

CHAPTER 5

PREVENTION AND CONTROL OF WORKPLACE HAZARDS

1. Principles of Hazard Control. Safety professionals and industrial hygienists are specialists who, through training and experience, develop proficiency in the recognition, identification, evaluation, and control of workplace hazards. Safety specialist personnel are thoroughly familiar with potential hazards created by various materials, equipment, and operations used in naval facilities, and special designs required by Navy occupational safety and health standards. Some applied principles which are used to prevent workplace hazards are:

a. Substitution. Replacement of existing (or intended) process, material, or equipment with an alternative item having less hazard potential.

b. Isolation. An appropriate barrier or limited is placed between the hazard and an individual who may be affected by the hazard.

c. Ventilation. Control of a potentially hazardous airborne substance by dilution of substance (general ventilation) or removal of substance (local exhaust ventilation).

d. Administrative Control. Employment of standard operating practices which reduce the exposure to a hazardous environment, provide preventive maintenance programs, and adjust work schedules.

e. Personal Protective Equipment. A device which, once properly donned, reduces the potential hazard.

2. Application of Hazard Control Principles.

a. Occupational Safety and Health in the Acquisition Process. DODI 5000.2-R requires that program Managers (PM) for Major Defense Acquisition Programs develop a programmatic environment, safety and health evaluation at the earliest possible time in the acquisition process. This evaluation describes the PM's strategy for meeting environment, safety, and health requirements during system construction, operation, maintenance, and disposal. PMs responsible for the acquisition of Navy weapons systems, facilities, and support equipment or major modifications to existing weapons systems, facilities or equipment shall perform a safety and health evaluation as described in DODI 5000-2R. This evaluation shall identify and evaluate occupational safety and health hazards, define risk levels, and establish a process that will manage the probability and severity of all hazards associated with the development, use, and disposal of these systems, facilities and equipment. The safety and health hazards to be managed include any conditions that create a significant risk of death, injury, acute or

chronic illness, disability, and/or reduced job performance of personnel who will produce, test, operate, maintain, or support the system, facility or equipment. Each management decision to accept the risks associated with an identified hazard shall be formally documented.

b. Navy PMs shall establish a hazardous material control and management program that ensures appropriate considerations are given to eliminating and reducing the use of hazardous materials in construction, maintenance, operation and disposal processes. They shall manage the selection, use, and disposal of hazardous materials to incur the lowest cost required to protect human health and the environment over the system's facility's, or equipment's life-cycle.

3. Design Reviews. Safety and occupational health related considerations shall be designed and engineered into all facilities, e.g., Public Works Department, designs which are acquired or constructed for use by Navy employees. To ensure appropriate hazard control techniques are applied, cognizant industrial hygienists and safety professionals shall participate in the review of plans and specifications for these projects which include all new construction, renovations, and alterations to industrial processes and materials. Projects which involve toxic materials, radiation, noise, or other health hazards shall be designed in accordance with established principles of good industrial hygiene published in texts and standards.

4. Operating Procedures. Integration of standard operating procedures that affect productivity with health and safety directives shall be achieved through coordination with cognizant safety and health personnel prior to issuance to ensure applicable Navy occupational and safety requirements have been considered.

5. Purchasing Procedures. The Naval Air Engineering Station, Lakehurst Public Safety Department shall fund all safety related items. The following procedures shall be adhered to when ordering safety equipment by all Naval Air Engineering Station departments/offices:

a. Items that are funded by the Public Safety Department will be entered into the RAPS system by the department requesting funding. It should then be forwarded to the Public Safety Department where it will be reviewed for approval. Item will then be sent back to the initiators inbox through the RAPS system.

b. Items that require Safety approval will also be entered into the RAPS system and forwarded automatically (which will depend on the FSC entered) to the Public Safety Department where it will be reviewed and sent back through the RAPS system to the initiators inbox.

6. Interim Hazard Abatement Measures. Prior to permanent hazard control measures, temporary immediate control measures are required to reduce the risk

of personnel/material damage. All interim control measures shall be noted during the workplace occupational safety and health inspection.

7. Permanent Hazard Abatement. This Station will control hazards principally employing engineering controls as the preferred method. Two criteria determine the feasibility of engineering controls: 1) technologically feasible engineering controls are those available either by procuring or adapting existing technology; 2) economically feasible engineering controls are those whose cost justifies the benefit it produces.

8. Safety and Health Program Self-Assessment and Improvement Plans. The Public Safety Department OSH Office shall perform a comprehensive self-assessment of the Station NAVOSH program at least annually. Based on the results of the assessment, plans of action shall be developed and implemented to address program areas in need of improvement. The station OSH council, shall review and concur with self-assessments and improvement plans and shall review the progress achieved in implementing improvement actions at least annually.

8. Responsibilities

a. Management personnel will continuously monitor all known facets of the hazard control program to ensure the identification and elimination of hazards.

b. Line supervisors will apply controls, constantly employing known principles of hazard control.

c. Line supervisors shall perform Job Safety Analyses in accordance with Exhibit 5-B.

d. Code 8.4.1, in his/her oversight function, will ensure design, engineering, installation, operational, maintenance, and disposal procedures are consistent with sound safety and health procedures.