

CHAPTER 1 SAFETY AND ENVIRONMENTAL HEALTH PROGRAM

A. Policy.

1. The Coast Guard's policy is to provide Coast Guard personnel and their families safe, healthful places to work and live and to comply with applicable safety and health laws, regulations and directives. Individuals have a responsibility for their own safety and health. Commands are responsible for the safety and health of assigned members, dependants in Coast Guard housing, all persons aboard their facility and those who may be affected by their operations. Maintenance and Logistics Commands provide safety and health support to all commands in their areas of responsibility.
2. The Coast Guard's fundamental safety and environmental health principle, applicable at every level in the organization and for every mission or activity, is to continually manage the safety and environmental health risks confronting Coast Guard personnel in their professional and private lives to acceptable levels and never to accept unnecessary risks. This principle will be applied by identifying hazards, assessing their risk and controlling risks to acceptable levels, consistent with the mission or activity being performed. Reducing risks will benefit individual members and all levels of the Coast Guard organization by preserving mission readiness and by reducing fatalities, the incidence of injury and disease, and the loss of property.

B. Mission. The mission of the safety and environmental health support program is to ensure the safety and health of Coast Guard personnel, to preserve Coast Guard material resources, and to protect public lives and property from endangerment by Coast Guard operations. The program will accomplish these goals by establishing safety and environmental health policies, enforcing those policies, and providing certain resources necessary for implementing those policies.

C. Purpose. The purpose of this Manual is to promulgate safety and environmental health policies, standards and guidelines and define safety and environmental health responsibilities.

D. Scope. Safety and environmental health policies, standards and guidelines in this Manual apply to:

1. Coast Guard active duty military personnel, on and off-duty.
2. Coast Guard appropriated and non-appropriated fund civilian personnel, on-duty and/or on Coast Guard property.

3. Coast Guard Reserve personnel on active duty, active duty for training or inactive duty for training.
4. All Coast Guard afloat and ashore facilities and aircraft.
5. Coast Guard Auxiliary personnel and facilities under orders.
6. Dependents of Coast Guard military personnel on Coast Guard owned or leased property.
7. Non-appropriated fund activities and facilities.
8. Contractors performing Coast Guard work on government facilities. Although contractors are primarily responsible for providing safe working conditions for their employees and ensuring compliance with OSHA regulations, the Coast Guard has overall administrative responsibility for its facilities and is responsible, under Executive Order 12196 (EO 12196) and in accord with the Occupational Safety and Health Act, to take reasonable steps to correct, or to require the correction of, hazards of which it could reasonably be expected to be aware.

E. Authority.

1. EO 12196, Occupational Safety and Health Programs for Federal Employees, requires the Coast Guard to maintain a safety and occupational health program in accordance with the Occupational Safety and Health Act of 1970 for civilian employees (Occupational Safety and Health Administration (OSHA) 29 CFR 1960 Basic Program Elements for Federal Employees). Although Coast Guard military personnel and uniquely military equipment, systems, and operations are not covered by the Executive Order and OSHA, military personnel performing operations and activities not uniquely military, e.g., industrial activities, are included in the program by direction of the Commandant as provided in this Manual. (See also 1.G for further explanation of OSHA's relationship.)
2. The Coast Guard and Coast Guard personnel are subject to Executive Orders; Federal laws, regulations and directives; and certain state and local laws and ordinances.

F. General Program Description.

1. The fundamental safety and environmental health risk management process is a subset of the Coast Guard's overall risk management policy described in Operational Risk Management, COMDTINST 3500.3. It focuses on the identification of hazards to Coast Guard lives, health, missions and property; evaluation, categorization and determination of confidence level of identified risks; and the control or abatement of the risks to an acceptable level, consistent with the mission. Risk management is a continual process and is primarily an individual and unit responsibility, facilitated, where necessary, and monitored by safety and environmental health professionals. The three primary steps of the safety and environmental health risk management process are:

a. Identification of Hazards. The essential first step of the safety and environmental health risk management process is the identification of all hazards that threaten personnel, mission and property under a unit's cognizance. Hazards may be identified by observation at the unit or similar unit or by analysis of prior performance.

b. Risk Assessment. Risk assessment is a two-part process:

(1) Risk Evaluation. Risks may be evaluated by measurement, estimation by experienced personnel or comparison to historical data. Risk evaluation determines the probability a hazard may precipitate a mishap and the mishap's likely severity in terms of injuries, health effects and property damage.

(2) Risk Categorization.

(a) Unabated risks shall be categorized with a risk assessment code (RAC) that reflects a combination of the probability and likely severity of a mishap determined during the risk evaluation process. There shall be five levels of risk, described by RACs One through Five, with RAC One being the highest risk category and RAC Five being the lowest:

1. RAC One. An immediate and serious hazard that is likely to result in death or permanent total disability if not controlled. RAC One risks demand immediate cessation of the operation and abatement of the hazard.

2. RAC Two. A hazard requiring immediate control through the use of engineering controls, administrative procedures/work practices, or personal protective equipment (PPE). If feasible or practical, the hazards should be abated as soon as possible or within six months.
 3. RAC Three. A hazard requiring control through the use of engineering controls, administrative procedures/work practices, or PPE. If feasible or practical, the hazards should be abated within the normal unit work cycle or engineering cycle.
 4. RAC Four. A lesser risk requiring continuing surveillance to ensure the risk does not increase. Abatement is not required unless conditions change and require re-evaluation.
 5. RAC Five. A negligible risk. Abatement or surveillance not required.
- (b) RACs are determined using the criteria and charts contained in Enclosure (18) of this Manual. The estimated probability of a hazard leading to a mishap is determined using Charts 1 or 2 and the estimated severity of that mishap is determined using Chart 3. The risk assessment code is then found at the intersection of the probability and severity levels on Chart 4.
- c. Risk Control. Risk control is the process of developing and implementing measures to control each risk. The preferred priority is (1) engineering controls; (2) administrative procedures/work practices (e.g. training, procedures, signs); (3) the use of personal protective equipment or combinations of these measures. Interim controls may have to be implemented and maintained to control risk until more permanent controls can be established and the risk abated. Risk control is the overall goal of the safety and environmental health risk management process.

