



UNITED STATES MARINE CORPS
MARINE CORPS LOGISTICS BASE
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ALBANY, GEORGIA 31704-0353

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OCT 23 2009

BASE ORDER 5100.13C

From: Commanding Officer
To: Distribution List

Subj: RESPIRATORY PROTECTION PROGRAM

Ref: (a) 29 Code of Federal Regulations (CFR), Section 1910.134
(b) NAVMC DIR 5100.8
(c) National Institute for Occupational Safety and Health (NIOSH) Guide to Industrial Respiratory Protection 87-116
(d) ANSI/Compressed Gas Association Specification G-7.1, Commodity Specification for Air, 2004
(e) ANSI/AIHA Z88.6-2006, Respiratory Protection - Respirator Use, Physical Qualifications for Personnel
(f) NEHC Technical Manual OM 6260 of August 2007

Encl: (1) Worksite Specific Respiratory Protection Plan
(2) Respirator Cleaning Procedures
(3) User Seal Check Procedures
(4) Request for Medical Clearance for Respirator Use

1. Situation. This Order revises the requirements established for the purpose of eliminating or minimizing occupational employee exposures to respiratory hazards and serves to help employees aboard Marine Corps Logistics Base, Albany (MCLBA) comply with Occupational Safety and Health Administration (OSHA) respiratory protection requirements as found in reference (a).

2. Cancellation. Base Order 5100.13B.

3. Mission. Leaders at all levels are responsible for implementing the requirements and procedures within this Order to eliminate or minimize occupational employee exposures to respiratory hazards.

4. Execution

a. Commander's Intent. Respiratory hazards can result in serious illness or death. This can lead to unnecessary

suffering to victims, reduce morale, and degrade our capabilities. The intent of this Program is to eliminate, or reduce to acceptable levels, all foreseen hazards associated with the respiratory exposure. This is accomplished by considering personal protective equipment (such as respirators) as the least preferred methods to protect employees from harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapor and by applying the provisions of references (a) through (f), when engineering and administrative controls are insufficient to protect employee's health or in emergency situations.

b. Concept of Operation. The Respiratory Protection Program will be implemented by applying the program elements identified in reference (a) throughout MCLBA and all tenant organizations.

c. Tasks

(1) Commanding Officer(CO). The CO will appoint in writing one person from the Risk Management Office (RMO) as the command Respiratory Protection Program Manager (RPPM).

(2) Installation Safety Manager (ISM). The ISM will:

(a) Provide a written recommendation to the CO one member of the RMO Staff to serve as the RPPM.

(b) Provide staff supervision over the RPPM.

(c) Ensure the RPPM is trained, qualified, and certified to perform his or her duties.

(d) Provide the necessary resources to allow the RPPM to effectively manage the program.

(e) Budget for and fund respiratory protection equipment and training related to respiratory protection program management.

(3) RPPM. The RPPM will:

(a) Serve as Program Manger of this Program.

(b) Establish and maintain a program which ensures employee protection from workplace respiratory hazards.

(c) Develop a written respiratory protection program that includes all elements required by reference (a) and update written program, as needed.

(d) Complete one of the following courses before appointment:

1. OSHA Training Institute Course 2220, Respiratory Protection.

2. OSHA Training Institute Education Centers Course 2225, Respiratory Protection.

3. Naval Occupational Safety and Health, and Environmental Training Center RPPM Course (A-493-0072).

4. Respiratory protection course with at least 32 hours of training which covers: minimum program requirements and administration; respirator types, selection, certification, and limitations; respirator cleaning, maintenance, and inspection; fit testing; respirator cartridge change out schedules; and medical considerations. The course must provide training in all aspects of 29 CFR 1910.134.

(e) Maintain expert knowledge about respiratory protection and current regulatory requirements.

(f) Authorize voluntary use of respirators as requested by other employees on a case-by-case basis, depending on specific workplace conditions and the results of medical evaluations.

(g) Provide employees who voluntarily choose to wear respirators with a copy of Appendix D of reference (a). (Appendix D details the requirements for voluntary use of respirators by employees.)

(h) Provide training for Respiratory Protection Technicians (RPTs).

(i) Oversee the effectiveness and quality of training programs for respirator wearers of tenant organizations.

