Beyond Compliance: Breaking Through to the Next Level of S, H & E Excellence!

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What's Motivating Us?

Often, much of a company's energy and resources related to safety, health and environmental performance, go into lowering rates to meet corporate or site objectives, being in compliance with OSHA or EPA regulations and procedures, avoiding potential liabilities, reducing related costs, worker compensation claims, etc. Having a "good record has its reward and payoff for many. Many companies have as their objective to make incremental improvements in S, H & E performance given their belief that their efforts in these areas will add to their overall stability by lessoning downtime and thus adding to productivity. There are leaders, though, that have never made the connection that insuring safe operations can lead to improvements in other areas. We believe from our 20 years in S, H & E improvement that an effective safety initiative not only prevents incidents but adds to overall productivity as well. Since 9/11 and the downturn in the economy and the subsequent tightening of the corporate "belt", being able to substantiate this spill over effect is often necessary in selling the value of investing in an improvement process to top management. The ROI, (return on investment) must be clear to all. In the domain of safety, health, and the environment, value may be measured qualitatively (in terms of preventing human suffering and loss in the quality of life) and quantitatively (in terms of preventing loss in dollars from the direct and indirect costs of incidents, fines, etc, trained employees to do the jobs, valuable equipment, and so on.)

Simply put, overall productivity can be affected by going through any one of a number of windows, be it safety, production, or quality to name a few. Going through the window of safety will have a side benefit of demonstrating a level of concern for employees and private citizens. As a generalization, when people experience being cared about, most will give back their all. When they don't, they won't! Performance can be affected at very subtle levels from conscious or unconscious attitudes and beliefs. The operating principle may become, "if they don't care about me, why should I care about them?" This attitude can adversely influence results in all areas, whether safety, health, the environment, production, quality, or efficiency.

Whatever your motivating factor for improvement may be, many of you have worked long and hard to gain the commitment and support of both line and management employees, and have achieved improvements. After many hours conducting worksite analyses, auditing, implementing programs and procedures, and ensuring that hazard prevention measures and controls are in place, you have accomplished a great deal.

This is often where the challenge comes in to convince ourselves and others to continue with our improvement processes, as well as, implement new programs or processes that can take us to the next level of performance. Continuing to excel and invest valuable resources of time, money, and human resources in the face of accomplishments that have already been achieved along with a struggling economy is the larger, ongoing expression of a genuine commitment to safety, health, and the environment and the safety, health and well-being of our employees and private citizens. What can happen if we accept that where we are as good enough is to overtly or covertly send the message that there is an acceptable number of injuries or incidents! The way that this can be interpreted is that "we don't care about our employees to the degree that we are willing to do whatever is possible to prevent everyone from being injured". By not taking on the challenge of achieving breakthroughs to new levels of prevention, we risk sending this message which can result in a loss in employee motivation, as well as, subsequent erosion in performance. When all levels of employees, both management and line, all essential to maintaining high levels of performance and excellence in all areas of productivity, no longer experience being cared about and are not being uplifted, motivated or inspired to move beyond their status quo, they may become stagnant and lose vital energy essential to continually improving. The 'Law of Entropy' from physics states that the way the universe is designed is to go from order to disorder. Whatever we don't put energy into will eventually break down. Our homes, cars, relationships or whatever! If we consciously or unconsciously pull back our energy due to a lack of motivation, anything we are involved in and any result we are responsible for will be affected.

It's Human Nature

After reaching an objective or goal, or at times an even less than sought after result, we humans have a tendency to redirect our attention and energy toward another objective. A common reaction is to assume that as certain measurable goals, for example, a significant reduction in injury and illness rates have been achieved, we can focus our attention elsewhere. This reaction, however, may also signal a deterioration in performance.

My colleagues and I witnessed this behavior at a large research and development worksite for a major chemical company that had achieved VPP Star status. The site's leadership was perplexed. Why, they wondered, following a period of remarkably low injury and illness rates, did their performance appear to slide, leading to significant increases in incidents?

The site's performance had begun to deteriorate shortly after Star status was achieved. Our investigations revealed that achieving this goal had created a false perception that safety, health, and environmental issues were now being "handled" by the company and rigorous attention to safety, health, and the environment was no longer necessary and their energy could be placed in other priorities.

