



RESPIRATORY PROTECTION PROGRAM

Directive 6 - 105

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I. PURPOSE

Police Officers of the Department of General Services Maryland Capitol Police (DGS-MCP) may be exposed to respiratory hazards during the course of their duty. These hazards include, but are not limited to; Weapons of Mass Destruction, Hazardous Material Releases, as well as Immediately Dangerous to Life or Health (IDLH) conditions. The purpose of this program is to ensure that the members of the Department are protected to the best of our ability from exposure to these respiratory hazards by utilizing training, proper equipment, and procedure / protocol.

II. SCOPE AND APPLICATION

This program applies to all sworn members of DGS-MCP who may be exposed to such hazards during an emergency.

III. COMPLIANCE

This program will comply with all respiratory standards as stated in The Code of Federal Regulations 29 CFR 1910.134.

IV. DEFINITIONS

- **American Conference of Governmental Industrial Hygienist (ACGIH):** The American Conference of Governmental Industrial Hygienist is an agency that establishes and sets the chemical industry standards including what is known as Threshold Limit Values (TLV) for various chemicals and other agents.
- **Air-Purifying Respirator (APR):** A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants from the breathing air before it is inhaled. An air-purifying respirator does not supply air to the user.
- **American National Standards Institute (ANSI):** Is an organization that coordinates the development and use of voluntary consensus standards in the United States.
- **Atmosphere-Supplying Respirator:** A respirator that supplies the user with breathing air from a source that is independent of the surrounding atmosphere. Atmosphere-supplying respirators include Supplied-Air Respirators (SAR) and Self-Contained Breathing Apparatuses (SCBA).
- **Canister or Cartridge:** A container with a filter, absorbent, or catalyst (or a combination of these items) that removes specific contaminants from the air passing through it.

- **Emergency Situation:** Any occurrence such as (but not limited to) the release of Weapons of Mass Destruction, equipment failure, rupture of containers or the failure of control equipment that may or does result in the uncontrolled, significant release of an airborne contaminant.
- **Employee Exposure:** Exposure to a concentration of an airborne contaminant.
- **Filter (or Air-Purifying Element):** The part of a respirator that removes solid or liquid aerosols from the air that is being breathed.
- **Fit Test:** A procedure used to qualitatively or quantitatively evaluate how well a respirator fits an individual.
- **Hazardous Chemical:** Any chemical that poses a physical or health hazard.
- **Immediately Dangerous to Life and Health (IDLH):** An atmospheric concentration of any toxic, corrosive, or asphyxiant substance that poses an immediate threat to life, or would cause irreversible or delayed adverse health effects, or would interfere with an individual's ability to escape from a dangerous atmosphere.
- **NIOSH (National Institute for Occupational Safety and Health):** An agency that establishes minimum performance standards for respirators and tests and approves respirators for various uses.
- **OSHA (Occupational Safety and Health Administration):** A federal agency of the Department of Labor that regulates workplace safety and health.
- **Permissible Exposure Limit (PEL):** Maximum time-weighted concentration at which 95 percent of exposed, healthy adults suffer no adverse effects over a 40 hour work week; an 8-hour time-weighted average unless otherwise noted. PEL's are expressed in either ppm or mg/m³. They are commonly used by OSHA and are found in the NIOSH Pocket Guide to Chemical Hazards.
- **Physician or Other Licensed Health Care Professional (PLHCP):** An individual whose legal scope of practice (as defined by license, registration or certification) allows him/her to provide – whether independently or when delegated the responsibility to do so – some or all of the health care services required by OSHA Respiratory Protection Standard.
- **Qualitative Fit Test (QLFT):** A pass/fail assessment of how well a respirator fits that relies on the individual's response to the taste or smell of the test agent.
- **Quantitative Fit Test (QNFT):** An assessment of how well a respirator fits that measures the specific amount of leakage into the respirator.
- **Respirator:** A wearable device that protects the user from breathing airborne hazards. There are several types of respirators, including:
 - Air-purifying respirators which filter the air and make it safe to breathe
 - Atmosphere-supplying respirators, which provide sources of clean air (such as airline respirators and Self-Contained Breathing Apparatuses (SCBA's)).

