Introduction to Health and Safety Management Systems
Program Development Guideline
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1 Introduction

This guideline describes to oil and gas employers what a health and safety management system is and why implementing one is not only beneficial but also essential. For guidance on how a health and safety management system is implemented, please refer to Enform’s Safety Program Development course.¹

2 What Is a Health and Safety Management System?

A health and safety management system (HSMS) is a systematic approach put in place by an employer to minimize the risk of injury and illness. It involves identifying, assessing, and controlling risks to workers in all workplace operations. An effective HSMS is a key component of any business; its scope and complexity will vary according to the type of workplace and the nature of its operations.

For both development and implementation of an HSMS to be successful, effective, and efficient, it needs to be based on a formal structure of defined elements. A successful HSMS includes but is not limited to the following seven elements:

1 Management involvement and commitment
2 Hazard identification and assessment
3 Hazard control
4 Training
5 Emergency response
6 Incident reporting and investigation
7 Communications

These seven elements were used to organize Enform’s COR Audit Protocol² and are elaborated upon within the Safety Program Development course.³ This guideline will explain why these elements are essential to a successful HSMS.
Continuous Improvement

Beyond a systematic approach, an organization should also commit to continuous improvement. The process of Plan-Do-Check-Act is depicted below in the Canadian Standards Association (CSA) Z1000 Continuous Improvement Model. 

![Image of the Plan-Do-Check-Act cycle]

**Figure 1.** CSA Z1000 Continuous Improvement Model
The four phases in the Plan-Do-Check-Act cycle involve:

**Plan**  Identifying and analyzing the problem
**Do**    Developing and testing a potential solution
**Check** Measuring how effective the test solution was and analyzing whether it could be improved in any way
**Act**   Implementing the improved solution fully

### 3 Why Implement a Health and Safety Management System?

For all workers and organizations, health and safety should be an expressed value. Studies show that organizations committed to health and safety excellence achieve success through a strong HSMS. Many benefits are associated with the development and implementation of an HSMS. Most importantly, an effective HSMS can help prevent injuries and property loss, reduce costs, and support due diligence. Developing a proactive approach to health and safety through an HSMS and its essential elements results in long-term financial and cultural benefits.

### Compliance with the Law

Provincial and federal occupational health and safety authorities and the Criminal Code of Canada require that employers provide safe work sites for their employees and other workers. Implementing and executing an effective HSMS assists with meeting this obligation as well as standards of “due diligence,” a legal phrase referring to a person’s duty to take reasonably practicable actions to protect the well-being of others. Not being aware of one’s legal responsibilities and duties is not a defence for non-compliance. For an employer, having an effective, functioning HSMS can form the basis for a due diligence defence when an incident results in loss or harm. A company and its workers can demonstrate their commitment to health and safety through an effective HSMS. The elements in this guideline can help a company not only to meet regulatory requirements, but also to exceed them.
Cost Reduction

An effective HSMS can prevent loss and costs from incidents that lead to injuries, illnesses, or death. Workers’ compensation costs can be significant, along with the other costs directly and indirectly related to and incurred when an injury or illness occurs. These costs add directly to operation costs and, in turn, profits. As well, a successfully implemented HSMS can prevent loss to property and production, losses from violations of legislation or regulations, lawsuits, and fines.

In addition to the monies saved from fewer incidents, an efficient HSMS leads to additional savings from increased productivity by improving workers’ skills, work practices, and consistency in carrying out critical tasks. Implementation of a successful HSMS also allows an employer to apply for a certificate of recognition (COR), which may result in WCB assessment rebates.

Employee Relations

Commitment to an HSMS demonstrates management concern for ensuring safe operations and thus helps build better employee relations, retain the best employees, and increase the contributions of these workers in achieving business goals. Ensuring that all workers return home in the condition in which they came to work, if not better, justifies the commitment and dedication of resources to an HSMS.

4 Practices of a Health and Safety Management System

Through a rigorous literature review, Enform identified seven practices that companies follow to successfully support health and safety in the workplace and produced a white paper titled *Paths to Safety Success: Seven Characteristics to Successful Worksite and Well Site Safety* of an HSMS. These practices, described in detail in Enform’s Safety Program Development course, formed the basis for Enform’s COR Audit Protocol.
Practice #1  Management Involvement and Commitment

What is management involvement and commitment?

Management involvement and commitment can be shown by:

- Allocating dedicated health and safety resources
- Setting clear direction and expectations through health and safety policies
- Assigning and monitoring health and safety responsibilities
- Directly engaging and communicating with workers

Why is management’s involvement and commitment important?

An organization’s values, visions, and culture are directly related to the commitment and behaviour shown by management. An organization’s leadership can significantly affect the HSMS. For the best results throughout an organization, senior management must believe that health and safety is as important as cost, productivity, quality, and employee relations. Regulations drive compliance, whereas management focus and employee engagement drive excellence.

*The tone at the top is fundamental to any health and safety initiative.*

Practice #2  Hazard Identification and Risk Assessment

What is hazard identification?

Hazard identification is a process used by a company to identify existing and potential hazards. Examples include but are not limited to:

- Inspections
- Job task analyses
- Site-specific hazard identifications
- Hazard reporting
Why identify hazards?

