

Chapter 4

The VPP Safety and Health Management System

- I. Introduction. OSHA requires VPP applicants/participants to have a comprehensive safety and health management system consisting of four basic elements and sub-elements. These elements work together to prevent fatalities, injuries, and illnesses in the workplace. Within this system, all parts are interconnected and affect one another.
 - A. The Four Elements. The VPP SHMS consists of four critical interrelated elements. Effective implementation requires that they function together in one comprehensive and systematic effort.
 1. Management Leadership and Employee Involvement. In a VPP-quality organization, management regards worker safety and health as a fundamental value and applies its leadership to safety and health protection with as much commitment, planning, and visibility as it does to other organizational purposes. In organizations with the most effective system, employees are actively and meaningfully involved in the planning and operation of the safety and health management systems and in decisions affecting their own safety and health.
 2. Worksite Analysis. The successful management of workplace hazards begins with a thorough understanding of all hazardous situations to which employees may be exposed and the implementation of a meaningful system to recognize hazards as they arise.
 3. Hazard Prevention and Control. Workplace hazards identified during the hazard analysis process must be eliminated or controlled by developing and implementing specified systems and by using the specified hierarchy of controls.
 4. Safety and Health Training. Training is necessary to reinforce and complement management's commitment to prevent exposure to hazards. All employees must understand the hazards to which they may be exposed and how to prevent exposure to themselves and others from such hazards. Effective training enables employees to accept and follow established safety and health procedures, as well as to understand they are protected from retaliation for reporting hazards.
 - B. Effective, Performance-Based Protection. The VPP system is performance-based. Employers and employees must identify their specific workplace hazards and needs, to develop and implement appropriate protective measures. OSHA's VPP experience provides ample evidence of this system's feasibility and effectiveness. The system's flexibility has enabled its application to any private sector and federal agency, and any size employer, from the small single worksite to the large multi-facility organization. The system's comprehensiveness and rigorous standards, when applied consistently and conscientiously, enable effective worker protection in diverse settings and under varied work conditions.

- II. Management Leadership and Employee Involvement. Each applicant must be able to demonstrate senior-level management leadership in, and commitment to, its SHMS. Management systems for comprehensive planning must address protection of worker safety and health. Employees must be meaningfully involved in the safety and health management system.

All aspects of the safety and health management system must be appropriate to the size of the worksite(s) and the type of industry.

- A. Management Leadership. Authority and responsibility for employee safety and health must be integrated with the overall management system of the organization and must involve employees. Management demonstrates its commitment to safety and health protection and VPP participation by establishing, documenting, and communicating to employees and contractors clear goals that are attainable and measurable; objectives that are relevant to workplace hazards and trends of injury and illness; policies and procedures that indicate how to accomplish the objectives and meet the goals; and resources necessary to accomplish the communicated goals and objectives in a timely manner. Management leadership actions include:
1. Signing a statement of commitment to maintain compliance with OSHA standards, to continuously improve safety and health, and to consistently meet VPP requirements.
 2. Maintaining a written SHMS documenting the elements and sub-elements, procedures for implementing the elements, and other safety and health programs, including those required by OSHA standards applicable to their industry. For example: Federal agencies' written programs must meet the requirements of 29 CFR part 1960, and referenced OSHA standards; and construction companies' written programs must also meet the requirements of 29 CFR 1926.20(b).
 3. Providing visible leadership in implementing the SHMS.
 4. Ensuring all workers at a participant's site (including any contractor's employees) are provided equal, high-quality safety and health protection.
 5. Establishing clear communication with employees and creating an environment that allows for reasonable employee access to site management and senior management.
 6. Responding to employees in a timely and appropriate manner following employees' reports of hazardous conditions. The SHMS must include tracking these responses and tracking hazard elimination or control to completion.
 7. Setting an example by following the rules such as, but not limited to, wearing any required personal protective equipment, reporting hazards, reporting injuries and illnesses, following the same safety and health procedures expected for all employees at the workplace, and subjecting managers and employees to the same disciplinary system for infractions.