- **Respirator Inlet Covering:** That portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying element, a breathing air-source, or both. The barrier may be a facepiece, helmet, hood, suit or mouthpiece respirator with a nose clamp.
- **Self-Contained Breathing Apparatus (SCBA):** An atmosphere-supplying respirator for which the source of breathing air is carried by the user.
- **Service Life:** The period of time that a respirator, filter, absorbent, or other respiratory equipment is expected to provide adequate protection for the user.
- **Threshold Limit Values (TLV's):** Exposure guidelines established by the American Conference of Government Industrial Hygienist (ACGIH), for airborne concentrations of many chemical compounds; represents the exposure levels that employees may regularly be exposed to without experiencing adverse effects.
- **User Seal Check:** A test conducted by the user to determine if the respirator is properly sealed to his or her face.

V. RESPONSIBILITIES

TRAINING UNIT:

The Training Unit is responsible for the overall administration of the respirator program for the Maryland Capitol Police.

Duties of the Training Unit include:

- Appointing a Program Administrator
- Developing and maintaining an Initial and In-Service Respirator Training Program
- Maintaining all records related to the administration of the Respirator Protection Program.

The **Program Administrator** is responsible for administering the respiratory protection program. The Commanding Officer of the Training Unit will appoint the Program Administrator for the Maryland Capitol Police.

Duties of the program administrator include:

- Identifying work areas, procedures and processes that require members to wear respirators, and evaluating hazards
- Selecting of respiratory protection options
- Monitoring respirator use to insure that respirators are used in accordance with their certifications
- Arranging for and/or conducting training
- Ensuring proper storage and maintenance of respiratory equipment
- Conducting fit testing
- Maintaining records required by the program

- Evaluating the program
- Updating the written program, as needed
- Identify purchasing needs of respiratory protection equipment
- Assuring that all equipment purchased is approved by National Institute for Occupational Safety and Health (NIOSH).

SUPERVISORS:

Supervisors are responsible for ensuring that the respiratory protection program is implemented accordingly. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by subordinates under their charge.

Duties of the Supervisor include:

- Ensuring that the employees under their supervision have received medical evaluations, appropriate training, and yearly fit testing
- Ensuring the availability of appropriate respirators and accessories
- Enforcing the proper use of respirator protection
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection program
- Ensuring that respirators fit well and do not cause discomfort
- Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program

EMPLOYEES:

Members have the responsibility to wear their respirator when required and in the manner in which they were trained.

Duties of Employees:

- Care for and maintain their respirators as instructed, and store them in a clean sanitary location and inspect their assigned respirator equipment on a regular basis.
- Informing their supervisor if the respirator or associated equipment no longer fits well, is damaged or needs to be replaced.
- Informing their immediate supervisor, who will notify the Program Administrator, of any respirator hazards that they feel are not adequately addressed.
- Must be clean-shaven in keeping with MCP rules and regulations.
- Must successfully complete fit testing on a yearly basis at In-Service training.

VI. PROGRAM ELEMENTS

General

All members of the MCP that have been medically cleared by DHMH/Concentra Medical Center will be required to wear respiratory protection when respiratory hazards exist.

Respiratory protection will be issued by the Program Administer, after the successful completion of medical screening, fit testing and training. Each individual wearer will store their individual respirator in the issued carrying case and it will be kept with the rest of their issued equipment, or in identified storage area.

During periods of heightened security levels or during known hazardous conditions, members are required to keep respiratory protection on or directly near their person at all times.

All members of the MCP will inspect their issued respiratory protection on a regular basis. The Training Unit will perform a fit test and detailed inspection at each member's annual In-Service Training.

Medical Evaluations

Prior to a member being fit tested, each member of the department will complete Occupational Safety and Health Administration (OSHA) medical questionnaire to evaluate the member's ability to wear a respirator. The questionnaire may be completed annually, based on DHMH/Concentra Medical Center's evaluation of the member.

Medical evaluations may include a physical exam, under certain conditions, at which time members may be required to supply additional health related information to our medical provider in order to complete the physical exam.

