

CHAPTER 6 – TRAINING

A. INTRODUCTION.....	1
B. CHAPTER-SPECIFIC ROLES AND RESPONSIBILITIES.....	1
C. IDENTIFICATION OF EMPLOYEES REQUIRING SAFETY TRAINING	3
D. TRAINING REQUIREMENTS	3
E. VERIFICATION AND EVALUATION.....	7
F. RECORDKEEPING.....	7
<u>Attachment 1- Sample Training Matrix</u>	8
<u>Attachment 2- SI Safety, Environmental & Health Training Requirements</u> ...	9
<u>Attachment 3- SI Standards for Safety Coordinator Qualifications and Skills</u>	17

CHAPTER 6 – TRAINING

A. INTRODUCTION

1. Safety information and training must be effectively and frequently communicated to staff to ensure that a safe operating environment becomes a regular and essential part of conducting business. The SI objective is to create and sustain positive cultural and behavioral changes in using safe work practices for the employees' personal safety and that of their coworkers. This is a key element of the SI goal of zero occupational injuries and illnesses.
2. Safety training requirements are comprehensive. Senior management needs to set the culture and climate on ways and means to lead and support their safety program. Staff and supervisors need training on the hazard controls and environmental compliance requirements specific to their job tasks and those under their purview. Safety Coordinators and safety committee members need additional skills in program management and self-assessments.

B. CHAPTER-SPECIFIC ROLES AND RESPONSIBILITIES

1. Directors shall:
 - a. Ensure sufficient training for Safety Coordinators and safety committee members to allow them to perform their assigned duties and to fulfill their training plan requirements of this Chapter.
 - b. Ensure sufficient funding and opportunity for all staff under their purview to receive the safety training required by this *Manual*.
 - c. Ensure safety training is performed as required by this *Manual*.
2. Safety Coordinators shall:
 - a. Identify, with the assistance of supervisors and the Office of Safety, Health and Environmental Management (OSHEM), employees requiring safety training per the requirements of this *Manual*, and develop a training matrix (see Attachment 1 for example) to ensure that this training (and any periodic refresher training) is provided according to the deadlines established.

- b. Develop employee safety training programs to fulfill requirements of this *Manual*.
 - c. Assess the effectiveness of the training received, as demonstrated by the proficiencies of the trained employees, during facility safety assessments.
 - d. Maintain an auditable system of employee training records, for the purpose of ensuring that all staff who require training have received it and are up-to-date with periodic training.
3. Supervisors shall:
- a. Assist the Safety Coordinator in developing a departmental training matrix that includes any safety training required by this *Manual*, so that they are able to identify the employees requiring applicable training, and can properly evaluate the effectiveness of their training programs.
 - b. Ensure that employees under their purview receive safety training identified in the training matrix developed above and within the established timeframes, including job specific safety orientation and job specific training.
 - c. Provide ample opportunity for employee involvement in safety program activities within the SI, seek employee input as to the types of additional safety training they would benefit from receiving, and show good faith effort to obtain requested training for them.
 - d. Maintain documentation of training provided to employees under their purview, as required by this *Manual*.
4. Employees and others covered by the scope section of [Chapter 1, "Overview"](#), of this *Manual* shall attend required safety training programs and apply the lessons-learned and safe work practices relevant to their assigned job tasks.
5. Office of Safety, Health and Environmental Management (OSHEM) shall:
- a. Develop SI safety training policies as required by this *Manual*, and special emphasis programs as necessary to meet the needs of emerging health and safety topics.
 - b. When requested, assists Collateral Duty Safety Coordinators in the development of their facility training programs, and coordinates the training needs of the SI.
 - c. Assess organizational training program effectiveness during the annual Management Evaluation and Technical Reviews (METRs).

C. IDENTIFICATION OF EMPLOYEES REQUIRING SAFETY TRAINING

1. Supervisors are to identify the employees who require training in their departmental training matrix and give to the Safety Coordinator for overall coordination. General requirements are included in section D of this Chapter and topic-specific requirements are detailed in the Operational Topic chapters of this *Manual* or in Attachment 2, SI Safety, Environmental and Health Training Requirements.
 - a. Individuals will be provided training commensurate with their safety responsibilities in the organization (e.g., senior management, new employees, supervisors, safety committee members).
 - b. Individuals will be provided training based on their job assignments and results of hazard assessments (such as the Job Hazard Analysis process described in Chapter 4, "Safety Risk Management Program", of this *Manual*) which will identify safety training requirements.
2. Results of injuries, illness and incident investigations are to be reviewed, by the supervisor and Safety Coordinator with any necessary assistance from OSHM, to determine specific and appropriate safety training to prevent recurrence of harmful events.