8. Defining in writing, and communicating the responsibility and authority for SHMS performance to all employees, with no unassigned areas. Each employee, at any level, must be able to describe his/her responsibility for safety and health.
9. Assigning adequate authority to those persons who are responsible for safety and health, ensuring they are able to carry out their responsibilities.
10. Providing and directing adequate resources to those who have responsibility and authority. This includes resources, such as time, training, personnel, equipment, budget, and access to information and experts, including appropriate use of certified safety professionals (CSP), certified industrial hygienists (CIH), licensed health care professionals, and other experts as needed.
11. Holding managers, supervisors, and non-supervisory employees accountable for meeting their safety and health responsibilities.
12. Evaluating managers' and supervisors' safety and health performance at least annually by operating a documented performance standards and appraisal system that addresses correcting deficient safety and health performance.
13. Planning for emergency safety and health expenditures in the budget, including funding for prompt correction of uncontrolled hazards.
14. Integrating safety and health into other aspects of planning, such as planning for new equipment, processes, and buildings.
15. Conducting an annual SHMS self-evaluation in order to:
 - a. Maintain knowledge of the hazards to which employees are exposed.
 - b. Maintain knowledge of the effectiveness of system elements.
 - c. Ensure completion of the previous years' recommendations.
 - d. Modify goals, policies, and procedures.

B. Employee Involvement. In addition to their right to report hazards, employees must be involved in the safety and health management system in active, meaningful, and constructive ways. There are many opportunities for employees to be involved and it is expected that all employees will participate in three or more different ways. Avenues for employees to have input into safety and health decisions include participation in audits, accident/incident investigations, self-inspections, suggestion programs, planning, training, job hazard analyses, and appropriate safety and health committees and teams.

1. The site culture must enable and encourage effective employee involvement in the planning and operation of the SHMS and in decisions that affect employees' safety and health.
2. To facilitate involvement, employees must have access to the results of self-inspections, accident investigations, and other safety and health data upon request. At unionized sites, this requirement may be met through employee representative access to these results.
3. Examples of acceptable employee involvement include, but are not limited

to, the following:

- a. Participating in *ad hoc* safety and health problem-solving groups;
- b. Participating in audits and/or worksite inspections;
- c. Participating in accident and incident investigations;
- d. Developing and/or participating in employee improvement suggestion programs;
- e. Training other employees in safety and health;
- f. Analyzing job/process hazards;
- g. Acting as safety observers; and
- h. Serving on safety and health committees constituted in conformance with the *National Labor Relations Act*.

4. Employees do not meet this requirement by only participating in incentive programs, attending meetings, or working in a safe manner.
5. All employees, including new hires, must be notified about participation in VPP and employees' rights under the OSH Act.

C. Contract Worker Coverage. All contractors and subcontractors, whether at general industry, construction, maritime, or Federal agency VPP sites, must follow worksite safety and health rules and procedures applicable to their activities while at the site.

1. VPP participants are expected to encourage all of their contractors to develop and operate effective SHMS.
2. Participants must have in place a documented oversight and management system for contractors that drives improvement in contractor safety and health and ensures contractors' employees are provided effective protection. Such a system must:
 - a. Address safety and health considerations during the process of selecting contractors and when contractors are on-site.
 - b. Include provisions for timely identification, correction, and tracking of uncontrolled hazards in contractor work areas.
 - c. Ensure that contractors follow site safety and health rules.
 - d. Include a provision for removing a contractor or a contractor's employees from the worksite for safety or health violations.
3. Injury and Illness Data Requirements.
 - a. Contractors (e.g., contracted maintenance workers) and temporary employees who are supervised by host management are governed by the host's SHMS and are, therefore, included in the host's rates.
 - b. Management is required to maintain TCIR and DART rate data (either for all contractors or for all applicable contractors) for hours worked at the worksite. (See Chapters 5, 6, 7, and Appendix B.)
 - c. Participants must maintain, and report annually to OSHA, the contractor TCIR and DART rate data.

4. Training. Managers, supervisors, and non-supervisory employees of contract employers must be made aware of:
 - a. Hazards they may encounter while on the worksite.
 - b. How to recognize hazardous conditions and the signs and symptoms of workplace-related illnesses and injuries.
 - c. Implemented hazard controls, including safe work procedures.
 - d. Emergency procedures.
 - e. Whistleblower Rights and Anti-Retaliation Protections.
- D. Self-Evaluation of the SHMS. The applicant/participant must annually evaluate the organization's safety and health efforts. This evaluation will judge success in meeting goals and objectives, and will help those responsible to determine and implement changes for continually improving worker safety and health protection.

