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The New Benchmark for Safety Management Systems

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For the first time in the United States, a national consensus standard for a safety and health management system—applicable to organizations of all sizes and types—has been issued. On July 25, 2005, ANSI approved ANSI/AIHA Z10-2005, Occupational Health and Safety Management Systems.

This is a major development. The standard provides senior managements with a well-conceived, state-of-the-art concept and action outline to improve safety and health management systems. However, few organizations have management systems in place that meet all of the standard's provisions. As employers make improvements in their safety and health management systems to meet the standard's provisions, the frequency and severity of occupational injuries and illnesses will likely be reduced. The societal implications of this standard are substantial. A few of those implications are addressed in this article.

This standard will have a significant and favorable impact on the content of the practice of safety—and on the knowledge and skill requirements for SH&E practitioners. This article reviews select provisions of the standard to which SH&E practitioners should pay particular attention. Those provisions pertain to risk assessment and prioritization; applying a prescribed hierarchy of controls to achieve acceptable risk levels; design reviews; management of change systems; having safety specifications in procurement systems; and safety audits.

ANSI/AIHA Z10-2005: Background

The American Industrial Hygiene Association (AIHA) obtained approval as the ANSI Accredited Standards Committee (ASC) for this standard in March 1999. The first full meeting of the committee was held in February 2001. Over the past six years, as many as 80 SH&E practitioners have been involved as committee members, alternates, resources, and interested commenters. They represented industry, labor, government, business organizations, professional organizations, academe, and persons of general interest.

Through this, broad participation in the development of and acceptance of the standard was achieved. The breadth of that participation is significant. A large number of SH&E professionals have written a standard that incorporates what has been learned in the past several years concerning the best practices in occupational safety and health management. In effect, they have stated that no matter how effective an existing safety management system has been, if it is lacking with respect to some of the provisions in the standard, risks can be further reduced by adoption of those provisions.

Employers who have a sincere interest in employee safety will welcome discussions on how their safety management systems can be improved. Many companies have issued safety policy statements that say the organization will comply with or exceed all relative laws and standards. Those employers in particular will want

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to implement provisions in the standard that are not part of their current safety management systems.

Furthermore, ANSI/AIHA Z10 places an obligation on SH&E professionals who give counsel on what safety management systems should encompass to become current with the standard's provisions. Having occupational safety and health management systems that comply with the standard is the right thing to do.

One reason the Z10 Committee succeeded was its strict adherence to the due diligence requirements mandated by the ANSI process. A balance of stakeholders provided input and open discussion, which resulted in vetting to a conclusion each issue raised. In the early stages of the group's work, safety and health, quality, and environmental standards and guidelines from around the world were collected, examined, and considered. In crafting Z10, the intent was not only to achieve significant safety and health benefits through its application, but also to impact favorably on productivity, financial performance, quality, and other business goals.

The standard is built on the well-known Plan-Do-Check-Act process for continuous improvement, for which there is abundant reference material. Briefly stated, the purpose of the standard is to provide organizations with an effective tool for continuous improvement in their occupational health and safety management systems and to reduce the risk of occupational injuries, illnesses, and fatalities. As to breadth of coverage, "This standard is applicable to organizations of all sizes and types" (AIHA).

A major theme apparent throughout the standard is that hazards are to be identified and evaluated, risks are to be assessed and prioritized, and risk elimination, reduction, or control measures are to be taken to achieve an acceptable risk level. According to the standard:

> A hazard is defined as a condition, set of circumstances or inherent property that can cause injury, illness or death.
>
> Risk is defined as an estimate of the combination of the likelihood of an occurrence of a hazardous event or exposure(s) and the severity of injury or illness that may be caused by the event or exposures (AIHA).

One must understand these definitions to successfully apply the standard. Every SH&E practitioner who has responsibilities for occupational safety and health should have a copy of this standard and be familiar with its provisions. With its annexes, the standard is a brief safety and health management system manual.

Compatibility, Harmonization, and Possible International Implications

Z10 is a management system standard-a performance standard, not a specification standard (see sidebar below). The drafters set out to ensure that it could be easily integrated into any management systems an organization has in place. As to structure, the standard is compatible and harmonized with quality and environmental management system standards (ISO 9000 and ISO 14000 series).

Management System Standards vs. Specification Standards

In a management system standard, which is essentially a performance standard, general process and system guidelines are given for a provision without specifying the details on how the provision is to be carried out, as would be the case in a specification standard. Section 5.2-B, a "shall" provision in ANSI/AIHA Z10, is used to illustrate the difference.

> Section 5.2: Education, Training, Awareness and Competence. The organization shall establish processes to:
>
> B. Ensure through appropriate education, training or other methods that employees and contractors are aware of applicable OHSMS requirements and are competent to carry out their responsibilities as defined in the OHSMS (AIHA).

That is the extent of the requirements for Section 5.2-B. Comments are made in the "should" column—the advisory column—on certain subjects such as training for safety design, incident investigation, hazard identification, good safety practices and the use of PPE, but those comments are not part of the standard.

If Z10 were written as a specification standard, requirements comparable to the following might be extensions of 5.2-B in the "shall" column (that is, the required column).

a. A minimum of 12 hours of training shall be given initially to engineers and safety practitioners in safety through design, to be followed annually with a minimum of six hours of refresher materials.
b. All employees shall be given a minimum of three hours' training annually in hazard identification.
c. All employees shall be given a minimum of four hours' training annually in the use of PPE.
d. All training activities conducted as a part of this provision shall be documented and the records shall be retained for a minimum of five years.

Of particular note is the recognition given in the Z10 introduction to the International Labor Organization's (ILO) Guidelines on Occupational Health and Safety Management Systems (ILO-OSH 2001) as a resource. The guideline is an additional reference for a safety and health management system. Available for purchase through ILO, the document can also be read (but not printed) online (www.ilo.org/public/english/support/publ/xtextoh.htm). ILO is an international organization of considerable influence. Intentionally, Z10 adopts from and is in harmony with ILO-OSH 2001.

Similarities between the guideline and Z10 are notable. However, Z10 goes beyond the guideline in some respects, and it may very well be considered as a model by the International Organization for Standardization (ISO). ISO is the world's largest nongovernmental developer of standards, working with a network of the national standards institutes of 148 countries. The U.S. is represented at ISO by ANSI, which is the approval body for Z10.

On two occasions—in 1996 and 2000—ISO voted on developing a standard for an occupational safety and health management system. Neither proposal was approved; in the latter case, the vote against carried by a narrow margin. The ISO membership is worldwide and a consensus for such a standard has not yet emerged among its membership.

