AMERICAN SOCIETY OF
SAFETY PROFESSIONALS

July 12, 2023

The U.S. Department of Labor (DOL)
U.S. Occupational Safety and Health Administration
200 Constitution Ave NW
Washington, DC 20210

U.S. Department of Labor; Occupational Safety and Health Administration

OSHA Encourages Stakeholders to Share Feedback on Effectiveness of Leading Indicators to Improve, Develop Resource Tool

Agency:	U.S. Department of Labor Occupational Safety and Health Administration (OSHA)
Date:	May 17, 2023
Agency/Docket Number:	Docket No. OSHA-2023-0006)
Topic:	OSHA Leading Indicators

Per OSHA's May 17, 2023, announcement, we submit the following information to address the request for comments:

> *WASHINGTON – The U.S. Department of Labor's Occupational Safety and Health Administration is asking for stakeholder input on their current use of leading indicators and their impact on managing their safety and health management systems. Leading indicators are proactive and preventive measures that can provide insight on the effectiveness of safety and health activities and reveal potential problems. They are vital in reducing worker fatalities, injuries, illnesses, and financial impacts. As OSHA considers developing a Leading Indicators Resource, the agency welcomes stakeholders to share their experience and expertise and provide detailed feedback on how/where they are used at their workplace. OSHA is interested in various perspectives on stakeholders' answers to questions,*

Introduction

As the DOL, including OSHA, is aware, ASSP is the oldest society of safety professionals in the world. Founded in 1911, we represent almost 36,000 professionals advancing workplace safety and health in every industry, in every state and around the globe. ASSP members have set the

occupational safety and health (OSH) community's standards for excellence, ethics and practice for more than 100 years.

ASSP's Overall Position

The Society has a long-standing position addressing measurement and indicators:

> *ASSP believes that data and injury rates derived from the current rule (29 CFR 1904) reveal limited, to no, leading information regarding injury causation, hazards and safety performance. Instead, they reveal more about injury management than safety management.*
>
> *ASSP further believes that a revision to the rule will help OSHA better achieve the purpose of developing "information regarding the causes and prevention of occupational accidents and illnesses" as set forth in the OSH Act. Such revision will also help align employer focus on leading metrics of performance as recommended by OSHA, called for in modern occupational safety and health management systems such as ANSI/ASSP Z10 and promoted by ASSP members.*
>
> *Approved by ASSP Board of Directors on June 8, 2019*

Applicable National Voluntary Consensus Standards – ANSI/ASSP Standards

We note significant similarities between this call for comments on indicators and a call for comments on modernization of the OSHA VPP. We attach that here as Appendix A to this technical comment.

Use of Voluntary National Consensus Standards

ASSP suggests that OSHA needs to review and consider the appropriate national voluntary consensus standards for the review of OSH indicators.

Our overall position is:

> *The utilization of national consensus standards will be of increased importance to this country as the economy of the United States moves towards more of a global perspective. National consensus standards reflect the opinions of the professionals who work at all levels of the public and private sectors in technology development, manufacturing, training, financial analysis, personnel, academia as well as insight from the final end user. This balanced insight enables standards to be crafted in a way which not only benefits and*

protects users of the standard, but also furthers the interests of the businesses which have been created to meet user demand.

ASSP supports the increased utilization of consensus standards in the formulation of legislation and regulation for occupational safety and health. Governmental agencies such as OSHA, CPSC, NHTSA, etc... should be encouraged to utilize these consensus standards as they provide an efficient/effective alternative to traditional public sector rule making.

What leading indicators should OSHA consider using to assess OSH performance Addressed by National Voluntary Consensus Standards?

ASSP suggests that OSHA review *ANSI/ASSP Z16.1-2022 Safety and Health Metrics and Performance Measures* for examples of effective leading indicators. Federal agencies, including OSHA, helped write this voluntary national consensus standard:

Scope: This standard defines requirements and expectations for organizations to establish effective measurement systems that assess safety and health performance, reduce risks, identify gaps in safety and health management systems, and drive needed improvements. It applies to all organizations and provides flexibility based on their size, type of management system and level of organizational risk. The standard can supplement requirements from government agencies, non-government organizations and other groups such as rating agencies that may have their own private or public reporting requirements.

This standard broadens the scope of metrics beyond incident rates and other failure metrics. It promotes the use of leading metrics, metrics related to success, and business impact. Business impacts include effects on productivity, quality, worker well-being, recruitment, retention, morale and engagement, absenteeism, company reputation, financial health and shareholder value.

We also recommend that OSHA review the following materials on this standard:

ANSI/ASSP Z16.1 Technical Brief

Safety and Health Metrics (Z16.1) - Homepage

Leading With Safety and Health Metrics

Using ANSI/ASSP Z16.1 to Effectively Measure & Improve OSH Performance

In addition, we recommend that OSHA review the technical materials listed below on leading and lagging indicators:

How to Implement and Evaluate Leading Indicators

Leading and Lagging Indicators: Do They Add Value to the Practice of Safety?

Webinar: Driving Safety Transformation by Analyzing Leading Indicators

Podcast — Episode 16: Leading and Lagging Indicators

Webinar: OSHA-ASSP Leading and Lagging Indicators

Safety Metrics Corporate & Site-Level Scorecards

Safety Through Accountability and Recognition

The question then is how do OSH professionals and their organizations measure success? ANSI/ASSP Z16.1 provides a systematic approach for measuring safety and health performance. As noted in the standard, a balanced approach is needed to measure risk management and management system improvements that support overall risk reduction.

ISO/ASSP 45004-2023

Of additional interest is that ASSP is moving forward to nationally adopt ISO 45004, *Occupational health and safety management — Guidelines on performance evaluation*, as an ANSI registered technical report.

> *Scope: This document provides guidance on how to assess occupational health and safety (OH&S) performance, through the selection and use of performance evaluation processes and indicators, and by monitoring, measuring, analyzing, and evaluating the data obtained. It enables organizations to determine if intended results are being achieved, including continual improvement of OH&S performance.*
>
> *This document is applicable to all organizations regardless of type, industry sector, level of risk, size, or location. It can be used independently or as part of OH&S management systems, including those based on ISO 45001:2018, or other standards or guidelines.*

Technical Comments and Responses to Specific OSHA Questions

OSHA asked for feedback on several specific questions:

- *What leading indicators do you use?*
- *What lagging indicators do you use (OSHA incident rates, for example)?*
- *What leading indicators are, or could be, commonly used in your industry?*
- *What metrics do you share with top management?*
- *How do you determine the effectiveness of your leading indicators?*
- *Do you link your leading indicators to outcome data, such as OSHA incident rates to evaluate results?*
- *How could employers be encouraged to use leading indicators in addition to lagging indicators to improve safety management systems?*
- *What barriers and challenges, if any, have you encountered to using leading indicators?*

We asked for feedback from the more than 35,000 ASSP members and the response was significant. They are summarized below.

Question #1. What leading indicators do you use?

A number of members commented that they use a series of leading indicators based on the type of work they are performing. One responding organization, noted at the corporate level, they have five indicators (some of them are not leading), but are treated in a universal manner. Leading metrics by themselves, can be misleading. In order for leading metrics to be effective, they must be associated with a goal (outcome) and a result. In the member comments, there are some overall themes we continue to see, and are captured in the summarized response below:

- ✓ Leadership engagement: Organizations track engagements of leaders through a data collection system where leaders report discussions or other interactions with workers and/or management/supervisors. There is an expectation on the volume of engagements generally over a 12-month cycle. There is also an expectation that corrective action plans developed by incident analysis, risk assessments, inspections, safety maintenance work orders, etc. be tracked to timely closure as part of Leadership accountability.

- ✓ Employee Involvement Program (EIP): EIP engagements are observations that occur, and are recorded, in our data management system. Primarily, EIP's are at the field level and are held between peers and workers. However, supervisors are also encouraged to have and record EIP's with their peers or craft. We set an expectation at the project level of the volume of EIP's per hours worked.

- ✓ Employee (Worker) Recognition: The number of workers actively participating in health and safety matters, to include offering improvement suggestions and solutions, should be an accountability metric at the supervisor or department head level. This will help promote worker engagement.

- ✓ Safety Task Assignment (STA) Evaluations: STA's are being used as a pre-planning tool where applicable crews and workers perform an assessment of their job tasks for that shift, incorporating hazard assessment and mitigation. Each first line supervisor conducts an STA each day at the beginning of the shift, or when the crew is diverted to a new task. STA's are evaluated by site leadership for completeness, accuracy, etc. Supervisors also coach crews on effective ways to conduct STA's. STA's are also used to establish task observations on the part of supervisors to measure the conformance rates (# of tasks being performed safely/total number of tasks observed) of workers using safety controls just discussed in the STA. The following day, STA's report on the observational findings and metrics as a means of accountability and recognition.

- ✓ Near Miss/Good Catch (NM/GC) Reporting: This is common as organizations are seeking to track all NM/GC reports as they occur and have set goals on the volume of these reports expect to be seen. A number of our responding organizations noted they use a standard calculation (similar to an IR) to calculate the frequency of occurrence and grade positively on the higher the number, the better. This encourages reporting on incidents or potential incidents and deflates the negative stigma associated with incident reporting, regardless of the type.

- ✓ SIF Reporting: Participating organizations noted that for each incident that is reported, it is evaluated based on severity or potential severity. There appears to be a conservative approach to SIF classification. The incident is being evaluated comparable to the rules and policies of the organization. Overall response indicates that almost all reported SIF's require additional investigation, contributing factors, root cause and corrective action. A number of respondents indicated that SIF's are also reviewed on a weekly basis to/by senior leaders in incident review sessions. We did see numerous examples of "Lessons Learned" being communicated to the organization in the form of Safety Alerts, which are distributed on a scheduled basis.

- ✓ The ANSI/ASSP Z.16.1 Standard provides examples of leading metrics in the standard and appendix.

Question #2. What lagging indicators do you use (OSHA incident rates, for example)?

- ✓ Member response indicates that they primarily use IR, DART and LT as primary lagging indicators. Organizations also evaluate workers' compensation costs and EMR.

- ✓ The ANSI/ASSP Z.16.1 Standard provides examples of lagging metrics in the standard and appendix.

- ✓ We do recommend that OSHA review the response to a similar question addressing VPP modernization.

Question #3. What leading indicators are, or could be, commonly used in your industry?