The annual self-evaluation is not a compliance audit. It is a critical review to assess the effectiveness of all four VPP elements and their sub-elements, and to analyze participant and contractor injury and illness data and trends. It should include a review of written programs, a walk-through of the workplace, and interviews with employees. An annual evaluation that is merely an inspection of the workplace(s) with a brief report pointing out hazards or a general statement of the sufficiency of the system is inadequate for purposes of VPP qualification or of maintaining VPP status.

1. The system must provide for an annual written narrative report with recommendations for timely improvements, assignment of responsibility for those improvements, and documentation of timely follow-up action or the reason no action was taken.
2. The evaluation must assess the effectiveness of all elements of the VPP SHMS and any other elements of the applicant's SHMS.
3. The evaluation may be conducted by competent site, corporate, other persons, or groups of persons who are trained and/or experienced in performing such evaluations. The annual self-evaluation may be conducted by a participant's employees along with managers, qualified corporate staff, or outside sources who are trained in conducting such evaluations.
4. Procedures for the self-evaluation involve selection and review of well-defined leading and lagging indicators.
5. Using metrics and performance measures as indicators to help measure progress toward goals and objectives; effectiveness of hazard controls and overall effectiveness of the SHMS must be in place. The written evaluation should include indicators identified.
6. Description of the indicators will address the:

- a. Rationale behind selection of the indicator.
 - b. Method, frequency, and responsibility for monitoring or measuring each indicator.
 - c. Methods used to keep records of the indicator.
 - d. Periodic review of indicator suitability (NOTE: indicators must be chosen carefully to effectively measure tangible results and prevent unintended consequences).
 - e. Analysis, interpretation, and communication of results.
7. Self-evaluation results in:
- a. Identifying deficiencies in the system that may have contributed to uncontrolled hazards or that limit the effectiveness of the SHMS.
 - b. Assigning responsibility and providing resources for correcting hazards and tracking corrective actions.
 - c. Assigning responsibility and providing resources for addressing system deficiencies and achieving goals and objectives.
 - d. Establishing new or revised system goals and objectives for the next year to correct identified deficiencies and improve SHMS.
8. The evaluation should follow the format provided in Appendix A. At least one annual self-evaluation and appropriate corrective action for identified hazards, must be completed before VPP approval. For applicants covered by OSHA's PSM standard, completion of the appropriate PSM Supplement B is also required as part of the evaluation. Following approval, the self-evaluation report must be included with the participant's annual submission to OSHA.

III. Worksite Analysis. The successful management of workplace hazards begins with a thorough understanding of all hazardous situations to which employees may be exposed and the ability to recognize and correct those hazards as they arise. An effective worksite analysis system must be implemented to systematically identify basic and unforeseen safety and health hazards, evaluate their risks, prioritize, and recommend methods to eliminate or control hazards. The following are the required methods of worksite analysis.

- A. Comprehensive Safety and Industrial Hygiene Surveys. These surveys, conducted at intervals appropriate for the nature of workplace operations, must include:
- 1. Identification of safety hazards accomplished by an initial comprehensive baseline survey and then subsequent surveys as needed. The initial baseline survey will identify the hazards to which employees are exposed. It establishes initial levels of exposure (baselines) for comparison to future levels, so that changes can be recognized. Baseline surveys will:
 - a. Identify and document safety hazards at the worksite(s) and how they are controlled.

