

CHAPTER 27**CONFINED SPACE ENTRY PROGRAM**

1. Purpose. To establish and disseminate the commands policy, requirements, and guidance involving operations in or on the boundaries of confined spaces.

2. Scope. The requirements of this chapter applies to all Naval Air Engineering Stations (NAES), Lakehurst activities and tenants. It includes all spaces owned, operated or leased by the command. Contractors required to enter into or work on the boundaries of confined spaces shall comply with the applicable requirements of references (a) and (f).

3. Policy. It is the Navy policy that all confined spaces shall be considered hazardous and entry into or work on the boundaries of such spaces is prohibited until the space has been evaluated by a qualified person to establish appropriate safety precautions. In order to preclude injury or death due to the exposure to hazardous, toxic, or abnormal oxygen atmospheres, and to prevent property damage from fire or explosions of confined spaces, detailed standards have been established. Pursuant to the requirements of references (a), (ee), and (ff), it is the policy of the Commanding Officer to maintain Confined Space Entry Program in compliance with references (f) and (ll) as applicable. To initiate and maintain an aggressive Confined Space Entry Program for the safe entry and work on confined and enclosed spaces aboard NAES Lakehurst. To ensure only trained and qualified personnel are permitted to perform work on or in the spaces meeting the criteria of an enclosed or confined space at all NAES Lakehurst activities, facilities, and equipment under the cognizance of this command.

4. Definitions.

a. Atmosphere. A gaseous mass enveloping a particular location or contained within a confined or enclosed space.

b. Confined Space. A space which by design has limited and restricted openings for entry and exit, a lack of natural ventilation, and which could contain or produce hazardous contaminants, oxygen deficiencies, or enrichment. Confined spaces are not intended for normal continuous occupancy and include spaces such as aircraft fuel cells and tanks, fuel storage tanks, process vessels, boilers, furnaces, sewers, utility tunnels, and similar spaces.

c. Confined Space Program Manager (CSPM). An individual who meets the requirements of reference (ll) and has been assigned the responsibility in writing for the overall Confined Space Entry Program by the Commanding Officer. The CSPM was previously referred to as Gas Free Engineer.

d. Class I Space. A space that contains atmosphere or conditions which

are immediately dangerous to life or health (IDLH). Such conditions include:

- (1) Oxygen content less than 16.5 percent or greater than 22 percent.
- (2) The presence of flammable gases or vapors at a concentration of 10 percent (or greater) of the lower explosive limit (LEL).
- (3) The presence of toxic agents which exceed a level from which a person could escape within 30 minutes without impairing symptoms or irreversible health effects.
- (4) Any combination of these conditions.

e. Class II Space. A space that contains atmosphere or conditions which are dangerous, but not IDLH. Such conditions include:

- (1) Oxygen content greater than 16.5 percent but less than 19.5 percent.
- (2) The presence of flammable atmospheres in concentrations greater than 1 percent but less than 10 percent of the LEL.
- (3) The presence of toxic agents at concentrations below levels which are IDLH but at or above established permissible exposure limits (PELs).
- (4) Any combination of these conditions.

f. Class III Space. A space that contains atmospheres or conditions which are contaminated, but not to a level which is dangerous or IDLH. Such conditions include:

- (1) Oxygen content greater than 19.5 percent, but less than 22 percent.
- (2) The presence of flammables or flammable atmospheres in concentrations less than 1 percent of the LEL.
- (3) The presence of toxic agents at concentrations below established PELs.

g. Gas-Freeing. Operations performed in testing, evaluating, removing, or controlling hazardous materials or conditions within or related to a confined or enclosed space which may present hazards to personnel entering or working in, on, or adjacent to the space.

h. Hazardous Substance/Atmosphere. A substance or atmosphere which by reason of being explosive, flammable, toxic, oxidizing, irritant, corrosive, or otherwise harmful is capable of causing serious injury, death, or property damage.

i. Initial Testing. Testing conducted on a confined or enclosed space when the space is first opened after a period of closure or service, such as the first tests conducted on a fuel tank when the tank has been in service and must be taken out of service for repair.

j. Initial Certification. The certificate issued by CSEP personnel as a result of the initial testing.

k. Qualified Person (QP). Individuals trained and qualified by the CSPM or ACSPM and assigned the duties to conduct tests of confined spaces as required by references (11). The QP performs their duties under the direction of the CSMP and/or ACSPM. The QP was previously referred to as Gas Free Engineering Technician.

5. Duties and Responsibilities.

a. The Commanding Officer.

(1) The commanding officer is responsible for establishing, conducting, and evaluating a comprehensive confined space entry program which meets the intent and specific requirements of reference (a).

(2) The Commanding Officer shall appoint, in writing, a qualified Confine Space Program Manager (CSPM) in accordance with reference (a).

b. Confined Space Program Manager.

(1) Per reference (a) the Confined Space Program Manager shall be responsible for establishing, implementing, and administering a Confined Space Entry Program.

(2) Ensure that procedures for the application of the provisions contained in reference (a) for confined space testing, treatment and certification prior to entry or work are established.