To move successfully beyond basic requirements for compliance, employees must view exceptional safety, health and environmental (S, H & E) performance not only as a company policy but also as a personal value. A personal belief in the benefits of safe, healthy and environmentally sound practices produces self-motivation and proactive behavior. Working with thousands of people over the years in various industry sectors, we found that once people realized what should be the obvious, that if they are going to be safe, no matter what the company does or doesn't do to support their safety, they must value safe behavior for themselves and the other people around them, on or off their jobs, and take personal responsibility for doing what is necessary for their own protection. The ultimate benefit for behaving safely comes to me and my

family! Paying rigorous attention to what is needed to be safe and doing what is required is exactly what is needed to do a job efficiently and effectively in the highest quality manner possible. The leadership and management skills necessary to insure people are trained, equipped, and actually do follow what is required, along with insuring that their work environment and equipment are as safe as possible, are the same to insure that jobs are carried out in a quality manner as well. So, how do we ensure that all employees are self-motivated and willing to take personal responsibility for safety, health, and the environment both on and off the job?

A Holistic, Integrated Process

To instill safety as a personal value, the process we have found that works most effectively is a holistic, integrated culture change process, that utilizes a variety of methods that promote and sustain improvement in attitudes and behaviors and also asks the question of "how do we maintain and improve our existing systems?" This involves building a common S, H & E culture (norms, values, attitudes and behaviors), which encourages everyone to work towards a vision of excellence with tangible objectives and goals, keeping in mind that each person is the one who benefits the most from this. Concern for each person must be expressed so each knows that he/she is appreciated for the value they bring to achieving their objectives and producing their results.

The Role of Human Factors

The role of human factors in injury and incident prevention should not be underestimated. It has been asserted that some 94-96% of workplace injuries are due to unsafe acts and more than 90% of these are also due to unsafe conditions.¹

During the 1920's and 1930's, the pioneering work in safety of Heinrich² revealed that an incident is often the culmination of a series of unsafe behaviors. Our experience and research at Topf Initiatives further suggests that most incidents are caused by one of two human factors: automatic, non-deliberate behavior, which is related to our ability to focus and pay attention and can be strongly influenced by stress, or conscious, deliberate behavior, which relates to our attitudes, beliefs and decision-making processes, which can result in either safe or unsafe behaviors. Short cuts and by-passing procedures occur from a conscious decision generally related to time, comfort or convenience.

During an assessment conducted at a major chemical company in 1983, Topf Initiatives found stress to be a major factor affecting safety and health performance. Stress, unless properly addressed, continues to be a major cause of industrial injuries and illnesses as we move further into the 21st century given the degree of downsizing and organizational changes of recent years. Well-trained, well-equipped personnel continue to be injured, injure others, and have errors due to these human factors.

The second human factor that has a major impact on incidents is *conscious or deliberate behavior*. In most of the chemical companies that we have worked with, employees have been trained and equipped to prevent incidents. However, even they do not always do what they know is correct in every situation. During one of our training sessions, for example, an employee from one facility reported that he had sustained an injury while working around the house. Using a ladder that was too short, he had to extend himself to reach a gutter and fell to the ground below. When asked why he used an improper ladder, he responded with some embarrassment that he didn't want to spend the money for a taller ladder.

If stress can dramatically affect safety and health performance this way, then does stress affect

over aspects of productivity? Our answer is a resounding yes! Since safety is about conformance to requirements and staying focused or paying attention, can inattention, distractions or deliberate short cuts or by-passing procedures cause errors in production, quality, customer delivery and service? Again, a resounding yes! Once people learn skills to observe and manage their own and their co-workers levels of being distracted, or the attitudes and beliefs that underlie taking shortcuts or by-passing procedures, they can apply these to error and incident prevention in other areas.

During the assessment phase for one of our clients we interviewed a chemical production worker who had an incident where he was splashed with chemicals. We learned that he was under stress from personal problems at home, and in rushing to complete coupling a line in a process that he was working on, did this task incorrectly (quality). The hose blew off after the process was restarted, spraying the person with chemicals (safety), and dumped the chemicals into the drainage system (environmental).

General safety statistics state that there are dramatically more off-the-job disabling injuries and deaths than those occurring at work³ and this example demonstrates that injury prevention skills must be internalized and generalized, so they can be applied to situations other than the original purpose. To illustrate this necessity, we like to use a modification of an old proverb, "Give a person a fish and they will eat for a day. Teach them to fish and they'll eat for a lifetime." Our version states,

"Give an employee PPE and a set of safety regs and they're safe for a day. Change awareness, attitudes, beliefs and behaviors, and they're safe for a lifetime."

The A-B-C Model

Greater awareness is essential to help employees become self-observant and self-managing, for once a belief is formed, humans tend to form habitual behavior. The A-B-C model from behavior science theory, derived from the work of B.F. Skinner, states that activating events (A) lead to behaviors (B), which lead to consequences (C). Apply a positive or negative reinforcement to an observed behavior and the result should be more or less of that behavior. However, this premise is clearly limited in its long-term effect given our natural ability to form beliefs and rationalize and justify anything we do.

The infrequency of observations also limits their effectiveness. When the police observe us on the interstate, we slow down. As soon as we think we are out of range, most of us resume a rate of speed we believe we can safely get away with. The same applies to safe practices at home and at work. To achieve lasting change, the beliefs that underlie unsafe behaviors must be addressed.

