

CHAPTER 3

ORGANIZATION AND STAFFING

0301. Discussion

This chapter provides guidance on Navy Occupational Safety and Health (NAVOSH) functional organization, staffing and responsibilities. An effective and dynamic command Occupational Safety and Health (OSH) organization requires a structure that provides all levels of the command with good lines of communication to the commanding officer for OSH matters.

0302. Organization of Occupational Safety and Health (OSH) Organizations at Headquarters Commands

Headquarters commands shall designate an OSH official who will have sufficient authority and responsibility to represent effectively and support the headquarters commander in the management and administration of the headquarters command OSH program. The designated OSH official shall report directly to the headquarters commander. An OSH organization, staffed and organized commensurate with the mission and functions of the command, shall support and report directly to the designated OSH official. An OSH professional shall head the OSH organization. The designated command OSH official shall:

- a. Establish, coordinate, direct and evaluate the effectiveness of NAVOSH policies, plans, programs and procedures.
- b. Serve as the focal point within the command for NAVOSH-related matters.
- c. Provide technical advice, direction and guidance on NAVOSH matters to other commands or bureau organizational elements and to subordinate field activities
- d. Interpret NAVOSH standards and regulations and develop or participate in developing new or revised standards, when appropriate.
- e. Conduct assessments of the effectiveness of the command's overall NAVOSH Program, and those of subordinate commands, and develop plans of action for improving performance in areas identified as needing improvement.
- f. Serve as the headquarters command's representative on safety councils, committees and working groups established by higher authority and the private sector. The OSH official shall serve as technical advisor to cognizant offices of the Chief of Naval Operations (CNO) on NAVOSH-related matters in areas over which the headquarters command is assigned cognizance.
- g. Review illness/injury analyses from command activities to identify and initiate actions to improve the effectiveness of the NAVOSH program and reduce instances of injury and illness.
- h. Foster OSH awareness through appropriate promotional methods and channels of communication.

- i. Ensure adequate consideration of OSH features in the design, purchase or procurement of items over which the command exercises acquisition authority.
- j. Plan, develop, participate and evaluate employee OSH training in coordination with cognizant training groups, offices and organizations.
- k. Review and coordinate budget requirements, requests and program objective memoranda for OSH and coordinate OSH budget submissions, as appropriate. Ensure that the OSH official at each field activity has sufficient authority and responsibility to plan for and ensure funds for the OSH staff, their equipment, materials and the training required to ensure implementation of an effective NAVOSH program.

0303. Organization, Functional Responsibilities, and Staffing Criteria for Shore Activity OSH Organizations

a. Organization. Each shore activity shall have an OSH organization, staffed and organized commensurate with the mission and functions of the command. An OSH professional shall head the OSH organization and shall have the authority, responsibility, and visibility to manage and represent effectively the activity's OSH program. Implementation of the NAVOSH program is considered a command staff level function. Accordingly, the head of the OSH organization shall report directly to the commanding officer of the shore activity.

b. Functional Responsibilities. "Direct Programs" refer to the OSH program areas that an OSH organization performs to support the command or activity of which it is a part. "Indirect Programs" are administrative activities in support of Direct Programs.

(1) For Direct Programs, as minimum core requirements, all OSH organizations shall:

(a) Manage OSH Programs. Plan, direct and administer the activity OSH program using the components of the process review and measurement system to focus efforts in those areas which will yield the best overall outcomes for the commands safety and health program.

(b) Conduct OSH Reviews. Perform and document reviews and evaluations to ensure that appropriate OSH requirements and considerations affect all operations, facilities, material and equipment.

(c) Conduct OSH Inspections. Plan, conduct and document workplace inspections of all buildings, grounds, facilities, materials, equipment, devices, operations and conditions to ensure compliance with applicable policies, laws, regulations and standards. For detailed program information, refer to chapter 9, NAVOSH Inspection Program, and chapter 11, Inspections and Investigations of Workplaces by Federal and State OSH officials.

(d) Abate Hazards. Manage the program for the correction of workplace hazards. For detailed program information, refer to chapter 12, Hazard Abatement Program.

(e) Provide Consulting Services. Provide consulting services to all activity organizational elements and all levels of supervision on OSH principles and technical aspects and their application to employees and workplaces.

(f) Investigate, Report and Record Mishaps. Coordinate the investigation of all mishaps. For detailed information, refer to chapter 14, Mishap Investigation, Reporting and Record-keeping.

