

Elements of a **Highly Effective** EHS Program

An HSI White Paper.

Safety professionals are responsible for a multitude of interworking competencies, including operational strategies, tactical duties, and personnel management, to ensure risk mitigation and the health and safety for employees within the organization. A number of tools and resources can be used to manage the various aspects of a safety professionals EHS program, and often times, these resources are a mix between those created in-house and those outsourced from a vendor. However, utilizing multiple vendors to provide different parts and pieces for an EHS program can create a chaotic environment lacking consistency, communication, and the ability to show results. By utilizing a single source to both identify scalable solutions and to streamline the management of these solutions, your EHS program will become more coordinated, compatible, and overall effective for your organization.

Intended for anyone involved in enterprise safety and health responsibilities, including safety professionals, risk management professionals, and human resource professionals, this whitepaper will examine how to successfully utilize a single, scalable, and streamlined solution to assess, plan, implement, and manage an effective EHS program, helping to increase control and positive results.

The Value of an EHS Program

In 1970, the United States Congress and President Richard Nixon created the Occupational Safety and Health Administration (OSHA), a national public health agency dedicated to the basic proposition that no worker should have to choose between their life and their job. In May of 1971, the first standards were adopted to provide a baseline for safety and health protection in American workplaces. At that time, most organizations did not have safety programs, let alone professionals dedicated to health and safety.

In the beginning most organizations were driven by compliance with the standards, but with time many realized the benefits of health and safety programs beyond avoiding OSHA citations and fines. Safety and health programs are proven to decrease accidents and incidents and their associated costs, such as workers compensation insurance claims and product and property damage, as well as increase employee productivity and morale.

The American Society of Safety Engineers first published a white paper in 2002 called *Return on Investment for Safety, Health and Environmental (SH&E) Management Programs* which outlined a number of examples of organizational gains from safety programs, including:

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

- A coal mining company in Charleston, West Virginia has attained a competitive advantage through investment in SH&E 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.
- A 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 improved safety and health program reduced Servicemaster's worker's compensation costs by \$2.4 million over a two-year period.
- OSHA's Office of Regulatory Analysis has stated: "...our evidence suggests that companies that implement effective safety and health can expect reductions of 20% or greater in their injury and illness rates and a return of \$4 to \$6 for every \$1 invested..." (ASSE 2002).

An article published in May of 2013 in Safety + Health magazine looked at both

the direct and indirect costs of a workplace accident or injury. Direct costs included workers compensation, medical expenses, civil liability or litigation costs, and property losses. Indirect costs included workplace disruptions, loss of productivity, worker replacement, training, increased insurance premiums and attorney fees. According to the National Safety Council (NSC), for every dollar spent in direct costs, as much as \$2.12 could be spent on indirect costs (National Safety Council 2012). The Center for Disease Control (CDC) estimates a fatal injury carries an average cost of about \$991,027 in direct costs alone. Using the NSC's estimates for indirect costs, a single fatal workplace injury would cost an average of \$1.42 million (Morrison 2014).

The same article offered a real world example from Schneider Electric, a global leader in energy management. As a result of investing in safety, the company saw its injury rate decrease. Schneider Electric is seeing more than \$15 million annual savings in direct costs alone and an upwards of over \$30 million in indirect costs based on NSC's cost model (Morrison 2014).

Elements of an EHS Program

Now that we understand the benefits of EHS programs beyond compliance, it's important to determine what elements you need to make your EHS program successful. Successful EHS programs encompass a number of elements that work together to ensure employee, product, and property safety through reduced risk. This may vary depending on your work environment and your workforce, as well as your preferences for administering and managing your program.

There are four main phases in developing a total EHS program: assessment, planning, implementation, and management. It is important to note that this is an ongoing process, with all stages of development working together. Once you have an EHS program in place, you need to continuously reassess and make any necessary adjustments to maintain success and continuously improve outcomes.

Assessment

Assessment begins with conducting a hazard assessment or job hazard analysis (JHA), defined by OSHA as a technique that considers job tasks as a way to identify hazards before they occur, focusing closely on the relationship between the worker, the task, the tools, and the work environment. Once you've identified any uncontrolled hazards around your workplace, you can work towards eliminating or reducing such hazards to a risk level that is acceptable for safe work to occur.

| SAMPLE OUTPUT FROM A JOB HAZARD ANALYSIS | |
|--|-----------------|
| JOB LOCATION: | Metal shop |
| ANALYST: | Joe Safety |
| DATE: | September, 2014 |
| TASK DESCRIPTION | |
| Worker reaches into metal box to the right of the machine, grasps a 15-pound casting and carries it to grinding wheel. Worker grinds 20 to 30 castings per hour. | |
| HAZARD DESCRIPTION | |
| Reaching, twisting, and lifting 15-pound castings from the floor could result in a muscle strain to the lower back. | |
| HAZARD CONTROLS | |
| <ol style="list-style-type: none"> 1. Move castings from the ground and place them closer to the work zone to minimize lifting. Ideally, place them at waist height or on an adjustable platform or pallet. 2. Train workers not to twist while lifting and reconfigure work stations to minimize twisting during lifts. | |

To successfully conduct a JHA, you must involve your employees. Ask your employees about the hazards present and talk about ideas to eliminate or control those hazards. Not only does it give you first-hand knowledge of the hazards present, it creates employee “buy-in” to the safety program you are creating by giving them a share in the ownership. Be sure to review your accident history, including injuries, losses that required repair or replacement, and “near misses” – events that came close to creating an accident or injury.