ASSP did get several responses from the construction and demolition industry that this issue presents challenges within the construction industry as employers don't define or track LI's with consistency. Construction and demolition organizations used to evaluate training as an LI (amount of training assigned versus amount of training completed) as a LI but found this metric not very valuable. Training is an expectation, and not delivering the appropriate amount is an execution issue, not a LI that's meaningful for OSH Professionals working in construction and demolition operations. If the construction and demolition industry can use common definitions and metrics related to pre-task planning and incident reporting; new approaches to benchmarking and lessons learned can be achieved. Reliance solely on lagging indicators is slowly changing within organizations that are progressing to more comprehensive sets of metrics to include sets of leading metrics that correlate to the lagging metrics.

Question #4. What metrics do you share with top management?

Member response indicates the following below:

- ✓ Leading and Lagging indicators
- ✓ Progress against goals (Organizations set actions/initiatives each year to address trends or specific areas of focus).
- ✓ Key issues of concern where senior leadership is need for engagement/support/action.
- ✓ Conformance rates of workers to standards, policies and controls.
- ✓ Closure rate of safety and health improvement initiatives.
- ✓ The number of new treatments or controls established, especially higher levels (engineering and above) of treatments and controls.

Question #5. How do you determine the effectiveness of your leading indicators?

Member response indicates significant interest in using the leading indicators included and addressed in the ANSI/ASSP Z16.1 Standard. Effectiveness is demonstrated by having a set of leading metrics that help predict or influence the lagging metrics (outcomes) . The ISO 45004 Standard is also starting to generate interest from the OSH community.

A number of our responding members indicate they are trying new LI's each year. If they do not see value in the LI, it is scrapped and will try another. The analytical perspective is also important. Analysis consists of how well the organization overall understands the LI and how they can impact the LI positively or negatively. Also, our responding members indicate it is important to look for data points that show progress on a metric and the need to improve.

Question #6. Do you link your leading indicators to outcome data, such as OSHA incident rates to evaluate results?

Responding organizations indicate that they do indeed try to have synergy.

Understanding risk management expects proactive activities to reduce risk, most of our responding organizations indicate they focus time/resources on both leading and lagging indicators. This allows companies and organizations to designate resources for areas of risk where they can have the most impact. Focusing time/resources on proactive activities provides the opportunity to have the most value to risk reduction. It is important to note that leading indicators are factors that to some extent can be controlled and also help raise awareness with workers and hold management accountable to continual improvement of safety and health risks and systems. The ANSI/ASSP Z.16.1 standard stresses the importance of the relationship between leading and lagging metrics, which is important to motivate management to provide the resources necessary to implement change and improvement. Identifying the actions/activities/resources needed to get the desired result helps influence the impact to the organization when successful.

Question #7. How could employers be encouraged to use leading indicators in addition to lagging indicators to improve safety management systems?

We would encourage OSHA to help raise awareness of the applicable voluntary national consensus standards. These standards are moving the indicator issue forward. ASSP would be committed to working with OSHA on an outreach initiative addressing leading indicators if the Agency would have such an interest.

Question #8. What barriers and challenges, if any, have you encountered to using leading indicators?

Virtually all respondents indicated their concern that the Federal government in some ways has discouraged the implementation of leading indicators due to reliance on lagging indicators in standards and regulations. The concern is that organizations may not want to invest in leading indicators because they see little interest from the federal government in regard to actual rulemaking. While this might be a completely realistic observation, it does indicate this is an area of opportunity for OSHA.

Conclusion

Of interest, we have spoken with many members who have experience with leading indicators. Their feedback indicates significant interest in this proposal relating to the implementation of modernized metrics used to safeguard occupational safety health.

We also included our position statement addressing the use of voluntary national consensus standards in the regulatory process and the value of safety management programs and systems. ASSP listed several of our consensus standards in this statement and let us know if OSHA should need any of these materials for review by the Agency.

Thank you for your time and attention to our comments. If we can be of any assistance in this matter, please let us know.

Respectfully,

James R. Thornton, CSP, CIH, FASSP
2023-24 ASSP President

AMERICAN SOCIETY OF
SAFETY PROFESSIONALS

ASSP Headquarters Contact Information

Timothy R. Fisher, CSP, CHMM, CPEA, ARM, FASSP
Director, Standards Development and Technical Services
American Society of Safety Professionals
ASSP External Relations
520 N. Northwest Highway
Park Ridge, IL 60068
TFisher@ASSP.Org; 847/768-3411

Sue Trebswether
Director, Marketing/Communications
American Society of Safety Professionals
ASSP External Relations
520 N. Northwest Highway
Park Ridge, IL 60068
STrebswether@ASSP.Org
847/768-3433

AMERICAN SOCIETY OF
SAFETY PROFESSIONALS

April 13, 2023

The U.S. Department of Labor (DOL)
U.S. Occupational Safety and Health Administration
200 Constitution Ave NW
Washington, DC 20210

U.S. Department of Labor; Occupational Safety and Health Administration

Seeking public comments on modernizing program that recognizes employers committed to best safety, health practices

Agency:	U.S. Department of Labor Occupational Safety and Health Administration (OSHA)
Date:	February 16, 2023
Agency/Docket Number:	OSHA-2022-0012
Topic:	OSHA VPP Modernization

Per the February 2023 call for comments, we submit the following information to address the request for comments for OSHA addressing:

> *This notice announces OSHA's interest in modernizing, improving, and expanding the various pathways that employers can establish and improve their safety and health programs with the pinnacle being Voluntary Protection Programs (VPP). OSHA asks for stakeholder input on how it should make these changes. In 1982, OSHA recognized that it did not have sufficient resources to inspect all of the country's workplaces regularly or exhaustively (Voluntary Programs to Supplement Enforcement and to Provide Safe and Healthful Working Conditions; Request for Comment and Information, 47 FR 2796, January 19, 1982). As a result, OSHA began the development of programs intended to encourage employers to voluntarily comply with OSHA standards and improve their safety and health management systems to exceed them over time.*

Introduction

As the DOL, including OSHA, is aware, ASSP is the oldest society of safety professionals in the world. Founded in 1911, we represent more than 36,000 professionals advancing workplace safety and health in every industry, in every state and around the globe. ASSP members have

set the occupational safety and health (OSH) community's standards for excellence, ethics and practice for more than 100 years.

ASSP's Overall Position

The Society has had a position statement addressing VPP for decades. It states:

> *ASSP supports cooperative compliance efforts that recognize or promote employer or employee programs that reduce, or control, recognized workplace hazards and risks, along with fostering employee involvement. Examples of such efforts include the Voluntary Protection Program (VPP) and the Safety and Health Achievement Recognition Program (SHARP).*

We have historically submitted correspondence and positions supporting VPP and recommending that it be provided with the necessary resources. An example of this support is exemplified by our statement during May 2010 supporting the restoration of funding to VPP:

> *ASSE Offers Support for Enzi's Bill to Restore $3.1 Million in VPP Funding*
>
> *The American Society of Safety Engineers (our name until 2018) said May 20 it supports legislation to restore funding to the Occupational Safety and Health Administration's budget for its Voluntary Protection Program.*
>
> *"As the current administration increases OSHA's capacity in enforcement, the value that cooperative programs have in reaching out to employers willingly committed to safety cannot be overlooked," ASSE President C. Christopher Patton said in a letter to Sen. Mike Enzi (R-Wyo.), ranking member of the Senate Health, Education, Labor, and Pensions Committee.*

Technical Comments to Specific OSHA Questions

1. OSHA General Observations: What is working well with VPP?

General ASSP Overall Comments

- ✓ We need to recognize the positive impact VPP has had on occupational safety and health OSH performance. However, given the data we have received from BLS the last 10 to 15 years with respect to annual deaths in all industries, we have much work yet to do via governmental agencies such as OSHA and professional OSH organizations such as ASSP.

- ✓ Recognition of the need for employee participation and engagement that VPP requires as part of participation.

- ✓ VPP provides a support structure to overall occupational safety and health management through its requirements for management accountability and worker involvement and engagement.

- ✓ VPP provides a basic framework for companies to engage their employees in safety culture ownership, which supports ongoing improvement and performance.

- ✓ Indicates the federal government is committed to occupational safety and health performance and not only writing regulations and issuing citations.

- ✓ VPP provides an avenue for recognition of OSH programs in the private sector indicating that business success is not negatively impacted by investment in OSH.

- ✓ VPP helps set high-level expectations and tone for a positive safety and health culture.

- ✓ VPP provides a basic understanding related to expectations that a work site needs to meet from a compliance and performance perspective.

- ✓ Establishes a good working relationship with local consultation OSHA officials and the private sector.

- ✓ VPP provides recognition to plant personnel, workers and the plant by recognizing achievement of being a VPP site.

- ✓ Provides an avenue for cooperation in the workplace.

2. OSHA General Observations: What could be improved?

ASSP notes this history to reinforce the strong consensus among ASSP members to support VPP. To collect input to inform our comment, ASSP contacted all 36,000+ members asking for their insight. In addition, we requested feedback from nearly 1,400 participants in our ANSI/ASSP standards program. We received nearly 250 responses none of which expressed opposition to OSHA launching an initiative to modernize VPP. We view this as strong member support of VPP and modernization. While we received some differing opinions with respect to specific questions asked by OSHA, we noted overwhelming support for VPP among our members.

We offer the following general observations:

- ✓ Near unanimous consensus from our responding members that VPP is worthy of a modernization effort.
- ✓ Near unanimous consensus that that the use of accepted voluntary national consensus standards such as Z10 and 45001 needs to be considered. ANSI/ASSP Z16.1 and ASSP TR-31000-2020 also need to be considered for additional technical guidance.
- ✓ Strong consensus that VPP should look at new initiatives to enhance inclusion and participation with the construction and demolition industry.
- ✓ Strong consensus that while the program can be modernized, the program and its requirements should not be weakened.
- ✓ Unanimous consensus that the name of VPP should not be changed.

3. General Observation: What has not worked well with VPP?

- ✓ Better harmonization is needed between the technical content provided in national and international voluntary consensus standards and other government resources.
- ✓ The importance, concepts and techniques of risk assessment and risk management are not included in current VPP application (or participation) criteria.
- ✓ VPP needs to better address evolving and cutting-edge OSH issues such as heat exposures, fatigue and the recent COVID pandemic/infectious diseases.
- ✓ Better alignment is needed with international and national standards bodies like ANSI and ISO, which includes ANSI/ASSP Z10 and ANSI/ASSP/ISO 45001. OSHA may wish to consider ANSI/ASSP Z16.1and the applicable risk assessment standard such as the Z590.3 Prevention Through Design, ISO 31000, and ISO 31010 Standards.
- ✓ VPP implementation criteria needs to be updated to be consistent with management systems consensus standards such as the ANSI/ASSP Z10 and ISO 45001. As OSHA has recognized, the program criteria are outdated. ASSP members have consistently commented that the current criteria reads too much as a checklist as compared to confirming the presence of an actual management system

- ✓ Some sections of the self-evaluation criteria need to be updated as they can stagnate year over year. OSHA should increase focus on year-to-year improvement and capturing best practice and processes.