(g) Implement Employee Hazard Reports. Implement requirements and procedures for employee hazard reporting. For detailed program information, refer to chapter 10, Employee Reports of Unsafe or Unhealthy Working Conditions.

(h) Analyze OSH Program Effectiveness. Prepare annual self-evaluation(s) of program and program elements following Program Review and Measurement System (PR&MS) Self Assessment Model guidelines contained in appendix 2-B. For detailed information regarding self-evaluations, refer to chapter 5, section 0505.

(i) Attend and Conduct Meetings. Attend, conduct or participate in activity and local OSH council and committee meetings. For detailed information, refer to chapter 4, Councils and Committees.

(j) Promote OSH Training and Education. Coordinate OSH training and educational programs. For detailed program information, refer to chapter 6, Training.

(k) Determine Personal Protective Equipment (PPE) Requirements. Evaluate all workplaces and determine PPE requirements. For detailed program information, refer to chapter 20, Personal Protective Equipment.

(l) Coordinate Hazardous Material Control and Management (HMC&M). Coordinate OSH aspects of the HMC&M program. For detailed program information, refer to chapter 7, Hazardous Material Control and Management.

(m) Coordinate Occupational Health. Coordinate all activity aspects of occupational health matters with the cognizant medical command. For detailed program information, refer to chapter 8, Occupational Health.

NOTE:

If activity personnel actually conduct workplace sampling, this is an additive function. The basic activity function is to coordinate these programs, develop local instructions and ensure compliance with regulations.

In addition, most organizations shall perform core functions in paragraphs 0303.b(1)(n) through (q), as necessary.

(n) Administer the Confined Space Entry/Gas Free Engineering Program. Non-maritime shore OSH organizations administer the Confined Space Entry program. For detailed program information, refer to chapter 27, Confined Space Entry program (Non-Maritime). Maritime shore-based activities administer the Navy Gas Free Engineering program. For detailed information, see NAVSEA S6470-AA-SAF-010.

NOTE:

Where multiple full-time test personnel are necessary (e.g., Public Work Centers) and the OSH organization conducts the testing, organizations shall develop a specific additive to the staffing equation based on the local workload for confined space testing.

(o) Administer the Asbestos Control Program. Coordinate the development and implementation of the Asbestos Control program. For detailed program information, refer to chapter 17, Asbestos Control.

(p) Administer the Respiratory Protection Program. Administer the activity Respiratory Protection program. For detailed program information, refer to chapter 15, Respiratory Protection.

(q) Administer the Radiation Safety Program. Coordinate and/or manage radiation protection and control programs including applicable ionizing and non-ionizing sources (i.e., lasers, radio frequency radiation (RFR), etc.). For detailed information, refer to chapter 22, Non-Ionizing Radiation.

(r) Manage Certain Other Program Elements. The following safety-related programs are not included in the minimum core elements used for determining staffing requirements. The level of application varies greatly among activities, depending on their mission, function, location and support. At activities where these programs have a major impact, organizations should treat them as additive functions requiring additional resources. Activities should determine resource requirements to perform the functions locally or have them performed by commands, based on workload analysis:

1. Motor vehicle and traffic safety
2. Weapons and explosive safety
3. Fire prevention
4. Recreation and home safety
5. Diving safety
6. Mercury control
7. Contractor oversight
8. Industrial hygiene
9. Environmental protection
10. Weight handling equipment safety
11. Compensation program support
12. Systems safety.

(s) Other Considerations. Other considerations in determining staffing requirements include the geography of an activity, the number of locations and the distance between them and sub-units and tenants supported. Geography can have a significant impact on workload where large distances exist between normal work sites and locations of inspections, investigations and evaluations. Organizations must evaluate the degree of support provided tenants and other personnel on and off base in determining staffing needs.

For locations outside the continental U.S. (OCONUS). Activities shall not gap NAVOSH positions for more than 30 days. When possible, activities should identify a relief before transferring the incumbent.

When applicable, perform the additional functions listed in paragraph 0303 b(1)(r). Activities shall treat these functions as additives when determining staffing requirements. In addition, activities must treat any collateral duties assigned to the OSH organization as additive when determining staffing.

(2) For indirect (administrative) programs, all OSH organizations shall:

(a) Supervise Personnel. Supervise personnel, accomplish administrative duties and provide training to personnel supervised.

(b) Provide Administrative and Clerical Support.