2. Safety and Environmental Health Risk Management Tools and Processes. Safety and environmental health risk management is an on-going process and principles that should become part of the organizational culture. However, there are certain formal tools available for use by units to manage risks and for superiors in the chain of command to oversee risk management activities. They include:
- a. Unit Profile. A unit profile is a description of a unit's physical environment, its personnel, its activities and its operations, prepared to facilitate support and oversight of the unit's safety and environmental health risk management processes. Unit profiles are prepared, maintained and updated by the supporting MLC. The profile shall include:
 - (1) Names and telephone numbers of key safety personnel.
 - (2) Description of physical plant.
 - (3) Description of all processes and operations involving recognized hazards.
 - (4) Operations, Evolutions and Functions Matrix (if available).
 - b. Coarse Risk Analysis. A coarse risk analysis is a tool for assessing the risks associated with a specific operation, process, item of equipment, or facility, using specialized software, trained risk assessors and experienced subject matter experts. Coarse risk analyses will normally be conducted on special risks identified by Headquarters program managers, safety and environmental health professionals or units and as designated by the Safety and Environmental Health Coordinating Board (SEHCB) or MLC (k)s. MLC personnel shall conduct the coarse risk with the assistance of subject matter experts from the field and/or higher echelons. The coarse risk analysis will categorize the risks associated with the operation being analyzed by assigning a risk assessment code, and it will determine a confidence level for the risk assessment categorization. It will suggest methods to control each risk, e.g., training, engineering controls, personal protective equipment, and administrative controls. Commandant (G-WKS) may specify a standard process and/or tools for conducting coarse risk analyses.

- c. Detailed Risk Analysis. Detailed risk analysis is a careful investigation of a specific and often unique operation, process or facility that requires in-depth analysis to assess risks, e.g., a particular industrial process. Industrial hygienists, safety and occupational health specialists and managers or environmental health officers will conduct detailed risk analyses.
- d. Unit Safety and Environmental Health Committees. Unit Safety and Environmental Health Committees are established to assist the Safety Officer in managing unit risks by identifying hazards, assessing risks and controlling risks. All units, except those units subordinate to a Group or MSO, shall have a unit safety and environmental health committee. Group or MSO subordinate unit representatives shall be included in Group or MSO safety and environmental health committees or shall, with permission of the Group or MSO, conduct unit-level safety and environmental health committees and forward minutes to the Group or MSO. Note: It is essential that parent and subordinate commands communicate and coordinate in policy and committee actions.
- e. Unit Inspections. See section 1.F.3.a. of this Manual.
- f. Special Emphasis Programs. Commandant (G-WKS) may direct measures to identify, assess or control specific risks including but not limited to:
 - (1) Aviation.
 - (2) Afloat Units.
 - (3) Environmental Health.
 - (4) Marine Safety
 - (5) Traffic.
 - (6) Firearms.
 - (7) Fire.
 - (8) Human Factors.
 - (9) Occupational Exposures.

- g. Operational Risk Management (ORM). Although ORM describes a decision-making process that is primarily geared for tactical operations, its processes are general enough for use by personnel involved in all Coast Guard activities, on and off duty. It contains some simple, easy-to-use risk assessment tools that may be applicable for non-operational safety and environmental health activities.
 - h. Safety and Environmental Health Checklists. Checklists designed for use by unit personnel are available via the intranet on the MLC (kse) websites to assist units in identifying safety and environmental health hazards and program deficiencies. Separate checklists are designed for afloat and shore-based units. They are divided into sections, all of which may not be applicable for a particular unit. Most checklist items are self-explanatory and do not require access to reference material or extraneous documentation. The checklists form an excellent foundation for annual and semiannual formal inspections or anytime a unit may wish to evaluate its safety and environmental health programs.
 - i. Employee Hazard Reporting. Employees, being the most familiar with their workplaces and processes, are often the most knowledgeable of their associated hazards. To take advantage of this intimate knowledge to identify hazards and, ultimately, control risks, employees are encouraged to report hazards and are protected from any retaliation that may arise as a consequence. Coast Guard units shall provide ample work time to report hazards and no Coast Guard member, employee, or contractor shall take adverse action against any person for reporting perceived hazards. Though employees are first encouraged to resolve the issue through the chain of command, reports of hazards may be made verbally, in writing or electronically via e-mail or a reporting template at either MLC's website
3. Program Oversight and Monitoring.
- a. Unit Inspections. Safety and environmental health are individual and unit responsibilities. The individual member and unit, therefore, are both responsible for identifying hazards, and the unit is primarily responsible for monitoring compliance with safe practices. Unit inspections are one of the tools the unit shall use to perform these functions. There are two types of unit inspections:

- (1) Routine Inspection. Supervisory personnel may conduct routine inspections in conjunction with material inspections or other normal workplace inspections. The objective is to identify physical hazards, such as missing guards, blocked exits, damaged electrical cords, etc. and take corrective actions.
- (2) Formal Unit Safety Inspection. Formal unit safety inspections are comprehensive, detailed inspections of a unit's safety and environmental health risk assessment processes as well as its spaces and equipment. The formal unit safety inspection shall be conducted at least once each year for all workplaces or more frequently at the discretion of the commanding officer or officer in charge. More frequent inspections shall be conducted in workplaces where high hazard operations and equipment may cause an increased risk of mishap, injury or occupational illness due to the nature of the work performed.
 - (a) Performed by unit personnel qualified to recognize hazards, evaluate risks and recommend general abatement procedures, e.g., trained Unit Safety Coordinator, Safety Petty Officer or Safety Officer. Units with no personnel trained to perform inspections may request assistance from cognizant MLC (k).
 - (b) Detailed inspection of machinery, spaces, procedures, and unit programs.
 - (c) Compliance-based inspection using appropriate sections of the unit safety and environmental health checklists promulgated by Commandant (G-WKS).
 - (d) Includes all spaces assigned to the unit and all processes conducted by the unit. Office spaces, shops, Coast Guard owned housing, vessels, aircraft, grounds, remote detachments, etc., of every unit shall be inspected.
 - (e) Formal inspections may be done in small components or in conjunction with other inspections over time as long as they are identified as SEH inspections (or findings having SEH implications); corrective action is taken; and the results are documented.