(j) Assess the effectiveness of the respiratory protection program and conduct periodic evaluations of division and command respiratory protection programs to ensure the provisions of the program are being effectively implemented and that it continues to be effective. These evaluations will include:

1. Consulting employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems.

2. Respirator fit (including the ability to use the respirator without interfering with effective workplace performance).

3. Appropriate respirator selection for the hazards to which the employee is exposed.

4. Proper respirator use under the workplace conditions the employee encounters.

5. Proper respirator maintenance.

(k) Maintain all required respiratory protection program documents and records such as worksite-specific plans, training records, and applicable references.

(l) Request the Naval Branch Health Clinic's (NBHC) Industrial Hygienist (IH) to conduct a health hazard evaluation of new or modified work operations to ensure appropriate respirators are specified.

(m) Ensure respiratory protection, recommended by the NBHC's IH, is provided to appropriate personnel by their organizations.

(n) Provide annual training to all RPTs and their supervisors.

(o) Conduct an annual review of the Respiratory Protection Program and submit the results to the Installation Safety Manager and tenant organizations upon request.

(p) Ensure that law enforcement personnel wearing respiratory protection are quantitative fit tested with the minimum standard of 2,000 fit factor and use all 8 OSHA fit testing exercises.

(q) Ensure that firefighters engaged in interior structural firefighting use self-contained breathing apparatus (SCBA) respirators.

(r) Submit budget requests to adequately support the Respiratory Protection Program.

(4) Officer in Charge (OIC) of NBHC. The OIC of NBHC will:

(a) Generate and maintain required medical records for employees enrolled in the Respiratory Protection Program.

(b) Provide a current listing of employees enrolled in the medical surveillance program to the RPPM upon request.

(c) Provide medical evaluations to employees enrolled (and candidates for enrollment) in the Respiratory Protection Program in accordance with references (a), (b), (e), and (f). The frequency of medical evaluation is summarized in the following table:

Respirator User Frequency of Medical Evaluation	
Age	Frequency of Evaluation
15 to 34 Years	Every 5 years
35 to 44 Years	Every 2 years
45+ Years	Annually
Note: Annual evaluation for SCBA users of all ages shall be required.	

(d) Provide a written recommendation to the employee and employee's supervisor regarding the employee's ability to use the respirator. The written results shall be recorded on Section B of enclosure (4).

(e) Ensure that the NBHC's IH:

1. Perform employee exposure monitoring upon initial work in a potentially hazardous atmosphere and whenever work conditions change that may affect employee exposure to respiratory hazards. Document the results of exposure monitoring in the periodic industrial hygiene survey.

2. Review hazard assessments to determine the type of respirators required to protect employees from respiratory hazards. Document the results during the periodic industrial hygiene survey.

3. Prescribe the appropriate type of respirator for each work area or process in accordance with reference (c). Document the recommendation and confirm the type of respirators used on the periodic industrial hygiene survey.

4. Provide a filter change out schedule for the prescribed filter or cartridge. Document the results on the periodic industrial hygiene survey.

5. Provide organizations with direct assistance and service in conducting their training and fit testing programs.

6. Evaluate the respiratory protection program annually to ensure that the written respiratory protection program is being properly implemented, and to ensure that employees are being protected from respiratory hazards. The results of this evaluation will be provided to the ISM.

(5) Commanders (Comdrs), COs and their Directors or OICs of Tenant Activities. Comdrs, COs and their Directors or OICs of Tenant Activities will:

(a) Implement the provisions of this Order and ensure personnel under their command are informed of the respiratory hazards in their work areas.

(b) Whenever respiratory protection is required, appoint in writing one member of their organization to serve as their organization's RPT. This will usually be the

organization's senior safety officer. Provide a current copy of the appointment letter to the RPPM.

(c) Provide the necessary resources to their RPTs and employees to ensure compliance with this Order.

(d) Ensure that a centrally located facility is staffed to maintain and issue respiratory protection equipment. Their organization shall provide one or more centrally located facilities depending on its nature and size. The facility personnel shall:

1. Ensure that only respirators approved by NIOSH or jointly by NIOSH/Mine Safety Health Administration (MSHA) are provided to respirator users.

