25,000, but the actual solution turned out to be only \$3,117 because of creative thinking on the part of the SLT and workers on location.

8. Finding creative solutions has turned out to be a key function of the SLT—A most important example is the development of the Idea Management Chart. According to a leading plant safety official, “The transparency that these tools and the training provided was the fuel that helped the SLT to become the recognized entity for both union and management to use to resolve concerns and improve safety in the facility.”

Making Safety a Core Value at the Afton-Sauget Plant

Honing in on Afton’s own marketing of “Passion for Solutions,” safety superintendent Reggie Maclin, plant manager Garrett and local union safety committeeman Randy Schwartzkopf, together established goals and objectives to support the safety mission of reinforcing the Sauget plant culture and an Afton goal of “moving toward zero” incidents. Much of the impetus for the expanding emphasis on safety and the safety process came from the OSHA-10 joint training and the discussions which followed. One of the primary concerns was the dust in the parking lot. A recommendation was to apply oil and “chips” (white rock). This prevented the dust from becoming airborne and entering the facility. According to Sauget’s safety staff, the “move to excellence requires employee input. Sustainable safety excellence can only be gained by empowering the employees who are all subject matter experts, to make change ... Every accomplishment made is due to the employee’s willingness to accept ownership and get involved in improving safety at our facility.”

The goal at Sauget is to make safety a “value,” not just a priority. To change this culture, Afton has implemented a number of policies and practices. They include:

- Moving from a focus on compliance to a focus on excellence. One aspect of this move is training all personnel at the Sauget facility in the OSHA-10 training. Furthermore, as a part of the cooperative effort with the ICWUC/UFCW, union employees were trained to be able to teach an OSHA 10-Hour training class. It is now these trained union employees who both train new employees and perform some of the annual refresher training. New operators receive two to three weeks of classroom training and several months of on-the-job training. As previously mentioned, new employees are also mentored by SLT members for their first several months on the job. Transferred employees are trained on new hazards and responsibilities of the job. Contractor employees receive a general contractor video and testing as well as program and job- specific training.
- Establishing a culture where government health and safety standards are simply the *minimum* acceptable measures to protect worker safety. Regular work site analysis, including fixed and portable monitoring, safety messages, corporate and contract audits, industrial hygiene and medical monitoring, root cause analysis for incidents, action item tracking, and periodic trend analysis, all help establish Afton’s ongoing commitment to standards above those of the compliance requirements. Hazard prevention and control also reinforce the message that more than routine compliance is expected at the Sauget facility. Included in the hazard prevention program area are emergency drills and training of the emergency response team, preventive maintenance, a certified inspector, a broad range of personal protective equipment, numerous engineering controls and ergonomics improvements, and an occupational health nurse and industrial hygienist.
  - Having the expectation that all Afton policies and procedures, and the use of recognized best practices, are integral to all operations at the Sauget facility to ensure worker safety. To reinforce this message, refresher and policy changes are covered with monthly safety meetings, safety meeting support materials, and in-house OSHA 501 trainers.
  - Frequent inspections help keep everyone aware of the importance of best practices. Each unit has a safety awareness coordinator who conducts weekly and monthly inspections, organizes safety meetings, is liaison between the union and supervisors, attends a central safety meeting, and maintains the unit’s top ten problem list.
- Creating a work force of plant-wide safety ambassadors. The SLT established safety ambassadors that included both hourly and salaried staff who had become knowledgeable in recognizing hazards and having them addressed through the appropriate channels.
- Providing communication tools necessary to bring varied departments together for problem solving opportunities. One way to increase transparency in how

problems are acknowledged and addressed has been to provide computers in work areas where all employees can track issues that they have raised, or others have raised, and see what progress has been made. If progress has not been made, they can then speak up for making their issue a higher priority

Sauget has instituted a top ten tracking systems and idea management flow chart. The SLT, an increasingly entrusted decision-making entity along with the union executive board and management, should be applauded for its efforts to change the culture of the facility.