However, since Z10 represents current best practices and since ISO will likely again consider the development of an international safety and health management system, one can speculate that Z10 will become the model for that standard. Continue the speculation, and one can envision international requirements for accredited safety and health management system audits related to the provisions of ANSI/AIHA Z10.

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Z10 Table of Contents

To provide a base for review and comparison with safety management systems with which SH&E practitioners are familiar, the following is the table of contents from Z10.

The annexes contain explanatory comments, examples of forms and references. While information in the annexes is not part of the standard, it will be helpful to those charged with its implementation.

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Long-Term Influence: Societal Implications

This is the standard's scope: "This standard defines the minimum requirements for occupational health and safety management systems (OHSMS)" (AIHA). Even though the standard sets forth minimum requirements, only a small segment of employment locations have safety management systems in place that include all of its elements. Over time, as the provisions of this ANSI standard are brought to the attention of employers and they strive to have safety management systems that are compatible with those provisions, its impact on what employers and society believe to be an effective safety management system will be extensive.

The reader should understand that the standard sets forth *minimum requirements*, which in the U.S. may not be enough. According to Ralph L. Barnett, chair of Triodyne Inc. and professor of mechanical and aerospace engineering at Illinois Institute of Technology, while complying with a standard is necessary, doing so may not be sufficient.

> Technologists, by and large, treat a standard as a "bible" which provides guidance for the discharge of their professional duties. Throughout the world, compliance or noncompliance with a safety standard is the criterion for determining whether or not safety has been achieved. Only in the [U.S.] is compliance with an appropriate standard treated as a necessary but not sufficient condition for precluding liability. [Thus, the term] minimum standard is an oxymoron (Barnett).

ANSI standards acquire a quasi-official status. Consultants who give counsel on safety management systems to employers other than their own should recognize the status that ANSI standards acquire from a legal liability viewpoint. As Barnett says, "Technologists, by and large, treat a standard as a 'bible' which provides guidance for the discharge of their professional duties."

Over time, as this standard attains that stature, it will become the benchmark against which the adequacy of safety and health management systems will be measured. Societal expectations of employers with respect to their safety and health management systems will be defined by the standard's provisions.

As awareness of the standard's provisions spreads, employers will likely seek SH&E practitioners able to give counsel on meeting its requirements. In that respect, certain provisions are of particular importance to safety practitioners; those provisions are in Planning (4.0); Implementation and Operations (5.0); and the Audit provision in Checking and Corrective Action (6.0). In summary, they state that employers "shall" establish and implement processes to:

- Identify and control hazards in the design process and when changes are made in operations—which requires that safety design reviews be made for new and altered facilities and equipment, and that a management of change system be put in place through which hazards and risks are identified and evaluated in the change process.
- Assess the level of risk for identified hazards—for which knowledge of risk assessment methods will be necessary.
- Use a prescribed hierarchy of controls in dealing with hazards to achieve acceptable risk levels—for which the first step is to attempt to design out or otherwise eliminate the hazard.
- Avoid bringing hazards into the workplace by incorporating design and material specifications into procurement contracts for facilities, equipment and materials.

Furthermore, the content of college-level safety degree programs will be affected as employers will seek candidates who understand the standard's requirements. Since one measure of a technical degree program's success is employment possibilities for its graduates, professors responsible for those programs will likely ensure that core courses properly equip students to meet employer needs. In many cases, that will require substantive curricula modifications.

Content of the examinations for the CSP designation is reviewed about every five years to ensure that the exams are current with respect to the work SH&E professionals actually perform. As the substance of SH&E practice changes in light of the impact of Z10, what those professionals who participate in the examination review process say about the content of their work at that time will influence the content of the CSP examinations.

The Continuous Improvement Process

In accord with the Plan-Do-Check-Act concept, the major sections of the standard are:

- 3.0: Management Leadership and Employee Participation
- 4.0: Planning
- 5.0: Implementation and Operation
- 6.0: Evaluation and Corrective Action
- 7.0: Management Review

Brief comments on 3.0 and 7.0 follow; more extensive remarks are made on select sections in 4.0, 5.0, and 6.0. When reviewing these excerpts, keep in mind the intent of the terms "shall" and "should." As is common in ANSI standards, requirements in the left column are identified by the word "shall." An organization that chooses to conform to the standard is expected to fulfill these requirements. The text in the right-hand column uses the word "should" to describe recommended practices or to explain the requirements on the left. Comments in the right-hand column are not requirements and are prefaced with an "E." The reader should note that the material printed in italics is taken verbatim from the standard.

Hazard Analysis and Risk Assessment Guide

1. Select a manageable task, system, or process to be analyzed.
2. Identify the hazards. Ask the question, "What characteristics of things or actions [or inactions] of people present a potential for harm?"
3. Define possible failure modes that result in exposure to hazards and the realization of the potential harm. Ask, "How could an undesirable event happen for a task and each associated hazard?"
4. Estimate the frequency and duration of exposure to the hazard.
5. Assess the severity of injury/illness. Based on experience and knowledge, make an estimate of the worst credible injury or illness consequence(s), should an incident occur.
6. Determine the likelihood of the occurrence of a hazardous event. This is usually subjective. For complex hazard exposure scenarios, brainstorming with knowledgeable people is advantageous. The likelihood of occurrence is normally related to an interval of time (several times a day, weekly, monthly, yearly, etc.).
7. Define the level of risk using a risk assessment matrix, risk ranking, or scoring system. [An example of a risk assessment matrix can be found in Figure 1 of this article.] The level of risk is determined by plotting the likelihood of an occurrence or exposure and the potential severity of the injury or illness. The organization must then determine if the level of risk is acceptable or unacceptable.
8. Hazard risks can then be listed and ranked. Risks, system deficiencies, and opportunities for system improvement make up the OHSMS issues for a particular organization. All OHSMS issues are then prioritized by considering the level of risk, potential for system improvements, compliance with standards and regulations, feasibility, and business consequences.
9. The organization selects prioritized OHSMS issues and develops documented objectives and implementation plans.

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3.0: Management Leadership and Employee Participation

Literature commenting on safety management, leadership, and employee participation is abundant. Thus, this section of the standard is dealt with briefly here. However, the reader should understand that this is the standard's most important section. SH&E practitioners will surely agree that "top management leadership and effective employee participation are crucial for the success of an occupational health and safety management system (OHSMS)" (AIHA). The standard says:

> Top management shall direct the organization to establish, implement and maintain an OHSMS.
>
> The organization's top management shall establish a documented occupational health and safety policy.
>
> Top management shall provide leadership and assume overall responsibility.
>
> The organization shall establish and implement processes to ensure effective participation in the OHSMS by its employees at all levels (AIHA).