D. TRAINING REQUIREMENTS

1. Training for Senior Management Staff.
 - a. Senior managers (Director and Associate Director level positions) will attend, within 90 days of appointment, with a refresher every 5 years, a Safety Management Seminar, provided by OSHM through OHR.
 - b. This seminar will detail senior management roles and responsibilities in developing and implementing the elements of a comprehensive safety program within their organization (per Chapters 2, "Roles and Responsibilities" and 3, "Elements of a Comprehensive Safety, Health and Environmental Management Program", of this *Manual*).
 - c. Senior managers should also attend new employee safety orientation, supervisors' safety training, and any other facility-specific training deemed necessary for them by their Safety Coordinator.
2. Training for Supervisors. Within 90 days of appointment, with a refresher every 5 years, supervisors will successfully complete "Supervisor Safety Training", provided by their Safety Coordinator. Occupational safety and

health training for supervisors shall include, at a minimum, information addressed in OSHEM's Training Lesson Plans.

3. New Employee Safety Orientation.

- a. Safety orientation will be provided to all new employees, defined as all individuals covered by section B.4 in this chapter who are:
 - (1) New to the SI,
 - (2) Returning to the SI after a break in service, and
 - (3) Those who have been transferred to a different building within the SI.
- b. New employee safety orientation will be presented in 3 phases (3.c, 3.d and 3.e below), the first on the day of hire, the second within 5 days of assignment and the third within 30 days.
- c. Initial SI Safety Orientation to be conveyed during the Office of Human Resources (OHR) New Employee Orientation on the day of hire.
- d. Job Specific Safety Orientation to be conveyed by the supervisor within 5 days of assignment. At a minimum, this information will include:
 - (1) Safety and security points of contact in the facility.
 - (2) Fire, medical and other emergency response procedures, nearest exits, and assembly points.
 - (3) Procedures for reporting hazards, accidents, injuries, and illnesses.
 - (4) Responsibilities under OSHA to follow SI safety regulations.
 - (5) Hazards encountered in materials or equipment used in the performance of their duties.
 - (6) For SI locations with limited access to emergency assistance (e.g., FLWO, Hilo, STRI, Belize) the information needs to also include any specific emergency response procedures pertinent to that locale (e.g., medical response/evacuation, wildfire response, boating safety).
- e. Site Safety Orientation to be conveyed by the Safety Coordinator within 30 days of assignment to the facility; it should be a thorough safety orientation that reviews the management, programs, and requirements of their assigned facility. At a minimum, this training shall include information addressed in OSHEM's Training Lesson Plans.

- f. Short-term authorized visitors will receive basic safety information pertinent to the location and purpose of their work, prior to or on the day of the start of their business with the SI. As a practical matter, the degree of detail will depend on the level of direct supervision exercised by the SI staff sponsoring their visit, or the provisions of their contract. At a minimum, this information will include:
 - (1) Fire, medical and other emergency response procedures, nearest exits, and assembly points.
 - (2) Immediate hazards encountered in the materials or equipment accessed by the visitor or contractor.
 - (3) Reporting procedures for hazardous work situations, accidents or other hazard incidents.
4. Job-Specific Training
- a. Job-specific training based on the training matrix and this *Manual* will be provided by the supervisor, with assistance from the Safety Coordinator to all persons prior to actually doing work with identified hazards.
 - b. Retraining, or refresher training, will occur when:
 - (1) Required by SI policy, required by regulation and/or detailed in specific operational chapters of this *Manual* and Attachment 2.
 - (2) A new hazardous process or material is introduced to the job site.
 - (3) Changes have occurred in applicable safety standards or workplace procedures that render the original training obsolete.
 - (4) An employee has demonstrated inadequacies in their understanding, knowledge, or skill in the use of equipment, tools, or recognized safe procedures.
 - (5) An employee has been reassigned to different duties, requiring different safety skills.
5. Construction Safety Training. Construction safety training is required for SI staff (particularly those designated as Contracting Officer's Technical Representatives – COTRs) who are directly responsible for supervision and direction of construction contracts, regardless of their size. This training is also strongly recommended for Exhibit Fabricators, Building Managers, and those staff working in construction-related trades. Training topics will include:

- a. Hazard recognition and identification.
 - b. OSHA Construction Safety Standards.
(Classes taught by SI will also include):
 - c. Overview of SI construction safety practices.
 - d. Zero injury techniques.
 - e. Protection of the public during construction.
 - f. Staff safety during construction.
6. Safety Awareness Training. Each supervisor will ensure that safety awareness information is provided, or reinforced whenever necessary or appropriate, and on a regular basis, at least monthly.
- a. The sessions should be appropriate to the nature of the operation and identified hazards. Examples would range from a monthly newsletter for an office to a review of safety glove selection and care for a laboratory.
 - b. Employees are to be requested to provide topics for these safety awareness sessions, and provided opportunities to research topics and lead discussions on safety topics they feel are pertinent to their job.
 - c. The safety discussions are to include (when applicable) a review of the causes and lessons-learned from any accidents or near-misses that have recently occurred within the previous three months.
 - d. General fire prevention and life safety as it pertains to their work area is to be discussed periodically.
7. Training for Safety Coordinators. Full-time and collateral-duty Safety Coordinators will be expected to fulfill professional development plans described in [Attachment 3](#). OSHEM will provide each coordinator, within 90 days of appointment, an overview of SI safety policy and procedures, and training on this *Manual*.
8. Training for Safety Committees. Safety Committee training is critical to the effectiveness of the organization's safety program. Safety committee members will receive training from the Safety Coordinator to enable them to fulfill their responsibilities as described in [Chapter 2, "Roles and Responsibilities"](#), of this *Manual*. Training is to be provided prior to the safety committee member's first inspection, as described in [Chapter 5, "Safety Assessment, Log of Deficiencies and Corrective Action Plan"](#), of this *Manual*. Training topics shall include, as a minimum, information addressed in

OSHEM's Training Lesson Plans. Senior Management (Director and Associate Director's) should also attend this training so they understand how their Safety Committee is functioning.

9. Training for Office of Protection Services (OPS) security personnel. OPS security personnel shall be trained by OPS in the detection and reporting of fire hazard conditions in accordance with OPS-31, "Fire Prevention and Awareness".

E. VERIFICATION AND EVALUATION

1. Formal hazard-specific training courses required by this *Manual* will include a means of verifying that the course material was completed. The trainer is to establish the criteria for passing the course (such as written or verbal quizzes, or successful completion of hands-on exercises). The trainer shall also solicit course evaluation feedback from the participants in an effort to improve the quality of the training.
2. Proper application of training concepts learned will be verified by the supervisor through practical observations in the workplace, and by the Safety Coordinator during workplace inspections and program assessments, by observation and interviews, and through analysis of accident and incident reports. Additional training may be recommended by the supervisor and/or Safety Coordinator based on results of this evaluation.

F. RECORDKEEPING

1. Documentation of all occupational safety and health training will be maintained by the supervisor and Safety Coordinator and will include: name and signature of participant(s), supervisor name, date, the title and basic objectives of the training program and the name (and signature if feasible) of the trainer. The Safety Coordinator shall verify all training as part of the facility program safety assessment process.
2. Safety, health and environmental training records shall be maintained by the supervisor and/or Safety Coordinator for a minimum of five years unless superseded by a more stringent regulatory requirement. Training retention requirements are detailed in individual operational chapters of this *Manual*, as well as summarized in [Chapter 8, "Program Reporting and Recordkeeping Procedures"](#).

Training Matrix

11.2009

Employee Name	Date	Date	Date	Date	Date	Date	Date	Date	Date
Department Name: XZY SHOP									
	Job Specific Safety Orientation (Initial) (Supervisor)	Site Safety Orientation (Initial) (Safety Coordinator)	Fire Protection & Life Safety (Annual) (Supervisor)	Hazard Communication (Annual) (Safety Coordinator/Supervisor)	Personnel Protective Equipment (PPE) (Initial & as Needed) (Supervisor)	Back Injury Prevention (Initial Risk) (Safety Coordinator/Supervisor)	Machinery/ Machine-Guarding (Every 3 Years) (Safety Coordinator/Supervisor)	Respiratory Protection (Annual) (OSHEM)	Forklift Training (Every 3 years) (Certified Instructor)
James Ashton	3/2/08	4/12/08	5/17/09	7/7/09	3/10/08	3/10/08	4/2/08	4/18/09	6/16/08
Nancy Craig	5/13/06	5/31/06	5/17/09	7/7/09	9/23/07	8/17/07	NA	NA	NA
Marty Fischer	7/26/04	8/1/04	5/17/09		9/23/07	6/23/06	9/23/07	4/18/09	8/15/07
John King	5/13/06	5/31/06	5/17/09	7/7/09	9/23/07	6/23/06	9/23/07	4/18/09	
Susan Miller	7/12/04	8/1/04	5/17/09	7/7/09	9/23/07	8/3/09	NA	NA	NA
Keith Pope	9/3/05	9/17/05	5/17/09	7/7/09	9/23/07	10/16/08	NA	NA	NA
Dave Smith	9/14/07	10/5/07	5/17/09	7/7/09	9/23/07	10/16/08	9/23/07	4/18/09	11/9/07

SI SAFETY, ENVIRONMENTAL AND HEALTH TRAINING REQUIREMENTS

9/14/2009

SI Safety Manual C Type of Training Target Audience Required Frequency Training Provider