- b. Unit Safety and Environmental Health Risk Assessment Survey. Responsible MLCs shall periodically audit unit level safety and environmental health programs. A major objective of MLC (kse) unit visits shall be implementation and support of risk management processes in all unit operations. Unit safety and environmental health surveys shall include the following items, if appropriate to the unit's mission and facilities:
- (1) Review and update of unit profile.
 - (2) Review of unit mishap history, outstanding hazard reports, hazardous condition notifications, and reports of previous safety and environmental health surveys.
 - (3) Review of unit's report of most recent completion of standard safety and environmental health checklists.
 - (4) Review of effectiveness of unit's safety and environmental health risk management program.
 - (5) Review of targeted program effectiveness, e.g., operational risk management (ORM), hazard communication program, respiratory protection program, etc.
 - (6) Assessment of unit's extent of integrating ORM concepts into key daily activities and processes and into the unit safety and environmental health program, including a review of compliance with requirements of Team Coordination Training, COMDTINST 1541.1.
 - (7) Assessment of effectiveness of previously identified safeguards.
 - (8) Assistance to unit with problems revealed by checklists, mishaps, etc.
 - (9) Assistance with training.
 - (10) Detailed risk analyses, if required.
 - (11) Spot or targeted inspections to determine overall program effectiveness.
 - (12) Assignment of risk assessment codes for all identified risks.

- (13) Preparation of a written report of findings and recommendations within 30 days to be provided to the Commanding Officer, with copies to the next higher level in the chain of command to Commandant (G-WKS) and to other commands that may be responsible for controlling or eliminating identified risks.

c. Headquarters MLC Safety and Environmental Health Program Evaluation. Commandant (G-WKS) shall evaluate MLC safety and environmental health support programs every two years. The program evaluation shall include but not be limited to:

- (1) Compliance with the requirements of this Manual.
- (2) Fundamental framework for providing safety and environmental health risk management support and oversight to units in their areas of responsibility.
- (3) Unit safety and environmental health risk assessment surveys.
- (4) Safety and environmental health data management systems.
- (5) Safety and occupational health analyses for planning proposals and engineering designs.
- (6) Incident response support.
- (7) Special emphasis programs.
- (8) Ad hoc assistance to field units.

d. Safety and Environmental Health Coordinating Board. The Safety and Environmental Health Coordination Board shall be comprised of the Chief, Office of Safety and Environmental Health (G-WKS); the Chief, Aviation Safety Division (G-WKS-1); the Chief, Shore Safety and Environmental Health Division (G-WKS-2); the Chief, Human Factors Division (G-WKS-3); the Chief, Afloat Safety Division (G-WKS-4); the Chiefs, Safety, Environmental Health, and Food Service Branches, MLC Atlantic and Pacific. The Chief, Office of Safety and Environmental Health shall chair the Coordinating Board. The Board will discuss and evaluate matters of safety and environmental health interest, charter committees to study specific issues and prioritize safety and environmental health issues.

G. Occupational Safety and Health Administration (OSHA).

1. Executive Order 12196 (followed by 29 CFR 1960 Basic Program Elements for Federal Employees) apply to Coast Guard civilian employees and to operations, equipment and systems that are comparable to those of industry in the private sector such as vessel, aircraft and vehicle repair, overhaul, and modification; construction; supply services; civil engineering; medical services and office work. They apply to all working conditions of Coast Guard civilian employees except those involving uniquely military equipment, systems, and operations. Uniquely military workplaces include cutters and aircraft. Uniquely military operations include activities such as search and rescue and the operation of cutters and aircraft. Although exempted from OSHA standards by the Occupational Safety and Health Act of 1970 and Executive Order 12196, Coast Guard military personnel, except where engaged in uniquely military operations, shall also comply with and units shall enforce OSHA standards where practicable or utilize alternate occupational safety and health standards that are as stringent as OSHA standards. OSHA shall be authorized to conduct announced or unannounced inspections and evaluations at Coast Guard sites employing civilian personnel engaged in other than uniquely military activities. Except for uniquely military workplaces and operations or those where only military personnel are employed, OSHA's inspectors and evaluators are authorized to:
 - a. Enter, without delay, during regular work hours, any building, installation, facility construction site, or other area, workplace or environment where work is performed by Coast Guard civilian employees or contract employees.
 - b. Inspect and investigate, during regular working hours and at other reasonable times, all pertinent conditions, structures, machines, devices, equipment and materials.
 - c. Privately question any civilian employee, any supervisory employee and/or any official in charge.
 - d. Formally report on unsafe conditions encountered by civilian employees.
2. Employee Rights. The Occupational Safety and Health Act guarantees civilian employees and employee representatives the following rights:
 - a. Access to copies of Coast Guard standards, procedures and injury and illness statistics.

- b. Right to report unsafe or unhealthful working conditions to appropriate officials and to have their name kept confidential, if requested.
- c. Right to assist in conducting safety and health inspections.
- d. Right to request, anonymously if desired, inspection of any work area alleged to possess unsafe or unhealthful conditions.
- e. Right to appeal, through the chain of command to Commandant (G-WK) and ultimately to Commandant (G-CCS) if they disagree with the disposition of unsafe or unhealthful conditions.
- f. Right to appeal to the Office of Federal Agency Safety and Health Programs, Occupational Safety and Health Administration, Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210, if all means of resolving an alleged unsafe or unhealthful condition within the Coast Guard have been exhausted.