(3) Ensuring that required instrumentation in sufficient quantity to meet the requirements of the activity confined space entry program is procured, maintained, and calibrated.

(4) Ensure all designated QP personnel are properly trained, qualified, and certified as specified in reference (a), including knowledge of the proper confined space entry procedures; proper use and calibration of instrumentation; selection, issue, and maintenance of personal protective equipment (PPE); and emergency procedures for the specific activity.

(5) Ensure that all appropriate activity personnel, other than QP personnel, are indoctrinated regarding the hazards of confined spaces and are fully aware of their responsibilities under the confined space entry program.

(6) Provide the evaluation and testing of confined or enclosed spaces; preparation, issuance of and posting of confined space entry certificates for confined spaces, indicating the safe or unsafe conditions and required control measures of the space and operations.

(7) Establish when requirements for cleaning, ventilating, inerting, pressing-up, or other treatments which may be required for confined or enclosed spaces.

(8) Ensure proper procedures are followed prior to commencement of, during, and after hot work in, on, or adjacent to confined or enclosed spaces.

(9) Ensure personnel do not work alone or unobserved in hazardous operations in confined or enclosed spaces.

(10) Ensure procedures are established for emergency rescue and medical treatment and all appropriate personnel are familiar with such procedures.

(11) Ensure procedures that require that work be stopped and all personnel removed from a space or location in the event an unsafe condition is detected or suspected.

(12) Ensure the Commanding Officer, and the appropriate department head are notified when any hazardous situation is detected, including any cases of work stoppage personnel evacuation.

(13) Maintain administrative requirements including accident reports and other records relating thereto.

c. Assistant Confined Space Program Manager (ACSPM).

(1) The duty of the ACSPM is to provide assistance to the CSPM in the performance of the duties specified in reference (a).

(2) The specific duties of the ACSPM shall be the same as those of the CSPM except that such duties shall be performed under the technical supervision of the CSPM.

(3) The ACSPM shall meet the same educational, experience and training requirements for certification as the CSPM and shall be equally qualified to perform gas free services.

(4) The ACSPM may function as the CSPM during the absence of the CSPM.

d. Qualified Person.

(1) Conduct tests of confined or enclosed spaces required by this

instruction and as prescribed and directed by the CSPM.

(2) Ensure confined or enclosed space certificates are correctly issued, posted, maintained, updated, and properly observed.

(3) Cause all work to stop and require all personnel to evacuate a confined or enclosed space where an unsafe condition is detected or suspected and immediately notify the CSPM and the job supervisor.

(4) Properly utilize and maintain required test instruments. Ensure all test equipment is calibrated prior to use.

(5) Ensure emergency procedures are observed, emergency personnel and equipment are in place when required by the nature of the operation, and all personnel are familiar with the established procedures prior to authorizing entry or work.

(6) Ensure personnel do not work alone or unobserved in a confined or enclosed space.

(7) Make certificate entries and perform other record keeping duties as prescribed by the CSPM.

e. Department Heads shall:

(1) Ensure the provisions of this instruction are met.

(2) Ensure no space under their cognizance, which may contain a hazardous atmosphere, is entered until certified "SAFE" by the CSPM or their designee.

(3) Require all personnel, military and civilian, who may be required to work in areas which may contain hazardous atmospheres, receive training in the requirements contained in this instruction.

(4) Ensure warning signs are posted near the entrance of all tanks, boilers, manholes, or other confined areas or spaces that may contain hazardous atmospheres.

NOTE: Public Works Department, Code 83, shall initially and permanently affix confined space warning signs on all confined spaces such as fuel storage tanks, process vessels, boilers, furnaces, sewers, lift stations, utility tunnels, vaults, and similar spaces on board NAES Lakehurst. Wording for confined space warning signs is as depicted in Exhibit 27A.

e. Contracting Officer shall inform contractors requiring confined space entry that it is their responsibility to comply with OSHA standards set forth in references (ee) and (ff).

f. Public Safety Department shall provide adequate trained/certified personnel to serve as Qualified Persons for the commands confined space entry program.

g. Supervisors shall:

(1) Ensure personnel under their supervision are familiar with the operations/associated hazards and the precautions necessary to control such hazards.

(2) Strictly enforce the observance of the safety and health requirements outlined in this instruction and in references (a),(ee), and (ff), as applicable.

(3) Coordinate confined space entry operations with the CSPM as required. Request for confined space entry services should normally be 24 hours prior to scheduled entry into confined spaces, except when an emergency necessitates immediate entry. Call extension 2525 to schedule confined space entry services.

(4) Arrange for portable ventilation or other equipment specified by the CSPM/QP.

NOTE: Departments that do not currently have equipment should make necessary arrangements to purchase equipment through the Public Safety Department.

(5) Promptly report to the CSPM/QP any unsafe conditions or procedures and, where warranted by the severity of such conditions, cease all operations until corrective action has been effected.

h. Operating personnel shall:

(1) Refrain from entering any area which may contain a hazardous atmosphere as defined in this instruction until certified "SAFE" by the CSMP or his authorized representative.

(2) Comply with all instructions of the CSMP/QP when working in or around an area which may contain a hazardous atmosphere.