1. Provide mail, messenger, receptionist, stenographic, typing, duplicating and supply/fiscal services.

2. Implement an office automation system to include database management, report generation, word processing and records maintenance.

3. Process correspondence.

4. Consult or confer with individuals.

5. Prepare and distribute reports.

6. Maintain publications.

(c) Manage Travel. Travel between work centers and to and from safety seminars, training courses or conferences, when essential to the job.

(d) Hold or Attend Meetings. Attend or conduct meetings, briefings and conferences pertaining to other direct support of the work center.

(e) Maintain Office Space. Maintain individual workspaces in a neat, orderly condition and conduct periodic housekeeping ("field days") as required.

c. Staffing Criteria. Activities with more than 400 employees shall assign, at a minimum, a full time OSH manager and adequate clerical support. The staffing criteria that follow are not mandatory but provide a good method of determining the number of qualified personnel to perform necessary OSH functions. The real measure of adequate staffing is whether all designated functions are per-

formed effectively and strong mishap prevention programs are implemented. Activities shall determine the number of professional (non-clerical) personnel needed to perform the primary functions listed above by the following method:

(1) Use the equation provided below, predicated upon the level of risk by major job hazard category and the number of personnel in each category. Most activities will have more than one job hazard category. The total number of professional personnel needed to perform minimum functions in the OSH organization is the sum of personnel specified for each category. Appendix 3-A explains the job hazard categories. Commands shall evaluate actual needs based on support available from others and number of supported personnel.

(2) The equation for calculating the number of professionals on the OSH staff is:

$$\begin{aligned} & 0.0033 \times \text{the first 1200 persons in Category A} \\ + & 0.0025 \times \text{the next 800 persons in Category A} \\ + & 0.0020 \times \text{the remaining persons in Category A} \\ + & 0.0020 \times \text{total number of persons in Category B} \\ + & 0.0016 \times \text{total number of persons in Category C} \end{aligned}$$

where $0.0033 = 1/300$ (1 professional per 300 workers), $0.0025 = 1/400$ (1 professional per 400 workers), $0.0020 = 1/500$ (1 professional per 500 workers), and $0.0016 = 1/600$ (1 professional per 600 workers).

(3) An example of staffing using this equation is:

$$\begin{aligned} & 900 \text{ employees in Category A requires } 3.0 \text{ staff} \\ + & 500 \text{ employees in Category B requires } 1.0 \text{ staff} \\ + & 1200 \text{ employees in Category C requires } 2.0 \text{ staff} \\ = & \text{Six professional employees required for office plus clerical staff.} \end{aligned}$$

(4) The number of employees counted in each category includes all who receive full OSH support (tenants and others). The equation does not include partial and part-time support (such as that provided students, reservists and tenants with safety staff). Organizations must account for this separately, based on local workload determinations.

(5) An assistant manager is required for an office with a total staff often or more. The staffing calculation above includes the OSH manager and assistant manager(s).

(6) Base clerical support on workload. All OSH organizations supporting an activity population exceeding 600 need, at least, full-time clerical support.

d. Position Classification Considerations. The OSH organization will have as its head, a fully qualified and trained OSH professional supported by a staff of qualified professionals. Reference 3-1 describes qualification and training requirements for OSH professionals. Classification guidance is provided as follows:

(1) OSH manager positions range from GS-11 up; OSH assistant managers from GS-11 up; specialists and technicians from GS-05 to GS-12 (the journeyman level is GS-11); and clerical support from GS-03 to GS-07. Appropriate military equivalents include Navy Officer Billet Codes (NOBCs) 0862, 2740, 8656, and 8995, from ensign to commander, Navy Enlisted Classifications (NECs) include 9571, SW-6021, and 8301, from E-4 to E-9. Military equivalents shall have acquired additional OSH professional training appropriate to their assignment.

(2) Classification series that apply, but are not inclusive, include:

<u>Position</u>	<u>May Compete</u>
Manager/Assistant/ Specialists	GS/GM-018, 081, 602, 610, 690, 803, 804, 1306, 1320, 1815, 1825, 2125
Technicians/ Other Technical Services	GS-019, 645 699, 1311
Administrative Others as appropriate	GS-318, 303, 326

NOTE:

The staffing criteria in this section replace all previous guides and standards for staffing of OSH organizations.