- b. Identify and document health and exposure hazards (usually by initial screening using direct-reading instruments) and determine if further sampling (such as full-shift dosimetry and air monitoring) is needed.
 - c. Evaluate the employer's exposure assessment programs.
 - d. Identify and document safety and health hazards that need further assessment.
 - e. Cover the entire work area, indicate who conducted the survey, and record when it was completed.
 2. Identification of health hazards and employee exposure levels are accomplished through an industrial hygiene sampling rationale and strategy. Sampling rationale should be based on the industrial hygiene sampling strategy and objective data which includes reviews of any changes that have occurred in the processes, equipment, or chemicals used; implementation of controls and their effectiveness; reviews of safety data sheets, employee complaints, exposure incidents, medical records, and any other instances that warrant sampling.
- B. Hazard Analysis of Routine Jobs, Tasks, and Processes. Task-based or system/process hazard analyses must be performed to identify hazards of routine jobs, tasks, processes, or phases in order to recommend adequate hazard controls. Acceptable techniques include, but are not limited to: Job Hazard Analysis (JHA), and Process Hazard Analysis (PHA).
 1. Hazard analyses should be conducted on routine jobs, tasks, processes, and phases that:
 - a. Have written procedures.
 - b. Have had injuries/illnesses associated with them or have experienced significant incidents or near-misses.
 - c. Are perceived as high-hazard tasks, (i.e., that could result in a catastrophic explosion, electrocution, or chemical over-exposure; or could result in serious injury or death.)
 - d. Have been recommended by other studies for a more in-depth analysis.
 - e. Are required by a regulation or standard.
 - f. Any other instance when the VPP applicant or participant determines that hazard analysis is warranted.
 2. In construction, the emphasis must be on specific safety and health hazards associated with each craft and each phase of work.
 3. The results of hazard analyses must be included in training and hazard control programs.

- C. Hazard Analysis of Significant Changes. Hazard analysis of significant changes, including but not limited to non-routine tasks (such as those performed less than once a year), new processes, materials, equipment, facilities, and phases, must be conducted to identify uncontrolled hazards prior to the activity or use.
1. Hazard identification must lead to hazard elimination or control.
 2. If a non-routine or new task becomes routine, a hazard analysis must be conducted.
- D. Pre-use Analysis. When a worksite is considering new equipment, chemicals, facilities, or significantly different operations or procedures, the safety and health impact to the employees must be reviewed. The level of detailed analysis should be commensurate with the perceived risk and number of employees affected. This practice should be integrated in the procurement/design phase to maximize the opportunity for proactive hazard controls.
- E. Documentation and Use of Hazard Analyses. Hazard analyses performed to meet the requirements of C or D, of this section, must be documented and must:
1. Consider both health and safety hazards.
 2. Be easily understood.
 3. Identify the steps of the task or procedure being analyzed, as well as any existing hazard controls, recommendations for more effective hazard controls, dates when analyses were conducted, and names of responsible parties.
 4. Be used in training on safe job procedures, modifying workstations, equipment or materials, and in future planning efforts.
 5. Be updated as the environment, procedures, equipment, or work phase changes, or errors are found that invalidate the most recent hazard analyses.
- F. Routine Self-Inspections. A system is required to ensure routinely scheduled self-inspections of the workplace. It must include written procedures that determine the frequency of inspections and areas covered, responsible parties for conducting inspections and abating hazards, documentation of findings and corrections, and the tracking of identified hazards for timely correction.
1. For general industry and maritime applicants/participants under the site-based approach, these inspections:
 - a. Must be made at least monthly, with the inspection schedule being determined by the types and severity of hazards.
 - b. Must cover the entire worksite at least once each quarter.
 2. Top management and others, including employees who have knowledge of the written procedures and hazard recognition, can participate in the inspection process.
 3. Personnel qualified to recognize workplace hazards, particularly hazards peculiar to their industry, must conduct inspections.

4. Written reports of findings are required. Documentation of inspections must be thorough.
 5. The system will track all hazard controls to completion.
- G. Hazard Reporting System for Employees. The applicant/participant must operate a reliable system that enables employees to notify appropriate management personnel in writing, without fear of reprisal about recognized hazardous conditions, and to receive timely and appropriate responses. The system must have an anonymous component and include timely responses to employees, including the tracking of hazard control or elimination to completion.
- H. Industrial Hygiene (IH) Program. A documented industrial hygiene exposure assessment strategy must be in place to address all potential health hazards in the workplace. Factors that need to be addressed in the assessment strategy include the probability and severity of exposure and a description of the work scenarios and population of employees that could be exposed. The assessment strategy provides the rationale for determining if baseline and subsequent surveys are needed to assess employee exposures.
1. Assessment strategy. The assessment strategy must use nationally recognized procedures for all sampling, testing, and analysis, with written records of results maintained in a logical order.
 2. Sampling Results. At a minimum, sampling results must be analyzed and compared to OSHA permissible exposure limits (PELs) to determine both employees' exposure and possible overexposure. Comparison to more restrictive levels, such as action levels, threshold limit values (TLVs), or self-imposed standards, is strongly encouraged to reduce exposures to the lowest feasible level.
 3. Documentation. Sampling results must be documented and must include a description of the work process, controls in place, sampling time, exposure calculations, duration, route and frequency of exposure, and number of exposed employees.
 4. Communication. Sampling results must be communicated to employees and management.
 5. Use of Results. Sampling results must be used to identify areas for additional study, in order to select hazard controls and determine if existing controls are adequate.
 6. Industrial Hygiene (IH) Expertise. IH sampling should be performed by a certified industrial hygienist (CIH). Initial and/or full shift sampling can be performed by staff members with specialized training in the specific procedures regarding the potential or identified health hazards in the workplace, but only if the sampling process and the results are reviewed by a CIH.
 7. Procedures. Standard, nationally recognized procedures must be used for surveying and sampling as well as for testing and analysis.