Chapter 1	Overview	Senior Management (Directors & Associate Directors), Safety Coordinator & Supervisor	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
Chapter 2	Roles and Responsibilities	Senior Management, Safety Coordinator & Supervisor	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
Chapter 3	Elements of a Comprehensive Safety, Health and Environmental Management Program	Senior Management, Safety Coordinator & Supervisor	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
Chapter 4	Safety Risk Management Program	Senior Management, Safety Coordinator & Supervisor	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
Chapter 5	Safety Assessments, Log of Deficiencies and Corrective Action Plans	Senior Management, Safety Coordinator & Supervisor	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
Chapter 6	Construction Safety Training	Required for Contracting Officer Technical Representative (COTR's) responsible for construction contracts, recommended for Exhibit Fabricators and related construction trades	Once	OSHEM Construction or Vendor
	Initial SI Safety Orientation	New Employees	Once, day of hire	OSHEM; all Depts at OHR Orientation

SI Safety Manual C Type of Training	Target Audience	Required Frequency	Training Provider
Job Specific Safety Orientation	All New Employees	Once, within 5 days of appointment	Organization, Supervisor
Site Safety Orientation	Senior Management, All Staff and New Employees	Once, within 30 days of appointment	Organization, Safety Coordinator
Safety Awareness Training	All Staff and Supervisors	At least monthly	Organization, Supervisor
Safety Committee Training	Senior Management Safety Committee Members	Once, within 1st year Prior to member's first facility inspection	Organization, Safety Coordinator
Safety Coordinator Orientation (Review of SI Safety Manual & Chapter Checklists)	Safety Coordinator	Once, within 90 days of appointment	OSHEM; all Depts
Safety Coordinator Training - See Chapter 6, Table 1	Safety Coordinator	See Chapter 6, Table 1	Outside Sources: OSHA, college, vendors
Senior Management Seminar (Review of Chapters 1-8)	Senior Management	OHR TO COORDINATE	OSHEM, OHR TO COORDINATE
Supervisor Safety Training	All Managers and Supervisors	Once, within 90 days of appointment, then every 5 years	Safety Coordinator; initial assistance from OSHEM and as required for Collateral Duty Safety Coordinators
Chapter 7 Injury/Incident Reporting and Investigation	Senior Management, Safety Coordinator & Supervisor	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
Automated Incident Reporting System (AIRS)	Safety Coordinator	Once, within 90 days	OCIO; OSHEM

SI Safety Manual C Type of Training	Target Audience	Required Frequency	Training Provider
Chapter 8 Program Reporting and Recordkeeping Procedures	Senior Management, Safety Coordinator & Supervisor	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
All Operational Chapters Require Job Or Hazard Specific Training			
Chapter 9 General Workplace Safety	All Staff and Contractors	Once within 30 days of appointment	Organization, Safety Coordinator, Supervisor
	Affected Employee & Supervisor	Before initial risk, then remedial as needed	Organization, Safety Coordinator, Supervisor
Chapter 10 Fall Protection	Affected Employee & Supervisor	Before initial risk, then remedial as needed	Organization, "Competent Person" *
Chapter 11 Machinery, Machine Guarding, and Hand and Portable Powered Tools	Affected Employee & Supervisor	Before machine, tool or equipment use. Remedial as needed. Refresher at least every 3 years.	Organization, Safety Coordinator or Supervisors
Chapter 12 Lock-out / Tag-out Program	"Authorized Employee", "Affected Employee" and their Supervisor *	Before initial risk, then remedial as needed	Organization, Safety Coordinator or Supervisor
Chapter 13	Materials Handling and Equipment		
	Back Injury Prevention	Before initial risk	Organization, Safety Coordinator or Supervisor
	Forklift Operation	Before initial use, then every 3 years	Organization, Safety Coordinator, Supervisor or Vendor
	All other equipment operation	Before initial use, then remedial as needed	Organization, Safety Coordinator or Supervisor

* See chapter for definition.

SI Safety Manual C Type of Training	Target Audience	Required Frequency	Training Provider
Chapter 14	Hot Work Management and Permit System	Safety Coordinators, Permit Authorizing Individuals (PAIs), Assoc. Director of Construction Management, Resident Engineers, Affected OFMR Supervisors	OSHEM/Fire
		Once, within 90 days of appointment	
		COTR's (related to maintenance & construction)	Associate Director of Construction Management or Immediate Supervisors
		Once, within 90 days of appointment, then refresher as needed	
		Fire Watch, Affected Employees (i.e. Exhibit Fabricators, Plumbers) & Supervisor	Organization: Safety Coordinator
		Once, within 90 days of appointment, then refresher as needed	
Chapter 15	Confined Space Entry	Safety Coordinator, Affected Employee & Supervisor, and COTR	OSHEM/EMD
		Before initial risk, then annually	
Chapter 16	Vehicle and Marine Safety	(reserved)	(reserved)
		(reserved)	
Chapter 17	Personal Protective Equipment	Affected Employee & Supervisor	Organization: Supervisor
		Before initial risk	
Chapter 18	Respiratory Protection	Affected Employee & Supervisor	OSHEM/EMD
		Before initial risk, then annually	
Chapter 19	Chemical Handling, Storage & Shipment	Affected Employee & Supervisor	Organization: Safety Coordinator, Supervisor
		Before initial use, then remedial as needed	
Chapter 20	Compressed, Liquefied and Cryogenic Gases	Affected Employee & Supervisor	Organization: Safety Coordinator, Supervisor
		Before initial use, then remedial as needed	
Chapter 21	Paint and Spray Finish Operations	Affected Employee & Supervisor	Organization, Safety Coordinator, Supervisor
		Before initial use, then remedial as needed	