Note: Agency safety and health programs must have provisions for responding to employees reports of unsafe or unhealthful working conditions and the Secretary of Labor encourages employees to use agency procedures as the most expeditious means of achieving abatement of hazardous conditions. It is recognized, however, that employee reports may be received directly by the Secretary.

- g. Right to be protected from discrimination, restraint, interference, coercion, or reprisal as a result of participation in risk management processes.

H. Safety and Environmental Health Risk Management Standards.

- 1. Coast Guard Instructions and Directives. Coast Guard safety and environmental health instructions and directives shall prescribe Coast Guard safety and environmental health risk management processes, activities and standards and shall have precedence over all other standards. Coast Guard instructions may incorporate nationally recognized consensus standards as well as standards or instructions from other agencies, e.g., Department of Defense, by reference.

Note: For civilian employees, the more stringent of Coast Guard or OSHA standards will apply.

2. Federal Laws and Regulations. Federal laws and regulations, where applicable, govern the Coast Guard. Coast Guard instructions and directives shall meet or exceed compliance with Federal laws and regulations. Although military personnel and uniquely military operations are exempted from OSHA jurisdiction by Executive Order 12196, OSHA standards contained in Title 29 of the Code of Federal Regulations shall apply to Coast Guard operations and functions and to all personnel, where practicable, including operations, equipment and systems that are comparable to those of industry in the private sector such as vessel, aircraft and vehicle repair, overhaul, and modification; construction; supply services; civil engineering; medical services and office work.
3. Consensus Standards. Numerous associations, institutes and organizations publish consensus standards and codes designed to codify safe practices or designs within an industry or field of employment. Examples of these organizations include the American National Standards Institute (ANSI), National Fire Protection Association (NFPA), American Conference of Governmental Industrial Hygienists (ACGIH), NSF International, the National Institute for Occupational Safety and Health (NIOSH) and others. The National Technology Transfer and Advancement Act of 1995 (Public Law 104-113) requires Federal agencies to adopt consensus standards where practicable. Consensus standards may be made mandatory by reference in a Coast Guard directive or, in the event no Coast Guard directive or standard exists, shall be used as guidelines and standards of good practice.
4. Specific Service-wide Standards. The following standards are adopted for service-wide use:
 - a. Exposure Limits. Threshold limit values (TLV) refer to airborne concentrations of substances or to energy intensities to which it is believed that nearly all workers may be repeatedly exposed 8 hours per day, 40 hours per week, day after day without adverse effect. These values, determined and published by the American Conference of Governmental Industrial Hygienists (ACGIH), are based on the most current toxicological data and workplace experience available and provide exposure guidelines. OSHA Permissible Exposure Limits (PEL), as published in 29 CFR 1910.1000, are federal standards and thus the law. OSHA PELs or ACGIH TLVs, whichever is more stringent, shall be considered the Coast Guard workplace standards for exposure to chemical substances and physical energies, except as specifically addressed in current Coast Guard directives. Unprotected Coast Guard personnel shall not be exposed to hazardous chemical substances or physical energies exceeding these limits.

- b. Ventilation Design. Ventilation systems used for the control of hazardous materials in the work environment shall be designed in accordance with requirements of the most recent edition of the Industrial Ventilation Manual published by ACGIH, and OSHA standards published in 29 CFR 1910. Air flow and air capacity specifications for these systems shall be those cited in the Industrial Ventilation Manual.
- c. Noise Standard. For Coast Guard, and in accordance with the ACGIH TLV, continuous noise levels at or above 85 dBA Time-Weighted Average (TWA) and impact noises exceeding 140dBA are considered hazardous. Noise exposures shall be calculated using a 3 dBA exchange rate. See section 1.P.24 of this Manual for the definition of TWA.

I. Safety and Environmental Health Organizational Roles and Responsibilities.

- 1. Department of Transportation. The Department of Transportation has delegated most Coast Guard safety and environmental health responsibilities to the Commandant. The Department acts as an intermediary between the Department of Labor and OSHA on most safety and environmental health matters. The Department also requires all DOT operating administrations to participate in the DOT Safety Council, a forum for promoting the safety of DOT employees and the public. Normally, the Director of Health and Safety, (G-WK), represents the Coast Guard at the DOT Safety Council, with support from (G-WKS).
- 2. Commandant.
 - a. Designated Agency Safety and Health Official (DASHO). The Chief of Staff (G-CCS) is the Designated Agency Safety and Health Official for the Coast Guard and is responsible for:
 - (1) Developing and promulgating safety and environmental health risk management and operational risk management policy.
 - (2) Establishing safety and environmental health risk management standards for equipment, systems and operations that are military unique or for which OSHA or appropriate consensus standards do not exist.
 - (3) Providing adequate resources to support safety and environmental health risk management policy and processes.

- (4) Implementing procedures for evaluating the effectiveness of safety and environmental health and operational risk management processes throughout the Coast Guard.

- b. Support Program Director for Safety and Environmental Health Risk Management. The Director of Health and Safety (G-WK) is the support program director for safety and environmental health risk management, and is responsible for assisting the Chief of Staff (G-CCS) in carrying out the DASHO duties.

- c. Support Program Manager for Safety and Environmental Health Risk Management. The Chief, Office of Safety and Environmental Health (G-WKS) is the support program manager for safety and environmental health risk management, and is responsible for:
 - (1) Providing staff support to the Chief of Staff (G-CCS) and the Director of Health and Safety (G-WK) in managing safety and environmental health and operational risks, including:
 - (a) Developing safety and environmental health risk management policy.
 - (b) Managing the safety and environmental health portion of the AFC56 training account and selected special emphasis training, including assessing and defining training requirements, curriculum development and specific course quota management.
 - (c) Convening Class A and B Mishap Analysis Boards, when warranted, and managing the mishap analysis process.
 - (d) Collecting and analyzing risk management data.
 - (e) Participating in the programming, planning and budgeting process to obtain or reallocate safety and environmental health risk management resources.
 - (f) Conducting special studies and evaluations, including but not limited to prototype or unique equipment, processes, operations and procedures.