- ✓ Several members have noted that VPP is administered differently in each of the ten Regions, even though the procedures and processes are meant to be consistently applied.

II. Incentives to Participate

1. **To what extent does OSHA's recognition as a VPP participant motivate organizations to improve safety and health?**

   - ✓ As society increases the adoption of *environmental, social and governance (ESG) principles,* we think *the* value of a "generally recognized structure and certification" becomes a value proposition. This is especially true if OSHA modernizes VPP via greater harmonization with accepted standards such as ANSI/ASSP Z10 or ISO 45001.

   - ✓ In some cities and municipalities, an organization's VPP status has accelerated its ability to win projects.

   - ✓ VPP recognizes that OSH performance is a core value and should not be an achievement to exhibit.

   - ✓ When working with senior leadership to solicit support to pursue VPP status, our members note that the level of recognition can help motivate implementation.

2. **Is the existing exemption from programmed inspections an effective motivator, and are they sufficient?**

   - ✓ Some inspection incentives might be enough to get employers that have integrated safety and health as a core value to participate, but this motivator falls well short of what is needed to get employers that have not to participate.

   - ✓ VPP needs to clearly communicate recognized circumstances that will warrant an inspection, such as a catastrophe or fatality.

   - ✓ If a company has a good occupational safety and health culture, it should not be concerned about an OSHA visit.

3. **Does the existing exemption from programmed inspections create any concerns about workplace safety and health at these facilities?**

   ✓ ASSP members have mixed opinions on this issue. While this does not generate significant concerns, it could have some impact on OSH performance. From the perspective of OSH performance and VPP participation, the exemption is not a significant driver for high-performing companies and organizations.

4. **What other incentives could OSHA offer to encourage VPP participation?**

   ✓ Strong support for the OSHA comments in the proposal noting synergy and harmonization with ISO 45001. This could lead to more globally recognized certification. This would be a significant incentive for companies and organizations with both national and global operations.

   ✓ Work with professional organizations such as ASSP to create and offer education addressing VPP participation and how to elevate OSH performance beyond compliance.

   ✓ More public recognition for participating companies and organizations.

   ✓ Explore the feasibility of tax credits for participating organizations and companies.

5. **Should all types of workplaces be included in the scope of VPP?**

   ✓ Yes, our members concur that all workplaces should be potentially able to participate. OSHA may need to create criteria for industries and workplaces that have hazards and exposures not covered by the overall framework.

   ✓ VPP criteria also needs to be modernized for construction and demolition operations. We understand that VPP does not exclude construction and demolition operations, but ASSP members have commented the current criteria makes implementation on some sites difficult to accomplish. Many large scale and multi-year construction projects “have” participated in VPP and obtained great employee engagement. However, current eligibility requirements for sites to have multiple years of operating experience, coupled with prolonged waiting periods, disqualify and/or disincentivize most from participation. Companies and organizations with non-stationary workers also report they find VPP difficult to participate with. We would suggest that a broader range of construction and construction-oriented companies be given a path to participation.

ASSP suggests that OSHA also consider inclusion of construction and demolition operations and recognition of these specific voluntary national consensus standards:

- ANSI/ASSP A10.1 Planning for Construction Safety & Health
- ANSI/ASSP A10.33 Safety & Health Program Requirements for Multi-Employer Projects
- ANSI/ASSP A10.38 Basic Elements of an Employer's Program to Provide a Safe and Healthful Work Environment
- ANSI/ASSP A10.39 Construction Safety & Health Audit Program

6. **Should the manufacture or use of any specific hazardous materials preclude involvement or require special conditions?**

   ✓ According to our members hazardous material use/manufacture should not be a selection criterion.

   ✓ Regardless of what it produces, a manufacturer should have proper safety procedures, policies, and PPE to mitigate the specific hazards.

   ✓ This question appears to have a biased perspective to it. Many organizations use hazardous materials of some sort; the key and inherent criteria should be that the organization has processes in place to assess and properly control such.

III. Assessing SHMS Effectiveness

1. **What criteria should OSHA consider for eligibility in VPP?**

2. **What concerns exist with the use of injury rates for participation in VPP?**

3. **Should OSHA consider the relative importance of various criteria (e.g., a weighting system) for eligibility and performance criteria, to reflect the performance of VPP applicants and participants more accurately?**

ASSP has an overall position on the issue of rates:

ASSP believes that data and injury rates derived from the current rule (29 CFR 1904) reveal limited, to no, leading information regarding injury causation, hazards, and safety

performance. Instead, they reveal more about injury management than safety management.

ASSP further believes that a revision to the rule will help OSHA better achieve the purpose of developing "information regarding the causes and prevention of occupational accidents and illnesses" as set forth in the OSH Act. Such revision will also help align employer focus on leading metrics of performance as recommended by OSHA, called for in modern occupational safety and health management systems such as ANSI/ASSP Z10 and promoted by ASSP members.

Our additional comments:

- ✓ Our members report that injury rates can be reviewed as part of the eligibility assessment, but these rates should not be an automatic reason for denial.
- ✓ Injury rates may not serve as an accurate reflection on the company and their safety culture.
- ✓ We support OSHA researching enhanced inclusion of an organization that has finished a conformance assessment via an accredited independent third-part audit and/or certification body.

ASSP also has a historic position on the impact of such systems:

Effective occupational health and safety management systems (OHSMS) are essential for workers in order to create and maintain safe, healthful, and productive workplaces.

4. What weight should DART and TCIR be given in an overall assessment of the effectiveness of a VPP participants' SHMS?

- ✓ Lagging metrics should still be utilized as a threshold for evaluating the effectiveness of VPP participants achieving reduction goals. However, the evaluation criteria should include a review of the leading metrics measuring the actions taken for identified improvements in controlling and reducing risk and improving management systems These enhancements could be added to the management accountability, goals and objectives, and the trend analysis sections of the evaluation criteria.
- ✓ The question then is how do OSH professionals and their organizations measure success? The ANSI/ASSP Z16.1 standard provides a systematic approach for measuring safety and health performance. As noted in the standard, a balanced

approach is needed to measure risk management and management system improvements that support overall risk reduction.

- ✓ VPP requires trend analysis of inspection and incident data. We know from long time our long time history and standards development initiatives that OSH professionals agree that metrics are essential components of effective safety and health management systems as they help them to evaluate, monitor and control injury and illness hazards and ensure job responsibilities are met. Metrics can also help you assess the effectiveness of risk controls, identify potential injury/illness sources, support progress toward achieving goals and track trends over time.

- ✓ Workplace safety and health, metrics have been generally divided into two categories: leading metrics and lagging metrics. Lagging indicators, measure what has already occurred and include incident data such as OSHA injury and illness statistics. Lagging metrics have been used for benchmarking, tracking progress toward a specified goal, or measuring compliance with a particular requirement. Leading metrics measure the identified actions that contribute to results and help achieve goals. These could include redesigning workflows or installing machine guarding to improve the safety and health of the work environment. To be effective, there must be a relationship between leading and lagging metrics.

5. What leading indicators should OSHA consider using to assess the performance of VPP participants' SHMS?

ASSP suggests that OSHA review *ANSI/ASSP Z16.1-2022 Safety and Health Metrics and Performance Measures* for examples of effective leading indicators Federal agencies, including OSHA, helped write this voluntary national consensus standard:

Scope: This standard defines requirements and expectations for organizations to establish effective measurement systems that assess safety and health performance, reduce risks, identify gaps in safety and health management systems, and drive needed improvements. It applies to all organizations and provides flexibility based on their size, type of management system and level of organizational risk. The standard can supplement requirements from government agencies, non-government organizations and other groups such as rating agencies that may have their own private or public reporting requirements.

This standard broadens the scope of metrics beyond incident rates and other failure metrics. It promotes the use of leading metrics, metrics related to success, and business impact. Business impacts include effects on productivity, quality, worker well-being, recruitment, retention, morale and engagement, absenteeism, company reputation, financial health and shareholder value.

We recommend that OSHA review the following materials on this standard:

ANSI/ASSP Z16.1 Technical Brief

Safety and Health Metrics (Z16.1) - Homepage

Leading With Safety and Health Metrics

Using ANSI/ASSP Z16.1 to Effectively Measure & Improve OSH Performance

We would also recommend that OSHA review the technical materials listed below on leading and lagging indicators:

How to Implement and Evaluate Leading Indicators

Leading and Lagging Indicators: Do They Add Value to the Practice of Safety?

Webinar: Driving Safety Transformation by Analyzing Leading Indicators

Podcast — Episode 16: Leading and Lagging Indicators

Webinar: OSHA-ASSP Leading and Lagging Indicators

Safety Metrics Corporate & Site-Level Scorecards

6. **Should any programs, policies or practices that may affect injury reporting be excluded from VPP site SHMS?**

Tools, programs, practices and policies that discourage or prohibit the reporting of incidents, near-misses or concerns would be excluded. OSHA has detailed guidance on these types of practices so we refer to OSHA guidance.

IV. Use of Consensus Standards as a Pathway to VPP

ASSP is secretariat and/or the technical advisory group (TAG) administrator to the American National Standards Institute, and the standards and consensus documents listed below should be considered as overall resources:

ISO 45001-Related:

ANSI/ASSP/ISO 45001-2018, Occupational Health and Safety Management Systems - Requirements with Guidance for Use

ASSP/ISO TR - 45001-2021, Occupational Health and Safety Management Systems – A Practical Guide for Small Organizations

ANSI/ASSP/ISO 45003-2021, Occupational Health and Safety Management –Psychological Health and Safety at Work –Guidelines for Managing Psychosocial Risks

ANSI/ASSP Z10-Related:

ANSI/ASSP Z10.0–2019, Occupational Health and Safety Management Systems

ASSP GM-Z10.101-2019, Guidance Manual: Keep Your People Safe in Smaller Organizations

ASSP GM-Z10.100-2019, Guidance and Implementation Manual for ANSI/ASSP Z10.0-2019 Occupational Health and Safety Management System

1. **Should OSHA create a new and separate pathway for organizations that are already certified to SHMS consensus standards to join VPP?**

We have a long-standing position on this overall issue:

- ✓ *ASSP supports reasonable public access to national voluntary consensus standards specifically referenced in regulatory provisions. However, this must be done without compromising the legitimate proprietary interests of the organizations that develop and maintain such standards.*

- ✓ *ASSP supports the increased use of consensus standards in the formulation of legislation and regulation for occupational safety and health. Governmental agencies such as OSHA, CPSC, NHTSA and others should be encouraged to use these consensus standards as they provide an efficient/effective alternative to traditional public sector rulemaking.*

- ✓ *ASSP opposes requirements that all such standards be made publicly available at no cost without permission of the developing organization.*

- ✓ *ASSP opposes standards-developing bodies losing or having their copyright protections stripped due to governmental incorporation of standards by reference.*

We have an extensive technical position on the use of national voluntary consensus standards that is attached to this technical comment as Appendix A.