SI Safety Manual C	Type of Training	Target Audience	Required Frequency	Training Provider
Chapter 22	Asbestos	Zone & Building Managers, Safety Coordinator, Affected Employee & Supervisor	Before initial risk, then annually	OSHEM/EMD
Chapter 23	Lead-Containing Materials	Zone & Building Managers, Safety Coordinator, Affected Employee & Supervisor	Before initial risk, then annually	OSHEM/EMD
Chapter 24	Collections-Based Hazards	Affected Employee & Supervisor	Before initial risk	Organization, Safety Coordinator, Supervisor
Chapter 25	Chemical Hazard Communication	Affected Employee & Supervisor	Before initial risk, as needed or remedial	Organization, Safety Coordinator, Supervisor
Chapter 26	Laboratory Safety	Affected Employee & Supervisor	Before initial risk	Organization, Supervisor
Chapter 27	Ventilation for Health-Hazard Control	Affected Supervisor	Before initial risk (as part of Haz Com or Lab Training)	OSHEM/EMD; Organization; Safety Coordinator
Chapter 28	Environmental Management Systems	Senior Management, Qualified Responsible Person (Environmental)	Before initial risk	OSHEM/EMD
Chapter 29	Hazardous Waste Management	Qualified Responsible Person (Environmental) & Affected Employee	Annually	OSHEM/EMD; Organization; Safety Coordinator
Chapter 30	Underground Storage Tanks (UST) Management Program	Affected Employee (UST operators & others)	See State regulations for specific requirements	OSHEM/EMD; Organization; Safety Coordinator
Chapter 31	Pesticides Management	Affected Employee (Pesticide Applicator) & Supervisor	See State regulations for specific requirements	Organization; Safety Coordinator; Supervisor

SI Safety Manual C Type of Training	Target Audience	Required Frequency	Training Provider	
Chapter 32	Ionizing Radiation	Affected Employee & Supervisor	Before initial risk, then refresher as needed	OSHEM/EMD; Organization; Safety Coordinator, Supervisor
Chapter 33	Non-Ionizing Radiation	Affected Employee & Supervisor	Before initial risk, then refresher as needed	OSHEM/EMD; Organization; Safety Coordinator, Supervisor
Chapter 34	Laser Safety	Affected Employee & Supervisor	Before initial risk, then refresher as needed	OSHEM/EMD; Organization; Safety Coordinator, Supervisor
Chapter 35	Fire Systems Inspection Testing and Maintenance (ITM) - Process and Record Keeping	Zone & Building Managers, Safety Coordinators, Affected OFMR, OPS & Smithsonian Enterprises(SE) Supervisors	Once, within 90 days of appointment	OSHEM/Fire
	Fire Systems Inspection, Testing and Maintenance (ITM) - Certification/Technical Training	Fire/Life Safety Technicians and others performing ITM tasks	As needed to achieve and maintain recommended certifications	Certifying Organization (i.e. NICET), Equip. Manuf., Trade Organizations, Safety Coordinator or Supervisor
Chapter 36	Fire Protection - General Requirements	Senior Management	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
		Zone & Building Managers, Safety Coordinator	Once, within 90 days of appointment	OSHEM/Fire
		Supervisor	Once, within 90 days of appointment, then refresher as needed	Organization; Safety Coordinator
		Employee	Once, within 5 days of appointment, then annually	Supervisor
	Fire Protection - Property Loss Design Criteria	Design & Project Managers, Exhibit Design Manager	Once, within 90 days of appointment, then refresher as needed	OSHEM/Fire

SI Safety Manual C Type of Training		Target Audience	Required Frequency	Training Provider
		Affected Employee & Supervisor	Once, within 30 days of appointment, then annually	Design & Project Managers, Exhibit Design Manager
	Fire Protection - Security Control Room Fire Procedures	OPS Control Room Operator and Supervisor	Once, within 30 days of appointment, then refresher as needed	OSHEM/Fire; OPS (to be conducted as part of the OPS Control Rm Operator Training)
Chapter 37	Life Safety Program	Senior Management	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
		Zone & Building Managers, Safety Coordinator	Once, within 90 days of appointment	OSHEM/Fire
		Supervisor, OPS Manager, Special Events Coordinator	Once, within 90 days of appointment, then refresher as needed	Organization: Safety Coordinator
		Special event employees, fire wardens, Safety Committee, OPS Officers	Annually	Organization: Safety Coordinator
		Employee	Once, within 5 days of appointment, then annually	Supervisor
Chapter 38	Fire Prevention	Senior Management	Included in Senior Mgt Seminar, Safety Coordinator Training and Supervisor Safety Training	OSHEM
		Zone & Building Managers, Safety Coordinator, Associate Director of Construction Management	Once, within 90 days of appointment	OSHEM/Fire
		Supervisor, OPS Manager, Special Events Coordinator	Once, within 90 days of appointment, then refresher as needed	Organization: Safety Coordinator
		COTR's (related to maintenance & construction)	Once, within 90 days of appointment, then refresher as needed	Supervisor