Annexes A, B, and C provide supporting data on these areas.

4.0: Planning

This section sets forth the planning process to implement the standard and to establish plans for improvement. "The planning process goal is to identify and prioritize OHSMS issues (defined as hazards, risks, management system deficiencies, and opportunities for improvement)" (AIHA).

An initial review of the OHSMS is to be made for that purpose (4.1). Issues identified during the review are to be assessed and priorities determined, and documented risk reduction objectives are to be established for the issues selected. An ongoing review process (4.1) is to be maintained for the same purposes. (Note the emphasis on hazards, risks, and management systems deficiencies.)

4.2: Assessment and Prioritization

Subsection 4.2 sets forth the requirements for assessment and prioritization. Few current safety management systems contain similar provisions.

> The organization shall establish and implement a process to assess and prioritize OHSMS issues identified in 4.1. The process shall:
>
> A) Assess the impact on health and safety of OHSMS issues and assess the level of risk for identified hazards;
>
> B) Establish priorities based on factors such as the level of risk, potential for system improvement, standards, regulations, feasibility, and potential business consequences; and
>
> C) Identify underlying causes and other contributing factors related to system deficiencies that lead to hazards and risks (AIHA).

These are the explanatory notes for 4.2A and 4.2B. E4.2A:

> The assessment of risks should include factors such as identification of potential hazards, exposure, measurement data, sources and frequency of exposure, types of measures used to control hazards and potential severity of hazards.

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Figure 1
Example of Risk Assessment Matrix

Severity of Injury or Illness Consequence and Remedial Action

Likelihood of Occurrence or Exposure for selected unit of time or activity	CATASTROPHIC Death or permanent total disability	CRITICAL Disability in excess of three months	MARGINAL Minor injury, lost workday accident	NEGLIGIBLE First aid or minor medical treatment
FREQUENT Likely to occur repeatedly	**HIGH** Operation not permissible	**HIGH** Operation not permissable	**SERIOUS** High priority remedial action	**MEDIUM** Take remedial action at appropriate time
PROBABLE Likely to occur sometime	**HIGH** Operation not permissible	**HIGH** Operation not permissible	**SERIOUS** High priority remedial action	**MEDIUM** Take remedial action at appropriate time
OCCASIONAL Likely to occur sometime	**HIGH** Operation not permissible	**SERIOUS** High priority remedial action	**MEDIUM** Take remedial action at appropriate time	**LOW** Risk acceptable: remedial action discretionary
REMOTE Not likely to occur	**SERIOUS** High priority remedial action	**MEDIUM** Take remedial action at appropriate time	**MEDIUM** Take remedial action at appropriate time	**LOW** Risk acceptable: remedial action discretionary
IMPROBABLE Very unlikely; may assume exposure will not happen	**MEDIUM** Take remedial action at appropriate time	**LOW** Risk acceptable: remedial action discretionary	**LOW** Risk acceptable: remedial action discretionary	**LOW** Risk acceptable: remedial action discretionary

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> Assessing risks can be done using quantitative (numeric) or qualitative (descriptive) methods. There are many methods of risk assessment. Examples are included in the Annexes and References.
>
> E4.2B: Business consequences may include either increased or decreased productivity, sales, or profit (AIHA).

Thus, employers are to have processes in place to identify and analyze hazards, assess the risks deriving from those hazards, and establish priorities for improvement that, when acted on, will achieve acceptable risk levels.

Annex K (Bibliography and References) provides a list of publications that describe the many possible risk assessment methods. For example, the *System Safety Analysis Handbook* describes 101 such methods.

The breadth of the field of knowledge in risk assessment can be daunting but it need not be. SH&E practitioners who become familiar with several basic and easily applied risk assessment methods will be able to give counsel on and apply the standard's risk assessment provisions. *Innovations in Safety Management: Addressing Career Knowledge Needs* includes the chapter, "A Primer on Hazard Analysis and Risk Assessment." It is designed to counter the dread that SH&E practitioners may experience in thinking about achieving an understanding of commonly used risk assessment techniques, and to give assurance that acquiring such understanding will not be overly difficult [Manuele(a)].

The chapter provides brief descriptions of eight hazard analysis and risk assessment techniques—preliminary hazard analysis; safety reviews/operations analyses; what-if analysis; checklist analysis; what-if/checklist analysis; hazard and operability analysis; failure modes and effects analysis; and fault tree analysis. Having knowledge of those techniques and how

they are applied will satisfy the needs and requirements of Z10. It should also be noted that in the application of these eight techniques, qualitative rather than quantitative judgments will prevail since for all but the complex risks, qualitative judgments will be sufficient; in addition, mathematical calculations will be limited.

Annex E provides information on the standard's assessment and prioritization requirements. It also contains a brief outline titled "Hazard Analysis and Risk Assessment Guide," which presents an easily understood and applied thought-and-action process on how to conduct a hazard analysis and a risk assessment. The sidebar on page 5 presents this outline.

Z10 will have a significant and favorable impact on the practice of safety—and on the knowledge and skill needs of SH&E practitioners.

Annex E also gives an example of a risk assessment matrix for illustrative purposes (Figure 1). This matrix gives incident probability categories, severity categories, and risk levels, which is typical, but it also incorporates recommended management action levels within the matrix. Such a matrix can serve as a valuable instrument in working with decision makers to set risk levels and prioritize corrective actions. Published risk assessment matrixes vary widely, so SH&E practitioners should develop models that are suitable to the organizations they serve. [See also Manuele(a) and (c).]

5.0: Implementation and Operation

According to the standard, "This section defines the operational elements that are required for implementation of an effective OHSMS" (AIHA). The comments here focus on only four provisions—hierarchy of controls, design review, management of change, and procurement. Only a few safety management systems have comparable provisions.

5.1.1: Hierarchy of Controls

Z10 outlines provisions for the use of a specifically defined hierarchy of controls. The organization "shall" apply the methods of risk reduction in the order prescribed. The standard and the explanatory comments state:

> The organization shall implement and maintain a process for achieving feasible risk reduction based upon the following preferred order of controls:
>
> A. Elimination
>
> B. Substitution of less hazardous materials, processes, operations or equipment
>
> C. Engineering controls
>
> D. Warnings
>
> E. Administrative control
>
> F. Personal protective equipment
>
> Feasible application of this hierarchy of controls shall take into account:
>
> a. the nature and extent of the risks being controlled;
>
> b. the degree of risk reduction desired;
>
> c. the requirements of applicable local, federal and state statutes, standards and regulations;
>
> d. recognized best practices in industry;
>
> e. available technology;
>
> f. cost-effectiveness; and
>
> g. internal organization standards.
>
> E5.1.1: The hierarchy provides a systematic way to determine the most effective feasible method to reduce the risk associated with a hazard. When controlling a hazard, the organization should first consider methods to eliminate the hazard or substitute a less hazardous method or process. If this is not feasible, engineering controls such as machine guards and ventilation systems should be considered. This process continues down the hierarchy until the highest level feasible control is found.
>
> Often a combination of controls is most effective. In cases where the higher order controls (elimination, substitution and implementation of engineering controls) do not reduce risk to an acceptable level, lower order controls may be necessary (e.g., warnings, administrative controls or personal protective equipment).
>
> For example, if an equipment modification or noise enclosure (engineering control) is insufficient to reduce noise levels, then limiting exposure through job rotation and using hearing protection would be an acceptable supplemental means of control (AIHA).