0304. Regional and Consolidated OSH Organizations

In some cases, it may be more effective and practical to establish a single OSH organization to meet the aggregate requirements of a number of small activities within the same geographic area and/or to support tenants of an installation. Activities shall staff all such consolidated OSH organizations following the criteria described in section 0303.

a. Activities furnishing OSH services and users of those services, shall establish written agreements. The agreement shall specify the services provided. Administrative control over the OSH organization shall rest with the command supplying the service.

b. Activities should not change consolidated OSH organization services without prior negotiations between the activities and/or units receiving services. Organizations shall negotiate agreements on a fiscal year or an as needed basis, at which time adjustments shall be made to take into account differences in size or number of activities serviced, services required and cost of operation of the consolidated OSH organization.

c. It is strongly recommended that regional safety managers attain board certification through either the American Board of Industrial Hygiene or the Board of Certified Safety Professionals. Per section 0606, professional certification is recommended for OSH professionals.

0305. Organization and Staffing of the Occupational Health Function

Integral to the proper establishment of a comprehensive NAVOSH program is a comprehensive occupational health program. Successful occupational health programs require professional supervision and oversight by qualified occupational health professionals. The primary sources of support services are hospitals and medical clinics. The occupational health/industrial hygiene components of those medical activities are responsible for providing complete occupational health support to all commands within their assigned area of responsibility (see chapter 8 for further details).

a. The Preventive Medicine and Occupational Health Division administers the program within the Chief, Bureau of Medicine and Surgery (BUMED). The occupational health and preventive medicine directorate administers the program at the hospital or clinic level. The director shall have direct access to the medical facility commanding officer and/or clinic officer in charge. Industrial hygiene and occupational medicine shall be divisions of occupational health and preventive medicine directorates. As a rule, military industrial hygienists shall provide dedicated service to the operating forces and the fleet, and civilian industrial hygienists shall maintain essential program continuity and provide services to the Navy shore establishment.

b. Functions. Refer to chapter 8.

c. Activities may deliver occupational medical services through a wide variety of organizational structures, ranging from single-physician clinics to multi-physician clinics that are co-located with a hospital or major medical clinic. The organization size affects the distribution of labor among physicians, nurses and other support staff.

d. Occupational Health Staffing Guides and Industrial Hygiene Laboratory Support Policy. Factors influencing the guidance provided below are: previously published guides for similar programs, the anticipated demand for physician services when applicable DoD instructions are fully implemented, and a review of physician-to-population ratios at regional medical commands. The guidance provides a staffing level that allows implementation of all medical components of the NAVOSH Program at a high level of quality consistent with progressive management of the Navy's industrial and fleet support programs. It conforms to the Federal Personnel Manual guidelines for physician staffing in the low-risk category and provides additional staffing for the high-risk category.

(1) Occupational Medicine Staffing Guide. The occupational medicine staffing guide applies to two specific professional categories: occupational health physicians and occupational health nurses. Disciplines contributing to occupational health programs, such as surgical and medical specialties, radiology, audiology, optometry, laboratory and technical or administrative support are not included. Expressed in mathematical notation, the staffing guide for occupational medicine is as follows:

$$MD = 0.0005A + 0.00033B + 0.00025C + 0.000125D + 0.000125E + 0.000125F$$

Where:

MD = required number of full-time physicians

A = population in risk category "A"

B = population in risk category "B"

C = population in risk category "C"

D = population in risk category "D"

E = population in risk category "E"

F = population in risk category "F"

NOTE:

Appendix 3-A describes population categories A through F with examples.

(a) The coefficients in the staffing formula represent the number of staff required to support one employee (e.g., 0.0005 physician for one shipyard employee. The reciprocal of this coefficient expresses the number of employees supported by one physician or nurse (e.g., one physician for 2,000 shipyard employees).

(b) The staffing guide provides one physician for every 2,000 employees in category A, plus one for every 3,000 employees in category B, and one for every 4,000 employees from other activities. The guide provides half as many physicians for mobile populations as provided for the low risk category.

(c) A number of factors influence the required staffing, including local injury and illness rates, past accomplishments of the occupational health program and proximity to definitive care facilities. Local variation from the expected typical situation is likely. Where significant variation exists, make an appropriate adjustment, either up or down, to the staffing level calculated by the guide.