2. Maintain all respiratory protection equipment in a sanitary and serviceable condition.

3. Store all respiratory protection equipment in a designated clean area.

(6) RPT. The RPTs will:

(a) Complete respiratory protection training provided by the RPPM and any additional respirator manufacturer training recommended by the manufacture of respirators used in their organization. At a minimum the RPT training will include:

1. Review of this Order and reference (a).

2. Responsibilities of the RPT position.

3. Types of respiratory hazards.

4. Use and limitations of the types of respirators used within their organization.

5. Filter change out schedule and criteria.

6. Maintenance, care, inspection, and repair of the types of respirators used within their organization.

7. Fit testing procedures.

(b) Maintain a current copy of the IH Survey.

(c) Complete and maintain an accurate worksite-specific respiratory protection plan, see enclosure (1), of each area in their organization where employees are required to wear respirators.

(d) Perform periodic inspections of respirators in their organization to confirm that the respirators and equipment are of the type specified in the Worksite-Specific Respiratory Plan and are being used and maintained properly.

(e) Perform and document the monthly inspection and function test of each SCBA used in the organization.

(f) Maintain and/or have access to an inventory of respirators and associated parts and equipment.

(g) Monitor maintenance and repair of equipment in accordance with the manufacturer's instructions.

(h) Ensure local procedures are established to remove from service any defective respirators or parts.

(i) Conduct respirator training and fit testing for employees within their organization and maintain records.

(j) Verify compressed breathing air quality for employees using atmosphere-supplying respirators (supplied-air and SCBA) will meet at least the requirements for Type 1-Grade D breathing air described in reference (d) which are:

1. Percent oxygen, balance is predominantly nitrogen content (v/v) of 19.5 - 23.5 percent.

2. Oil (condensed) content of 5 milligrams per cubic meter of air or less.

3. Carbon monoxide content of 10 ppm or less.

4. Carbon dioxide content of 1,000 ppm or less.

5. Lack of noticeable odor.

(k) Verify the quarterly tests for compressed air quality are performed and the results maintained in accordance with references (a) and (d).

(l) Inspect compressors used to supply breathing air to:

1. Prevent entry of contaminated air into the air-supply system.

2. Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (5.56 deg. C) below the ambient temperature.

3. Ensure suitable in-line air-purifying sorbent beds and filters for breathing air quality are maintained and replaced or refurbished periodically in accordance with the manufacturer's instructions. A tag or similar document containing the most recent sorbent bed change date and the signature of the person who changed the sorbent beds will be displayed near the compressor.

(m) Issue under voluntary use filtering facepiece type respirators with the approval of the RPPM.

(n) Assist supervisors with the provision of this Order within the scope of training.

(7) Supervisors. Supervisors will:

(a) Conduct hazard assessments to determine the type of respirator required to protect employees from respiratory hazards.

(b) Verify their employees have the requisite training, fit testing, and medical evaluation before authorizing them to wear a respirator.

(c) Confirm any use of respirators by employees under their supervision is in accordance with this Order and the Worksite Specific Respiratory Protection Plan, see enclosure (1), for the work area or process.

(d) Complete Section A of enclosure (4) and submit the results to Physician Licensed Health Care Professional (PLHCP) prior to employee's medical evaluation for respirator use.

(e) Initiate safety briefings on respiratory protection issues at the start of each new project or task that involves respiratory hazards for affected employees under their supervision.

(f) Record complaints related to respirator usage, act promptly to investigate complaints, correct hazards, and get medical assistance. Report all respirator related incidents to the RPPM through the RPT before the end of the work shift.

(g) Physically check each respirator prior to its assignment to their employees to be sure that it is of the type specified in the Worksite-Specific Respiratory Protection Plan.

(h) Establish local procedures to remove from service any defective respirators or parts.

(i) Continually monitor compliance with the requirements of this Order.

(8) Employees. Employees assigned respirators will:

(a) Obtain the respiratory protection equipment determined by the NBHC periodic industrial hygiene survey, and inspect, use and maintain per the instructions and training received.

(b) Wear a respirator only for which they were medically qualified, fit tested, and trained. Fit testing protocols will be those listed in reference (a) and conducted:

1. Prior to initial use and at least annually thereafter, of the respirator with the same make, model style, and size of respirator that will be used in the workplace.

