











VSE CORPORATION **Basis for ISMS** • The most adaptable model for any situation is the

- **DoE/NRC ISMS Model**
- This model has significant adaptability for many industries as it represents the distillation of best practices for many process industries
- Line management has been given specific responsibilities that include integration of 5 core functions and 8 guiding principles in work planning, budgeting, authorization, execution, & change control





VSE CORPORATION **ISMS Elements** Five Core Functions of ISMS All employees must incorporate the core functions into their daily work

- activities
- Define the Scope of Work. Missions are translated into work, expectations are set, tasks are identified and prioritized, and resources are allocated. Analyze the Hazards. Hazards associated with the work are identified,
- 2. analyzed and categorized.
- **Develop and Implement Hazard Controls.** Applicable standards, policies, procedures, and requirements are identified and agreed upon; controls to prevent/mitigate hazards are identified; and controls are implemented. 4 Perform Work within Controls. Readiness is confirmed and work is
- performed safely.
- Provide Feedback and Continuous Improvement. Information on the adequacy of controls is gathered, opportunities for improving the definition and planning of work are identified, and line and independent oversight is conducted. 5



VSE CORPORATION **ISMS Elements** Eight Guiding Principles of ISMS Line Management Responsibility for Safety. Line management is directly responsible for the protection of workers, the public, and the environment. Clear Roles and Responsibilities. Clear and unambiguous lines of authority and responsibilit protection of workers, the public, and the environment. It success requests that the success requests and Responsibilities. Clear and unambiguous lines of authority and responsibility for ensuring safety is established and maintained at all organizational levels and for its employees. Competence Commensurate with Responsibilities, Personnel are required to have the experience, knowledge, skills, and capabilities, necessary, to discharge their responsibilities. Balanced Priorities, Managers must allocate resources to address safety, along with programmatic and operational considerations. Protection of workers, public, and environment is a priority whenever activities are planned and performed. Identification of Safety Standards and Requirements. Before work is performed, the associated hazards must be evaluated, and an agreed-upon set of safety standards and Requirements. Before work is defined in a diverse consequences. Hazard Controls Tailored to Work Being Performed. Administrative and engineering controls are tailored to the work being performed to prevent adverse effects and to mitigate hazards. Operations Authorization. The conditions and requirements to be associated beards. 2. 3. 5. 6. Departions Autorization. The conditions and requirements to be satisfied before operations are initiated are clearly established and agreed upon. Employee involvement Employee involvement is an essential element in all aspects of work planning and performance. Employee involvement should be promoted as a key ingredient in the successful implementation of ISM. 7.



VSE CORPORATION VSE Approach to ISMS

VSE Corporation Federal Group already Management Approach Incorporates the ISMS processes and intends to enhance...

Employee Involvement

- Employee involvement is an essential element in all aspects of work planning and performance.
- Employee involvement shall be promoted as a key ingredient in all VSE programs, systems, and processes







& Employee Involvement • Management commitment and employee involvement are complementary to each other • Management commitment provides the motivating force and resources for organizing and controlling activities within an organization

• Employee involvement provides means through which workers develop and express their own commitment to HES protection



- Management clearly establishes policies that have been communicated to and understood by all employees
- Management is visibly involved in implementing the HES program
- Planning, for HES must be a part of the overall management planning process that includes the employees participation



VSE CORPORATION I: Management Leadership & Employee Involvement • An environment must exist that allows for reasonable employee access to top site management • Encourage employee involvement in program decisions that affect their HES (e.g., inspection or hazard analysis teams; developing or revising safe work rules; training new hires or co-workers; assisting in investigations)

Assign and clearly define commensurate authority and responsibilities in all aspects of HES program



I: Management Leadership & Employee Involvement

Management

VSE CORPORATION

- Sets example of HES behavior
- Ensures all workers, including contractors, are provided equally high quality HES protection
- Hold managers, supervisors, & employees equally accountable for meeting their responsibilities through a documented system
- Review program operations at least annually to evaluate, identify deficiencies, and revise as needed via documented timely follow-up















As part of any comprehensive HES program or management system, health hazards related to IH exposures need to be identified. Hazard analyses may

• Use of direct reading instruments

include:

- Review of processes and MSDS information
- Visit facilities during normal operations
- Review maintenance items, including periodic operations
- Review available baseline sampling data
- Review entire worksite, including multiple shifts













VSE CORPORATION II: Worksite Analysis

Hazard Analysis

- The results must be included in training and hazard control programs
- Hazard analysis must also be conducted for non-routine tasks and as circumstances change