Our position also addresses this issue to some extent:

- ✓ *To address one of the key questions from OSHA, ASSP believes that regulatory agencies would benefit from the use of independent workplace safety and health auditors to augment the resources available to federal and state regulators. Such auditors must be qualified by experience, education, training, or professional certification.*

2. **What additional criteria, if any, should such organizations be required to meet to be eligible for VPP recognition?**

ASSP firmly believes that organizations and companies able to indicate compliance with ANSI/ASSP Z10 or ISO 45001 should warrant positive consideration during the application and review process.

Specifically, our position is as follows:

> *ASSP believes that regulatory agencies would benefit from the use of independent workplace safety and health auditors to augment the resources available to federal and state regulators. Such auditors must be qualified by experience, education, training, or professional certification.*

3. **Are there any current VPP application requirements that should be waived for organizations already certified to SHMS consensus standards such as ISO 45001?**

- ✓ Our members concur that the program could be designed to make the process more efficient and effective for organizations that are certified against ISO 45001.

- ✓ While ANSI/ASSP Z10 is not included in this question, but should be considered for inclusion. While certification against ANSI/ASSP Z10 is currently not common, ASSP recently included an audit rationale in the Z10 Implementation Guide that could increase third-party conformity assessments.

4. **Should organizations that voluntarily follow any of these consensus standards, but that have not been certified by a third party, have an easier path to VPP?**

- ✓ Additional clarification is needed. We interpreted this to mean an organization/ company that performs internal audits, then self-declares compliance against the standard.

- ✓ While we agree this has potential, the process would require some type of assessment to determine eligibility.

5. **What concerns exist for facilities that are voluntarily following or are certified to a consensus standard such as ISO 45001 that might reduce the effectiveness of their entry to the VPP program through an alternative entrance route?**

- ✓ ASSP is not clear on the direction of this question. We interpreted this question to be that OSHA is asking if there is any documentation and evidence showing effective and efficient implementation of these management system standards.

- ✓ We have included our technical position on the effectiveness of occupational health and safety management standards as Appendix B.

V. Role of Accredited Certification Bodies in VPP Reviews

1. **Is there a role for certification bodies who are accredited to audit organizations for conformance to SHMS consensus standards to perform or assist in performing VPP application reviews?**

We believe certification bodies have a role within the parameters of this question. To summarize our position:

- ✓ We are a strong supporter of high-caliber certification bodies and have historically supported accredited certifications and credentials.

- ✓ ASSP does not oppose the public sector also from issuing certifications and credentials.

- ✓ Certification bodies should operate at the highest levels and be accredited by an organization recognized by groups such as the Institute for Credentialing Excellence or the National Commission for Certifying Agencies.

- ✓ Public-sector regulatory and legislative scenarios must recognize and include accredited certification bodies from the private sector in OSH regulations and programs.

We recommend that OSHA consider this applicable standard:

ANSI/ASSP/ISO/IEC TS 17021-10-2021, Conformity Assessment – Requirements for Bodies Providing Audit and Certification of Management Systems

Scope: ANSI/ASSP/ISO/IEC TS 17021-10-2021, Conformity Assessment – Requirements for Bodies Providing Audit and Certification of Management Systems - Part 10: Competence Requirements for Auditing and Certification of Occupational Health and Safety Management Systems.

This document specifies additional competence requirements for personnel involved in the audit and certification process for an occupational health and safety management system and complements the existing requirements of ISO/IEC 17021-1.

Three types of personnel and certification functions are defined:

- *auditors;*
- *personnel reviewing audit reports and making certification decisions;*
- *other personnel.*

2. **Should OSHA engage with certification bodies and those who accredit them to create a hybrid SHMS certification option for industry (e.g., ISO 45001-VPP)?**

We believe OSHA should meet with the certification and accreditation bodies and stand ready to assist with and participate in these conversations. The Society is not a certification or accreditation body, but does have some expertise in this area.

3. **Are there aspects of the VPP review that would not be suitable for SHMS certification bodies to perform?**

Based on our experience, the answer to this question is “No”. We have not identified situations or aspects of VPP review that would be excluded to SHMS certification bodies. We would be interested to see more information on this question to clarify our understanding of this issue.

VI. Role of Certified Safety and Health Professionals in VPP Reviews

1. **Is there a role for certified safety and health professionals (e.g., CSP or CIH) or senior worker safety and health representatives (e.g., a long-term safety committee member) to perform (or assist in performing) VPP application reviews?**

- ✓ Individuals with current CSP and CIH designations automatically qualify for professional membership status in ASSP. It is also worth noting that the Society was the initial founding member of the Board of Certified Safety Professionals (BCSP), which awards the CSP among other well-recognized industry certifications.

- ✓ ASSP believes having the Department of Labor/OSHA cite recognized certifications among the accepted qualifications for VPP application reviewers/assessors would further elevate their role in this process.

- ✓ With the assistance of qualified auditors, employers would be more open to making suggested improvements, if there were incentives for participation.

- ✓ A third-party audit program would not lessen OSHA's enforcement role. Rather, it would provide a practical way to expand the agency's positive impact and provide greater access to the many resources available to employers so they can take proactive measures to create safe, healthy workplaces.

2. **Should OSHA engage with organizations that credential safety and health professionals to create a designation or special training that helps such professionals demonstrate their competence to perform VPP reviews?**

   - ✓ We believe OSHA should engage with the certification bodies that offer industry-recognized accredited certifications for occupational safety and health professionals.

   - ✓ It is also covered in under sections of this comment, but the Certified Safety Professional (CSP) or the Certified Industrial Hygienist (CIH) – meet stringent requirements of quality accreditation bodies – the National Commission for Certifying Agencies (NCCA), the Council of Engineering and Scientific Specialty Board (CESB), or ANSI/ANAB.

3. **Are there any aspects of the review that would *not* be suitable for certified safety and health professionals or senior worker safety and health representatives to perform?**

Based on our experience, the answer is "no". We can think of no situations that would exclude certified occupational safety and health professionals from participating in VPP reviews.

4. **Are there other credentialed safety and health professionals who should be allowed to perform or assist in VPP application reviews?**

The following credentials are recognized by ASSP for professional membership in the Society. We suggest that OSHA review this list since it would serve as a starting point for review:

1. *You must have acquired either the CSP or CIH certification.*

2. *Or, you must have a doctorate-level degree in an OSH field and 5 years of OSH experience.*

3. *Or, you must have your bachelor's degree and 5 years of OSH experience, along with one of the following certifications:*

    - *Associate Safety Professional (ASP)*
    - *Canadian Registered Safety Professional (CRSP)*
    - *Certified Fire Protection Specialist (CFPS)*
    - *Certified Hazardous Materials Manager (CHMM)*
    - *Certified Health Physicist (CHP)*
    - *Certified Human Factors Professional (CHFP)*
    - *Certified Industrial Hygienist (CIH)*
    - *Certified Occupational Health Nurse (COHN)*
    - *Certified Occupational Health Nurse-Specialist (COHN-S)*
    - *Certified Professional Environmental Auditor (CPEA)*
    - *Certified Professional Ergonomist (CPE)*
    - *Certified Protection Professional (CPP)*
    - *Certified Safety and Health Manager (CSHM)*
    - *Certified Safety Professional (CSP)*
    - *Certified User Experience Professional (CUXP)*
    - *Construction Health and Safety Technician (CHST)*
    - *Chartered Fellow-IOSH (CFIOSH)*
    - *Chartered Member-IOSH (CMIOSH)*
    - *Occupational Health and Safety Technician (OHST)*
    - *Professional Engineer (P.E.)*
    - *Safety Management Specialist (SMS)*

VII. Tiered VPP

1. Should OSHA consider a tiered approach to VPP?

- ✓ We believe this is a worthwhile consideration. The main issue and concern will be to create and defend a criteria that allows for such an approach. We do believe the idea is worthy of consideration but will be a formidable task.

2. **What criteria could the VPP program use to distinguish between, for example, a new participants tier, a tier for organizations with fully functional SHMS programs, and VPP participants who are truly exceptional?**

   ✓ This is a difficult question to answer. We do not believe organizations that do not have fully functional programs should be recognized. The program is based on performance and are not aware of organizations able to meet the applicable levels if they do not have fully functional programs. However, it would also be helpful to have a clearer definition/explanation of what the term "fully functional" means in this context.

3. **What benefits could OSHA provide that would encourage organizations to improve their performance and move from a lower to a higher tier?**

   ✓ This question is addressed in other areas of this comment.

VIII. Effective VPP Administration

1. **What data should be collected during the initial application process and periodic evaluations to ensure that VPP applicants are, and remain, eligible to participate in VPP?**

   ✓ The current data collection is formidable, but OSHA would perhaps want to include:

   ✓ Information related to third-party audits and certification if the applying organization has successfully undergone a conformance assessment.

   ✓ Any additional background or information related to review and use of leading indicators.

2. **Are there issues related to data integrity and confidentiality in the collection and storage of data from VPP initial applications and periodic evaluations? If so, how should these issues be addressed?**

While this is more of a legal question, the information related to program performance would not be confidential. We are trying to understand if there are specific applications identified by OSHA that impact this proposal.

3. **If OSHA were to engage or authorize third-party reviewers to conduct on-site evaluations, what review process should be used to ensure the quality of the data produced during such evaluations?**

We recommend that OSHA review the Congressional record from the evaluations on third-party audits and reviews during the debate on applicable legislation in the 1990s. These issues were specifically raised and addressed by legislators and regulators:

https://books.google.com/books?id=Ti8sAAAAMAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

https://trackbill.com/bill/us-congress-senate-bill-385-safe-act/298079/

4. **How can OSHA use technology and the internet to streamline and improve VPP? For example, should OSHA develop an online application and renewal system? Should OSHA create a VPP webpage dedicated to sharing best practices?**

We did not have any comments from members indicating that technological issues/concerns discourage participation in VPP.

5. **What steps can OSHA take to ensure that any use of third-party certification does not result in facilities with less than exemplary SHMS being admitted to the program?**

See our answer in the response to Question #3 earlier.

