



Do just  
enough  
or redesign  
systems.  
But the  
biggest  
“mess”  
requires  
business  
skills.

# How to sweep away a **SAFETY MESS**

By JAMES E. LEEMANN, PH.D.

**T**he safety and occupational health world is a total *mess*.

Now, before you stop reading, let me define the term “mess.” So often, the most destructive misconception plaguing safety and health professionals is how we treat problems. When managers ask safety and health professionals to delineate the anticipated problems the organization will face in the coming year, their answer is often based on the challenges they are experiencing at the moment, such as ergonomics, aging workforce, training, accident investigations, employer paid PPE, LOTO, recordkeeping, management systems, etc.

Rarely are we confronted by separate problems, even though we tend to make lists of problems, prioritize them, and attempt to align human and financial resources to address each problem separately.

As Russell L. Ackoff, the preeminent

systems thinker, once wrote, “We are confronted by situations comprising complex systems of strongly interacting problems,” or as Dr. Ackoff prefers to call such systems of problems – *messes*.

He goes on to write, “The behavior of a mess depends more on how its parts interact than on how they act independently of each other.”<sup>1</sup>

Safety and health professionals hate to increase the complexity of their request for resources, so they fall back to advancing their agenda one problem at a time. In all fairness, not many managers know how to view their safety and health problems in a holistic, systemic fashion either.

## **Prescriptions for problems, or messes**

When we are confronted with a safety or health problem, we select one of four ways to deal with the problem, or mess.

**Resolution:** To resolve a problem, or mess, one selects a course of action that yields an outcome that is good

enough. This course of action is heavily influenced by past experiences, qualitative judgment, the utilization of trial-and-error inputs, and so-called common sense. The focus is on the uniqueness of the problem versus its interrelatedness with other problems. Resolutions are sold to management as approaches that minimize risks and maximize the possibility of survival.<sup>2</sup>

---

*Take the case of Jeff, who is being intimidated by Mike, his supervisor, for reporting a series of unsafe work conditions and Mike's intimidation tactics to Mike's boss, Joe. Since Mike knows he is Joe's best supervisor, Mike tells Joe that Jeff is overreacting, but he will look into the alleged unsafe work conditions. Without pursuing the intimidation complaint, Joe is satisfied the issue has been resolved. Mike addresses the least unsafe work condition and considers the issue resolved. Due to the continued stress from Mike's intimidation, Jeff is severely*

*injured as a result of one of the unsafe work conditions.*

**Solution:** To *solve* a problem, or mess, one selects a course of action that yields or comes as close as possible to the best possible outcome — something that optimizes. This course of action draws upon experimentation, quantitative judgment, observation and measurement, and uncommon sense. The focus is more on the general aspects of a problem than its uniqueness. Problem solving is the major activity of management who typically prefers optimal solutions for incompletely formulated problems to less-than-optimal solutions to completely formulated problems.<sup>3</sup>

*Before Jeff approached Joe, Mike's boss, he visited with Mike over the course of several months about a number of what he thought were unsafe work conditions. Mike assigned his plant safety professional, Susan, to analyze Jeff's unsafe work conditions and report back to him on her recommendations in two days. Even though Susan was in the midst of an annual third-party safety audit and was annoyed by Mike's request, she analyzed the safety statistics for Jeff's work area and several recent incident reports, and formulated several solutions, which she reported back to Mike. Mike approved Susan's solutions; however, injuries persisted in Jeff's work unit.*

**Absolution:** To *absolve* a problem, or mess, one selects a course of action that ignores the problem hoping the problem will take care of itself or just go away on its own accord. Unfortunately, this approach to dealing with a problem, or mess, is a more common practice than most would expect. The reason: it is more difficult to attach responsibility to someone for not doing something than it is for doing something that should not have been done.<sup>4</sup>

*On a number of occasions Jeff took the opportunity to express his concern about unsafe work conditions to Mike; however, Mike chose to ignore Jeff, thinking Jeff was just another trouble-maker. After awhile, Mike stopped hearing Jeff's concerns and*

*incorrectly thought Jeff had finally given up out of frustration.*

**Dissolution:** To *dissolve* a problem, or mess, one selects a course of action that results in redesigning the system and/or environment in which the problem, or mess, is located so as to eliminate the problem, or mess, and enable the system involved to do better in the future than the best it can do today.

The focus in dissolution includes both the general nature and uniqueness of the problem, or mess.<sup>5</sup> Dissolution employs the use of Idealization to redesign the system involved or the environment in which the problem, or mess, is located. The organizational objective of Idealization is development rather than growth or survival. Development is about increasing the desire and ability of one's quality of life and that of others; whereas growth is about increasing in size.<sup>6</sup> Einstein continued to develop long after he stopped growing.