SI Safety Manual C Type of Training		Target Audience	Required Frequency	Training Provider
		Special event employees, fire wardens, Safety Committee, OPS Officers	Annually	Organization, Safety Coordinator
Chapter 39	Exposure Assessment and Medical Surveillance	Affected Employee & Supervisor	Before initial risk, then annual or per regs, supervisor once	OSHEM/EMD & OHS
Chapter 40	Bloodborne Pathogen Exposure Control Program	OPS, First Responders, OHS Staff, & Supervisors of Above Staff	Before initial risk, then annually, supervisor once	OSHEM/OHS
Chapter 41	Occupational Noise	Affected Employee & Supervisor Identified by OSHEM	Initial within first 6 months of exposure, then annually, supervisors once	OSHEM/OHS
Chapter 42	Temperature Extremes (Heat)	Zone & Building Managers, Safety Coordinator, OFMR Staff	Once, within 90 days of assignment, then annually	OSHEM/EMD OR OHS
Chapter 43	Temperature Extremes (Cold)	Zone & Building Managers, Safety Coordinator, OFMR Staff	Once, within 90 days of assignment, then annually	OSHEM/EMD OR OHS
Chapter 44	Zoonoses Control	Affected Employees & Supervisor	Before initial risk, then annually, supervisor once	OSHEM/OHS

SI STANDARDS FOR SAFETY COORDINATOR QUALIFICATIONS AND SKILLS

Scope: These Standards apply to both full-time and collateral duty Safety Coordinators.

Standards : These professional development standards are intended to assist SI Safety Coordinators in attaining or sustaining the range of professional competencies necessary to managing Safety, Health, and Environmental Programs at SI facilities. They are based on training and career development tracks described by organizations such as the American Society of Safety Engineers (ASSE) and the Board of Certified Safety Professionals (BCSP), and include these essential topics:

Accident and Incident Investigations: determining the facts related to an accident or incident based on witness interviews, site inspections and collection of other evidence.

Advising Management: helping managers establish safety objectives, plan programs to achieve those objectives and integrate safety into the culture of an organization.

Environmental Protection: controlling hazards that can lead to undesirable releases of harmful materials into the air, water or soil.

Fire Protection and Life Safety: reducing fire and life safety hazards by inspection; layout of facilities, exit/egress, and processes; and design of fire detection and suppression systems.

Ergonomics: improving the workplace based on an understanding of human physiological and psychological characteristics, abilities and limitations.

Health Hazard Control: controlling physical, chemical, radiological or biological hazards that can create harm.

Hazardous Materials Management: ensuring that hazardous chemicals and other products are procured, stored, used, managed and disposed of in ways that prevent fires, exposure to or harm from these substances.

Hazard Recognition: identifying conditions or actions that may cause injury, illness or property damage

Health Promotion: promoting health-enhancing behavior and lifestyles to ensure fitness for duty.

Inspections/Audits: assessing safety, health risks from equipment, materials, processes, facilities or abilities.

Hazard Control and Prevention Technologies: applying engineering, behavioral, and work practice control technologies to reduce, eliminate, and prevent injury, illness, and property damage.

Record Keeping: maintaining safety and health information to meet government requirements, as well as to provide data for problem solving and decision making.

Regulatory Compliance: ensuring that mandatory safety and health standards are satisfied.

Training: providing employees and managers with the knowledge and skills necessary to recognize hazards and perform their jobs safely and effectively.

Summary of Tables

- Table 1 lists knowledge and skill (training) subjects which are pertinent to managing SI safety operations, including the time frames expected for completion of formal training.
- Table 2 lists suggestions for additional skill-building courses to evaluate overall Safety Coordinator technical, managerial and leadership competencies.
- Table 3 lists contact information for the courses and vendors listed in Table 1.

Questions or concerns about the applicability of any instructions or training courses proposed in lieu of those recommended in the tables should be referred to the appropriate OSHM liaison staff.

Implementation

Traditionally the team of SI Safety Coordinators comprise a range of professional backgrounds, from those with formal education in the safety sciences and/or professional certifications, to those with mostly on-the-job training and experience in safety program management.