- Emphasizing employee empowerment and responsibility through personal contacts. The message to all Afton personnel is that it is their personal obligation to become individual safety leaders. Incorporating the joint management-union team approval and control of the safety ACE budget demonstrates one level of commitment to that empowerment.

Indications of success

The SLT is a trusted decision-making entity that identified and resolved one hundred and four safety concerns throughout the plant. The SLT, along with the union executive board, should be applauded for changing the culture of the facility. Throughout this project, in individual and group meetings with dozens of employees, we were informed that the employees are actively engaged in the SLT. Through these discussions, we learned that both management and union employees feel that their needs are being represented in the identification and solution of problems. Our program review and analysis indicates that these are demonstrations of program success. The plant also has seen an increase in the number of people involved in the safety programs.

Outside conferences around the U.S. have recognized the implementation of the SLT and its expanded role as being an outstanding benchmark of success. Afton Chemical management and local 871C presented at VPP Region 5 Safety Conference in Indianapolis in May 2014 and at the National VPP Safety Conference in August 2014. A follow-up presentation is also on the agenda of the May 2017 VPP Region 5 Safety Conference. According to one member of the Afton management team, “(t)o have our SLT present (their successful model) at regional and national conferences could not have been thought of in the past,” demonstrating just how far the union and management have come in developing this new system.

Whether speaking to management, union, or safety-focused personnel, the emphasis on safety appeared obvious and putative. Sauget has found that workers are most interested in an effective safety program when they have direct involvement with identifying potential safety and health hazards and direct influence on the solutions. Employees were more likely to support and use programs in which they have input. Furthermore, these group decisions have benefited from the group’s wider range of experiences. By engaging the employees and then educating them, they are empowered to make change for the betterment of the company. “By educating (our employees) in ways such as the 10-Hour OSHA Awareness class, they are empowered to hold us accountable which makes us better. Some companies are afraid to educate their employees. That is not the case at Afton.”(Sauget site Safety

Manager). Likewise, to accomplish this level of success, management commitment is also crucial.

Conclusion

According to a lead trainer from the Chemical Workers training center, “(the) cooperative effort has reaped incredible rewards and is expected to be a model for many other facilities. Leadership from both management and the union are to be commended.”

This study corroborates key policy implications summarized at the outset: listen to production workers to identify problems and find cost-efficient solutions; work hard and commit time and money to health and safety; cultivate leadership, both in management and labor and encourage the building of trust in one another; train everyone and have an on-going training program; have a dedicated budget for safety and health with joint labor-management decision-making.

Good labor-management cooperation requires good leadership at both the management and union levels. It also requires a “can do” spirit among all participants. Promoting safety and solving safety problems requires broad acceptance and participation. And while not everyone was satisfied with what Afton’s SLT accomplished, a team spirit was emerging. Workers felt they had a voice and an opportunity where they had not before and management had involvement and ownership at a level they had not seen before. The growth in this relationship has continued to build and is evidenced by the fact that it has been five years since that OSHA-10 training in Sauget and the facility’s SLT and union-management relationship is stronger than ever. This is further demonstrated by Afton Chemical and local 871C continuing to train all new employees in a joint labor-management 10-hour OSHA class.

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Authors’ Biographies

Bruce Mahan was the ICWUC Training Center’s Education Coordinator and a member of the educational staff since the center started in 1988. He was the lead staff on this project until his retirement in 2016.

Reggie Maclin conducts environmental health and safety for Afton Chemical and serves on the Safety Liaison Team.

Ruth Ruttenberg has been an evaluation consultant with the ICWUC for approximately 20 years.

Keith Mundy is the Center’s Field Training Coordinator during this project and serves as the liaison for many of the ICWUC locals.

Tom Frazee, is the ICWUC Training Center's Nuclear Coordinator and was an instructor during this project.

Randy Schwartzkopf, works at Afton Chemical and serves on the Safety Liaison Team. He is the Vice President for ICWUC Local 871C and has been a worker trainer with the center since 2013.

John Morawetz is the founding and current director of the ICWUC Center for Worker Health and Safety Education.

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