8. Use of Contractors. If an outside contractor conducts industrial hygiene surveys, the contractor's report must include all sampling information listed in this section and be effectively communicated to site management. Any recommendations contained in the report should be considered and implemented where appropriate and necessary. Use of contractors does not remove responsibility for the IH program, from the VPP applicant, or participant.
- I. Investigation of Incidents and Near-Misses. The applicant/participant must investigate all incidents and all reported near-misses, and must maintain written reports of the investigations. Incident and near-miss investigations must determine root causes and:
1. Be conducted by personnel trained in incident investigation techniques. Personnel who were not involved in the accident or who do not supervise the injured employee(s) should conduct the investigation to minimize potential conflicts of interest.
 2. Document the entire sequence of relevant events.
 3. Identify all contributing factors, emphasizing failure or lack of hazard controls.
 4. Determine whether the SHMS was effective, and provide recommendations to prevent recurrence.
 5. Human errors, which may be unintentional lapses, mistakes in judgment or violations of procedures, should be studied to understand why the failures occurred and what controls are appropriate. Do not place undue blame or reprisal on employees.
 6. Assign priority, timeframes, and responsibility for implementing recommended controls.
 7. The results of investigations (to include, at a minimum, a description of the incident and the corrections made to avoid recurrence) must be made available to employees on request, although the actual investigation records need not be provided.
 8. The results of investigations must be documented. Lessons learned and investigation results need to be incorporated into subsequent workplace analyses and hazard control implementations.
- J. Trend Analysis. The process must include analysis of information such as injury/illness history, hazards identified during inspections, employee reports of hazards, incident and near-miss investigations, and OSHA logs, and the purpose of trend analysis is to detect trends/patterns with common causes in order to control or eliminate them.
1. The results of trend analysis must be shared with employees and management and utilized to direct resources; prioritize hazard controls; and determine or modify goals, objectives, and training.
 2. Patterns and trends can be used to measure safety and health performance and for setting goals and objectives.

IV. Hazard Prevention and Control. Effective prevention and control of workplace hazards are critical to protecting employee safety and health and avoiding workplace incidents. Prevention and control allows employers to minimize or eliminate safety and health risks and liabilities as well as meet their legal obligation to provide employees with a safe and healthy work environment. Site hazards identified during the hazard analysis process must be eliminated or controlled by developing and implementing appropriate controls. Management must ensure the effective implementation of systems for hazard prevention and control and ensure that necessary resources are available, including the following:

- A. Certified Professional Resources. Access to certified safety and health professionals and licensed health care professionals is required. They may be provided by offsite sources such as corporate headquarters, insurance companies, or private contractors. OSHA will accept certification from any recognized accrediting organization.