- (g) Managing special emphasis areas, including but not limited to:
 - 1. Aviation safety
 - 2. Marine safety
 - 3. Environmental health
 - 4. Fire safety
 - 5. Traffic safety
 - 6. Human factors
 - 7. Afloat safety
 - 8. Occupational Medical Surveillance and Evaluation
- (h) Forming partnerships and alliances to leverage resources and maximize risk management effectiveness.
- (i) Conducting Headquarters MLC Safety and Environmental Health program evaluations and special inspections.
- (j) Reviewing major acquisition planning proposals and participating on matrix design and configuration control boards. (Includes acting as a voting member on all cutter and boat Configuration Control Boards.)
- (k) Providing specialized expertise to field units.
- (l) Representing or providing support to Coast Guard representatives to the DOT Safety Council.
- (m) Convening the Safety and Environmental Health Coordinating Board.
- (n) Establishing safety and environmental health priorities and coordinating efforts to address them.

3. Area and District Commanders. Area and district commanders are responsible for:
 - a. Practicing operational risk management for all operations under their operational control.
 - b. Complying with responsibilities for supporting Operational Risk Management as described in Operational Risk Management, COMDTINST 3500.3.
 - c. Implementing unit level risk management at Area and District Headquarters.
 - d. Ensuring compliance, by units within their chains of command, with Coast Guard safety and environmental health directives, as implemented by the designated regional safety and health manager.
4. MLC Commanders. MLC Commander (k) are Chief, Health and Safety and provide oversight and resources for the Safety and Environmental Health Program within their area of responsibility.
5. MLC Support Program Manager for Safety and Environmental Health Risk Management. The Chief, Safety and Environmental Health, MLC (kse), is designated the regional safety and health manager and is responsible for providing the necessary support and direction to implement an effective safety and environmental health program at all districts, area units and headquarters units located within their organizational and geographic area of responsibility. These responsibilities include, but are not limited to:
 - a. Developing a framework to support Area, MLC and District units, and headquarters units without full time safety and health staff in meeting their safety and environmental health program responsibilities.
 - b. Preparing and maintaining unit safety and environmental health profiles as described in section 1.F.2.a. of this Manual.
 - c. Conducting unit safety and environmental health risk assessment surveys, as outlined in section 1.F.3.b. of this Manual, for: (a) Area units on behalf of the Area Commander; (b) district units on behalf of district commanders; and (c) headquarters units on behalf of Commandant (G-CCS). Unit safety and environmental health risk assessment surveys shall be conducted:

- (1) Annually for high-risk units, including Area Cutters, Integrated Support Commands, Marine Safety Offices, buoy tenders, air stations and the Yard.
 - (2) At least triennially for all other units. More frequent risk assessment surveys may be necessary at units with high personnel turnover or short tours of duty to ensure program continuity.
- e. Providing safety and environmental health risk management advice and facilitating the integration of operational risk management, as necessary.
 - f. Implementing and maintaining a hazardous condition notification (HCN) tracking database meeting the requirements of enclosure (1) to this Manual.
 - g. Implementing and maintaining an employee hazard reporting procedure and log meeting the requirements of enclosure (1) to this Manual.
 - h. Implementing and maintaining a mishap investigation and reporting database meeting the requirements of Chapter 3 to this Manual.
 - i. Implementing and maintaining an industrial hygiene sampling database meeting the requirements of enclosure (8) to this Manual.
 - j. Reviewing engineering designs to ensure compliance with safety and environmental health laws and regulations.
 - k. Conducting detailed safety and environmental health risk assessment surveys and studies as described in section 1.F.2.c. to this Manual.
 - l. Reviewing employee hazard notices and investigating these notices when necessary.
 - m. Providing technical assistance to units on request.
 - n. Managing safety and environmental health training programs specified by Commandant (G-WKS), including quota management, slate preparation, vendor selection and management. See section 1.N to this Manual.

- o. Nominating issues of highest safety and environmental health priorities.
 - p. Providing a representative to the Safety and Environmental Health Coordinating Board when convened by Commandant (G-WKS). See Section 1.F.3.d to this Manual.
6. Group or MSO Commanders. Group or MSO commanders are responsible for:
- a. Ensuring that safety and environmental health and operational risk management processes are utilized to reduce and maintain risks at acceptable levels throughout the group.
 - b. Complying with responsibilities for supporting Operational Risk Management as described in Operational Risk Management, COMDTINST 3500.3.
 - c. Ensuring compliance with the applicable Federal and Coast Guard safety and environmental health standards and regulations of section 1.H. to this Manual.
 - d. Appointing a unit Safety Officer, normally the Executive Officer, and if warranted, a Unit Safety Coordinator. See sections 1.J.3. and 2.J.5. to this Manual.
 - e. Implementing a group safety and environmental health risk management framework covering all subordinate units in accordance with this Manual, including but not limited to:
 - (1) Group and subordinate unit safety and environmental health training as outlined in section 1.N. to this Manual.
 - (2) A group safety and environmental health committee consisting of at least the group safety officer, group safety coordinator and representatives from all group units. See section 1.F.2.d. to this Manual.
 - (3) Specific hazard related programs, e.g., respiratory protection, confined space, hazard communication, covering all group units where the specific hazards exist.
 - (4) Conducting hazard assessments and providing all appropriate personal protective equipment.