Management and line employees must learn not only to recognize unsafe behaviors but also to gain insight into the thought processes and beliefs that encourage them.

The Strength of Beliefs

Both organizational and personal beliefs influence choices and resulting behaviors. In the workplace, the organization's culture ensures that beliefs, stressing positive or negative behaviors, are passed on to new employees. "This is the way it's done around here," is the mantra of many organizations. If the way it's done can create incidents and injuries, can it lead can "this way" lead to problems in other areas?

However, although workplace procedures and safeguards may be well established and understood, personal beliefs such as "I know what I'm doing so I can shortcut this procedure,"

can cause even the most safety-conscious individuals to put logic aside and by-pass procedures.

We observed this behavior at one of our clients' facilities, where a chemist, knowing that protocol mandated that a process he was working on must be shut down before making a correction, failed to follow this procedure. His self-justification was that this shortcut would save precious time in a competitive business climate. Fortunately, no one was injured, yet the lab supervisor discovered the incident when she stopped in to check on his progress.

This situation demonstrates that both organizational and personal values must be addressed. Values are the principles and standards we consider worthwhile and they exert a strong influence on our behavior. In this instance, leadership needed to reinforce that the organizational value for the well-being of each person must take precedence over both the organization's and the chemist's interests in maintaining a competitive edge.

To achieve a breakthrough in S, H & E performance, it is essential for labor and management to identify current values and professed values.

A practical approach to teaching and reinforcing values might include:

- Conducting a present time survey to determine employees' perceptions and understanding of the organization's beliefs and values relative to S, H & E. Include both management and line employees and ask questions to determine whether the stated company values and what people perceive as company values are really the same. Determine whether past values still hold true today. Include questions that uncover the perceptions that lead to error in quality, production, etc. as well.
- Perform a gap analysis between the stated values of the organization and the results of the perception survey to identify inconsistencies between what is said and what shows up in daily practice.
- Communicate the findings with all employees and give this information to a group or committee consisting of a cross section of management and line personnel. Empower this committee to identify the values and beliefs that will positively influence safety, thinking and behaviors at the present time.
- Communicate the updated values to all employees. Enable people to discuss these values openly to ensure their understanding and acceptance.
- Establish or reinforce the existing structure that permits employees to communicate their safety concerns and reports of unsafe behaviors.

Other Components

Conventional wisdom at most sites today states that employees at all levels must be involved in order to improve performance. However, recognizing the importance of teamwork does not mean that people possess the necessary skills or are even willing to apply their knowledge. Many people are either asked or volunteer to accept positions on safety and health committees without direct experience or training in the required skills such as leadership, communication, coaching and counseling. Ongoing training in these skills is surely needed for breakthrough performance.

Another primary ingredient in moving beyond basic compliance is the continued willingness to

take personal responsibility for safety, health, and the environment. Most training focuses on learning how we can change the behaviors of others; however, monitoring one's own management or leadership styles, recognizing when we resist taking action, and understanding the negative consequences of this type of behavior will take H, S, & E performance to the next level.

 Regardless of your position, you should encourage others by your example and continue to promote discussion of safety-related attitudes and behaviors.

Safety and health improvement must impact *all levels* of an organization. These include:

- Self (individuals engage in self-observation, self-management and take personal responsibility for their own and others behavior)
- Peer (co-workers provide interaction, intervention, and support)
- Leader (management and labor co-lead the improvement effort, including coaching and counseling every level of employee, contractor or visitor)
- Organizational (corporate and site leaders assure that safety, Health, and environmental values and commitments are demonstrated consistently by all)

Achieving long-term change involves a complex array of components, including raising awareness, shifting attitudes and beliefs, changing behaviors, and correcting workplace conditions. Making improvements is not a one-time "fix", but rather an ongoing effort that must be kept alive for every person, every day.

As stated earlier, the "Law of Entropy" states that whatever we don't put energy into will eventually break down. Recognizing this, every facility must focus their resources on continuous improvement and ensure that safety, health, and environmental excellence continues to be communicated and perceived as a value by every member of the organization. When this occurs, other aspects of productivity will be positively affected including the quality of work that is completed, the efficiency and effectiveness of people involved, their levels of satisfaction, and the ultimate profitability and success of the business.

¹Accident Prevention Manual for Business and Industry, starting with the 3rd edition in 1955 through the 8th edition in 1980.

² W.H. Heinrich, *Industrial Accident Prevention*, 1930.

^{3"} Gay Lynn Cronin, Safety Numbers At A Crossroads," Safety & Health Magazine, November 2001

⁴Rudolf Clausius, 2nd Law of Thermal Dynamics, 1865.