Note that Z10 prescribes a hierarchy of controls that contains six elements, the first of which, in priority order, is to design out or otherwise eliminate the hazard. If the hazard is eliminated, the risk is eliminated. Also note that the substitution element is separate from the elimination element.

The number of elements and the separation of substitution from elimination are important. Other published hierarchies of control are not quite as descriptive and complete. Some have as few as three elements. Over time, the hierarchy of controls set forth in Z10 will become the accepted norm. Annex G provides a pictorial and verbal display of the hierarchy of controls listed in 5.1.1 with application examples for each element.

In an occupational setting, these outcomes are to be achieved through the application of the hierarchy of controls:

1. an acceptable risk level
2. work methods and processes in which the probability of (a) errors by supervisors and workers because

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of design inadequacy is at a practical minimum; and (b) supervisors and workers defeating the system is at a practical minimum

Similar outcomes should be expected when applying the hierarchy of controls to other hazards and risks, such as for the design and use of industrial and consumer products, and environmental management systems. [See also Manuele(c).]

5.1.2: Design Review and Management of Change

The following excerpts indicate what the standard requires for design reviews and management of change, and replicate the explanatory information given in its right-hand column. Again, these are "shall" provisions.

The organization shall establish and implement processes to identify, and take appropriate steps to prevent or otherwise control hazards and reduce potential risks associated with:

A. New processes or operations at the design stage; and

B. Changes to its existing operations, products, services or suppliers.

The process for design reviews and management of change shall include:

a. identification of tasks and related health and safety hazards;

b. consideration of hazards associated with human factors;

c. consideration of control measures (hierarchy of controls—5.1.1);

d. review of applicable regulations, codes and standards; and

e. a determination of the appropriate scope and degree of the design review and management of change.

E5.1.2: The process for conducting design reviews and managing changes is designed to prevent injuries and illnesses before new hazards and risks are introduced into the work environment. The design review should consider all aspects including design, construction, operation, maintenance and decommissioning.

The following are examples of conditions that should trigger a design review or management of change process:

- new or modified technology (including software), equipment or facilities;
- new or revised procedures, work practices, design specifications or standards;
- different types and grades of raw materials;
- significant changes to the site's organizational structure and staffing, including use of contractors;
- modification of health and safety devices; and
- new health and safety standards or regulations (AIHA).

Design Review

The author has long professed that the most effective and economical way to minimize risks is to address the hazards from which they derive during the design process. That is what this standard requires—and it is an extremely important element in this standard. Its impact can be immense.

To become qualified to give counsel on establishing a management system to apply the design review requirements of this standard, many SH&E practitioners will have to acquire new knowledge and skill. A chapter in *Innovations in Safety Management* titled "How to Avoid Bringing Hazards into the Workplace" covers this topic [Manuele(a)]. It includes a general industry guide to safe design and operational requirements; general design safety checklist; and a section on design safety reviews.

Another key reference in this area is *Safety Through Design*, which contains these three major sections: Introducing Safety Through Design; Integrating [Safety Through Design] into Business Processes; and Safety Through Design in Industry. The latter section contains six chapters pertaining to application of safety through design concepts in general industry, the automotive industry, aircraft manufacturing, the chemical industry, construction and in the electronics industry (Christensen and Manuele).

> ***Employers who have a sincere interest in employee safety will welcome discussions on how their safety management systems can be improved.***

In the chapter on application in general industry, Adams discusses challenges to process implementation and maintenance. He notes: "Implementing an effective safety through design process often requires challenging the culture within an engineering organization" (Adams). If a design safety review management system is not in place in an organization, SH&E practitioners should anticipate a long-term effort to achieve the culture change necessary to meet the requirements of Z10. This often means establishing a management system that mobilizes engineering, purchasing, quality control, and other departments that may not be accustomed to working collaboratively. (To assist in that accomplishment, *Safety Through Design* includes a chapter titled "Achieving the Necessary Culture Change" by Steven I. Simon.)

Management of Change

Employers are to have processes in place to identify and take the appropriate steps to

prevent or otherwise control hazards and reduce the potential risks associated with them when changes are made to existing operations, products, services, or suppliers.

With respect to drafting and implementing management of change procedures, generalists can learn from those in organizations that have met the management of change requirements of OSHA's Process Safety Management of Highly Hazardous Chemicals standard (1910.119), issued in 1992. Briefly, 1910.119 requires that employers establish and implement written procedures to manage changes. Requirements of Z10 and 1910.119 have similar purposes. Getting effective management of change procedures in place and maintained is not easily done, however.

For all occupations, many incidents that result in severe injury occur when out-of-the-ordinary situations arise, particularly when unusual and nonroutine work is being performed and when sources of high energy are present. In support of that premise, consider these excerpts from historical and explanatory data published with respect to 1910.119.

> Management of Change: OSHA believes that one of the most important and necessary aspects of a process safety management program is appropriately managing changes to the process. This is because many of the incidents that the agency has reviewed resulted from some type of change to the process. While the agency received some excellent suggestions concerning minor changes to improve this proposed provision, there was widespread support for including a provision concerning the management of change in the final rule (OSHA).

As noted, support for the management of change provisions was strong. However, about two years after 1910.119 became effective, Thomas Seymour, a director at OSHA as the standard was being developed, said that chemical plant operators had reported that the management of change requirement in the standard was the most difficult to apply. Therefore, it is not surprising that courses have been developed to help those responsible for meeting the management of change requirements.

Given this, SH&E practitioners should thoroughly study the management of change requirements of Z10 to determine how they might help to achieve the culture change necessary for their implementation. Applying change management methods will be necessary. Fortunately, the literature on change management is extensive. One good reference on the process is Casada, et al's *A Manager's Guide to Implementing and Improving Management of Change Systems*.