- B. Hazard Elimination and Control Methods. The types, severity, and risk of hazards posed to employees should be considered when determining methods of hazard prevention, elimination, and control. In general, the hierarchy of controls detailed below should be followed.
 - 1. Elimination or Substitution. Eliminating the hazard should be the first control method where possible. Substitution of a hazardous material should be implemented where the new material does not pose a greater hazard.
 - 2. Engineering. Engineering controls directly eliminate a hazard by such means as isolating the hazard or ventilating the workspace. These are the most reliable and effective controls.
 - 3. Protective Safety Devices as Engineering Controls. Although not as reliable as traditional engineering controls, such methods can be acceptable and include interlocks, redundancy, failsafe design, system protection, and fire suppression systems.
 - 4. Administrative. Administrative controls significantly limit daily exposure to hazards by controlling or manipulating the work schedule or work habits. Job rotation is an example of an administrative control.
 - 5. Work Practices. These controls include workplace rules, safe and healthful work practices, personal hygiene, housekeeping, maintenance, and procedures for specific operations.
 - 6. Personal Protective Equipment (PPE). The decision to use PPE, and the adoption of specific PPE by an applicant/participant, must be directly related to hazards identified in hazard analysis. The use of PPE, in combination with other controls, or alone, should be used only when all other hazard controls have been exhausted or proven infeasible.

When engineering controls have been studied, investigated, and implemented, yet still do not bring employees' exposure levels to below the OSHA PEL; or when engineering controls are determined to be infeasible, then a combination of controls through a hazard control program, may be used.

C. Hazard Control Programs.

1. The hazard control programs must be:
 - a. Understood and followed by all affected parties;
 - b. Appropriate to the hazards of the site;
 - c. Enforced through a clearly communicated, written disciplinary system that includes procedures for disciplinary action or reorientation of managers, supervisors, and non-supervisory employees who break or disregard safety rules, safe work practices, proper materials handling, or emergency procedures. The disciplinary system for safety and health can be incorporated into an all-encompassing disciplinary system. Disciplinary programs must be designed to ensure that employees are not discouraged from reporting;
 - d. Written, implemented, and updated by management as needed, utilized by employees; and
 - e. Incorporated in training, positive reinforcement, and correction programs.
2. Compliance. Applicants and participants must be in compliance with any hazard control programs and standards required by OSHA, such as PPE, Respiratory Protection, Lockout/Tagout (LOTO), Confined Space Entry, Process Safety Management (PSM), or Bloodborne Pathogens. VPP applicants and participants must periodically review these programs to ensure they are up-to-date.

D. Occupational Healthcare Program.

1. Licensed health care professionals must be available to assess employee health status for prevention, early recognition, and treatment of illness and injury.
2. Arrangements for needed health services, such as pre-placement physicals, audiograms, and pulmonary function tests, must be included.
3. Employees trained in first aid, CPR, physician care, and/or emergency medical care, must be available for all shifts within a reasonable time and distance. If the applicant or participant provides Automated External Defibrillators (AED), training must be provided.
4. Emergency procedures and services including provisions for ambulances, emergency medical technicians, emergency clinics, and hospital emergency rooms should be available. Employees on all shifts should be trained in the procedures and services. See H. in this section.

- E. Preventive Maintenance of Equipment. A written preventive maintenance system must be in place for monitoring and maintaining equipment used by employees. Equipment must be inspected, replaced, and repaired on a schedule, following manufacturers' recommendations, to prevent it from failing and creating a hazard. A portion of the system should also include predictive elements and measures for equipment maintenance. Documented records of maintenance and inspections and repairs must be kept and can be documented in various media, such as computer software packages. The system must include maintenance of hazard controls such as, but not limited to machine guards, exhaust ventilation, and mufflers.
- F. Tracking Hazard Correction. A documented system must be in place to ensure that hazards identified by any means (e.g., self-inspections, accident investigations, employee hazard reports, preventive maintenance, or injury/illness trends.) are assigned to a responsible party and corrected promptly. This system must include methods for:
1. Recording and prioritizing hazards.
 2. Assigning responsibility, timeframes for correction, implementation of interim protection methods, and follow-up to ensure correction.
- G. Disciplinary System. A written disciplinary system addressing safety and health violations is required. This system can be a subpart of an all-encompassing workplace disciplinary system. The safety and health disciplinary system must include:
1. Procedures for appropriate disciplinary action or reorientation of managers, supervisors, and non-supervisory employees who violate or disregard safety and health policies, safety rules, safe work practices, proper materials handling, or emergency procedures.
 2. Clear communication to employees and management.
 3. Equitable enforcement.
 4. Safeguards to ensure employees report injuries, illnesses, workplace hazards, accidents, or near misses, without fear of retaliation.
 5. Disciplinary policies and how these will be applied to contactors and their employees.
- H. Emergency Preparedness and Response. Written procedures for response to all emergencies (e.g., fire, chemical spill, accident, terrorist threat, or natural disaster) on all shifts must be established, follow OSHA standards, be communicated to all employees, and be practiced at least annually. These procedures must list requirements or provisions for:
1. Assessment of the emergency.
 2. Assignment of responsibilities (such as incident commander).
 3. First aid.
 4. Medical care.
 5. Routine and emergency exits.
 6. Emergency telephone numbers.
 7. Emergency meeting places.