(d) If the total population in categories A, B, C, D, E and F supported by a medical treatment facility is less than 6,000, then activities shall base physician staffing on achieving minimum required capability and enhancing efficiency using a combination of physicians and occupational health nurses. In larger medical treatment facilities, where the calculation indicates the need for three or more physicians, activities shall substitute medical providers (physician's assistant or nurse practitioner) at the rate of four alternates for three physicians (recognizing that when these substitutions are made, some additional physician time is needed for supervision).

(e) When the population served is geographically distributed in groups smaller than 6,000 employees or where the occupational health staff of the region is dispersed among numerous small medical treatment facilities, activities shall use the guide to indicate fractions of full-time equivalents. Medical treatment facilities serving 400 or more employees should have a full-time nurse, and those serving 2,000 or more employees should have a full-time physician. Rounding the staffing calculation at the medical treatment facility level rather than at a superior medical command level may yield a larger staffing requirement. The need for a specialized capability at remote locations justifies the additional requirement, even if met on a standby basis. This guide defines a remote location as one requiring more than 30 minutes of travel time from the nearest regional medical treatment facility during peak traffic load.

(f) Each medical treatment facility should have access to at least one physician with recognized credentials in occupational medicine, such as board certification by the American Acad-

emy of Occupational Medicine. However, the complement of physicians in an occupational health clinic may include family practice physicians, internal medicine physicians and General Medical Officers. Appendix 3-B provides a recommended grade level structure for direct support occupational medicine physicians at the line activity organizational level.

(2) Occupational Health Nurse Staffing Guide. Determine staffing for occupational health nursing staff by the following formula:

$$\text{OHN} = 0.0006A + 0.0004B + 0.0003C + 0.00015D + 0.00015E + 0.00015F$$

Where:

OHN = required number of occupational health nurses

A = population in risk category "A"

B = population in risk category "B"

C = population in risk category "C"

D = population in risk category "D"

E = population in risk category "E"

F = population in risk category "F"

(3) Industrial Hygiene Staffing Guide. The cognizant medical command shall base the industrial hygiene staffing on the total military and civilian personnel supported. Staffing for industrial hygienists in BUMED organizations that directly support line activities can be determined based on the following formula:

$$\text{IH} = 0.002A + 0.0008B + 0.0004C + 0.0004E + 0.0004F + 0.004L + S$$

Where:

IH = the required number of industrial hygiene staff

A = population in risk category "A"

B = population in risk category "B"

C = population in risk category "C"

E = population in risk category "E"

F = population in risk category "F"

L = number of activities (locations) supported

S = support to ships that designate the claiming BUMED organization (Navy Environmental and Preventive Medicine Unit (NAVENPVNTMEDU) or clinic) as primary source of industrial hygiene support, calculated per formula below:

$$S = 0.87CV + 0.87AS + 0.35LH + 0.17CG + 0.13DD + 0.087(FF + AM + AO + AT) + 0.044SS + 0.022OT$$

Where:

CV = number of ships designated CV or CVN

AS = number of ships designated AS

LH = number of ships designated LHA, LHD or LPH

CG = number of ships designated CGN

DD = number of ships designated DD, CG or DDG

FF = number of ships designated FF or FFG

AM = number of ships designated LPD, LSD, LST, AGF or LCC

AO = number of ships designated AO, AOE, AE, AOR or AFS

AT = number of ships designated ARS or ATS

SS = number of ships designated SSN or SSBN

OT = number of ships not in any category listed above

(a) This guide applies to all medical regions. However, unique circumstances may require increases or decreases in the staffing derived from its use. Where such adjustments are appropriate, the local medical region should define and justify them. Possible adjustment factors include the following:

1. Additional staff should be added to support remote facilities where the travel requirement exceeds 5 percent of total staff time.

2. Additional staff may be justified to place full-time industrial hygienists in remote facilities where the calculated requirement exceeds 0.5 person but is less than 1.0 person. The added increment would greatly enhance the program's effectiveness by reducing unproductive travel and enabling much quicker response time for evaluating intermittent operations, investigating employee complaints and conducting special surveys to monitor unusual or exceptional hazards.

3. Additional staff likely will be required to provide engineering design review and to develop operating procedures for major facility expansion efforts. Additional staff may also be required to support the Engineering Field Divisions (EFDs) in facilities acquisition and review of construction plans and specifications for the elimination or engineering control of health hazards per chapter 5.

(b) Most regions will require at least one individual with skills and experience expected at the GS-12 level. Regions that support activities with a wide range of industrial settings, including major industrial facilities or highly complex research and development environments, will require technical positions at the GS-13 level. Supervisory positions at the GS-13 or GS-14 level are appropriate, depending on the size and complexity of the region's programs. Appendix 3-C provides recommended rank or grade levels.