5.1.3: Procurement

Although the requirements for procurement are plainly stated and easily understood, they are brief in relation to the enormity of what will be required to implement them. An interpretation of the requirements could be: SH&E practitioners, you are assigned the responsibility to convince managements and purchasing agents that, in the long term, it can be very expensive to buy cheap. This is what the standard and the explanatory data state.

> The organization shall establish and implement processes to:
>
> A. Identify and evaluate the potential health and safety risks associated with purchased products, raw materials, and other goods and related services before introduction into the work environment;
>
> B. Establish requirements for supplies, equipment, raw materials, and other goods and related services purchased by the organization to control potential health and safety risks; and
>
> C. Ensure that purchased products, raw materials, and other goods and related services conform to the organization's health and safety requirements.
>
> E5.1.3: The procurement process should be documented. See section E5.4.
>
> E5.1.3A: For example, organizations should evaluate MSDS and other health and safety information of a new chemical, or examine the design specifications and operations manual for a new piece of equipment being considered for purchase (AIHA).

Only a small percentage of employers have included specifications in their purchasing agreements and contracts that require suppliers to identify the hazards and assess the potential risks in the equipment and materials being purchased. As a safety director in a major company said recently, the only safety specification in their contracts is that OSHA standards and other legislative requirements be met.

The Z10 standard implies that safety through design concepts are to be applied in an organization's purchasing system with respect to both physical hazards and work methods. Adding an element to safety management systems that will help to avoid bringing hazards into the workplace could produce surprisingly good reductions

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Z10 Resources from ASSE

The Standard
ASSE is offering ANSI/AIHA Z10 to its members for $58; list price is $65. To learn more, visit www.asse.org/fr3388.htm or contact ASSE's Customer Service Department at (847) 699-2929.

Safety 2006 Session
ASSE's annual Professional Development Conference will include Session #657, ANSI Z10: What Is It and Can It Be of Benefit to You? The session will provide an overview of the standard, discuss its key elements and review the benefits of its implementation. To learn more about this session, visit www.safety2006.org.

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in the frequency and severity of hazardous incidents and exposures.

Procedures encompassing the requirements will not be easy to implement, but recognition slowly arises that they should be an integral part of a safety management system. One example, the ergonomic design criteria established by DaimlerChrysler for equipment suppliers and vendors and company engineers, is cited here to indicate broad and complex procurement requirements. These criteria can be found at https://gsp.extra.daimlerchrysler.com/mfg/amedd/tooldesign/textsection15.htm. The 13-page document covers ergonomics criteria only. It sets forth specifications for suppliers and vendors to meet so as to avoid bringing ergonomics hazards into the workplace. To review the general acquisition provisions instituted by DaimlerChrysler pertaining to "Tool and Equipment Follow-up, Certification and Buy-Off Procedures," change the "15" in the web site address to "14."

Getting these procurement provisions in place will be a challenge for SH&E practitioners, but the benefits can be immense.

6.0: Evaluation and Corrective Action

This section of the standard outlines the requirements for processes to evaluate the performance of the safety management system and to take corrective action when shortcomings are found. Provisions pertain to monitoring, measurement and assessment, incident investigation and audits. Comments address only one provision in 6.0 (audits). Why only this one? Because audits "shall" be made. From a review of the requirements of this section, it seems that many organizations may be making substantive revisions in their audit systems.

Audit requirements are for safety management systems audits, not specification audits. The audits are to measure the organization's effectiveness in implementing the OHSMS elements. Thus, audits are to determine whether the management systems in place do/do not effectively identify hazards and control risks. This is what the standard and the explanatory data state.

6.3 Audits

The organization shall establish and implement processes to:

A. Conduct periodic audits to determine whether the organization has appropriately applied and effectively implemented the OHSMS elements, including identifying hazards and controlling risks;

B. Document and communicate audit results to:

   a. Those responsible for corrective and preventive action;

   b. Area supervision; and

   c. Other affected individuals, including employees and employee representatives.

C. Immediately communicate situations identified in audits that could be expected to cause a fatality, serious injury, or illness in the immediate future, so that prompt corrective action under 6.4 is taken.

E6.3 Audits required by this section are "system" oriented rather than "compliance" oriented. The audit should determine if the OHSMS meets the requirements of this standard. Audits should be conducted by individuals independent of the activities being examined. This does not mean that audits must be conducted by individuals external to the organization (AIHA).

Although many SH&E practitioners are familiar with safety audit processes, they should review what the standard requires and determine whether it will be to their benefit to revise their audit systems. Annex I is helpful in this respect; it contains an example of an audit outline that matches the Plan-Do-Check-Act sections of Z10.

7.0: Management Review

This section requires that OHSMS performance be reviewed and that management take appropriate actions in response. It is an important part of the Plan-Do-Check-Act process.

7.1 The organization shall establish and implement a process for top management to review the OHSMS at least annually, and to recommend improvements to ensure its continued suitability, adequacy, and effectiveness.

E.7.1: Management reviews are a critical part of the continual improvement of the OHSMS (AIHA).

These are a few of the subjects to be reviewed at least annually: progress in risk reduction; effectiveness of processes to identify, assess and prioritize risk and system deficiencies; and effectiveness in addressing underlying causes of risks and system deficiencies.

Conclusion

ANSI/AIHA Z10-2005 represents an important step in the evolution of the practice of safety. Realistically, it can be expected that over time it will become the benchmark against which safety and health management systems will be measured. As the quality of safety and health management systems improves, it is logical to expect that the frequency and severity of occupational injuries and illnesses will be reduced.

SH&E practitioners must not ignore the long-range impact Z10 will have on societal expectations concerning the quality of safety management systems that employers have in place, and on the expectations employers will have concerning the knowledge and capabilities of SH&E personnel. Prudent SH&E practitioners will study the requirements of the standard to determine

whether they need additional skills and capabilities, then will take action to acquire those skills. Having done so, they will be equipped to help managements put in place safety management system elements that may not currently exist.

The author also suggests that the leaders at professional organizations such as ASSE consider developing seminars to instruct SH&E practitioners about the content and application of ANSI/AIHA Z10-2005, particularly with respect to the requirements for risk assessments, the application of a hierarchy of controls, design reviews, management of change, procurement, and audits. ■

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The Attractive Nuisance Doctrine

by Charles H. Morgan, J.D., CPCU, CLU, CSP, ARM

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Introduction

Under Common Law, it was generally held that a landowner owed no duty of care to a trespasser other than refraining from creating a dangerous condition or instrumentality designed to inflict injury to the trespasser. Over time, however, an exception to this general rule evolved for the protection of young children who have somehow been "enticed" onto the property by a "dangerous instrumentality" that catches the imagination of the children as an object of recreation. An early Washington State decision (Ilwaco, etc., *Nav. Co. v Hedrick,* 1890), for example imposed liability on a railway company following the death of a child from playing on an unsecured turntable. In finding for the plaintiff, the court noted that the defendant knew children were attracted to the machine, were in the habit of playing on it, and that the method of securing it in the past had proved ineffective.