(3) Notify the supervisor of any suspected hazardous condition related to confined spaces at any building, structure, or area.

(4) If there is the possibility that the condition may involve flammable or explosive material or fumes, promptly notify CSPM at extension 2525 or the commands Fire Department at extension 2333.

(5) Attendant personnel shall be instructed that no rescue attempt

involving entry shall be made until the rescue control point has been notified and assistance has arrived. Rescue efforts by means of the lifeline (where used) shall be made until assistance arrives.

i. Public Safety Department shall:

(1) Provide the point of contact for confined space entry services.

(2) Provide equipment required for implementing and monitoring the Confined Space Entry Program.

(3) Coordinate required training between the CSPM and departments/commands.

6. Procedures.

a. No person shall enter any space which has been identified with a confined space warning sign or meets the criteria of reference (a), (f), (ee), or (ff), until the CSPM/QP has inspected the area and certified that hazards have been reduced to an acceptable level. All such spaces shall be considered "UNSAFE" until certified "SAFE" and the appropriate entry certificate or tag has been posted. If the space is "UNSAFE", entry shall be prohibited until precautions prescribed by the CSPM/QP are taken. Exhibit 27B is a copy of NAEC 5100/14, Gas Free Certificate.

b. A permanent record shall be maintained by the CSPM.

c. Certification shall never be in effect longer than twenty-four hours and may be less if deemed necessary.

d. Entry and/or work in or on class I and class II spaces shall be IAW reference (ll). If a space must be entered when the atmosphere is or may become hazardous, a lifeline and air breathing apparatus shall be worn as prescribed by the CSPM.

e. Personnel shall not work alone or without communication or observation in a confined or enclosed space. A trained observer/attendant shall be standing by at the entry point. Retrieval/rescue equipment shall be in place to assist in the removal of the entry personnel in the event of an emergency. UNDER NO CIRCUMSTANCES SHALL AN UNPROTECTED PERSON ENTER A SPACE TO ATTEMPT TO RESCUE A PERSON WHO MAY BE OVERCOME BY TOXIC GASES OR OXYGEN DEFICIENCY. RESCUE UNDER THESE CONDITIONS SHALL NOT BE UNDERTAKEN UNTIL THE FIRE DEPARTMENT HAS BEEN NOTIFIED AND ARRIVES AT THE SCENE.

f. Protective clothing shall be worn as necessary.

g. Inerting and pressing-up operations shall be done in emergency situations and shall be supervised by the CSPM.

h. Inerting or pressing-up shall not be used to permit "hot work" on containers which contain gasoline, JP fuels, or other highly volatile material.

i. Steam cleaning of fuel tanks shall be done by operating personnel when practicable.

j. The CSPM has the authority to immediately order anyone out of an area and/or suspend operations if an "UNSAFE" condition is found to exist. The CSPM shall promptly notify the Commanding Officer of any work stoppage and the reason for such action.

k. The CSPM is authorized access into all spaces within the confines of this activity for the purpose of performing official duties.

8. Contractor Operations. Contractor operations which involve confined or enclosed space entry or work are governed by references (ee) and (ff) for non-maritime operations and should be guided by the National Institute for Occupational Safety and Health (NIOSH) Criteria Documents for Confined Spaces for Non-Maritime Operations. Where contractors are performing work aboard NAES Lakehurst, the following provisions shall be observed:

a. The contractor, when performing non-maritime operations, shall provide a qualified person as required in references (ee) and (ff) or as recommended by the NIOSH Criteria Document for Confined Spaces. The contractor shall provide written certification for the name of the competent person, the type of equipment to be used, and any related training the competent person has received , for the Contracting Officer's acceptance.

b. The appropriate laws and regulations make no provision for Navy personnel to perform confined space entry services for contractor operations. Performance of such functions may involve assumption of liability by the Navy in the event of a mishap. Therefore, Navy personnel shall not certify spaces for contractor operations or personnel except where failure to do so would create an extreme emergency and would endanger personnel and property and may, therefore, create even greater potential liability. Such cases must normally be authorized by the Commanding Officer and shall be personally conducted and supervised by the Confined Space Program Manager, except where the nature of the emergency is so extreme that delays created by seeking the Commanding Officer's approval or the personal services of the CSPM would create a greater danger.

c. Where naval personnel and contractor personnel are to occupy the same space for a given task or operation, the space in question shall be certified by the Navy CSPM in accordance with the requirements of this instruction and the appropriate contractor representative shall be so informed. However, such services and subsequent notification shall in no way relieve the contractor of any pertinent statutory obligations for the safety and health of contractor personnel and the contractor shall be so informed.

d. In all cases involving contractor operations on board NAES Lakehurst, the contracting officer shall inform the appropriate contractor that the contractor's confined space entry personnel shall be adequately qualified and that all operations are to be conducted in accordance with the provisions of this instruction (in addition to all other statutory or regulatory requirements) since NAES Lakehurst personnel and facilities may also be at risk.

9. Forms. All forms mentioned in this notice will be used and maintained by the NAES Lakehurst Confined Space Program Manager and QP ONLY.