- (5) Coordination of MLC support to group units. See section 1.I.4. to this Manual.
 - (6) Conducting annual and semi-annual inspections of the group and subordinate units as described in Section 1.F.3.a. to this Manual.
 - (7) Investigation of group and subordinate unit mishaps and review of unit mishap reports as outlined in Chapter 3 to this Manual.
7. Unit Commanding Officers. Headquarters unit commanding officers and unit commanding officers and officers in charge not subordinate to a Group or MSO shall be responsible for:
- a. Ensuring that safety and environmental health and operational risk management processes are utilized to reduce and maintain risks at acceptable levels throughout the command.
 - b. Complying with responsibilities for supporting Operational Risk Management as described in Operational Risk Management, COMDTINST 3500.3.
 - c. Ensuring compliance with applicable Federal and Coast Guard safety and environmental health standards and regulations of section 1.H. to this Manual.
 - d. Appointing a unit Safety Officer, normally the Executive Officer, and, if warranted, a Unit Safety Coordinator. See sections 1.J.3. and 1.J.5. to this Manual.
 - e. Implementing a unit safety and environmental health risk management program, including but not limited to:
 - (1) Unit safety and environmental health training as outlined in section 1.N. to this Manual.
 - (2) A unit safety and environmental health committee consisting of at least the unit safety officer, unit safety coordinator and representatives from the unit. See section 1.F.2.d. to this Manual.

- (3) Specific hazard related programs, e.g., respiratory protection, confined space, hazard communication, covering all group units where the specific hazards exist.
- (4) Conducting hazard assessments and providing all appropriate personal protective equipment.
- (5) Coordination of MLC support to the unit. See section 1.I.4. to this Manual.
- (6) Conducting annual (or more frequent if required) inspections of the unit as described in Section 1.F.3.a. to this Manual.
- (7) Investigation of unit mishaps and review of unit mishap reports as outlined in Chapter 3 to this Manual.

8. Supervisors and Managers. Supervisors and managers of other employees shall:

- a. Apply applicable risk management processes to reduce and maintain safety and environmental health and operational risks at acceptable levels, both on and off duty
- b. Seek additional guidance from superiors in the chain of command when risks associated with a mission seem unnecessary or exceed the commander's intent.
- c. Ensure their employees are provided adequate training on the hazards and operations of their work processes and equipment.
- d. Conduct daily walk-through of active work areas, where feasible.

9. Individual Members and Employees. Individual members and employees shall:

- a. Apply applicable risk management processes to reduce and maintain safety and environmental health and operational risks at acceptable levels, both on and off duty.
- b. Seek additional guidance from the superiors in the chain of command when risks associated with a mission seem unnecessary or exceed the commander's intent.

- c. Comply with applicable Federal and Coast Guard safety and environmental health standards and regulations.

J. Safety and Environmental Health Personnel. The following personnel will support the safety and environmental health program:

1. Commandant (G-WKS) shall be staffed with personnel to support the safety and environmental health responsibilities of Commandant (G-CCS) and (G-WK).
2. MLC (kse) shall be staffed with personnel to support the safety and environmental health responsibilities of the MLC commander, including:
 - a. MLC Personnel. MLC personnel manage MLC safety and environmental health programs, provide advice to units, conduct safety and environmental health risk assessment surveys and unit support visits and other duties necessary to support the safety and environmental health responsibilities of the MLC commander.
 - b. MLC Detached Safety and Environmental Health Officers (SEHO). Detached safety and environmental health officers shall be sited remote from the MLC's at Integrated Support Commands to provide convenient and timely safety and environmental health services to the field. Detached officers shall make their services available to units in their geographic area of responsibility in accordance with the following priorities:
 - (1) Support of Marine Safety units.
 - (2) Support of respective ISC commander.
 - (3) Support of Area units.
 - (4) Support of District units.
 - (5) Support of Headquarters units.
 - (6) Other requested support and consultation work in their respective geographic areas of responsibility.

(7)

- c. Safety and Environmental Health (SEH) Technicians. SEH Technicians are senior Health Services Technicians or Marine Science Technicians collocated with SEHOs. They shall assist the SEHOs in providing convenient and timely safety and environmental health services to the field.
3. Unit Safety Officers. Commanding officers and officers in charge appoint unit Safety Officers. Coast Guard Regulations specify that executive officers or XPOs shall be designated in writing as safety officers of afloat units. Except for aviation units and units subordinate to groups, shore unit executive officers and XPOs shall also be designated in writing as the unit's safety officer. Safety officers shall be responsible to the commanding officer or officer in charge for carrying out the unit safety and environmental health risk management processes in accordance with this Manual and MLC policies. Group safety officers shall be designated as the safety officer for all subordinate units and have cognizance over safety and environmental health matters for subordinate units.
4. Aviation Safety Officers. The terms aviation safety officer and flight safety officer are synonymous. Each aviation command shall have an assigned or appointed flight safety officer to advise and assist the commanding officer in matters pertaining to aviation safety, and particularly to manage the command's risk management processes. Specific duties of the aviation safety officer as well as the application procedure and qualification requirements are described in Chapter 2 of this Manual.
5. Unit Safety Coordinators. At units not subordinate to a group and assigned no primary duty safety petty officer, at least one unit safety coordinator (USC) shall be appointed to assist the safety officer in carrying out the unit safety and environmental health risk management processes in accordance with this Manual. Groups may direct subordinate units to assign unit safety coordinators to assist the group safety officer in carrying out his/her safety and environmental health risk management duties. USCs shall attend the Unit Safety Coordinator Course, G-KSE-060, before or as soon as possible after designation as a USC.
6. Preventive Medicine Technicians Assigned to a Clinic. Independent duty preventive medicine technicians (PMT) are Health Services Technicians specially trained to provide environmental health services, including water and waste water management, food service sanitation, thermal stress management, hearing conservation, and pest management. Independent duty PMTs are assigned to selected clinics and are available to provide services to units served by the clinic.