2. Whenever a different respirator facepiece (size, style, model or make) is used. Tight-fitting facepiece will be fit tested and pass an appropriate Qualitative Fit Testing (QLFT) or Quantitative Fit Testing (QNFT).

3. Whenever the employee reports, or the NBHC Physician, supervisor, RPT, or RPPM makes visual observations of, changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

4. If after passing a QLFT or QNFT, the employee subsequently notifies the supervisor, RPPM, or NBHC Physician that the fit of the respirator is unacceptable, the employee will be given a reasonable opportunity to select a different respirator and be re-fit tested.

(c) Wear the respirator when and where required and in the manner in which they are trained.

(d) Receive training by the RPT prior to using a respirator and annually thereafter. This training will include the following topics:

1. Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.

2. Limitations and capabilities of the respirator.

3. How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.

4. How to inspect, don, remove, use, and check the seals of the respirator.

5. Procedures for cleaning and disinfecting respirator using enclosure (2) and the manufacturer's instructions.

6. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.

7. Filter change out schedules and criteria.

(e) Use in accordance with the manufacturer's instructions and the training received.

(f) Report immediately any defects in the respiratory protection equipment. Whenever there is a respirator malfunction, immediately evacuate to a safe area and report the malfunction.

(g) Report promptly to the supervisor any symptoms of illness that may be related to respirator usage or exposure to hazardous atmosphere.

(h) Inform their supervisor if their respirator no longer fits well, and request a new one that fits properly.

(i) Clean and disinfect their respirator as often as necessary, see enclosure (2).

(j) Store their respirator in accordance with manufacturer's instructions.

(k) Shave all facial areas that seal to the respirator facepiece.

(l) Allow nothing to interfere with the facepiece seal of the respirator.

(m) Inspect their respirator immediately before each use according to the manufacturer's instructions.

(n) Perform a user seal, negative and positive respirator fit check each time a respirator is donned in accordance with the training provided and using enclosure (3).

(o) Change respirator cartridges/canisters according to established change out schedule.

(p) Guard against damage to or loss of respiratory protection equipment.

(q) Wear only a filtering facepiece under voluntary use of respirators. Each organization will supply the respirators. Personnel must be trained on the proper use and

care of this respirator; however, they do not have to be placed in the medical surveillance program.

(9) Law Enforcement Personnel. Law enforcement personnel assigned respirators under Chemical, Biological, Radiological, Nuclear, and High Yield Explosives (CBRNE) operations will adhere to the provisions of paragraph 4(c)(8)(a) through (q) of this Order. Marines are deemed fit for respirator use and are waived from the medical physical requirements.

5. Administration and Logistics

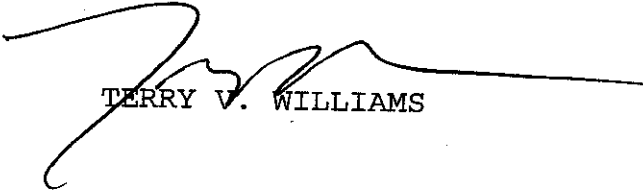
a. Administration. None.

b. Logistics. None.

6. Command and Signal

a. Signal. The Order is effective the date signed.

b. Command. This Order is applicable to this Command and all tenant commands and organizations located aboard MCLBA. Contractors are responsible for providing their own respiratory protection programs and respiratory protective equipment.