The Doctrine Today

A more recent Washington case (*Schock v Ringling Brothers,* 1940) enumerated the five elements that must be present for the "attractive nuisance" doctrine to apply. They are as follows.

1. The instrumentality or condition must be dangerous in itself, that is, it must be an agency that is likely to, or probably will, result in injury to those attracted by, and coming in contact with, it.

2. It must be attractive and alluring, or enticing, to young children.

3. The children must have been incapable, by reason of their youth, of comprehending the danger involved.

4. The instrumentality or condition must have been left unguarded and exposed at a place where children of tender years are accustomed to resort, or where it is reasonably to be expected that they will resort, for play or amusement, or for the gratification of youthful curiosity.

5. It must have been reasonably practicable and feasible either to prevent access to the instrumentality or condition, or else to render it innocuous, without obstructing any reasonable purpose for which it was intended.

Other courts in other states have since modified these requirements slightly. The Massachusetts Child Trespasser Statute of 1977, for example, further stipulates that the "utility to the landowner of maintaining the artificial condition and burden of eliminating the danger are slight in comparison to the risk of harm to children." Another commentator in Michigan adds further the need to inquire as to "whether the landowner took reasonable precautions or exercised reasonable care to eliminate the hazard or to protect the children from harm."

What Qualifies as an Attractive Nuisance?

Virtually all states hold that the condition or instrumentality must be "artificial," or something not normally present on the premises. Therefore, in most cases, a naturally occurring pond would not qualify, although there are some particular conditions that would serve to render a natural body of water as an "attractive nuisance." These conditions are described briefly in a FactSheet from the State of Ohio (http://ohioline.osu.edu/als-fact/1006.html).

By far the most common example of such a condition, however, is an unfenced swimming pool. The 2001 case in Ohio that finally adopted this doctrine (*Bennett v Stanley*) involved an abandoned swimming pool that had filled with about six feet of rainwater and had become "pond-like." One of the Bennett children went to the pool to look for frogs, and subsequently drowned, as did his mother in an apparent rescue attempt.

In addition to swimming pools, the state of Ohio regards the following units of farm property as qualifying as "attractive nuisances":

- chemicals and chemical storage areas
- grain bins
- manure lagoons
- water wells and cisterns
- heavy equipment
- machinery and tools
- gas and water tanks

While the great majority of such hazards tend to be rural in nature, the Consumer Product Safety Commission has mounted a campaign to target "unstable trash collection bins" as attractive nuisances in the inner cities. The agency notes that there have been 47 injuries and deaths from crushed skulls and chests since 1971.

Other Forms of Attractive Nuisance

Other commonly described forms of attractive nuisance include the following:

- a fountain with goldfish
- an idling lawnmower
- power tools
- construction equipment, materials, and debris
- liquor cabinets
- tunnels
- dumpsters
- appliances, particularly refrigerators
- automobiles
- falling hazards such as sinkholes, trenches, and abandoned mines

Conclusion

It must be pointed out that this list is by no means exhaustive. As indicated on www.legalzoom.com, virtually "any object on your property, no matter the size, has the potential to be an attractive nuisance." Its advice is "to think back to when you were a kid—would you have played with it? If so, how?" ■

Emergency Preparedness and Response

by USDOL/OHSA and Nina H. Nobile, CSP, HEM, AHRME

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All emergencies are either internal or external in origin. The internal ones can be better planned for, as there are known sources and points of origin where the emergency is likely to occur. These include, but are not limited to, violence in the workplace, leaks or spills of hazardous materials, fires, explosions, loss of use of water, or loss of power. External emergencies include, but are not limited to, large-scale power outages, hurricanes, tornadoes, external hazardous material exposures, biological threats, and plane or multiple vehicle crashes.

Every facility should have a set of survival tactics that cover what to do about evacuating or sheltering in place and food, water, and medical supplies in the event there is an emergency. It is essential that everyone knows the chain of command in every situation.

Developing an emergency action plan (EAP) is a natural next step following the completion of a thorough workplace evaluation depicting all noted hazards.

The plan is based upon describing how employees will respond to various types of emergencies. The following areas should be considered when developing the description of how employees should respond in these various situations:

- work site layout
- structural features
- emergency systems

Some of the essentials to consider when deciding if an emergency evacuation is necessary are:

- **Conditions**—Fires, explosions, floods, tornadoes, hurricanes, toxic chemical release, biological and/or radiological accidents, violence in the workplace, or civil disturbances.
- **Shelter in Place**—In situations when a biological or radiological accident or a toxic chemical release occurs outside, a decision to shelter in place may be made.
- **Chain of Command**—A designated person(s) should be chosen to order a shutdown or evacuation or initiate any emergency preparedness procedures.
- **Routes, Exits**—Routes and procedures to use in evacuations should be clearly outlined.
- **Assisting Occupants with Evacuation**—Some may need special assistance, and that should be available. This is especially important for those with disabilities or language differences.
- **Accounting for Employees**
- **Special Equipment**
- **Appropriate Respirators**

What Is a Chain of Command?

A chain of command works as a designated team of authority figures led by an incident commander (IC). This individual is in charge of implementing the entire emergency plan. The IC is responsible for the entire response including:

- developing incident objectives
- managing incident operations
- setting priorities
- defining the ICS organization for the particular response

The IC may choose deputies and assign them responsibilities for certain aspects of the response plan. These deputies must have the same qualifications as the IC since they may have to take over the position of IC at any time.

It is for this reason that every member of the emergency response team must be trained for potential crisis. Furthermore, it is important that they can each physically carry out the duties needed to properly expedite the tasks they may be responsible to perform. Some of the areas to train them include:

- use of various types of fire extinguishers
- shutdown procedures
- requirements of the OPSHA bloodborne pathogens standard
- first aid, including CPR and use of SCBA (self-contained breathing apparatus)
- chemical spill control procedures
- search and emergency rescue procedures
- hazardous materials emergency response ■

Loss Control Section Seminar at the 2005 Annual Meeting and Seminars

by Eli Shupe Jr., CPCU

Eli Shupe Jr., CPCU, is a member of the CPCU Society's Loss Control Section Committee and recently completed his term as chairman. He earned his CPCU designation in 1992 and has been active in both local and national CPCU Society work ever since. His first job in the insurance industry was in 1959, working in the Average Rate Department for the Wisconsin Insurance Rating Bureau, a predecessor to ISO. He has worked for a number of insurance companies in various capacities, including training, marketing, loss control, product management, and both field and home office underwriting.