It is expectation that Safety Coordinators hired or appointed after January 1, 2007, will already have acquired the majority of the proficiencies listed in the attached Table 1, and that their further professional development plans will include formal training for the remainder of required applicable operational topics. In these cases, the timeline goals of 3, 6, and 12-months can reasonably be attained.

However, Safety Coordinators in assigned positions as of 2006, particularly individuals with little or no formal training background in the safety disciplines, will be afforded a grace period to complete the attached training plan, on the following schedule:

- The courses required within 3 months can be completed in 6 months.
- The courses required within 6 months can be completed in 12 months.
- The courses required within 12-months can be completed in 18 months

Safety Coordinators and their supervisors will need to carefully plan a reasonable training schedule in order to balance the time-line goals presented here, with the expectations of their actual safety duties.

To maximize effectiveness, the courses are to be taken in priority order of their highest facility hazards and risks.

Table 1 - Safety Coordinator Training Plan

COURSE	OPERATIONAL TOPICS				SUGGESTED TRAINING COURSES (see Resource Key for vendor information)	
	CORE TOPICS	PRIORITY:	Required within 6 mos if applicable to operations	ADDITIONAL:		
SI Safety Policies: Understanding and application of SI safety policies, Safety Manual requirements, and SI injury/illness reporting requirements, including SI-AIRS process.	X	Required for ALL Coordinators within 3 mos of appointment	Required within 6 mos for ALL Coordinators	Required within 6 mos if applicable to operations	Required within 12 mos. if applicable to operations	Scheduled with OSHSEM: one-on-one orientation to SI Safety Policy and Program, and Instructions on new AIRS process
Supervisor Safety Course					Attend an OSHSEM-taught supervisor safety course.	
Basic Safety Program Management, including the following topics: (1) Understanding of applicable state, local and federal, incl. 29 CFR 1910 and 1960. (2) Development & implementation of safety programs (3) Identification of hazards, development of controls measures & evaluation of effectiveness (4) Development of program goals and objectives. (5) Inspections & investigations (6) Recordkeeping	X				OSHA Course 6010 Occupational Safety & Health Course for Other Federal Agencies NSC Principles of Occupational Safety and Health OSHA 2450/1989 Safety & health Management Guidelines Vendors: OSHA TI, OSHA-EC (local), NSC OR EQUIVALENT: Other possible vendors: ABS, ASSE, MFR1, various AF (armed forces) on line training. Additional Highly Recommended OSHA Course #511: Occ. H&S Standards for General Industry (best source: OSHA-MIRC local)	
Conduct Training: Ability to develop and present		X			Suggested train-the-trainer vendors: NSC	

training programs and to communicate effectively with staff at all levels.						Safety Training Methods: NESHT courses; OSHA 501 Trainer Course for Gen Ind., Teaching Techniques thru OSHA-NRC; GSA Contractor American Management Associates
Life Safety: Fundamental principles of life safety applicable to all facilities		X				NEPPA 101 (2-day, minimum course) OSHA 2070: Fire Protection & Life Safety Suggested Vendors: OSHA-TI, NEPPA, MOSH, OSHA, OSHA-EC, MFR1, VDL1
Fire Protection: Fundamentals of systems (sprinklers, etc) and impairment controls; course should address NEPPA 25 (ITM), 13 (Sprinklers), 51B (Hot work)						
Welding, Cutting, Brazing (including Hot Work Permitting)	X, if Coordinator is the Hot Work Permit Authorizing Individual		X, if Coordinator is NOT the Hot Work Permit Authorizing Individual			OSHA 3220 or equivalent Suggested Vendors: OSHA TI; OSHA-EC; NEPPA, MOSH, MFR1, VDL1
<p>FOR FOLLOWING: OSHA-Equivalent courses http://www.osha.gov/dcs/plote/index.html might also be offered by: OSHA- NRC, MFR1, NSC, NEPPA, ICC, AMA, MOSH, VDL1, LSI, ACS, USCG See attached "Resource Key"</p>						
Electrical Safety, including Lock-Out/Tag-Out		X				OSHA 3090 or equivalent
Personal Protective Equipment		X				MOSH, several courses; or as part of general industry regulations courses, such as OSHA Course #511: Occ: H&S Standards for General Industry (best source: OSHA-EC local)
Chemical Spill Response: OSHA-required "First Responder Awareness Level"		X				Taught by OSHEM/EMD.
Asbestos and Lead Hazard Awareness		X				Taught by OSHEM/EMD.