8. Training drills including, at minimum, annual evacuation drills, should be conducted at times appropriate to the performance of work so as not to create additional hazards. Coverage of critical operations must be provided so that all employees have an opportunity to participate in drills.
9. Documentation is required to address the site's inclusion of all employees. Additionally, information needs to be included about how absent employees will receive an opportunity to participate in drills.
10. Documentation must include a critique of evacuation drills and recommendations for improvement.
11. Appropriate PPE where needed.

V. Safety and Health Training. Training is necessary to reinforce management commitment to preventing exposure to hazards. All employees must understand the hazards to which they may be exposed and how to prevent harm to themselves and others from such hazard exposure. Effective training enables employees to accept and follow established safety and health procedures.

- A. Knowledge of Hazards. Training must be provided to ensure that managers, supervisors, non-supervisory employees, and contractors know the hazards in their workplace, how to recognize hazardous conditions, signs and symptoms of workplace-related illnesses, and safe work procedures.
- B. Required by Standard. Training required by OSHA standards must be provided in accordance with the standard.
- C. Addressing the Needs of All Employees. The safety and health training needs of each employee are systematically determined to ensure that all hazards in the employee's work and workplace are addressed. This may be determined through, but not limited to job hazard analyses (JHA), hazard analysis findings, position descriptions, and work tasks.
- D. Managerial Responsibilities. Managers and supervisors must understand their safety and health responsibilities and how to carry them out effectively.
- E. New Employees. New employee orientation/training must include, at a minimum, discussion of hazards at the worksite, protective measures, emergency evacuation, employee rights under the OSH Act, and VPP. All employees, including new hires, must be notified about participation in VPP and employees' rights under the OSH Act.
- F. Training for Emergencies. Training should be provided to inform all employees about their responsibilities for each type of emergency. Managers, supervisors, and non-supervisory employees, including contractors and visitors, must understand what to do in emergency situations.

- G. Safety and Health Responsibilities. Management must ensure that employees who have specific roles in the SHMS are competent to carry out their responsibilities based on an effective combination of education, training, and experience. The competency requirements for each role should be incorporated into position descriptions and standard operating procedures (SOPs). Needed training must be completed before the employee is assigned to SHMS duties.
- H. Documentation. Training attendance must be documented.
- I. Frequency.
 - 1. Training required by OSHA standards must be conducted at least as frequently as required by the noted standard.
 - 2. Training that is not specifically required by OSHA standards must be provided at adequate intervals. Specific intervals should be determined based on assessments by the site's safety and health staff.
 - 3. Additional training must be provided when changes occur in work processes, new equipment, new procedures, or work phases.
- J. Appropriateness. Training curricula must be up-to-date, specific to worksite operations, and modified when needed to reflect changes and/or new workplace procedures, trends, hazards, and controls identified by hazard analysis. Training curricula must be understandable for all employees.
- K. Qualification of Trainers. Persons who have specific knowledge or expertise in the subject must conduct training.
- L. Personal Protective Equipment. Where PPE is required (either by OSHA standard or management requirement), employees must understand why it is required, its limitations, how to use it, and how to properly maintain it and ensure that it fits properly.

VI. Recommended Practices for Safety and Health Programs.

Recommended practices for Occupational Safety and Health Programs can be found at <https://www.osha.gov/shpguidelines/index.html>. The guidelines are substantially similar to the 1989 SHMS Guidelines currently utilized by VPP employers, with some exceptions.

- A. OSHA has statutory requirements for employers in the construction industry to have safety and health programs. However, those requirements are not systems-based and are different from the voluntary guidelines.
- B. Implementation of the 2016 Recommended Practices for Safety and Health Programs is not required by OSHA standards. However, all VPP applicants/participants are strongly encouraged to incorporate these practices into their SHMS.