The date was Tuesday, October 25, 2005. The location was the CPCU Society's Annual Meeting and Seminars in Atlanta, GA, where your Loss Control Section presented a seminar entitled "Controlling the Inland Marine Loss Exposures." Featured presenters were **David Shillingford,** National Equipment Register; **Barry Tarnef, CPCU,** Chubb CCI; and **Ken Mikkelson, CPCU,** Cincinnati Insurance Company. **Eli Shupe Jr., CPCU,** Cincinnati Insurance Company and Loss Control Section Committee Chairman, served as the moderator for the seminar.

David Shillingford started things off describing common loss situations regarding contractors equipment and ways to prevent them. Theft is the biggest cause of loss. Almost all such losses could be prevented if the insured would take the time to secure the equipment.

Ken Mikkelson, CPCU, discussed loss prevention at builder's risk job sites.

Almost all such losses could be prevented if the insured would take the time to secure the equipment.

Since there is no common "VIN"-type serial numbering system, as with autos, it is very difficult to trace equipment. Even if equipment is found, returning it to the owner becomes a very difficult task. Many times recovered equipment is a long way from where it was taken. Compounding this problem is the ease with which it can be disposed of by the thief. New equipment is expensive and, given the chance to get some at a very good price, many contractors will not bother to ask where it came from or why the price is so low.

Some of the prevention methods included:

- Lock the equipment and take the key(s).
- Keep the equipment in lighted areas.
- Block small equipment with large equipment.
- Leave them in fenced-in enclosures with alarms on the gates.
- Put tracking devices on the equipment.
- Keep a detailed list, by serial number, of what equipment is where.
- Hire a guard service to secure the job site or at least patrol the equipment staging area.

Another suggestion was to register all equipment with an organization such as the National Equipment Registry. Then if the equipment is stolen, the police have a source to turn to when it is recovered to help them determine the correct owner so that they can return it.

Shillingford's presentation was followed by a presentation on preventing cargo losses by **Barry Tarnef.** And guess what? His main theme was also security. Cargo security means if you have a target commodity, (1) don't advertise it; and (2) watch it. Don't advertise it seems rather basic, but sometimes the marketing guys get there ahead of loss control.

Take for instance Best Buy, the consumer electronic store. All its trucks and trailers, the ones that carry appliances and TVs, among other hot items, have "Best Buy" splashed all over them. You can guess who got to the trucks and trailers first—it was not the loss control guys. This type of advertising just encourages theft; it makes it easier for the thieves to spot a target.

Other prevention methods include:

- Implement team driving; one person is in the truck at all times.
- Install GPS tracking systems.
- Install alarm systems on the trailers.
- Secure tailgate locks and fifth wheel locks when the tractor is not attached.
- And speaking of tractors, in some cases it makes sense not to leave the tractor attached to the trailer so the thief needs to bring his own tractor. This is an inconvenience, and most thieves are not that well-equipped.
- If it can be avoided, do not share a trailer, but use a smaller one yourself.

Besides theft, Tarnef also said rough handling, spoilage, water damage, and contamination were other significant causes of loss. Prevention of some of these loss causes can be a little more challenging. For instance, rough handling would, to some degree, be related to the experience of the employee and the quality of the handling equipment used to load and unload the trailer.

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Spoilage losses can be controlled if climate control units are kept in top-notch condition with regular maintenance and have dual alarm systems—one alarm is different colored lights that the driver sees in his or her rearview mirror, and the other an audible alarm in the cab. Also, these units cannot be left unattended very long or they might run out of fuel.

Contamination gets back to sharing trailers. The risk is much higher if there are other shippers' goods in the trailer with your stuff. Contamination can take the course of fumes escaping through the container, splashing on your goods when the other goods leak, or if the container were to break.

Water damage comes about when you allow your goods to be loaded on older, improperly maintained trailers with leaky roofs or floor boards.

One other item of interest: Of 136 theft losses monitored, 79 occurred in Georgia, and 61 were from rest stops or truck stops. Not unexpected, out of 216 total losses, 124 occurred between Friday and Sunday.

Tarnef's presentation was followed by a short break, and then **Ken Mikkelson, CPCU,** discussed loss prevention at builder's risk job sites. At the building site, there are additional concerns: not only must you control the property loss, you also have worker safety with which to be concerned. There are several loss situations that affect both the property and worker.

Collapse of a portion of the building, such as a wall that is improperly braced, could injure a worker. Falling items being improperly lifted and/or a clear zone not being maintained under the lifting device could injure both the worker and the item being lifted.

Some controls for the fire hazard include:

- Designated worker smoking areas.
- Hot work watch—Someone stays behind after welding or flame cutting has been completed to check and make sure there is nothing smoldering.
- Control of temporary wiring—Wiring is often carrying higher loads than the wire size is meant to carry, and often is not equipped with circuit overload protection.
- Temporary heaters—Heaters are left on too long and begin to burn themselves, or are placed too close to combustibles.

Mikkelson showed some actual loss photos and explained what went wrong in each case and what could have been done to perhaps prevent the loss.

Everyone in attendance agreed it was a very good program crammed with important, useful information. ■

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Retired FDNY Battalion Commander Richard Picciotto will speak at the CPCU Society's Annual Meeting on September 10, one day before the fifth anniversary of 9/11.

Online registration will begin in early spring.

Photo courtesy of Nashville CVB and Heavenly Perspectives.

Managing Imports and Outsourcing in a Global Arena

by John R. Cavallo, CPCU, CSP

John R. Cavallo, CPCU, CSP, is a senior product safety specialist in St. Paul Travelers Risk Control. Cavallo works out of the Jericho, New York office, handling product liability and general liability risk control needs in the northeastern United States.

Many U.S. businesses have shifted manufacturing of their products to foreign countries in an effort to decrease costs and to better compete on a global scale. Foreign manufacturers are exporting their products to achieve a greater share of the large U.S. market. These trends will likely increase. While there may be financial attractions to the sale of products manufactured outside the United States, there also may be risks. The experience of others can help minimize some of these risks.

A Summary of Some of the Issues

A review of regulatory agency web sites like the Consumer Product Safety Commission (CPSC) or the Food and Drug Administration (FDA) can give a sense of the staggering number and type of recalls initiated by domestic sellers of foreign products. In most cases, bodily injury or property damage descriptions are included.

Pursuing a claim or enforcing a contractual agreement in a foreign jurisdiction can be costly, time consuming, unsuccessful, or essentially impossible. This can effectively give the U.S. seller the same product liability exposures as a U.S.-based manufacturer. Importers, wholesalers, retailers, and manufacturers of products containing foreign-made components need to be actively concerned about assuring product/component safety and compliance with regulations and standards.