Working at Heights / Fall Protection				X		OSHA 3110 or equivalent
Machinery and Machine Guarding				X		OSHA 2040 or equivalent
Material Handling (powered ind trucks, etc)				X		Any above vendors or as part of general industry regulations courses, such as OSHA Course #511: Occ: H&S Standards for General Industry (best source: OSHA-EC local)
Cranes				X		OSHA 2080 or equivalent
Confined Space Entry				X		OSHA 2260 or equivalent
Laboratory Safety				X		LSI seminars ACS
Hazardous Materials, including flammable & combustible liquids Code (NFPA 35) and Compressed Gases (NFPA 55)				X		OSHA 2010 or equivalent
Boating, Diving, Maritime Safety				X		USCG certifications
Spray Finishing					X	OSHA 3100 or equivalent
Ergonomics					X	OSHA 2250 or equivalent
Introduction to Industrial Hygiene					X	OSHA 521 or equivalent
Radiation Safety					X	Courses taught by OSHEM.
RCRA Orientation to Hazardous Waste Mgmt					X	
Bloodborne Pathogen Control					X	
Construction Safety					X	
Fire Extinguisher Hands-on Training					X	

Table 2 - Additional Recommended Skill-Building Courses

Topic	Recommended Sources See Resource Key, last page of document
Respiratory Protection	OSHA Course 2220 (OSHA TI or EC) or OSHA EC
Local exhaust ventilation / HVAC Systems: design, maintenance, inspection	ACGIH Industrial ventilation course ICC MERHC OSHA 2210 (OSHA TI or EC)
OSHA 1910.120 emergency responder classes: * 24-hour First Responder Operations Level (Haz Mat Operator) * Hazardous Materials Technician * HAZWOPER, 40-hour	OSHA-EC, MFRI
Environmental Compliance	ABS ERC
Asbestos and Lead-Based Paint Abatement courses (supervisor, inspector, project designer)	Consult OSHEM for state certified trainer list
CPR-First Aid-AED Wilderness First Aid First Responder (EMS)	MFRI NSC – look up local training sites at http://train.nsc.org/tcd/TCDMain01.aspx American Heart Association, http://www.americanheart.org/presenter.jhtml?identifier=3012360 American Red Cross http://www.redcross.org
IAQ / Mold identification & remediation	ACGIH AMA AIHA OSHA 2330 (OSHA TI or EC)

Table 3 - Resource Key

ABS	ABS Consulting, www.absconsulting.com
ACGIH	American Conference of Governmental Industrial Hygienists www.acgih.org 1330 Kemper Meadow Drive, Suite 600; Cincinnati, OH 45250
ACS	American Chemical Society http://www.acs.org 1155 Sixteenth Street, NW; Washington DC, 20036
AF	Armed Forces (various) websites: http://www.safetycenter.navy.mil/training/index.asp http://www.swl.usace.army.mil/safety/index.html http://www.afsc.af.mil/organizations/education/amic.asp
AIHA	American Industrial Hygiene Association www.aiha.org /Content 2700 Prosperity Avenue, Suite 250; Fairfax, VA 22031
AMA	Aerosol Monitoring and Analysis, http://www.amatraining.com/default.asp?ID=37 1331 Ashton Road; Hanover, MD 21076
AM&A	American Management Association, http://www.amanet.org
ASSE	The American Society of Safety Engineers www.asse.org 1800 E Oakton St; Des Plaines, IL 60018
ERC	Environmental Resource Center www.ercweb.com/home/ 101 Center Pointe Drive; Cary, North Carolina 27513
FEMA	Federal Emergency Management Agency http://training.fema.gov/
ICC	International Code Council www.iccsafe.org 4051 Flossmoor Road, Country Club Hills, CA 60478-5795.
LSI	The Laboratory Safety Institute http://labsafetyinstitute.org/ 192 Worcester Road; Natick, MA 01760
MERHC	Mid-Atlantic Environmental Hygiene Resource Center www.mgi.org/n_mehrc.shtml
MFRI	Maryland Fire and Rescue Institute; University of Maryland www.mfri.org

Current as of November, 2009

	4500 Paint Branch Parkway; College Park, MD 20742
MOSH	http://www.dlr.state.md.us/labor/train.html Maryland Occupational Safety and Health (MOSH) - Training and Education 312 Marshall Avenue Suite 600 Laurel, Maryland;
NESHT	National Environmental, Safety and Health Training Association Neshta.org
NFPA	National Fire Protection Association (NFPA) Seminars www.nfpa.org 1 Batterymarch Park; Quincy, Massachusetts; USA 02169-7471
NSC	National Safety Council http://www.nsc.org/ 1121 Spring Lake Drive; Itasca, IL 60143-3201 <u>Local NSC Chapter</u> Chesapeake Safety Council http://www.chesapeakesc.org/ 17 Governor's Court, Suite 185; Baltimore, MD 21244
OSHA TI	Occupational Safety and Health Administration Training Institute http://www.osha.gov/dcsp/ote/index.html
OSHA EC	OSHA Education Centers, local sites across the country http://www.osha.gov/dte/edcenters/index.html
USCG	U.S. Coast Guard Office of Boating Safety http://www.uscgboating.org/
VDLI	Virginia Department of Labor and Industry – Consultative Services http://www.doli.virginia.gov/vosh_coop/vosh_osh_training.html

Current as of November, 2009