All medical evaluations of questionnaires and examinations of members of the Department will be performed by DHMH/Concentra Medical Center under the direction of a Licensed Physician and are held and treated as confidential.

Medical clearances given by DHMH/Concentra Medical Center will be issued at one of the following three levels as determined by the licensed physician:

- ***Level One*** – There are no considerations and a member is cleared for all duties
- ***Level Two*** – Medical restrictions will be imposed upon the member in which certain types of respiratory equipment can or cannot be used. This also includes the limited use of respiratory equipment to enable a member to escape from a hazardous environment only.
- ***Level Three*** – Member is not medically qualified to wear any type of respiratory equipment.

Medical evaluations may be conducted on a member at the request of their supervisor, or if the member's physical health has changed in a manner that may prevent them from wearing a respirator.

At any time, a member may request a medical evaluation to assess his or her ability to wear a respirator.

Selection and Use Procedures

Only National Institute for Occupational Safety and Health (NIOSH) – approved respirators will be used.

All respiratory protection equipment will be used in accordance with its manufacturer's specifications.

Each individual member will be responsible for the cleaning, care and maintenance of his or her respirator.

The only respirator used by the Maryland Capitol Police is the MSA Chemical and Biological Warfare Agent Gas Mask, and NBC (Nuclear, Biological, and Chemical) Escape Canister. This is a negative air-purifying respirator that, in conjunction with the filters, makes the air safe to breathe.

No other type or make of unit will be used while operating in an emergency situation.

Respirator Inspection and Maintenance

Before each use, the wearer will inspect each respirator, and canisters or cartridge to ensure that all protective equipment has not exceeded its service life and is in proper working order.

The user will perform the proper seal check prior to each use.

All Supervisors will verify that the appropriate respiratory protection is being used, inspected, and maintained.

Respirators will be inspected during routine cleanings. Worn or deteriorated parts will be replaced according to the manufacturer's specifications.

Only persons identified by the Program Administrator will perform repairs to the respiratory equipment. In the event that the equipment cannot be repaired, a Supply Request (MCP Form 120) will be completed and the Program Administrator will issue replacement equipment.

Fit Testing

Each user of a respirator will be fit tested yearly, to ensure that they can maintain a proper face piece to face seal. This fit test will be conducted during In-service training.

Fit testing will be conducted annually or more often, as necessary by using the TSI Porta-Count Pro+ Machine and computer generated fit test report.

The minimum acceptable fit factor will be equal to or greater than 500.

Fit testing will be performed in accordance with Occupational Safety and Health Administration (OSHA) standards 29 CFR 1910.134.

The MCP will follow the quantitative fit test protocols.

The Program Administrator will keep a written record of all fit test results and update annually.

Only personnel approved by the Program Administrator, in accordance with the aforementioned standard, will perform fit testing.

Members must follow proper donning and doffing techniques as outlined in.

If the member fails to employ proper techniques, the fit tester will educate the member as to proper methods as outlined in.

Fit tests will be performed using either the members' personal respirator or a respirator of identical construction. The face piece will be modified for testing procedures by the insertion of test tubing into the filtration system and adapter.

All members will be required to successfully complete a fit test prior to their use of any respirators in the work place.

The MCP will make available to all members a properly fitting respirator. Members are to refrain from entering any suspected or known Immediately Dangerous to Life and Health (IDLH) atmosphere.

Sanitizing and cleaning of the member's personal respirator will be completed after each annual fit test during In- Service training.

Quantitative Fit Test Procedure

No member will be fit tested if they have smoked any tobacco products within ½ hour of the start of the fit test.

Before starting, the tester will ensure that the member has no facial hair that will interfere with the face piece seal. The exhalation valve of the member's face piece will be inspected for debris and cleaned as required. The test adapter will be sanitized and attached to the members face piece with a sampling tube inserted into face piece. The nose cup will be removed.

A user seal check as outlined in will be completed prior to attaching the filter cartridge.

The member will wear the face piece for 5 minutes prior to the exercise/test phase.

The member will be referred to the DHMH/Concentra Medical Center if they exhibit any difficulty in breathing.