Companies have a legal obligation to identify hazards and control risks. Hazard identification, within the HSMS, is the foundation for all other systems (e.g., emergency response planning, training etc.) It has been proven that identification and control of hazards lead to reduced injury and illness in the workplace.

Reporting is the first step to eliminating injuries altogether.

What is a risk assessment?

Risk assessment is the identification and analysis, either qualitative or quantitative, of the likelihood of the occurrence or a hazardous event or exposure, and the severity of injury or illness that may be caused by it. Primarily, a risk assessment identifies the chance of harm or loss occurring due to a hazard.

Why perform risk assessments?

An effective risk assessment allows an organization to be proactive in regards to health and safety, as opposed to being reactive and dealing with the injuries or illnesses once they occur. It has been recognized that the best, most efficient, and most economical way to eliminate hazards is at the earliest possible stage.

You can’t control what you don’t know.
Practice #3  Hazard Control

Hazard control includes the methods, techniques, procedures, and actions taken by a company to reduce, eliminate, or minimize the risks of both health and safety hazards. Hazard controls are defined by the Hierarchy of Controls and include:

- Elimination or substitution
- Engineering controls
- Administrative controls
- Personal protective equipment (PPE), the last line of defence\(^{21}\)

Why control?

Companies control hazards to eliminate and reduce the risk of harm to employees and equipment. As well, companies have a legal obligation to control their hazards, and it is a due diligence requirement to control known hazards.\(^{22}\) Statistics show that an effective hazard assessment and control process reduces injury and illness (e.g., wearing seat belts, obeying speed limits, etc.).\(^{23}\)

*Hazard control is where safety comes into practice.*

Practice #4  Training

What is training?

Training refers to an organized activity aimed at imparting information and/or instructions to improve the recipient's performance or to help him or her attain a required level of knowledge or skill.\(^{24}\) Training includes but is not limited to:

- Orientations
- Current job- and industry-specific training
- Competency assessment
Why train?

Occupational Health and Safety legislation requires employers to adequately train and ensure competence of employees. Training helps people acquire the skills, knowledge and attitudes to make them competent in the health and safety aspects of their work. Effective employee training will assess training needs and integrate the HSMS elements into daily operations. Health and safety training itself is an administrative-level hazard control designed to decrease injuries.

*Incident prevention is a people issue.*

Practice #5  Emergency Response Planning

What is emergency response planning?

Emergency response planning refers to the methods, techniques, procedures, and actions the organization has put in place to respond to potential emergencies (e.g., fire, explosion, etc.).

The plan should include but not be limited to:

- The responsibilities and training of key people at emergency sites and offices
- Adequate resources in place
- Various emergency and post-emergency procedures
- Drills and evaluations to measure effectiveness

Why plan?

Legally, an employer must have a response plan for any emergency that may require the rescue or evacuation of workers. Only through appropriate preparedness can the consequences of an emergency be minimized.

*Prevention is 100% mitigation.*


Practice #6   Incident Reporting and Investigation

What is incident reporting and investigation?

Incident reporting and investigation are reactions triggered by an event. In addition to reporting and investigating the incident, statistics should be recorded and analysed to identify trends and needs.

Why report and investigate?

Employers have a legal obligation and a workers’ compensation insurance requirement to ensure incident reports and investigations are completed. Incident reporting and investigation contribute to the corporate memory. These memories demonstrate failures in existing systems and assist in learning from these failures so we can prevent similar or worse loss in future. The trending reports that are produced from investigating and reporting incidents can be used to identify deficiencies in the system so that corrections and improvements can be made.

*Investigate failures to prevent failures.*

Element #7   Corporate Communication

What is corporate communication?

Corporate communication refers to a company’s formal or informal verbal, written, or unwritten policies, plans, standards, and procedures. Successful communication is a two-way process that leads to employee engagement. Communications are conducted through general meetings; joint workplace health and safety committee meetings; written messages; and daily, informal communication between supervisors and their employees, contractors, and subcontractors. Communication that effectively supports implementation and monitoring of the HSMS include both evaluation and record keeping.
What is evaluation?

Evaluation includes but is not limited to:

- Audits
- Assessments
- Corrective actions

What is record keeping?

Record keeping is a systematic procedure by which the records of an organization are created, captured, maintained, and disposed of.  

Why communicate?

Communication is the demonstration of the management’s commitment to the HSMS. Employers are legally obligated to communicate health and safety practices to their employees. Good, consistent communication and employee engagement may result in reduction of injuries and illnesses as well as improved performance. Effective communication is essential to ensure employees understand policies, procedures, and the requirements to perform their jobs safely and to implement the HSMS fully.

Why evaluate?

Audits evaluate the content of the HSMS against a recognized standard or an internal program to determine the effectiveness of the system and promote continuous improvement. Audits can assist a company in applying for a certificate of recognition (COR), which may result in WCB assessment rebates.

Why keep records?

Companies keep records to preserve them for evidential purposes, efficient updating, and timely availability.

*Communication works for those who work at it.*
References

6  Ibid.
10 Ibid.
15 Ibid.


