Standards & Sustainability
International Standards in Occupational Hygiene

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The current global focus on sustainability is having a major impact on all organizations. It will impact occupational hygienists as well. As a new “mental model” for organizational accountability, it will have a profound impact on how we practice our profession. This effect will be amplified by the focus that standards development organizations, such as ISO, have placed on creating sustainability standards. This means that we will need to understand and utilize the consensus standard development processes – both to protect and advance the professional practice of occupational hygiene. There will be challenges; however, there is action we can take to have a voice and create our own “Strategy for Sustainability”.

Key words: Sustainability, mental models, management system, standards development

Sustainability is a hot topic

More and more organizations are establishing sustainability policies, adding sustainability pledges to their websites and requesting sustainability assertions from their supply chain. So, if sustainability is such a good thing - what exactly is it?

The idea of sustainability or “sustainable development” is credited to the 1987 Brundtland Commission Report - Our Common Future. In it, sustainability was defined as the following - “meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

Companies are increasingly using sustainability in public relations and marketing initiatives for both themselves - to show what good corporate citizens they are - and for their products - how eco-friendly these products are.

In the words of Richard MacLean, a frequent contributor to the discussion of sustainability - “Industry is touting the banner of sustainability as a tactic to push an agenda of self-regulation and voluntary initiatives. Public-private partnerships are being promoted as the path forward instead of direct accountability through government regulation.”

This means development of consensus standards has moved front and center as a key tool in this new sustainability era.

The concept of “sustainability” has been taken up by ISO and is now at the core of ISO’s standards development process. This is a fundamental shift in focus. It means that the foundation of international consensus standards development - at least for ISO standards - has shifted from the original mission of developing standards for promoting international trade and reducing trade barriers to a more nebulous mission of promoting sustainability.

Models

Human thought is heavily influenced by mental models. They help us understand the world but, in turn, they also shape our thinking about the world and our place in it.

For example, at one time, society had a view of the universe and our place in it which placed man at the center of existence. Our “view of self” changed as our model of the universe changed as first the sun, then our galaxy, then the expanding universe itself - was placed at the center of our mental model of existence.

Today, the hot debate in the discussion of management system standards is whether the model underlying management system structures should be plan-do-check-act (PDCA) - as used in ISO 14001 - or process management - as used in ISO 9001 - or something else entirely. This is an important debate because the mental model that wins will determine the structure of all future ISO management system standards and guide the revision of those standards that already exist - including ISO 9001 and ISO 14001.

In this vein, the mental model that has been developed for visualizing and defining sustainability is likely to have an equally profound impact on EHS professionals.

Let’s examine this model for a moment. Although there are variations, sustainability is often viewed as a type of Venn diagram with equally-sized circles or spheres representing economic, societal and environmental factors.

The first thing to note about this model is that occupational safety and health (OH&S) and environmental concerns are not even in the same sphere. Environmental sustainability is visualized as having little to do with people issues and nothing whatsoever to do with labor issues - which are where OH&S is placed. This presents a significant problem for EHS professionals. It means that, in the prevailing model of sustainability, we are attempting to straddle two spheres with different - and often conflicting - goals. To make this feat even more challenging, the sustainability stakeholders for OH&S and the environment are different - their motivations, desires and power-base are distinct.

In addition, the market force dynamics, type and extent of governmental interventions and commonly used regulatory framework are also entirely different and, at least on the environmental side, rapidly evolving.

From the 50,000 foot view of sustainability, OH&S and the environment have very little in common and what they do have in common is rapidly evolving. EHS professionals are attempting to maintain their balance on a landscape that is both split apart and shifting.

Consensus Standards Development

If the consensus standards development process is indeed “the path forward” in achieving a sustainable future, we need to understand what it is and the associated opportunities and dangers. I am often asked - “What is an international standard?”

The ISO definition is as follows - “A document established by consensus and approved by a
recognized body, that provides for common and repeated use, rules, guidelines or characteristics of activities and their results, aimed at the achievement of an optimum degree of order in a given context.”

A couple of key points about this definition -

First, consensus standards are not government regulations - at least not initially. Although they often form the basis for government regulation and they may be adopted or referenced by governmental bodies, they are not governmental action. This often creates confusion. For example, in the United States, the regulatory outputs of the Occupational Safety and Health Administration (OSHA) are also called standards. The same word is used to describe the output from two very different processes. Second, international standards are typically developed by some group of interested volunteers pursuant to a defined and documented consensus process. This consensus process is intended to provide an opportunity for divergent views to be represented and taken into account in the standards development process.

What is the role and promise of consensus standards?

First, international consensus standards are absolutely critical to the functioning of a global economy. They help to ensure your bank card works, the food you consume is safe, and the products you purchase work together. Consensus standards development is the primary forum for the development of the infrastructure standards supporting our increasingly electronically-controlled existence. No one country or governmental entity alone can accomplish the breadth of standardization and consistency that can be accomplished by consensus standards.

Second, at least in theory, consensus standards allow for the balanced participation of stakeholders, as equal players, in the standard development process. The consensus mechanisms developed by the major standards development organizations - or SDOs - are designed to foster collaboration or consensus. From a business perspective, standards are useful to create a level playing field - establishing a performance floor that all competitors must meet.

What are the dangers associated with consensus standards?

Even if the consensus standard process works as intended - there is a genuine need for the standard being developed and the consensus process is robust and inclusion - there is a “dark side” to the development of consensus standards.

First is the consensus process itself. You end up with a consensus standard - this often being the lowest common denominator on what all the participants could agree. This often means you can end up with something resembling a camel when the market need is for something more like a gazelle.

The second and, by far the most significant, danger is that consensus standards creating “burn in” - decisions that impact and determine the character and nature of all future activity - good or bad.

- Do you drive on the right or left side of the road?
- Is your electrical supply 110 or 220 volts?

Large organizations are particularly susceptible to burn in. Once a particular standard is adopted, change is extremely difficult and tends to be strenuously opposed. One of the most persistence arguments against ISO’s move to a standardized management system structure is that it will require organizations to change the numbering in their management system manuals. Once in place, form starts dictating substance.

So which wins - the promise of consensus standards or the dangers?

For now, the promise still seems to be winning although there are signs that the dangers are starting to be recognized.

The Challenges for EHS Professionals

Having laid the foundation by discussing the mental model associated with a focus on sustainability, as well as the promises and dangers associated with consensus standards development, I would like to touch on the challenges faced by occupational hygienists in consensus standards development.

These challenges include the following:

- Labor issues are local not international
- Occupational disease is hidden
- Workers are not polar bears
- Information is not free
- Standards are critical to professional survival

Four Strategies for Sustainability

So what is the path forward?

In order to be successful in the future, occupational hygienists will need to adopt four strategies for sustainability. These are -

1. Understand the mental models
2. Participate in the process
3. Prioritize and strategize
4. Seek collaboration, not martyrdom

Conclusion

Sustainability - whatever the definition - is important. Given our shrinking world and lack of robust global governance structures, consensus standards will continue to play a key role in defining how sustainability is going to be accomplished.

If occupational hygienists want to have a voice in determining the scope and nature of their profession in the future, they will need to understand the challenges of consensus standard development and utilize their own strategies for sustainability.