You also need to evaluate your areas of compliance. Compliance training is based on the hazards present on your job site, and your JHA will provide a roadmap to ensure you are covering compliance training requirements. Some compliance requirements may not come out of your JHA, such as CPR training, so be sure to review the appropriate OSHA regulations for your industry and work tasks.

Now that you have a better idea of what topics you need to focus your efforts, you can begin to look into the specific elements of your EHS program and what you need to consider.

Planning

Planning for your EHS program means taking your assessment step to the next stages and requires looking at what training elements should be involved. Employee training programs that teach best safety practices and hazard awareness, as well as satisfy compliance requirements, are a critical piece of every EHS program. OSHA does not define how you must conduct your safety training, and as mentioned before, there are a number of benefits to training beyond compliance. Ensuring employees understand the hazards and how to mitigate those hazards reduces accidents and incidents and can also improve morale and productivity.

There are a number of ways you can deliver your training, including onsite, in a classroom, or via stand-alone eLearning courses. Often, a mix of both classroom and eLearning, especially eLearning courses that can be customized, is an effective means to conduct training. Training programs, no matter how they are delivered, need to be engaging to students and technically accurate. Many topics, such as HAZWOPER, forklift safety, and CPR, benefit from or are required to have a hands-on, tactical training component. Having an EHS solutions provider that offers several formats and options for content delivery ensures that training needs for both safety professionals and students can be addressed.

First aid and CPR training may be required for your employees, however, required or not, ensuring your employees know how to respond in the event an incident occurs is a critical step in mitigating risk. Employees who know how to respond correctly can ensure an accident doesn't turn into a catastrophe.

Additionally, engineering controls can be implemented to mitigate risk. Combined with employee training, engineering controls provide a solid foundation to build your EHS program on that encourages and implements safety throughout the workplace. The basic concept behind engineering controls is that the work environment and the job itself should be designed to eliminate hazards or reduce exposure to hazards to the extent feasible (OSHA). Therefore, tracking engineering controls, hazard correction, personal protective equipment, and automated external defibrillators (AEDs) is an essential part of your EHS program, and selecting a tool that allows you to track all of your actions in one system helps to streamline your efforts and easily report on outcomes.

Implementation

Implementing a complete EHS program can be made easier by streamlining your tools and resources. By aligning your assessment, training, and tracking resources, you create more visibility into your program at all levels of your organization. Whether you have a single site with 30 employees or a global

QUESTIONS FOR ASSESSMENT & PLANNING

What training topics am I required to cover for compliance?

What training topics should I address based on my JSA?

What training format, online or classroom, is best for my organization and employees – or do I need a mix of both?

What access to technology do my employees have?

Do I have instructors available for hands on compliance training? Do I have instructors available for CPR training?

What are the demographics of my organization – Do I have multiple locations and job shifts? Do I have non-English speaking employees? Are there specific employee groups that require specialized training?

What training should be conducted for my AEDs?

What engineering controls have I established, what equipment and PPE am I using and how am I tracking those currently?

Can I streamline the tracking in any way?

infrastructure with thousands of employees, the more you can reduce the chaos of multiple systems and solutions, the easier it will be to implement your program, gain employee and leadership buy-in, showcase results, and continuously improve.

The team responsible for safety and health at your organization will want to determine the best process for implementation. You may choose to implement all at once or by division, geography, or work environment. Whatever you choose, when working with a solution provider, especially one that can provide a complete solution, they can make it easy for you to roll-out the program to your various employees. Your solution provider should guide you through the process and provide training and support throughout the journey.

Management

Management of your EHS program is one of the most important elements of your total program and something that should be on-going during the assessment, planning, and implementation phases. The management piece is critical, as it helps to organize your program for ongoing success.

There are a number of ways to manage an EHS program, including the traditional spreadsheet. Although spreadsheets are still an effective way to keep track of data, when it comes to EHS management, a technology-based solution is the most efficient and effective means to ensure your data. Choose a technology solution that incorporates all of the elements of your EHS program, including employee management, training deployment, customization, and reporting, AED and equipment management, and document storage. The technology solution should be robust enough to handle the data, yet scalable to your organization, allowing you to organize your data by corporate hierarchy as well as by demographic data points that are important to you. Although it may not be mission critical, a mobile-friendly technology platform that you can access from any device, at any location, may help you avoid headaches down the road.

Tying It All Together

There are a number of elements that must work together to ensure a successful EHS program. Though the above elements are listed in stages, each one must work together and have an overlapping quality to be successful. Utilizing multiple vendors to provide individual elements can create chaos, cause lack of consistency, communication, and the inability to show results. A better option is to use a single solutions provider that makes it easy to scale an EHS program to your organization's needs, helping you gain better visibility into your program so you can maintain compliance, reduce

risk, and save money. A single solution allows everyone at all levels in the organization to see the positive impact and value of your EHS program and your efforts, giving you confidence in your program and the ability to foster a safer work environment.

By optimizing the assessment, planning, implementation and management phases of your EHS program, you can easily achieve ongoing success with greater control, increased visibility, and an increased return on your investment, but more importantly, you will be protecting and saving more lives.

Sources:

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Partner with a solution provider that makes it easy to protect and save lives, and show a successful return on your EHS program investment. Schedule a consultation today!

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