Organizations with more than 18 individuals generally include several divisions, and may apply this recommended grade level structure at the division level.

(4) Industrial Hygiene Officer Career Path. This is the established career path for industrial hygiene officers:

<u>Tour</u>	<u>Assignment/Grade</u>
1	Assignment to a shore medical command or NAVENPVNTMEDU for training (O-1 to O-2).
2	Assignment to an aircraft carrier as assistant safety officer (O-2 to O-3).
3	Assignment to a shore medical command, NAVENPVNTMEDU, Marine Aircraft Wing, Force Service Support Group or Naval Occupational Safety and Health and Environmental Training Center (NAVOSHENVTRACEN) (O-3).
4	Assignment to a tender as safety officer. Assignment to Naval Sea Systems Command (COMNAVSEASYSCOM) ship/submarine design or acquisition support (O-3 to O-4).
5	Assignment to Type Command (TYCOM), NAVENPVNTMEDU, Navy Environmental Health Center (NAVENVIRHLTHCEN), Submarine Training Facility (SUBTRAFAC), Shore Medical Command or Commander, Naval Safety Center (O-4 to O-5).
6	Assignment to Fleet Commander In Chief (FLTCINC) staff, officer in charge, commanding officer, or director of a naval medical or line activity, President, Board of Inspection and Survey (PRESINSURV), NAVINSGEN, BUMED or NAVENVIRHLTHCEN (O-5 to O-6).

(5) Industrial Hygiene Laboratory Support

(a) Recommendations made by Navy industrial hygienists, based on laboratory analysis of collected air samples, affect the health of employees. Laboratory results are used in the determination of appropriate respiratory protection for any given job or operation, the design or modification of equipment and engineering controls and to document worker exposure. Biological samples, such as blood and urine collected by clinical personnel, serve to evaluate the uptake of such toxic substances as lead and mercury.

(b) Analytical techniques shall conform to those recommended by the Occupational Safety and Health Administration (OSHA) or the National Institute for Occupational Safety and Health (NIOSH). The laboratory shall also be capable of preparing sample media and performing any other related chemical or instrumentation work in support of the industrial hygienist.

(6) Industrial Hygiene Laboratory Resource Guide

(a) Navy Industrial Hygiene Laboratory Support Policy. Considering the Navy's projected needs for industrial hygiene laboratory support and the recommendations of occupational health program managers, the Navy shall maintain not more than three large consolidated laboratories, each to serve a specific geographical area. Each consolidated industrial hygiene laboratory (CIHL) shall be accredited by the American Industrial Hygiene Association (AIHA) and maintain such accreditation. Each laboratory shall have, as a minimum, three gas chromatographs, two atomic absorption spectrophotometers, two microscopes, a UV-visible spectrophotometer, a high pressure liquid chromatograph and a zinc protoporphyrin analyzer.

(b) Activities shall staff laboratories to meet the expected sample analysis requirements of Navy industrial hygienists, based on extrapolation of the trend in requested determinations performed by each laboratory. Activities may use the following formula to estimate the staffing needed:

$$y = 1.0 + 0.00025x$$

Where:

y = the number of laboratory staff (professional staff, including chemists and technicians)

x = number of laboratory determinations to be completed each year

Activities that analyze environmental samples (such as indoor air quality or air toxics) should not use this formula to calculate staffing for analyzing these samples. Until experience is gained with such analyses, which may be different in time requirements from industrial hygiene samples, activities may justify their staffing for these analyses based on evaluation of commercial prices for similar analyses.

(c) Appendix 3-D provides an appropriate grade level structure for a given staff size. Each laboratory shall also have one clerical billet to handle sample receipt, logging and administrative correspondence.

(d) BUMED has CIHLs at the following activities:

1. Navy Environmental and Preventive Medicine Unit Two, Norfolk, VA
2. Navy Environmental and Preventive Medicine Unit Five, San Diego, CA
3. Navy Environmental and Preventive Medicine Unit Six, Pearl Harbor, HI.