IX.VPP Worker and Safety Professional Involvement

1. **OSHA utilizes Special Governmental Employees (SGEs) to assist with the evaluation process. Should SGE use be expanded to provide additional capacity to the program?**

Yes, the program should be expanded. This would allow more industry personnel to have a stake in the program, provides more resources to OSHA to expedite the VPP process, and further proliferates the adoption of the program. The VPP process is slow, especially for State programs., creating a barrier to more participation. More resources would help remove this barrier.

2. **Should SGE training be standardized to ensure consistency?**

Yes, the training should be standardized on the most complete and effective curricula currently in use. Our members' collective experience indicates that it could take up to a full five days to training to thoroughly review and understand the VPP process elements and how to effectively evaluate them in reference to the technical requirements of the process and the goals and objective of the program. Streamlining the process for renewing the SGE qualification in each

five-year cycle would allow greater participation of experienced SGEs. Perhaps some of all of the renewal process could be on-line remote training for SGEs that have participated in an evaluation in the two years before the end of their cycle.

In addition, OSHA should consider future curricula standardized, updated, and aligned with the ANSI/ASSP Z490.1-2016 Standard: *Criteria for Accepted Practices in Safety, Health and Environmental Training*. Streamlining the process for renewing the SGE qualification in each five-year cycle would allow greater participation of experienced SGEs. Perhaps the renewal process could potentially be enhanced use of on-line remote training for SGEs that have participated within the two-year evaluation time period.

3. **Are there items that should be included in SGE curricula that are not currently included?**

The addition of Total Worker Health Total Worker Health® program elements into the VPP process, including the VPP evaluation process, should be considered for future efficacy of the program. A greater focus on the use of injury, process and behavioral data/information for the identification of trends and opportunities to enhance the safety of the site should be added. The linkage between Safety and Health and Sustainability/ESG programs should be added to ensure VPP is seen as a vibrant element of the sustainability of industry. Finally, the updating of the VPP process and SGE training to include the latest elements of ANSI Z10, [ANSI Z490] and ISO 48000 should be undertaken to align the process to the most current EHS management systems.

X.VPP Name

1. **Should OSHA consider "rebranding" VPP and giving it a new name?**

Our members reported that VPP is well known and recognized. We would not support changing the name of the program.

2. **What considerations should OSHA factor in when considering any new program name?**

Please see comment above.

3. **Should OSHA sponsor a naming contest for the program?**

Please see comment above.

Conclusion

Of interest, we have spoken with many members who have experience with VPP. Their feedback indicates significant interest in this proposal relating to the implementation of enhanced safety management systems and infrastructure.

We also included our position statement addressing the use of voluntary national consensus standards in the regulatory process and the value of safety management programs and systems. ASSP listed several of our consensus standards in this statement and let us know if OSHA should need any of these materials for review by the Agency.

Thank you for your time and attention to our comments. If we can be of any assistance in this matter, please let us know.

Respectfully,

Christine M. Sullivan, CSP, ARM
2022-23 ASSP President

ASSP Headquarters Contact Information

Timothy R. Fisher, CSP, CHMM, CPEA, ARM, FASSP
Director, Standards Development and Technical Services
American Society of Safety Professionals
ASSP External Relations
520 N. Northwest Highway
Park Ridge, IL 60068
TFisher@ASSP.Org; 847/768-3411

Sue Trebswether
Director, Marketing/Communications
American Society of Safety Professionals
ASSP External Relations
520 N. Northwest Highway
Park Ridge, IL 60068
STrebswether@ASSP.Org
847/768-3433

AMERICAN SOCIETY OF SAFETY PROFESSIONALS

Appendix A

AMERICAN SOCIETY OF SAFETY PROFESSIONALS

POSITION STATEMENT ONTHE ROLE OF CONSENSUS STANDARDS AND GOVERNMENTAL REGULATIONS IN OCCUPATIONAL SAFETY AND HEALTH

Approved by the ASSP Board of Directors
August 25, 1995, Reaffirmed June 2008, and June 2011
June 2018, Reaffirmed With ASSE/ASSP Name Change

APPENDIX A

POSITION STATEMENT ON THE ROLE OF CONSENSUS STANDARDS IN OCCUPATIONAL SAFETY AND HEALTH

The utilization of national consensus standards will be of increased importance to this country as the economy of the United States moves towards more of a global perspective. National consensus standards reflect the opinions of the professionals who work at all levels of the public and private sectors in technology development, manufacturing, training, financial analysis, personnel, academia as well as insight from the final end user. This balanced insight enables standards to be crafted in a way which not only benefits and protects users of the standard, but also furthers the interests of the businesses which have been created to meet user demand.

ASSP supports the increased utilization of consensus standards in the formulation of legislation and regulation for occupation safety and health. Governmental agencies such as OSHA, CPSC, NHTSA, etc... should be encouraged to utilize these consensus standards as they provide an efficient/effective alternative to traditional public sector rule making.

Policy Implementation

ASSP advocates initiatives to encourage the utilization of national consensus standards as an effective/efficient option for meeting the demand of increased regulation/legislation in occupational safety and health since:

- National consensus standards have fewer procedural burdens

- The consensus method provides for a balance between competing interests
- The voluntary nature of consensus standards enables users to adapt provisions to meet unusual circumstances.
- Much lower standards development cost are obtained.

(Supporting white paper enclosed)

WHITE PAPER ON THE ROLE OF CONSENSUS STANDARDS AND

GOVERNMENTAL REGULATIONS IN OCCUPATIONAL SAFETY AND HEALTH

Preface

The American Society of Safety Professionals acknowledges a responsibility to take an active role in the evolution of national policy with respect to safety and health standards and regulations. At all times, and especially in times of political reform, there is a need for government to receive the counsel of the safety and health community with respect to standards development and promulgation.

As we review over three (3) decades of social legislation and its enforcement under EPA, OSHA, CPSC, etc., Congress and the professional safety and health community are again raising questions as to what the role of occupational safety and health standards and regulation should be. Some legislators have proposed a more comprehensive program of standards and enforcement. Others have maintained that the proper place for standards development and enforcement is within the national consensus standards-setting framework. Others have supported a performance-oriented approach to safety and health standards.

While this paper primarily focuses upon occupation safety and health standards and regulation, the positions set forth here can be applied generically to other regulatory areas. Essentially the uses of national consensus standards in the regulatory process, unless warranted by legislation already in place, should be pursued along the lines suggested in the various venues of this paper.

Introduction

To obtain a legislative compromise one of whose objective was to avoid delays that were inevitable if regulations were developed under the provisions of the Administrative Procedure Act, the Occupational Safety and Health Act of 1970 required the newly formed Occupational Safety and Health Administration (OSHA) to promulgate safety and health regulations using existing nationally recognized consensus standards. While this action did serve the congressional intent of quickly establishing a set of regulations for OSHA to enforce, it also resulted in the adoption of hundreds of regulations that were of minimum value in protecting workers. Although OSHA has done much to eliminate such nuisance regulations, enforcement of regulations with questionable value in the 1970's resulted in resentment from industry that lingers even today.

Yet another problem in OSHA's rapid adoption of consensus standards as regulations was that advisory provisions of voluntary consensus standards became mandatory provisions of government regulations. In other words, not only was the voluntary standard made into a mandatory regulation, but many advisory provisions that used the word "should" were made into mandatory provisions when OSHA replaced the word "should" with "shall." The result was

that some regulations were, as a practical matter, impossible to fully comply with. Many OSHA regulations were changed to address such concerns, but the experience seems to have damaged OSHA's reputation and credibility.

These developments also impacted the conduct of consensus standards committees. Many committees revised standards to clarify the original intent of provisions, more explicitly addressed exceptions to general provisions, narrowed the scope of the standards or otherwise reacted to developments at OSHA. Even today, members of consensus standards committees look beyond conveying general principles and concepts and concern themselves with exceptions to the rule, adverse impact on specific industries, legal implications of standards, and the potential for misinterpretation. Thus, as a result of OSHA and other factors1, the development and maintenance of consensus standards related to occupational safety and health has become a much more complicated and demanding endeavor.

Given that OSHA regulations now exist and given the cost and complexity of developing and maintaining consensus standards, one may question the value of consensus standards activities. Should consensus standards be withdrawn if they cover areas also covered by OSHA regulations? If so, what would happen if OSHA is eliminated? If no, what value is the consensus standard providing? What role should consensus standards play in occupational safety and health? What functions must be reserved for regulation?

To the above end this paper examines the proper role of consensus standards and government regulation in occupational safety and health. After describing the role of consensus standards to occupational safety and health, this paper concludes with a description of policies of the American Society of Safety Professionals intended to enhance this role.

Discussion

The Value of Consensus Standards Generally

When compared to government regulation, consensus standards have several advantages, including the following:

- fewer procedural burdens,
- consensus method,
- voluntary nature allows users to adapt provisions to meet unusual circumstances,
- much lower development cost.

These advantages lead to authoritative documents that can be quickly developed and modified, appeal to common sense, are flexible in application, and are cost effective when compared to the federal regulatory process.
It is important to note that the concept of consensus and the input of most, if not all, materially interested parties is critical to the consensus system. Care must be exercised in the makeup and organization of consensus committees to assure the integrity of the process. Without these attributes the validity of a consensus standard is suspect.

When Government Regulation Is Required

As previously stated, the validity of consensus standards is based on achieving consensus among all materially interested parties. It follows that government regulation is probably necessary when consensus cannot be achieved in the voluntary standards process, or when the voluntary standards process does not receive input and consider the views of all materially interested parties.

Government regulation is also required when a higher level of validity or greater objectivity is required for enforcement. Such may be a watershed issue for industry as OSHA is legislatively and administratively reformed. If industry wants high objectivity (i.e., little or no discretion or interpretation by OSHA compliance officers), then detailed and comprehensive regulations must exist. On the other hand, if industry wants less regulation and greater flexibility, then industry should consider greater application of voluntary standards in enforcement decisions made by OSHA compliance officers using their professional judgment. Given the appeal provisions allowed under OSHA this trade off appears worthwhile.

A potential danger in increased use of consensus standards is that the process will become targeted by special interests. However, viewed another way, increased use, and application of consensus standards by OSHA will motivate increased participation in the consensus process and thereby increase the quality and validity of consensus standard related to occupational safety and health. While the "political" intensity of the process may increase, each party in the process will proceed with the understanding that (1) consensus does not require unanimity, and (2) failure to reach consensus may result in federal regulation.