*Even though Jeff was aware of the unsafe work conditions, he realized the need to engage more individuals to gain buy-in and identify approaches to dissolve the unsafe work conditions. By engaging co-workers from all shifts, Susan the plant safety professional, and his boss Mike, the group substantiated Jeff's unsafe work conditions along with identifying several other situations. By actively participating in the effort, everyone began to recognize the interrelationships of all the unsafe work conditions and how to invent means and find scarce resources to dissolve the mess. In addition, everyone made a personal commitment to take ownership of the outcome.*

## Litany of messes

Prior to writing this article, I solicited 30 mid-career safety and health professionals to provide me with the messes they were either currently addressing or expect to address in the foreseeable future. Not surprisingly, these professionals identified the following messes:

- aging workforce (physical and mental demands);
- soft tissue injuries;
- rising severity of injuries;
- lack of relevant training;

- poor training documentation habits;
- failure to prove employees have received adequate training;
- loss of organizational memory due to retirements and attrition;
- relying too much on poorly written procedures versus experience;
- safety and health organization reporting through operations/production yet responsible for all employees;
- chemical inventory and tracking;
- perception of risk in a laboratory setting and the failure to use the appropriate level of PPE;
- plethora of safety goals resulting in no focus;
- failure to learn from past incidents;
- management's belief that achieving VPP status allows safety to be placed in maintenance mode;
- loss of seasoned mentors with "life perspectives" in the safety and health fields;
- piling on non-safety and health responsibilities;
- lack of career development;
- seeking relevance by capitalizing on the sustainability movement;
- failure to link safety and health management systems (e.g., OHSAS 18001, ANSI Z10, ILO OSH 2001) to business processes; and,
- the assumption by management that behavior-based safety is the answer to all safety messes.

## Dissolving the great mess to come

Indeed, these messes are critically important and relevant, especially to those individuals that offered them; however, I would propose an even greater mess facing safety and health professionals over the coming years that will encompass most, if not all, of these above messes and more. So what is this great mess we are facing?

Last year, Herbert E. Meyer, formerly with the CIA and a leading authority on the strategic use of intelligence, penned an Internet article entitled "What in the World is Going on?" (You can find it via Google keywords: "What in the World Is Going On?; H.E. Meyer".)

In his article he postulated four major transformations that are shaping political, economic and world events and the implica-

tions of these transformations. The transformations included: 1) The War in Iraq; 2) The Emergence of China; 3) Shifting Demographics of Western Civilization; and 4) Restructuring of American Business.<sup>7</sup>

Although the first three transformations will have some tangential effect on safety and health professionals, the greater mess lies in the fourth transformation – Restructuring of American Business. Meyer describes how American business is transforming into the world's first 21st century economic model.

The implications of this transformation to safety and health professionals include:

- companies will become increasingly smaller;

- revenues will decline but profits will increase;

- employers will no longer guarantee jobs;

- companies will have fewer employees and more independent contractors;

- the cultural and psychological characteristics of the company will be constantly changing;

- all benefits and compensation will

be flexible and portable;

- fracturing will lead to rapid and multiple changes in business processes; and,

- companies will require a steady supply of workers.

In all likelihood, safety and health professionals will become independent contractors creating an entirely new paradigm from which gaining buy-in and ownership for safety and health performance throughout the organization will be no trivial task.

By far, the Restructuring of American Business transformation will be the greatest mess facing safety and health professionals in the immediate and foreseeable future requiring Dissolution.

**James E. Leemann, PhD.**, is adjunct professor, Tulane University's Center for Applied Environmental Public Health, and president, The Leemann Group LLC, Scottsdale, Ariz. Jim is also the project director, Pulse of the EHS Professions, Center for Environmental Innovation.

#### Footnotes

<sup>1</sup> Ackoff, R.L. 1999. Re-Creating the Corporation – A Design of Organizations for the 21st Century. Oxford University Press. New York, NY.

<sup>2</sup> Ibid., at 13.

<sup>3</sup> Ibid., at 14.

<sup>4</sup> Ibid., at 13.

<sup>5</sup> Ibid., at 14.

<sup>6</sup> Ackoff, R.L. The Art and Science of Mess Management. In Interfaces 11.1:20-25, February 1981.

<sup>7</sup> Meyer, H.E. What in the World is Going on? A Global Intelligence Briefing for CEOs. Posted at Superfactory.com. February 12, 2007.



Reprinted from *Industrial Safety & Hygiene News*  
September 2008 ©2009 *Industrial Safety & Hygiene News*