(e) Medical activities having an industrial hygienist on staff shall maintain or establish minimum laboratory capabilities for local usage to include the following:

1. Asbestos identification and quantification using polarized light microscopy (PLM) and phase contrast microscopy (PCM)

2. Gravimetric sample analyses using a micro- or semi-micro-balance
3. Calibration equipment necessary to calibrate industrial hygiene sampling equipment
4. Equipment and supplies necessary to prepare sampling media. The above capabilities, not offered by the CIHLs, shall be available locally. The CIHLs perform analyses requiring staff chemists (i.e., chromatography and spectrophotometry). Each activity with a local asbestos laboratory shall enroll it in the proficiency analytical testing (PAT) program operated by the AIHA. Each local laboratory shall participate in the Asbestos Bulk Identification Proficiency Testing Program that is contractor-operated. Local laboratories may only perform asbestos analyses when they have achieved proficient ratings in each of the testing programs.

(f) BUMED, through the NAVENVIRHLTHCEN, shall ensure appropriate audit control and overall centralized management of the CIHLs.

(7) Emergency Industrial Hygiene Laboratory Support. Some samples will require quick analysis because of the hazardous toxicants involved and potentially costly curtailment in production. In such situations, activities may use local commercial testing laboratories if:

- (a) Such laboratories are accredited by AIHA and have a proficient rating through the PAT Program for the particular analyses of interest, (i.e., metals, organic solvents, free silica or asbestos).
- (b) The forms required by Section 0802.5 are used.
- (c) Copies of the laboratory results are mailed to NAVENVIRHLTHCEN.

Chapter 3

References

3-1. NAVEDTRA 10076A, "Career Development Plan for Safety and Occupational Health and Industrial Hygiene Personnel."

Appendix 3-A Job Hazard Categories

Review activity manpower authorization lists to identify all jobs by hazard exposure category as listed below. The number of personnel performing jobs in each category are totaled and entered into the equation in section 0303c. Most activities will have employees in more than one category. The following work center descriptions are examples of the type of work performed in each job hazard category. They are not all inclusive:

<u>JOB HAZARD CATEGORY</u>	<u>HAZARD LEVEL</u>	<u>WORKCENTER DESCRIPTION</u>
A	HIGH	<p><u>INDUSTRIAL OPERATIONS</u>: Machine shop (cutting, grinding, machining, drilling, planing and shaping metal); arc and acetylene welding; foundry operations (work with molten metals); electroplating; abrasive blasting; solvent cleaning operations; high-voltage electrical work; power plants (i.e., steam or electrical generation); ship repair work; aircraft rework; and spray painting.</p> <p><u>MEDICAL</u>: Radiation sources, communicable diseases, contaminated medical substances and handling chemicals.</p> <p><u>HEAVY EQUIPMENT OPERATIONS AND MAINTENANCE</u>: Heavy equipment operations (bulldozers, cranes and earth movers); repair and maintenance of large motors, engines and materials handling equipment (i.e., tower and bridge cranes).</p> <p><u>TOXIC/HAZARDOUS MATERIALS HANDLING</u>: Work involving use or cleanup of acids, corrosives, reactives, pyrophoric materials, carcinogens, pesticides, radioactive material and other high hazard chemicals or materials (asbestos, PCBs, etc.).</p> <p><u>CONSTRUCTION</u>: Construction or repair of piers, warehouses and buildings to include all building trades (i.e., painters, carpenters, sheet metal workers, plumbers, electricians, roofers, tilers, masons, concrete workers and work on scaffolding, communication towers or other high risk work).</p> <p><u>OTHER</u>: Work involving extreme exposures to heat, cold, diving/salvage, heights or other high risk work.</p>

<u>JOB HAZARD CATEGORY</u>	<u>HAZARD LEVEL</u>	<u>WORKCENTER DESCRIPTION</u>
B	MODERATE	<p><u>SUPPLY/TRANSPORTATION</u>: Movement of materials in storage facilities using forklift trucks, overhead cranes and powered hand trucks, where materials are stacked above 3 feet in height. Manual material handling/lifting (i.e., assembly line, exchanges and warehouse operations).</p> <p><u>MECHANICS</u>: Repair and maintenance of automotive vehicles, building maintenance and aircraft maintenance.</p> <p><u>RDT&E</u>: Engineers, test mechanics and laboratory personnel involved in the research, development, evaluation and test of systems.</p>
C	LOW	<p><u>ADMINISTRATIVE/CLERICAL/CLASSROOM</u>: Those positions that involve primary work in an office environment but may include visits to worksites for inspection or evaluation.</p>
D*		<p><u>SHIPBOARD PERSONNEL</u>: Those positions that involve working on board ships at sea.</p>
E*		<p><u>OPERATING FORCES</u>: Those positions on shore and at sea that involve the operation and support of aircraft operations.</p>
F*		<p><u>STUDENTS</u>: Positions allotted to personnel who are receiving formal, offsite training in excess of 5 working days.</p>

NOTE:

- * Job Hazard Categories D, E and F can be Hazard Level HIGH, MODERATE or LOW depending upon the specific duties assigned to the individual.