The Value of Consensus Standards in Areas Addressed by Government Regulations

A practical concern to resource-limited standards developers is the extent to which support should be continued for consensus standards in areas addressed by government regulation. Consensus standards related to safety and health are perceived as less acceptable when OSHA regulations address the same issue, but nevertheless provide the following benefits:

- consensus standards can provide a useful "how to" supplement to OSHA regulations,
- consensus standards can influence revisions to OSHA regulations,
- unlike OSHA, consensus standards can address off-the-job safety and health issue,
- consensus standards address new issues and incorporate updated scientific information quickly while OSHA proceeds with its rulemaking process,
- consensus standards can provide a valuable reference for safety and health evaluations in cases where OSHA regulations have become outdated.

The Relationship Between OSHA Regulations and Consensus Standards

What the preceding discussion suggests is that a complementary relationship should exist between OSHA regulations and consensus standards. As a matter of policy, OSHA should take advantage of valid consensus standards and use them in enforcement, mindful of the fact that consensus standards are not written to address every foreseeable circumstance. OSHA will spend less money developing regulations, and armed with common sense, consensus standards, and reasonable discretion, OSHA compliance officers can do their job more effectively. For the consensus standards developer, OSHA regulation can provide an alternative to stalemate when consensus cannot be achieved. In addition, such action is also in accordance with the approved, reaffirmed, and revised Office of Management and Budget Circular A-119 Federal Participation in the Development and Use of Voluntary Standards (See Appendix B). For those almost unresolvable issues of standards setting, the ASSP

recommends more use of the negotiated rulemaking option as critical safety and health standards need to be available.

ASSP Supports Consensus Standard Alternatives to Federal Regulation

ASSP encourages support of consensus standards activities and processes as an alternative to government regulation of occupational safety and health whenever conditions permit. When compared to government regulation, consensus standard activities allow for greater participation by ASSP professionals in the development of safety and health practices. Also, since consensus standards do not profess to address every possible situation, ASSP professionals also have greater influence in the application and interpretation of consensus standards than they do with federal regulations.

Implications for OSHA Reform

ASSP encourages support of OSHA reforms that foster the use of consensus standards in enforcement when a standard does not exist, is inadequate, or is obsolete/dated. For safety professionals/practitioners to realize greater opportunities to apply their professional skill and judgement, consensus standards must, in some sense, be authoritative. Without such authority, safety and health professionals may not have sufficient influence and resources to properly do their jobs. For consensus standards to be authoritative. OSHA must be able to routinely rely on provisions of consensus standards in enforcement.

Since national consensus standards do not contemplate every possible scenario, there exists a need for interpretation of the standards based upon professional judgement. When such standards are used in the regulatory enforcement process, federal/state agencies should rely primarily, although not exclusively, upon the view of those who wrote the standards. Facilitation of agency needs should be provided promptly in a collegial manner.

ASSP's View of Government Regulation

While government regulation appears fundamental to safety/health standardization, it should, nevertheless, be efficient, participative, and centralized. The regulated community will more likely view these characteristics as a value-added process where they are encouraged to provide input. Having regulations developed centrally reduces the need for each jurisdiction to prepare their own standards. Having multiple standards bodies presents many difficulties for the regulated community that has facilities in many jurisdictions.

Standards need to be written for the regulated community to readily understand and implement. If standards were more clearly written, compliance directives would not be needed as an interpretation would be obvious. Standards often appear written more for ease of enforcement or to help the solicitors prevail in legal proceedings. Enabling legislation may be necessary, in this situation, to achieve the desired results.

These regulatory standards often have some requirements which have little to do with achievement of safety and health objectives. Some of this may result from OSHA's approach in writing standards in a one-size-fits-all style. These standards should require only what is necessary to achieve a reasonable reduction in risk. Layers of documentation and written certifications are often extras that add compliance burden with little safety/health accomplishment. If enabling legislation is needed to obtain these results, such action may be necessary.

- Standards, developed by OSHA or any agency, need a user panel review before they are published in final form. Enabling legislation or appropriate regulation may be required to obtain this result.

- Standards covering similar issues in the same Part or across different Parts of OSHA standards should have the same requirements unless the hazards are very different.

- OSHA should have an active process to review standards and update them on a five (5) year cycle after a period of experience in application to harmonize them with the more current consensus standards.

- The standards making/regulatory process should factor in a requirement to allow visits of sites/personnel in the regulated community at any time in the development of a standard to review how issues proposed or being developed for regulation are currently being managed and the costs of managing these issues.

The above features should be put forth or considered as desirable tasks of rule-making when legislators or regulators move toward development of such regulatory standards.

Conclusion

The ASSP supports a complementary relationship between OSHA regulations and consensus standards related to occupational safety and health which uses valid consensus standards enforcement, mindful of the fact that consensus standards are not written to address every foreseeable circumstance. ASSP points out that action of this nature may empower and enhance the professional stature of both ASSP members and OSHA compliance officers. Most importantly, such action will allow for a more efficient and responsive use of occupational safety and health resources thereby improving working conditions.

To further set in place the Society's view of national consensus standards per se Appendix A is provided. This policy position was approved by the Board of Directors on March 5, 1990. In essence the position looks at consensus voluntary standards apart from regulations while covering the range of issues involved in effective participating in the uniquely American system of standards making.

AMERICAN SOCIETY OF SAFETY PROFESSIONALS

APPENDIX B

THE RETURN ON INVESTMENT FOR SAFETY, HEALTH, AND ENVIRONMENTAL (OSH) MANAGEMENT PROGRAMS

NOTICE: This report, white paper, and set of recommendations were produced by the ASSP Council on Practices and Standards (CoPS) of the American Society of Safety Professionals (ASSP). CoPS is a council of ASSP, which provides technical insight to ASSP leadership addressing the practice of the safety profession, its specific disciplines, and the standards of practice impacting our members.

The ASSP Council on Practices and Standards is structured to provide balanced and sound Assessment of matters related to the effectiveness and efficiency of the standards of practice in the safety profession. The Council consulted with many organizations, entities, and governmental agencies while developing this report and white paper, however, it has not been reviewed for approval by any other entity than ASSP. The contents of this report, and its recommendations, do not represent the views of any other organization other than ASSP. The mention of trade names, companies, or commercial products does not constitute any recommendation or endorsement for use.

The information and materials contained in this publication have been developed from sources believed to be reliable. However, the American Society of Safety Professionals (ASSP) accepts no legal responsibility for the correctness or completeness of this material or its application to specific factual situations. By publication of this paper, ASSP does not ensure that adherence to these recommendations will protect the safety or health of any persons or preserve property.

Approved by the Council on Practices and Standards and the ASSP Board of Directors
June 8, 2002, Reaffirmed/Reviewed June, 2008, June 2010, June 2017 and June 2019

SUMMARY ADDRESSING THE RETURN ON INVESTMENT (ROI) FOR SAFETY, HEALTH, AND ENVIRONMENTAL (OSH) MANAGEMENT PROGRAMS

ASSP continues to get a significant number of inquiries addressing the return on investment for the creation and maintenance of occupational health and management safety systems. ASSP is the secretariat of the Z10 Committee, which writes the current Z10 Occupational Health and Safety Management Systems Standard and two outstanding implementation guides. In addition, ASSP also serves as the TAG Administrator (Technical Advisory Group) to ANSI for the ISO TC-283 Committee. TC-283 is the global committee responsible for the ISO 45001 OHSMS Standard and other pending publication. The Society takes great pride in being a global champion advocacy for the relevance and value of occupational health and safety management systems and the importance of effective safety management overall.

There have been a significant number of questions and inquiries from occupational safety and health professionals (OSH) looking for information about the implementation of such systems. Of interest is that ASSP member continue to challenge the Society to show examples of a safety management system having a positive impact. There are many examples, but these specific examples below and attached should assist. There are some research papers, white papers, data, and examples.

The implementation, maintenance, and improvement of OSH programs are of significant importance to this country as the economy of the United States moves toward more of a global perspective. Such programs positively impact all Americans and specifically those who work at all levels of the public and private sectors in technology development, manufacturing, training, financial analysis, personnel, academia as well as the final end user. An effective OSH Program not only benefits and protects the organizations implementing such a program, but also furthers the interests of the United States in a globally competitive environment.

The American Society of Safety Professionals (ASSP) knows from data and anecdotal information that investment in a OSH program is a sound business strategy, for any organization regardless of size, and will lead to having a positive impact on the financial bottom line. ASSP calls on governmental agencies such as Occupational Safety and Health Administration (OSHA), Mine Safety and Health Administration (MSHA), Environmental Protection Agency (EPA), Consumer Product Safety Commission (CPSC), and the National Highway Traffic Safety Administration (NHTSA), etc…, to do more in regard to showing that OSH management is more than simple compliance. The private and public sector should be encouraged to work together to show American business and industry that OSH is not only required under the law but should become and remain a core business strategy.

AMERICAN SOCIETY OF SAFETY PROFESSIONALS

RETURN ON INVESTMENT (ROI) FOR OCCUPATIONAL SAFETY AND HEALTH (OSH) MANAGEMENT PROGRAMS

Introduction

The key question asked of many OSH Professionals by financial planners in business and industry is: Do safety and health management programs improve a company's bottom line? The answer is a resounding "YES", although benefits may be somewhat hard to quantify. But in addition to outright savings on worker's compensation benefit claims, civil liability damages[i], and litigation expenses, having a solid safety and health management program with senior management commitment will improve productivity and employee morale. It can also make the difference between winning and losing bids and even government contracts.

ASSP has taken the position that the days are over when companies can view safety and health violations as the status quo, and regard OSH violations and the attendant civil penalties as another "cost of doing business." For one thing, penalties have been increasing in dollar amount. In addition, knowing violations that result in the death or serious injury of a worker may be prosecuted at the state level under criminal laws, or in a referral by a government agency to the U.S. Department of Justice.

The Hidden Costs of Failed Safety and Health Systems

Anyone who has had the misfortune of witnessing or handling the aftermath of a serious or fatal on-the-job injury knows that, without question, the costs go far beyond those that appear in a company's ledger book. For those who survive, or who work with the accident or illness victim, the costs continue with psychological stress that may require years of counseling. Many times, co-workers who witness a serious event find themselves unable to return to the worksite for a significant period of time, which presents additional costs to the company through the abrupt loss of skilled workers. A plant with a singularly bad reputation for safety and health may find itself unable to attract workers at all or may have to pay wages well above market value to do so. These are just a few of the "hidden" costs of a poor safety and health program.

Moreover, as more information concerning a company's compliance and injury/illness experience becomes publicly available over the Internet and from the federal agencies through Freedom of Information Act (FOIA) requests, foes of industrial growth may use this data to defeat permit applications or zoning change requests. Part of being a "good corporate citizen" - rather than a company that no one wants in their backyard - is offering a safe and healthful work environment to the local residents.