Foreign laws, product standards, and user expectations can differ from those in the United States. These differences impact the levels of safety and quality measures required in engineering, production, and testing. Some countries have few or even no manufacturing or testing standards. Consequently, flammability, lead and other toxic content, food sanitation, electrical safety, and toy safety are examples of frequent issues of concern. While some foreign countries have comprehensive standards and testing requirements, they may differ from those in the United States in key ways. Design features like guards, interlocks, labeling, warnings, and instructions may be different or absent in foreign products.

What This Means to the Domestic Importer/Seller

Broadly stated, "strict liability" says "one who sells . . . a defective product" that causes bodily injury or property damage may be held responsible for that damage. As a result, it is not uncommon for any seller to stand alone in the American courts when it comes to actual claims or lawsuits and in dealing with regulatory matters or recalls. This also can impact U.S. manufacturers of products containing foreign-made raw materials, components, or subassemblies.

Know Product Regulations and Standards

Be familiar with U.S. standards and regulations that apply to your products (labeling, design, record keeping, test requirements, etc.). Non-compliance with an industry standard or government regulation can increase the likelihood of a product liability claim and make the case difficult to defend in court. Additionally, the Homeland Security and the FDA Bioterrorism Act have created new regulations regarding the importation of food products.

Know Foreign Manufacturers and Suppliers

Foreign Country Profile and Safety Awareness

A country's general, political, economic, and financial stability and other developmental factors are considerations. Some countries have developed product safety standards or laws for products manufactured or sold within their borders. Those doing business in these countries need to be aware of applicable standards. Some examples include:

- European Union's (EU) January 15, 2004 revised General Product Safety Directive (original date—August 1, 1988)
- EU's Restriction of Hazardous Substances Directive for products sold in Europe after July 1, 2006 (restricts use of lead, mercury, cadmium, hexavalent chromium, and certain halide-containing flame retardants)

- Taiwan's Toys and Children's Product Safety Ordinance, January 11, 1994
- Hong Kong's Consumer Goods Safety Ordinance of April 1998: Toys must fully comply with one of the following: International Voluntary Toy Standard, European Standard EN 71 or American Society of Testing & Materials (ASTM) F963
- Australia's July 1992 product liability laws
- China's 1993 product quality laws, amended July 8, 2000 (China is expected to adopt the EU's restriction to hazardous substances directive.)
- Japan's Product Liability Law, July 1, 1995
- International Organization for Standardization (ISO): 133 national standard bodies as of December 1998, and 11,950 international standards; ISO 9001-2000 and 14000 are two more widely known standards

In counties with established standards and methods of enforcement, it is more likely that manufacturers understand product safety regulation and their importance, and are willing to work with customers to make products that meet U.S. safety needs. Likewise, if exporting to foreign countries, a domestic seller must understand and comply with the respective regulations of the foreign buyer. Domestic exporters that do not meet foreign standards may be banned from those countries.

Reputation of the Manufacturer/ Vendor

Good references, especially from others in your business and in the same part of the country, are important. A company's reputation and delivery on customer expectations, including the ability to resolve a problem, are key indicators. Long-term relationships with manufacturers or vendors with proven reliability are often the most economically feasible in the long run, even if they are not the cheapest.

Other Steps to Minimize Risks

Using a Domestic Importer

Use of a domestic importer does not eliminate the potential for problems. However, this strategy may help to provide a level of protection, specifically where the domestic importer maintains product liability insurance, provides vendors coverage, and annually provides a certificate of insurance. Check with your attorney, insurance agent, or broker to determine satisfactory limits for your situation. A large domestic importer may also be able to influence foreign manufacturers to meet important product safety criteria.

Foreign Insurance and Contractual Options

Insurance contracts and other contracts with foreign companies can pose several dilemmas. Will they be enforceable? Are they underwritten by a recognized carrier? What about language and language interpretation issues? What does "coverage" include? Does it include product liability and does it extend to losses in the United States? It is generally a good practice to have an attorney with expertise in international products/ contract law review a copy of any foreign insurance coverage or any contract with a foreign company.

Third-Party Testing

Using or requiring the use of a third-party testing laboratory (a laboratory with U.S. locations that can provide a certificate of liability insurance) makes good business sense for almost any product. The laboratory should be able to help verify compliance with standards and regulations. Copies of these tests should be obtained and kept on record. Where practical, keep product batch samples. Having this documentation not only helps verify the quality of the product, but can also help sell it to discriminating buyers. These records can be critical evidence in the event of a claim.

License to Use Brand Names

There may be product lines where it is advantageous to use a popular U.S. brand name to help sell the product. In order to have permission to use this brand name, one needs to purchase permission or a license from the owner of the brand. It is likely that the owner of the brand name will want to test product samples before allowing their brand name to be used. Such testing and licensing creates another layer of quality control.

Tight Controls on Quality and Efficiency

Quality Control and Documentation

Foreign manufacturers trying to get a piece of the U.S. market are trying hard to meet the needs of their U.S. customers. They should be willing to provide copies of product quality-control test records. These records can be translated and stored electronically. Ideally, the translations should be done by a certified translator to help maximize clarity.

Maintain records, programs, and communication channels to quickly implement a recall or other remedial action, if necessary. Have a plan of action ready with assigned roles. It may be helpful to run a periodic mock recall.

Specifications in Writing

Products consultants and successful companies agree it is prudent to have a written document with specific, objective criteria reflecting agreement with customer expectations for product design, manufacture, testing, labeling, or other important specifications.

Onsite Staff

Some companies periodically inspect foreign manufacturing locations to verify that expectations are being met. Other companies have a company representative permanently on site to verify compliance and be available when issues arise.

Warnings, Instructions, and Manuals

Many products have labeling standards. Languages can have social, cultural, and religious overtones and subtleties. Assuring compliance with such standards

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and accurate translations should be a part of the process. Where translations are necessary, they should be done by a certified vendor that provides evidence of domestic insurance.

Compliance Certification

Certifications of product compliance or records of product test results from the foreign manufacturer are desirable, but are not a substitute for third-party testing or other quality control measures. Watch for counterfeit independent laboratory labels on imported products. Independent laboratories can be contacted to verify the listing of manufacturers and/or products in question.

Closing Comments

This article reflects experiences of those who have successfully done business involving imported products and foreign manufacturing. Likewise, companies that have learned from negative experience know the importance of extra care with the selection and monitoring of foreign partners and with clear documentation of product safety expectations and responsibilities.

For more information to address your product safety needs or to learn about our product safety life cycle, call Karen Stetler, director, at (860) 277-9293. ■

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