<u>JOB HAZARD CATEGORY</u>	<u>HAZARD LEVEL</u>	<u>ACTIVITY</u>
A	HIGH	NAVSHIPYD, SRF, SIMA, AIMD, NAVAVNDEPOT, PWC, WEAPONS/ORDNANCE STATION, MEDICAL/DENTAL ACTIVITIES, CONSTRUCTION ACTIVITY (NMCB, NMOBU, NMCBR), SURFACE WARFARE CENTERS, TEST CENTER OR LAB, SUB IMA.
B	MODERATE	NAS, NAF, NAVSTA, NAVCOMTELSTA, NCTAMS, NAVCOMMU, FISCs, TRADE SCHOOLS (only those involving the teaching of industrial operations, repair or maintenance operations).
C	LOW	NAVPRO, HEADQUARTERS, and all activities with primarily office or classroom work.
D		Personnel serving onboard CV, CVN, AS, LHA, LHD, LPH, DD, CG, DDG, FFG, LPD, LSD, LST, LCC, AO, AOE, T-AE, -TAO, T-AFS, T-ARS, ATS, SSN, SSBN and other ships not designated.
E		Wings, air squadrons.
F		Students at FTCs, NTCs, OCS, Aviation OCS and midshipmen at U.S. Naval Academy.

NOTE:

- * Job Hazard Categories D, E and F can be Hazard Level HIGH, MODERATE or LOW depending upon the specific duties assigned to the individual.

Appendix 3-B
Distribution of Occupational Health Physicians by Rank/Grade Level

Rank/Grade	Total Number of Physicians														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
06 / GS-15	1	1	1	1	1	1	1	1	1	1	1				
05 / GS-14	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
04 / GS-13	4	4	3	3	3	2	2	2	2	2	2	2	2	1	
03 / GS-12	8	7	7	6	5	5	4	3	3	2	1	1			

NOTE:

The GS-12 positions are to be filled with experienced non-physician health care providers such as physician assistants and nurse practitioners working under an established preceptor. Physicians without appropriate training or experience are not suitable for working independently in the occupational health field.

Appendix 3-C
Suggested Rank/Grade Level Structure
for Industrial Hygiene Support

Rank/Grade	Number of Persons																	
	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
05/GS-14	1	1	1	1	1	1												
05/GS-13	1	1	1	1	1	1	1	1	1	1	1	1						
04/GS-12 ^a	3	3	3	3	3	3	3	2	2	2	2	1	1	1	1	1	1	1
03/GS-11 ^b	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	1	1	0
02/GS-09	4	4	3	2	2	2	2	2	1	1								
01/GS-07	2	1	1	1	1													
GS-05	4	4		4	3	3	3	3	3	2	2	2	2	1	1	1		
Clerical Support ^c	4	4	4	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1

Notes:

^a GS-12: Considered a non-supervisory journeyman level industrial hygienist.

^b GS-05 to GS-11: Billets may be either for industrial hygienists or industrial hygiene technicians (mix to be determined at the local level). GS-09 is considered a non-supervisory journeyman level for industrial hygiene technicians and GS-11 could be a technical supervisor.

^c Represents recommended clerical support based on the table above.

Appendix 3-D
Suggested Grade Level Structure for
Consolidated Industrial Hygiene Laboratories

Rank/Grade	Size of Staff (professional billets)								
	12	11	10	9	8	7	6	5	4
05/GM-13 chemist	1	1	1	1	1	1	1	1	
04/GM-12 chemist	3	3	3	2	2	2	2	2	2
03/GS-11 chemist	2	2	2	3	2	2	1	1	1
02/GS-09 chemist	2	1	1	1	1	1	1	1	1
01/GS-05, 06, 07 chemist	2	2	2	1	1	1	1		
GS-05, 06, 07 technician	2	2	1	1	1				
GS-04 technician									
Each laboratory should also have one clerical billet to handle sample receipt, logging and administrative correspondence.									