TERRY V. WILLIAMS

DISTRIBUTION: A

WORKSITE SPECIFIC RESPIRATORY PROTECTION PLAN

Division/Center _____ CWC/Shop _____ Date _____

A. Task Description

B. Atmospheric Hazards (from IH Survey)

C. Controls installed to reduce exposure

D. Required Respiratory Protection

Type	Type of Filter	MUC	Filter Change Schedule	Limitations/Remarks

E. Employee Information (attach roster if necessary)

Name	Date of Med. Exam	Date of Training	Date of Fit Test

F. Emergency Information

Signs and symptoms of exposure: _____

Evacuation Procedures _____

First aid procedures _____

Supervisor's name _____ Supervisor's signature _____

RPT's name _____ RPT's signature _____

RESPIRATOR CLEANING PROCEDURES

1. These procedures are provided for employees to use when cleaning respirators. They are general in nature, and cleaning recommendations provided by the manufacturer of the respirators may be used if they are equivalent in effectiveness. Equivalent effectiveness simply means that the procedures used must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.
2. Procedures for Cleaning Respirators:
 - a. Remove filters, cartridges, or canisters. Disassemble face pieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.
 - b. Wash components in warm (43°C, 110°F maximum) water with mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
 - c. Rinse components thoroughly in clean, warm (43°C, 110°F maximum), preferably running water. Drain.
 - d. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for 2 minutes in one of the following:
 - (1) Hypochlorite solution (50 ppm of chlorine) made by adding approximately 1 milliliter of laundry bleach to one liter of water at 43°C, 110°F maximum.
 - (2) Aqueous solution of iodine (50 PPM iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodine/100 milliliters of 45% alcohol) to 1 liter of water at 43°C, 110°F.
 - (3) Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by respirator manufacturer.
 - e. Rinse components thoroughly in clean, warm (43°C, 110°F maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents of disinfectants that dry on face pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
 - f. Components should be hand-dried with a clean lint-free cloth or air dried.
 - g. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.
 - h. Inspect and test the respirator to ensure that all components work properly in accordance with the manufacturer's instruction.

USER SEAL CHECK PROCEDURES

1. The individual who uses a tight fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this Enclosure, or the respirator manufacturer's recommended user seal check method will be used. The user seal checks are not substituted for qualitative or quantitative fit tests.

2. Facepiece Positive and/or Negative Pressure Checks

a. Positive pressure check. Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve and then carefully replacing it after the test.

b. Negative pressure check. Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for 10 seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

3. Manufacturer's Recommended User Seal Check Procedure. The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures and equally effective.

Request for Medical Clearance for Respirator Use

SECTION-A: Request for Medical Clearance for Respirator Use Questionnaire
 (The following areas should be considered in the medical evaluation and the Medical/industrial hygiene interface documented appropriately)

Supervisor/Manager _____

Department _____

Employee _____

Date of Birth _____

Employee # _____

Circle Type or Types of Respirator to be used: (Indicate weight(s) of respirator(s))

	Weight		Weight
Open-circuit SCBA	_____	Supplied air continuous-flow respirator	_____
Pressure demand supplied	_____	Closed-circuit SCBA	_____
Air respirator	_____	Combination air-line and SCBA	_____
Air-purifying (non powered)	_____	Air-purifying (powered) (PAPR)	_____

Expected level of physical work effort (63CFR 1284) (Circle and describe all that apply):

Light: sitting while writing, typing, drafting, assembly work (<3 mets)

Moderate: sitting while nailing or filing, driving a truck or bus in urban traffic, walking on a level surface @2mph (slowly) (<5 mets)

Heavy: lifting 50 lbs. from floor to waist or shoulder, loading dock, shoveling, climbing stairs with 50 lbs. (>5 mets)

Extent of Usage:

1. On a daily basis
2. Occasionally – but more than once a week
3. Rarely – or for emergency situations
4. Maximum Number of Hours of use Per Day (estimate): _____

Special Work Considerations (circle and describe all that apply)

Protective clothing

Vapor Barrier clothing

Temperature and humidity

Personal Protective Equipment

Responsibility for health and safety of others, of Public (Security, Rescue, HazMat, Fire Brigade, Nuclear)

Dangerous Work Environment (High Voltage, high places, machinery)

Hazardous material

Hazardous atmosphere (IDLH)

Confined Space

Communication essential

Normal vision essential

Description of usual job functions, title, tasks, work activities:

SECTION-B: Supervisor/Manager's Copy of PLHCP's Written Recommendation
 Detach or place on separate form or transmit electronically

PLHCP Determination: Circle a Class

Class 1: No restriction on respirator use.

Class 2: Conditional Use: Some specific use restrictions or medical requirements (e.g., moderate/light work Only, PAPR only, no SCBA use, annual medical evaluation, age-specific medical evaluation).

Class 3: No respirator use permitted (permanent).

Class 4: No respirator use permitted (temporary) – you require additional medical evaluation and/or Treatment and physician evaluation (see above).

Class 5: Additional temporary/permanent (non-respirator) restrictions – (e.g., no heavy lifting, no climbing, No heat stress).

Restrictions/Additional Medical Requirements:

Date of next medical re-evaluation _____

PLHCP Signature _____