7. Primary Duty Safety Petty Officers. Marine Science Technicians have been assigned to selected units to assist the safety officer in carrying out the unit safety and environmental health risk management processes.
 8. Industrial Hygienists. Industrial hygienists are civilian employees in the GS-690 series or military officers trained in the science and art of recognition, evaluation and control of environmental factors or stresses arising from the workplace which may cause sickness, impaired health or significant discomfort or inefficiency. Industrial hygienists are assigned to Commandant (G-WKS), MLCs, the Yard and other units with significant environmental health risks.
 9. Safety and Occupational Health Specialists and Managers. Safety and Occupational Health Specialists and Managers are civilian employees in the GS-018 series or military officers assigned full-time safety and environmental health duties. They are assigned to Commandant (G-WKS), MLCs, or other units with relatively high risks.
 10. Safety and Occupational Health Coordinators. Safety and occupational health coordinators are military personnel assigned to Marine Safety Offices who, as a collateral duty, manage risks inherent in the marine safety programs and especially to manage risks at marine safety and environmental incidents.
- K. Safety and Environmental Health Information Resource Management. Information is an essential element of risk management programs. Safety and environmental health managers rely on internet resources, compliance checklists, data and automated systems to identify historical hazards, determine occupational disease and mishap trends, comply with Federal law, evaluate and quantify risks, manage abatement and control programs, archive information on occupational exposures, monitor units for compliance with safety and environmental health program directives, assess the effectiveness of control and abatement measures, determine costs of mishaps and occupational disease, and distribute information to users. Units and commands may use locally developed automated tools, and a number of automated systems have been developed for Coast Guard-wide use, including:
1. Mishap Data System. The Mishap Data System provides a means of reporting accidental injury, illness and property damage and analyzing mishap data.
 2. Hazardous Condition Notification Systems (HCN). HCN provides a means of reporting and monitoring safety and environmental health hazards reported by employees or discovered through the risk assessment processes.

3. Industrial Hygiene Management Information System (IHMIS). IHMIS provides a means to collect and analyze chemical and physical energy exposure data and hazardous material data.
 4. Hazardous Material Information and Reporting System (HMIRS). HMIRS provides units with hazardous materials information and management processes. HMIRS is available on compact disk (vessels only) and via the Internet.
 5. Unit Safety and Environmental Health Checklists. These checklists are guides to be used by safety officers, unit safety coordinators and others for evaluating safety and environmental health programs and identifying safety and environmental health hazards.
 6. Aviation Incident and Accident Tracking System (AVIATRS). AVIATRS is a system for reporting and tracking aviation and aviation-related mishaps, recommendations and corrective actions.
 7. Occupational Medical Surveillance and Evaluation Program (OMSEP). The Occupational Medical Surveillance and Evaluation Program (OMSEP) utilizes a database to catalog exposure and medical examination data on members enrolled in OMSEP.
 8. Unit Profile Database. Section 1.F.2.a. of this Manual describes the unit profile. The unit profile database captures and contains information on unit safety and health personnel and descriptions of unit operations and processes.
 9. Other Internet Resources. The Internet has provided wide access to internal Coast Guard instructions and safety information. The MLC (kse) and Commandant (G-WK) websites provide safety and environmental health information and policies. External to the Coast Guard, other Federal agencies and private organizations provide regulatory information, consensus standards, guidance and recommended practices. OSHA, NIOSH, ACGIH, EPA, DOT, ANSI, NFPA, and DoD Service Safety Centers are just some examples.
- L. Field Inputs to Program Revision. Field units are encouraged to provide constructive comments and suggestions to improve safety and environmental health risk management processes. Forward recommendations through the chain of command to Commandant (G-WKS).

- M. Waivers. This instruction prescribes safety and environmental health risk management processes for use Coast Guard-wide. In unusual circumstances where the provisions of this instruction may be impossible or impractical or in instances where commands may wish to implement and evaluate locally developed processes with the objective of improving the Coast Guard's safety and environmental health program, the Commandant may consider waiving specific portions. Commands shall forward all requests for waivers through the chain of command and via the respective MLC to Commandant (G-WKS), specifying the item(s) of the instruction covered by the request, accompanied by a description of the requested alternative, a justification for the request and the requested time period, not to exceed two years.
- N. Training. Training is considered an integral part of any safety and environmental health risk management program. Training, whether formal or informal, is a prerequisite to recognizing hazards, assessing risks and controlling them. Safety and environmental health training ranges from brief on the job training by supervisors or more experienced co-workers to lengthy formal training schools. Formal training responsibilities include:
1. Headquarters (G-WKS) training responsibilities shall include the following:
 - a. Establishing courses and promulgating course descriptions in COMDTNOTE 1540 located on the Training Quota Management Center (TQC) website.
 - b. Collecting and analyzing training course requirements from the MLC (kse)s.
 - c. Prioritizing quota requests.
 - d. Participating in G-WTT AFC56 Prioritization Panel to secure quotas and funding for safety and environmental health courses.
 - e. Managing certain courses directly and supervising MLC course management.
 2. MLC (kse) training responsibilities include the following:
 - a. Advising Commandant (G-WKS) of emerging training requirements.
 - b. Collecting training course requirements from field activities.

- c. Collating and summarizing field training requirements and advising Commandant (G-WKS) of field training needs necessary to manage the Coast Guard-wide training program.
 - d. Managing individual courses, including contracting with vendors, selecting students, initiating orders via the appropriate training management systems or by preparing slates, approving substitutions and monitoring course applicability and quality.
 - e. Providing instructors and training at field units as required.
3. Unit training responsibilities include the following:
- a. Providing general safety and environmental health training, e.g., motor vehicle safety, respiratory protection, hazard communication for workplace materials, operational risk management, etc., as an integral part of the command safety program.
 - b. Requesting training support from the MLC (kse) as needed.
 - c. Requesting specific safety and environmental health Class C training courses for members as required for their assigned duties.
 - d. Documenting attendance at required training courses, including dates, topics, length, instructor(s), and syllabus or other source of topic instruction, in a manner that permits ready review of training status.

O. Definitions.

1. Annual Unit Safety Inspection. A comprehensive, detailed inspection of a unit's safety and environmental health programs, spaces and equipment by a person or persons trained in the recognition, evaluation and control of risks.
2. Coarse Risk Analysis. A method of analyzing and assessing risks using trained facilitators, experienced subject matter experts and software tools.
3. Consensus Standards. Consensus standards are standards and codes developed by knowledgeable personnel of a profession, industry or discipline and published by an association, institute or organization to codify safe practices or designs. Consensus standards may be made mandatory by reference in a Coast Guard directive or, in the event no Coast Guard directive or standard exists, shall be used as guidelines where applicable.