VSE CORPORATION II: Worksite Analysis Employee Hazard Reporting System H • The system must include tracking of responses and tracking of hazard elimination or control to completion • • The system will include identifying actions to be taken to prevent recurrence and follow-up checks/actions for process improvement verification •















VSE CORPORATION Case Analysis **Decision-Making Process** The decision-making process consists of **5** steps: 1. Determine whether a case occurred; i.e.; whether there was a death, illness, or injury Establish that the case was work related; that it resulted from an event or exposure in the work environment 3. Decide whether the case is a injury or illness; and If the case is an illness, record it; or 4. 5. If the case is an injury, decide if it is recordable based on a

finding of medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job



VSE CORPORATIO **Determining Whether a Case Occurred**

- VSE has nothing to record unless an employee has • experienced a work-related illness or injury
- In most instances, recognition of these illnesses and . injuries is fairly simple
- However, some situations have troubled employers. Two of these are:
 - 1. Hospitalization for observation
 - 2. Differentiating a new case from the recurrence of a previous injury or illness



VSE CORPORATION **Determining Whether a Case Occurred** 1. Hospitalization for observation

The determining factor is not that the employee went to the hospital, but whether the incident is recordable as a work-related illness or as an injury requiring medical treatment or involving loss of consciousness, restriction of work or motion, or transfer to another job

2. Differentiating a new case from the recurrence of a previous illness or injury

Employers are required to make new entries on their OSHA forms for each new recordable illness or injury. However, some entries should <u>NOT</u> be made for the recurrence of symptoms from previous cases, and it is sometimes difficult to decide whether or not a situation is a <u>new case</u> or a recurrence



VSE CORPORATION **Determining Whether a Case Occurred**

Differentiating a new case from the recurrence of a previous injury or illness guidelines address this problem:

- Illnesses: Generally, each occupational illness should be recorded. However, certain illnesses, such as silicosis, may have prolonged effects which recur over time. The recurrence of these symptoms should not be recorded as new cases. Some occupational illnesses, such as dermatitis or respiratory conditions, may recur as the result of new exposures to sensitizing agents, and should be recorded as new cases
- **b.** <u>Injuries</u>: The aggravation of a previous injury almost always results $from \ some \ new \ incident \ (slip, \ trip, \ fall, \ sharp \ twist, \ etc.). \ Consequently,$ when work-related, these new incidents should be recorded as new cases



VSE CORPORATION Medical vs. First Aid Treatment One of the most confusing aspects of recordkeeping is determining if an injury or illness is recordable, based upon first aid or medical treatment Medical Treatm ient: Administering immunizations, such as Hepatitis B or rabies (does not include tetanus) Using wound closing devices, such as sutures, staples, etc. **using rigid means of support to immobilize parts of the body** Physical therapy or chiropractic treatment Medical Treatment does not include: • Visits to a physician or other licensed health care professional solely for observation or counseling The conduct of diagnostic procedures, such as X-rays and blood tests, including the administration of prescription medications used solely for diagnostic purposes

VSE CORPORATION **Medical vs. First Aid Treatment**

First Aid:

- Using a nonprescription medication at nonprescription strength Administration of tetanus immunizations Cleaning, flushing or soaking wounds on the surface of the skin Use of wound coverings, such as bandages, Band-Aids ®, gauze pads, etc. Application of hot or cold therapy Use of any non-rigid means of support (elastic bandages, wraps, nonrigid back belts, etc.) Use of temporary immobilization devices while transporting an accident victim (splints, slings, neck collars, back boards, etc.) Drilling of a fingernail or toenail to relieve pressure, or draining fluid from blister Use of the matches
- Drining of a migernan or toenan to releve pressure, or draming huid from bister Use of eye patches Removal of foreign bodies from the eye using only irrigation or a cotton swab Removal of splinters or foreign material from areas other than the eye by irrigation, tweezers, cotton swabs or other simple means Use of finger guards

- Administration of massage
- Drinking fluids to relieve heat stress











VSE CORPORATION Distinguishing Between Injuries & Illnesses

- All work-related illnesses must be recorded, while injuries are recordable only when they require medical treatment (other than first aid), or involve loss of consciousness, restriction of work or motion, or transfer to another job
- The decision between injuries and illnesses, therefore, has significant recordkeeping implications













VSE CORPORATION II: Worksite Analysis

Accident/Incident Investigation System

- The investigation should seek out root causes for the accident/incident
- Analyze injury and illness trends over time, so that patterns with common causes can be identified and prevented - to include at other sites (lessons learned)