Companies may also "externalize" costs associated with workplace injuries or illnesses, to the detriment of their safety and health program management. If some other organization (such as worker's compensation, social security, welfare or other insurance) pays the costs, corporate management may have a disincentive to control hazards. ASSP believes here is an excellent example of being "penny wise and pound foolish."

When insurance pays for the immediate costs of employee injuries, ultimately we will all pay either in the form of higher premiums, inability to obtain insurance completely, or passed-through costs to the consumer. Conversely, when there are fewer accidents, society saves as a whole. Fewer hospitals, medical professionals and rehabilitation facilities will be needed, and employee productive capacity will not be reduced as a result of occupational injury, disease, and death.

Past Secretary of the Treasury, Paul O'Neill, who also served as the long-time chairman of Alcoa Steel Corporation, has taken the position that investment in safety, health, and the environment is good for the economy, country, the firm, and its workers. Part of his company's (Alcoa) key business strategy included emphasis on occupational safety,

health, and environmental management. His belief is that investment in OSH makes sounds business sense and should be a cornerstone of an organization's goals and objectives. During his nomination, appointment, and confirmation as Secretary of the Treasury, Mr. O'Neill consistently spoke in favor of ongoing investment in OSH as positive generator for organizations2.

Some statistics and examples to consider when reviewing the "Economics of Safety"[ii]:

- Nearly 50 workers are injured every minute of the work week
- Between 15 to 17 workers die on-the-job each day
- Workplace injuries will cost society $128 billion in losses this year, which equals one-quarter of each dollar of pre-tax corporate profits
- Indirect costs of injuries may be 20 times the direct costs -- Indirect costs include: training and compensating replacement workers; repairing damaged property; accident investigation and implementation of corrective action; scheduling delays and lost productivity; administrative expense; low employee morale and increased absenteeism; poor customer and community relations
- To cover the cost of a $500 accident, an employer would have to:
    - ✓ bottle and sell 61,000 cans of soda
    - ✓ bake and sell 235,000 donuts
    - ✓ deliver 20 truckloads of concrete

OSH Investment as a Core Business Strategy

In recent years, encouraging senior management commitment to safety and health program management has become a priority for federal and state agencies involved with safety regulation and enforcement. A survey of employers indicates that the Top Ten motivations for taking actions were:

1. Cost of workers' compensation insurance (59 percent);
2. "Right thing to do" (51 percent);
3. "Increases Profitability" (33 percent);
4. Federal/State safety rules (31 percent);
5. "Too many accidents" (29 percent);
6. Employee morale (26 percent);
7. Productivity (23 percent);
8. OSHA fines (20 percent);
9. Employee concerns (5 percent); and
10. Recommendations of outside experts (13 percent)4.

Examples of Savings Attributable to OSH programs[iii]

- On August 29, 2001, Liberty Mutual Insurance Company released a report titled: A Majority of U.S. Businesses Report Workplace Safety Delivers a Return on Investment. The Liberty Mutual survey shows 61 percent of executives say $3 or more is saved for each $1 invested in workplace safety.

- A OSH Director for an environmental services company in Massachusetts reported that its tracking data indicated $8 saved for each dollar spent on a quality OSH program.

- A coal mining company in Charleston West Virginia has attained a competitive advantage through investment in OSH programs. The company claims its worker compensation rate is $1.28 per $100 in payroll as opposed to its competitor's rate of $13.78.

- Fall protection program implementation reduced one employer's accident costs by 96 percent - from $4.25 to $ 0.18 per person-hour

- Implementation of an OSHA consultation program reduced losses at a forklift manufacturing operation from $70,000 to $7,000 per year

- Participation in OSHA's Voluntary Protection Program has saved one company $930,000 per year and the company had 450 fewer lost-time injuries than its industry average

- A SHARP (Safety & Health Assessment & Research for Prevention Program) participant reduced its lost workday incidence rate from 28.5 to 8.3 and reduced insurance claims from $50,000 to $4,000 through decreases in both direct and indirect losses through a reduction its number of back and shoulder injuries.

- Implementation of an improved safety and health program reduced Servicemaster's worker's compensation costs by $2.4 million over a two-year period

- A manufacturer using a state consultation program reduced its worker's compensation modification rate from 1.7 to .999, and saved $61,000 on its worker's compensation insurance premiums\OSHA VPP sites saved $130 million in direct and indirect injury/illness costs in 1999.

- OSHA's Office of Regulatory Analysis has stated: …our evidence suggests that companies that implement effective safety and health cans expect reductions of 20% or greater in their injury and illness rates and a return of $4 to $6 for every $1 invested...

- In their 9/2001 article titled: Measuring Safety's Return on Investment, Susan Jervis and Terry R. Collins, make the argument that there is a direct correlation between a company's performance in safety and its subsequent performance in productivity and financial results. They pointed out that in the Forbes 1999 Financial Rankings, among those listed ten of the most-successful U.S. businesses were participants in the OSHA VPP program6.

Federal Programs

The original OSHA effort to encourage use of safety and health management programs was the Voluntary Protection Program (VPP) initiative, established in 1982, was restructured in 1996 and is still in effect. The VPP emphasizes the importance of worksite safety and health programs in meeting the goals of the OSH Act, and provides official recognition of excellent safety and health programs, assistance to employers in their efforts, and the benefits of a cooperative approach among labor, management, and government to resolve potential safety and health problems. Recognition in the VPP requires rigorous attention to workplace safety by all personnel. Sites are approved based on their written safety and health program and their overall performance in meeting the standards set by the program.[iv]

The VPP is comprised of program elements that have been demonstrated to reduce the incidence and severity of workplace injuries and illnesses.

- The "STAR" program is the most highly selective program and is for applicants with occupational safety and health programs that are comprehensive and successful in reducing workplace hazards. Lost workday rates are 53 percent below national averages.
- The "Merit" level is for companies with good programs that are looking to improve and proceed to the STAR level. Lost workday rates are 35 percent below national averages.
- The "Demonstration" level is designed for contractors who meet the requirements as STAR-level companies but are not otherwise eligible for the STAR or Merit designations.

VPP participation is strictly voluntary and OSHA keeps application information confidential. Participating employers must still comply with OSHA standards, but they are exempt from programmed OSHA inspections (although not from those prompted by employee complaints or triggered by fatalities, catastrophes or significant leaks and spills). OSHA claims the following ROI for companies participating in VPP[v]:

- Injury Incidence Rates: In 1994, of the 178 companies in the program, 9 sites had no injuries at all. Overall, the sites had only 45% of the injuries expected, or were 55% below the expected average for similar industries.
- Lost Workday Injury Rates: In 1994, of the 178 companies in the program, 31 had no lost workday injuries. Overall, the sites had only 49% of the lost workdays expected, or were 51% below the expected average for similar industries.
- While protecting workers from occupational safety and health hazards, companies following the management guidelines mandated for VPP membership also experience decreased costs in workmen's compensation and lost worktime, and often experience increased production and improved employee morale.
- The lost workday case rate at Thrall Car Manufacturing Company in Winder, Georgia decreased from 17.9 in 1989 when the facility began implementing a VPP quality safety and health program to 4.6 in 1992 when the plant was ready to qualify for the Star Program. In 1994 the rate was 0.6. From 1989 when Thrall Car's Winder, Georgia plant began implementing its programs to qualify for the VPP and 1992, workers' compensation costs dramatically declined by 85%, from $1,376,000 to $204,000.

- At Monsanto Chemical Company's Pensacola, Florida Plant, which employs 1600 workers, the Lost Workday Case Rates have steadily declined during the period the worksite was implementing effective safety and health programs and in the four years since approval to the VPP. The rates fell from 2.7 in 1986 to 0.1 in 1994.

- Mobil Chemical Company has brought all of existing plants (plastics production and chemical plants) into VPP. OSHA reported that the company's recordable injuries were reduced 32%, lost workday cases were reduced 39%, and the severity of cases was reduced by 24%. Also, the company reduced its workers' compensation costs by 70 per cent, or more than $1.6 million, from 1983 to 1986, during the years it was qualifying its plants for the VPP. This reduction has been sustained through 1993. Mobil Oil Company's Joliet, Illinois refinery experienced a drop of 89 percent in its workers' compensation costs between 1987 and 1993.

- Occidental Chemical Company determined that as their Safety Process Systems Implementation percentage increased company-wide their Injury/ Illness rate decreased from 6.84 in 1987 to 1.84 in 1993, a 73 % decline.

- In the construction industry, Georgia Power Company brought two large power plant construction sites into the VPP in 1983 and 1984. By 1986, one site had reduced its total recordables by 24 per cent and its lost workday cases by a third. The other site reduced recordables by 56 per cent and its lost workday cases by 62 per cent. At Georgia Power's two power plant construction sites, the direct cost savings from accidents prevented at one site was $4.14 million and was $.5 million at the other for 1986 alone.

- During three years in the VPP, the Ford New Holland Plant noted a 13 per cent increase in productivity and a 16 per cent decrease in scrapped product that had to be reworked.

- During a recent evaluation of the Kerr-McGee Chemical Corporation Mobile, Alabama plant in July 1991, the VPP team found that at the same time, work related injuries continued to decline, production hit an all time high that exceeded the goal by 35 percent.

Additionally, OSHA has received considerable information on improvements in morale, productivity, and product quality. Although anecdotal in nature, these improvements are referred to frequently enough by participants in the VPP to indicate that there is a good possibility of a direct relationship between improved management of safety and health protection and these benefits.

OSHA E-Cat Initiatives

OSHA continues to expand its "e-CAT" initiative, which pushes implementation of a safety culture at every level of an organization. The multi-faceted program has four components: (1) Management System and Safety/Health Integration; (2) Safety and
Health Checkups; (3) Creating Change; and (4) Safety and Health Payoffs.

OSHA's e-CAT program consists of electronic Compliance Assistance Tools ("CATs") that provide guidance information for employers to develop a comprehensive safety and health program. Such programs are required by some states, although there is currently no such federal OSHA requirement.

OSHA's safety and health program management rule is under development, and its future will depend on the regulatory priorities of any Administration. The draft rule, released in October 1998, would have covered all general industry employers and applied to hazards covered by the General Duty Clause and existing OSHA standards. The proposal set forth the following core elements:

- Management leadership and employee participation (hold managers accountable for carrying out safety and health responsibilities in the workplace and provide them with the authority to do so; and, provide employees with the opportunity to participate in establishing, implementing and evaluating the program);

- Hazard identification and assessment (conduct worksite inspections, review safety and health information, evaluate new equipment, materials and processes before they are introduced to the workplace,and the severity of hazards);

- Information and training (provide employees with information and training in the safety and health program with respect to the nature of hazards, what is done to control the hazards, and the provisions of applicable standards); and

- Evaluation of program effectiveness (at least once every two years, after the initial program development).