At the onset of this respiratory protection program the fit test will be administered by Program Administrator. All procedures will be in full compliance with manufacturer's recommendation and in accordance with Federal Register 1910.134.

The fit test will be conducted using a Portacount machine and computer generated fit test report.

This fit test report will be maintained in each member's file.

The minimum acceptable fit factor will be equal to or greater than 500.

Facial Hair

No member will be allowed to participate in fit testing, training or emergency operations that may require the use of a respirator if they have any facial hair that comes between the sealing surface of the face piece and the face, or interferes with valve function.

Examples include but are not limited to beards, goatees, sideburns, or excessively long hair. This is to ensure that you will be able to make and maintain an effective respirator seal, per MCP Directives Manual.

Eyeglasses

Use of standard eyeglasses within a respirator face piece is not permitted. Contact lenses or corrective lenses that can be worn within the face piece will be permitted.

Approved spectacle kits are available for use with face pieces. No other devices are to be used by members without prior approval of the Program Administrator.

Members who wear glasses will be provided with a spectacle kit free of charge upon request. Upon being issued the spectacle kit, the member will then take the spectacle kit to his or her optometrist and have the eyeglass prescription filled.

Training

All members that are medically cleared and fit tested to wear a respirator will receive instruction from the Training Unit on the respirator equipment that covers:

- Methods of recognizing respiratory hazards
- Instruction in the hazards and honest appraisal of what could happen if the proper respiratory protection device is not used
- Respirator Protective Equipment's capabilities and limitations
- Instruction and training in the actual use of respiratory protection equipment and close and frequent supervision to assure that it continues to be properly used, to include the function, correct donning, clearing procedures, care, cleaning, and storage
- Classroom and field training to recognize and cope with emergency situations.

Upon successful completion of classroom instruction, members will be issued respirator protection equipment from the Program Administrator.

Annual refresher training will be conducted during the members annual In-Service.

Only members trained by the Program Administrator or his/her designee will conduct the fit test.

Members of the department are not authorized to make any repairs to respirator equipment.

Retraining

If a supervisor feels that a member needs retraining in respirator use, they must review the situation with the member and then contact the Program Administrator in writing, documenting their concerns.

The Program Administrator will review all documentation and may interview the member involved. If it is deemed that the member involved is in need of re-training, this will be conducted at the earliest convenience of the Program Administrator to ensure the safety of the member and the integrity of the program.

Retraining on the use of the respirator will be conducted in strict compliance with.

Hazard Evaluation – Atmosphere

Any atmosphere that is proven on an emergency scene will be considered to be Immediately Dangerous to Life and Health (IDLH) until otherwise proved to be safe. Examples of such atmospheres include, but are not limited to, interiors of buildings or vehicles that are on fire, avenues of smoke travel, plumes, clouds, vapors, dust or any particulate matter in the air.

No member shall use the respirator to enter an atmosphere as described above.

GAS DETECTION METERS WILL BE USED EXCLUSIVELY TO DETERMINE IF THE ATMOSPHERE IS SAFE, as determined by the City, State or Federal agencies using air monitoring or other equipment.

Members of the department should not wait to use respiratory protection in any situation in which they feel it is required. It is better for a member of the department to error on the side of caution, then not to wear the respiratory protection at all.

If a member uses their respirator during an actual event, the member will follow the decontamination procedures set forth from the on scene Incident Commander or his/her designee.

Record Keeping for Respiratory Protection Program:

The following documents and records will be maintained by the Maryland Capitol Police through the Program Administrator:

- Fit test record, produced at the time a member is fitted. A copy will be filed and updated by the Program Administrator.
- The respirator training record. Copies and access to these records will be available through the Training Unit.
- Current edition of the department's respiratory program. A copy of this program

will be available at each Detachment, Police headquarters and fit test site.

- Any documents relating to program evaluation, complaints, problems and suggestions will be kept on file by the program administrator.
- DHMH/Concentra Medical Center will forward a copy of the medical release form to the program administrator. This form will be kept in a confidential file for each member.
- A copy of the departmental report will be sent to the program administrator if any member suffers an inhalation injury while operating at the scene of any emergency.
- A database of members approved to wear the respiratory mask will be maintained by the Program Administrator.