4. Designated Agency Safety and Health Official (DASHO). The DASHO is the individual who is responsible for the management of the safety and health program within an agency, and is so designated by the head of the agency in accordance with the provisions of 29 CFR 1960.6 and Executive Order 12196.
5. Detailed Risk Analysis. A careful investigation of a specific operation, process, facility or piece of equipment to assess risks.
6. Employee. Any person employed or required to work for the Coast Guard, including members of the Coast Guard Reserve and Coast Guard Auxiliary when performing Coast Guard activities, without regard for compensation.
7. Formal Unit Safety Inspection. An inspection performed at least annually (or semi-annually for high risk operations) by unit or MLC personnel qualified to recognize hazards, evaluate risks and recommend general abatement procedures, e.g., trained Unit Safety Coordinator or MLC safety professional. The formal unit safety inspection includes all machinery, spaces, procedures, and unit programs, using appropriate sections of the unit safety and environmental health checklists promulgated by Commandant (G-WKS). High hazard operations and equipment shall be inspected more frequently.
8. Hazard. Any real or potential condition that could cause death, injury or occupational illness to personnel; damage to or loss of property; or mission degradation.
9. Headquarters MLC Safety and Environmental Health Program Evaluation. A biennial evaluation of an MLC's safety and environmental health support program and risk management processes by Commandant (G-WKS).
10. High Hazard Operations and Equipment. Workplaces where there is an increased risk of mishap, injury, or occupational illness due to the nature of the work performed. These workplaces may be determined by regulatory requirements, Coast Guard instruction or procedures, consensus standards, recommended practices, guidance, and individual command hazard identification. Such workplaces include those conducting refueling and heavy industrial operations; using heavy equipment; and using, handling or storing significant quantities of hazardous materials. Specific operations including but not limited to extensive confined space entry, hot work, working aloft, material and weight handling and machinery operation may fall into this category. Even climatic conditions may influence this determination. What may be routine in warm climates may present higher hazards in cold climates.

11. Industrial Hygiene. The science and art devoted to the anticipation, recognition, evaluation and control of those environmental factors or stresses arising from the workplace which may cause sickness, impaired health and well-being, or significant discomfort and inefficiency, or which could adversely affect the Coast Guard's mission capability.
12. Inspection. A comprehensive survey of all or part of a workplace in order to detect safety and environmental health hazards.
13. Mishap. An unplanned, unexpected, or undesirable event or series of events resulting in death, injury, occupational illness, or damage to or loss of materiel. For civilian employees, any occupational illness or injury reported on a Form CA-1 or CA-2 to the Office of Worker's Compensation, Department of Labor, is a recordable mishap and shall be reported via the Mishap Reporting System.
14. Operational Risk Management. A continuous, systematic process of identifying and controlling risks in all Coast Guard operations and activities by applying appropriate management policies and procedures as described in Operational Risk Management, COMDTINST 3500.3. This process includes detecting hazards, assessing risks, and implementing and monitoring risk controls to support effective, risk-based decision-making
15. Probability. The likelihood that a specific event will occur.
16. Risk. The chance of personnel injury or death and/or property damage or loss. Risk is generally a function of the probability that a hazard will lead to an undesirable event and the likely severity of that event.
17. Risk Assessment. The systematic process of evaluating the level of risk associated with a hazard, categorizing the risk and assigning a confidence level to the categorization.
18. Risk Assessment Code. A code that describes a risk as being in one of five categories according to its severity and probability.
19. Risk Management. The systematic process of maintaining risks at acceptable levels. Some risks are inherent in everyday life and the Coast Guard mission, but risks without a commensurate return in terms of real benefits are to be avoided. The GENERAL risk management process includes hazard identification, risk assessment and risk control or abatement. Control or abatement of safety and environmental health risks is the objective of the Coast Guard's safety and environmental health program.

20. Routine Inspections. Inspections performed by unit personnel, possibly in conjunction with material inspections, to identify safety and environmental health hazards.
21. Safety Professionals. Safety and Occupational Health Specialists and Managers, Industrial Hygienists and military officers trained in those disciplines whose primary duties include oversight or support of risk management activities.
22. Severity. The expected consequences of an event in terms of injury, damage or impact on mission.
23. Special Emphasis Programs. Programs implemented to control a specific group of risks, e.g., aviation, vessels, environmental health, fire and traffic.
24. TWA (Time-Weighted Average). The average concentration of a chemical substance or physical energy measured or calculated for an 8-hour workday and 40 hour workweek.
25. Uniquely Military. Military equipment, systems and operations that are unique to the national defense mission such as military vessels, aircraft, weapons, operations of cutters and aircraft, search and rescue operations, associated research and development activities, and operations under emergency conditions. Operations, equipment and systems that are comparable to those of industry in the private sector such as vessel, aircraft and vehicle repair, overhaul, and modification; construction; supply services; civil engineering; medical services and office work are not uniquely military.
26. Unit Profile. A unit profile is a description of a unit's physical environment, its personnel, its activities and its operations, prepared by MLC personnel to facilitate support and oversight of the unit's safety and environmental health program.
27. Unit Safety Coordinator. Member assigned collateral duties by unit to assist in unit safety programs. Unit Safety Coordinator shall attend Unit Safety Coordinator training
28. Unit Safety and Environmental Health Committee. A committee to assist the unit safety officer in identifying and controlling safety and environmental health risks.

29. Unit Safety and Environmental Health Risk Assessment Survey. A periodic audit of unit level safety and environmental health risk management processes by the responsible MLC.

30. Workplace. The physical location where Coast Guard work is performed. Workplaces include shore facilities, vessels, aircraft, and anywhere on land or water not owned by the Coast Guard where Coast Guard military or civilian personnel are required to perform Coast Guard work.