Existing programs would be grandfathered as long as they satisfied the basic obligation for each core element and the employer could demonstrate the effectiveness of its program. The rule would also require employers at multi worksites to provide information about hazards, controls, safety and health rules and emergency procedures for all workers. ASSP commented extensively about this rule in regard to its technical applications, however, the Society remain steadfast in its belief that more needs to be done to encourage the development and implementation of OSH programs.

Finally, OSHA has the "SHARP" program (Safety and Health Achievement Recognition Program), which provides incentives and support to develop, implement and improve effective safety and health programs. Participating employers may be exempted from OSHA programmed inspections for a period of one year. All consultation and visits are conducted at employer request. Typical participants are smaller high-hazard businesses (e.g., with fewer than 250 employees) that do not have serious safety and health problems. Participants undergo a comprehensive site visit and agree to correct all identified safety and health hazards.

Even where not mandated by law, OSH management programs are critical to the safety, health, and environmental performance of an industrial employer. Companies that are truly committed to excellence should consider participation in the VPP or the other consultation and professional development programs offered by OSHA or through professional safety organizations such as ASSP.

State Programs

At the state level, Oklahoma in the past was lauded for its "Safety Pays" program, which offers employers assistance in developing management programs that identify and eliminate workplace hazards and ensure compliance with OSHA regulations. Nine employers were among those receiving the state's Awards of Excellence" and it was noted that the employers had zero lost-time accidents while reducing worker's compensation insurance costs from 47 to 97 percent.

Similar savings were noted in Alberta, Canada, where the Worker's Compensation Board announced last year that over $2 million in premium refunds would be distributed to more than 400 employers who registered in the "Partners

in Injury Reduction" (PIR) program. Other PIR program benefits included lower worker's comp premiums, increased worker productivity and minimized accident costs. The average lost-time claim rate at PIR participant worksites dropped more than 20 percent.

Private Sector Initiatives

At the private sector level, the American Textile Manufacturers Institute (ATMI) instituted the "Quest for the Best in Safety and Health" program in 1993 to help its members identify strategies for continuous improvements in safety and health. Approximately 50 companies participated and had impressive results. At one company, Springs Industries, 45 percent of its plants worked 1 million manhours or more without a single lost-time accident and some exceeded 10 million manhours. What was the secret of their success? The following elements were responsible for a 25 percent decrease in overall injuries in the program's first year:

- Guaranteeing management commitment,
- Publicizing the company's commitment to safety throughout the community,
- Including discussions of safety issues during employee interviews,
- Offering employee wellness programs (healthier employees are less likely to be injured on the job),
- Training employees thoroughly, with new hire orientation and use of Job Safety Analysis (a blueprint for carrying out each step of a job safely),
- Conducting accident investigations and creating a case management program, and
- Implementing an effective OSH program that involves total commitment from employees and management based on a "team" approach.

Environmental ROI

It has become generally accepted and understood that there is a significant and growing correlation between industrial companies' investment in their environmental programs and their overall competitiveness and financial performance. For example, Innovest Strategic Value Advisors has consistently reported that some researchers claim that the "sustainability premium" can regularly exceed 200 basis points annually for broadly diversified portfolios. There have even been instances where it can surpass 500 in sectors with a particularly acute risk exposure8.

Innovest Strategic Value Advisors, in an annual investment research report on the Global Auto Parts market, reported that its results indicated that firms investing in environmental management posted accumulated returns over 48.8% higher than environmental laggards over a 3-year period, and 6% higher returns over 1-year. The report further indicated that Denso Corporation and Snap-On Tools emerged as the top ranked companies in this annual survey, which surpassed the performance of 18 of the world's leading automotive parts and supply companies in areas such as environmental management, resource usage, climate change, product life cycle analysis and sustainability-related profit opportunities in new markets9.

In addition, a subsequent study of the electric utility industry, found that portfolio managers who screen out companies with poor environmental records can outperform others by more than 7% annually. Finally, a news report shows that the top environmental performers in the computer sector have outperformed their industry rivals financially by 25% since the beginning of 1998. The report, The Computer Industry -- Hidden Risks and Value Potential for Strategic Investors, calls into question the view of the environment as a cost center and presents evidence linking superior environmental performance with competitiveness and profitability. Citing Dell Computer Corp. as one example, the report says the company's energy-efficiency initiatives already have generated cost savings of 37%.[vi]

Value of Company/Organizational Reputation

Most of text is taken or based upon a report titled: The Benefits of Reputation Management. The Reputation Institute is a private research organization founded by Professor Charles Fombrun Stern School of Business, New York University, and Prof. Cees van Riel, Rotterdam School of Management, Erasmus University. The Institute's mission and core purpose is to build thought leadership about corporate reputations, their management, measurement and valuation. It brings together a global network of academic institutions and leading edge practitioners interested in advancing knowledge about corporate reputations. OSH is part of the reputation analysis process.

It has long been recognized that a Company's reputation is of significant value in generating a favorable ROI. For example, a company or organization will benefit from a favorable reputation by becoming the first choice of customers, investors, suppliers, and employees. A favorable reputation with customers creates a degree of brand equity with them that enhances loyalty, encourages repeat sales, and grows revenues. Similarly, a favorable reputation with employees can help attract better employees, spur productivity, and enhance profitability. Comparing book values with market valuations suggests that the intangible ASSP's of public companies in the US and the UK constitute on average some 55 per cent of their market valuations - a proportion that has grown steadily over the past 40 years. These intangibles are made up of intellectual capital such as patents and reputational capital (the strength of the company's stakeholder relationships).

Update Reference and Supporting Materials Below

Articles Embedded:

- ✓ A Research paper on SMS Safety Culture and effectiveness

research paper investigation-sms-sa

- ✓ So You're a Systems Type, Eh? (Article – File #062)

062_063_VP_0517z.pdf

- ✓ The original ASSP White Paper on Safety and return on investment

ROI Paper 2008 - Reaffirmed 2010.pdf

- ✓ Maximizing audit impact using management systems (Article – File #025547)

025547um.pdf

- ✓ An Overview of the Occupational Health & Safety Management Systems Standard (Article – F3 - Manuele)

F3_Manuele_0414.pdf

- ✓ Safety Management Systems (Article – File Haight)

F1Haight_0514.pdf

- ✓ GRI 403-2018: Health and Safety Standard (Article – GRI OHSMS)

GRI_OSHMS_45001_Z10_0918.pdf

Other Websites and Supporting Materials

The materials below should also be of interest. These are additional articles and studies looking at management systems. Several are specific to management systems and some are talking about management systems overall. The sites are from colleges, governmental agencies, and other non-commercial sites. Hopefully, these materials though should be of assistance when looking at ROI and implementing a management system.

How ISO 45001 and Z10 Safety Management System Standards Fit With GRI Standard on Occupational Health and Safety

A systematic review of the effectiveness of safety management systems

Safety management systems- Audit tools and reliability of auditing

A Human Factors Perspective on Safety Management Systems

Effectiveness of occupational health and safety management system interventions: A systematic review
Safety Management System

Planning and Implementing Safety Management Systems

An empirical analysis of the effectiveness of occupational health and safety management systems in SMEs

Return on Investment of Safety Risk Management System in Construction

Return on Investment Tool for Assessing Safety Interventions

Safety Management System SMS Explained

Safety Management Systems (SMS): Information, Approaches and Best Practices

Paradoxes, Challenges and Opportunities in the Implementation of Safety Management Systems

MIOSHA Fact Sheet - Safety & Health Management System

U.S. Department of Energy – Safety Management System Policy

One of the other questions with ASSP members and OSH Professionals deals with GRI (Global Reporting Initiative) since it has the requirement for inclusion of a management system. A fast history that should assist:

- GRI produced a standard in 2018 that is an update of an existing standard and address management systems, (Article Embedded). This standard probably will not be updated for several years.
- Both ASSE/ASSP and the U.S. TAG to ISO TC283 wrote letters on the GRI Standard since we wanted the document to recognize Z10 and ISO 45001, (Article Attached).
- The GRI Standard to review: is attached – it is also available on their site so I am including the link to the document: :

  https://www.globalreporting.org/standards/gri-standards-download-center/gri-403-occupational-health-and-safety-2018/

  https://www.assp.org/news-and-articles/2018/09/24/how-iso-45001-and-z10-fit-with-gri-standard-403-on-occupational-health-and-safety

If/when an OSH Professionals decides to work with an organization to pursue implementation of a management system, ASSP will be pleased to offer additional information. ASSP can offer applicable management system standards, books and publications, and high caliber applicable training. We look forward to working with our members and OSH stakeholders in the future on such implementations.

Conclusion

Workplace injuries and illnesses are costly in financial and human terms. More than $40 billion are paid each year by employers and their insurers in worker's compensation benefits, or nearly $500 per covered employee. This figure is simply unacceptable. The data and citations referenced throughout this paper support the ASSP finding that there is a direct positive correlation between investment in OSH and its subsequent ROI. Ultimately, company executives must recognize that they have a duty to provide a safe and healthful workplace to those who work for the company or visit the worksite. It is unethical to risk someone's life and health in order to save money. A sound safety and health management program can help companies fulfill their moral obligation.

Endnotes:

[i] Negligent or willful injury and wrongful death suits can be brought where contractors or worksite visitors may be involved, as well as under certain state laws (Maryland, West Virginia and Ohio are some examples), which permit employees or their survivors to sue employers in tort where egregious or intentional behavior, or ultra-hazardous activities are involved.

[ii] Based upon a speech given by then Alcoa Chairman Paul O'Neill to the Council for Excellence in Government on May 10, 1999 titled: Excellence in Government-How do We Get It

From an article titled: Do You Know How Much Accidents Are Really Cutting Your Business?, Lee Smith Colorado State University Health&Safety Consultation Program, 1996.

[iii] Survey by the National Federation of Independent Business, Motivating Safety in the Workplace (June 1995).

Article by Adele L. Abrams, Safety Management Programs Make Dollars and Sense, ASSP Management Practice Specialty Newsletter, The Compass, Volume Number 2, Winter 2001-2002.

[iv] From the article: Measuring Safety's Return on Investment, Susan Jervis and Terry R. Collins, ASSP Professional Safety Journal, September 2001.

[v] Taken from the U.S. Occupational Safety and Health Administration (OSHA) publication, The Benefits of Participating in VPP, 2001

[vi] 8 Most of this text is taken or based upon a study conducted by Innovest Strategic Value Advisors, New York, NY, 2001.