USE^{CORPORATION} II: Worksite Analysis

Trend Analysis

- Information that might be used includes:
 - Injury/illness history
 - Hazards identified during inspections
 - Employee reports of hazards
 - Accident investigations and/or other means







VSE CORPORATION III: Hazard Prevention & Control

- Triggered by a determination that a hazard or potential hazard exists
- Where feasible, prevent hazards by effective design of job or job site
- Where elimination is not feasible, control hazards to prevent unsafe and unhealthful exposure
- Elimination or control must be accomplished in a timely manner



VSE ^{CORPORATION} III: Hazard Prevention & Control Hazard Elimination and Controls Hierarchy used in selecting actions to eliminate and control hazards:

- 1. Engineering Controls Most reliable and effective (where feasible)
- 2. Administrative Controls Significantly limit daily exposure to hazards by controlling or manipulating the work schedule or manner in which work is performed, e.g., job rotation







VSE CORPORATION III: Hazard Prevention & Control

Hazard Controls

- Site hazards identified during the hazard analysis process must be eliminated or controlled by developing and implementing the system discussed in this section
- The hazard controls a site chooses must be understood and followed by affected parties, and appropriate to the hazard and size of the worksite







VSE CORPORATION III: Hazard Prevention & Control Preventive Maintenance System • System must be written, and document the monitoring and maintenance of workplace equipment such as...

• Preventive and Predictive Maintenance, to prevent equipment from becoming hazardous



VSE CORPORATION III: Hazard Prevention & Control

Hazard Correction Tracking

• The site must have a system for initiating and tracking hazard elimination or controls, identified through the various HES programs, in a timely manner



Occupational Health Care Program must include:

- Use of health care professionals to assess employee health status for prevention of and early recognition and treatment of injury and illness
- Access to certified first aid and CPR providers, physician care, and emergency medical care for all shifts within a reasonable time and distance



VSE CORPORATION III: Hazard Prevention & Control

- **Disciplinary System**
- Program must be written
- Must be clearly communicated & equitably enforced
- Include procedures for disciplinary action or reorientation of managers, supervisors, and non-supervisory employees who:

Break or disregard HES rules, safety work practices, proper material handling, or emergency procedures



VSE CORPORATION III: Hazard Prevention & Control

Emergency Procedures

- Must be developed for all shifts worked
- Must be written and communicated to all
- Must list requirements for PPE, first aid, medical care, emergency egress
- Must include provisions for emergency telephone numbers, exit routes
- Must include training drills including, at a minimum, annual evacuation drills





IV: HES Training HES Training • Address the HES responsibilities of ALL personnel, whether salaried or hourly • Most effective when incorporated into other training about performance requirements and job practices • Complexity depends on size and complexity of worksite and nature of hazards

VSE CORPORATION IV: HES Training Managers and Supervisors • Understand their HES responsibilities as discussed in Element I: Management Leadership and Employee Involvement, and are able to carry them out effectively, including: • Analyzing the work under their supervision to identify

- unrecognized potential hazards
- Maintaining physical protections in work areas
- Reinforcing employee training through continual performance feedback and, if needed, enforcement of safe work practices

U.V.	in the second	ALL LAD	
			71
STEX 1			



VSE CORPORATION **Off-Time HES Training** • VSE Management should be aware of their personnel's personal activities (such as sports, hunting, boating, etc.) • Re-emphasize home safety and health (such as weapons safety, poison ivy life vests, CPR, electrical safety, ticks, snakes, bugs, and POV safety) • We need to emphasize warnings about drug and alcohol abuse and taking on too much and therefore not sleeping















III. Hazard Pr	evention & Control Hie	rarchy
Safe Work Pra	ctice and Administrativ	ve Controls
• Established	to reduce duration of ex	xposure
 May result i as changing practices, or performs th 	n a reduction of exposu work habits, improving making other changes e job	re through such methods sanitation and hygiene in the way the employee



HES Topic Review IV. HES Training Provide Training on Applicable Documents Ensure all employees understand and are aware of the hazards to which they may be exposed and the proper methods for avoiding such hazards Employees understand their HES responsibilities Limit certain job assignments to employees who are "certified," "competent," or "qualified," meaning they



have had special previous training



VSE CORPORATION

Take this climate and make a permanent HES cultural change





Do the right things right the first time – <u>every</u> time – with a focus on all our employees' – VSE's <u>most valued resource</u>