# **General Order 0-8**



RESPIRATORY PROTECTION PROGRAM		
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# **POLICY**

The Respiratory Protection Program, as required by law, is designed to protect members from exposure to respiratory hazards to include, but is not limited to: Weapons of Mass Destruction, Hazardous Material Releases, and Immediately Dangerous to Life or Health conditions. By utilizing training, proper equipment and procedure/protocol, members may minimize exposure to respiratory hazards during their course of duty.

### SCOPE AND APPLICATION

The Respiratory Protection Program applies to all sworn members of the Department who may be exposed to such hazards during an emergency.

# OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS 1910.134(c)

- The Respiratory Protection Program is developed with the required worksite-specific procedures to include, but is not limited to:
  - Medical evaluation of members required to use respirators;
  - Fit testing procedures for tight-fitting respirators;
  - Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations;
  - Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators;
  - Training in the respiratory hazards to which they are potentially exposed during routine and emergency situations;
  - Training in the proper use of respirators, including putting on (donning) and removal (doffing) of respirators, and their maintenance; and,
  - Procedures for regularly evaluating the effectiveness of the program.

# **MEDICAL EVALUATIONS**

The Mercy Medical Center's Public Safety Infirmary (PSI) shall perform medical evaluations by using the OSHA Respirator Protection Questionnaire and/or a medical examination. (The medical examination obtains the same information as the questionnaire.) The information requested by either medical evaluations shall comply with OSHA Regulations.

PSI shall ensure that follow-up medical examinations are provided on an as need basis. The follow-up medical examinations shall include any medical tests, consultations, or diagnostic procedures that the Physician or Other Licensed Health Care Professional deems necessary to make a final determination.

The Respiratory Protection Equipment is mandatory issued departmental equipment for those medically qualified.

# **COMPLIANCE**

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

### **DEFINITIONS**

**Air-Purifying Respirator** - 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.

**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 Respirator (SAR) and Self-Contained Breathing Apparatuses.

**Canister or Cartridge -** A container with a filter, absorbent or catalyst (or 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.

Filter (or Air - Purifying Element) - The part of a respirator that removes solid or liquid aerosols from the air that is breathed.

**Fit Test** - A procedure used to qualitatively or quantitatively evaluate how well a respirator fits an individual. Each member is required to be Fit Tested annually. The Fit Test is <u>not optional</u>.

**Immediately Dangerous to Life and Health -** 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.

**Occupational Safety and Health Administration (OSHA)** - A Federal Agency of the Department of Labor that regulates health and safety in the workplace.

**Physician or Other Licensed Health Care Professional** - 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** - 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** - 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 (positive and negative) 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).

**Self-Contained Breathing Apparatus -** An atmosphere supplying respirator for which the user carries the source of breathing.

**Service Life -** The period of time that a respirator, filter, absorbent, or other respiratory equipment is expected to provide adequate protection for the user.

**User Seal Check** - A test conducted by the user to determine if the respirator is properly sealed to his/her face.

# **RESPONSIBILITIES**

The Education and Training Section is responsible for the overall administration of the Respiratory Protection Program for the Baltimore Police Department. The Education and Training Section shall also assign a Program Administrator.

# **REQUIRED ACTION**

### Member

- All members shall be required to wear respiratory protection whenever and wherever respiratory hazards exist.
- 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 sworn members must adhere to OSHA respiratory standards.
- All sworn members must complete the OSHA Respirator Protection Questionnaire. The OSHA Respirator Protection Questionnaire must be completed every two (2) years.

**NOTE:** The OSHA Respirator Protection Questionnaire is **confidential**. When the OSHA Respirator Protection Questionnaire is completed, it will be <u>sealed</u> in an envelope and forwarded to PSI for review. It may be necessary for PSI to request additional information through a follow-up medical evaluation only if responses on the OSHA Respirator Protection Questionnaire warrant further evaluation. (Follow-up medical evaluations are required by OSHA regulations.) **Members designated for follow-up medical review must respond to PSI and cooperate with medical personnel**.

- If no additional medical review is necessary, PSI will forward all Respiratory Clearance Letters to the Education and Training Section's Program Administrator.
- Upon receipt of the Respiratory Clearance Letter, the Education and Training Section shall conduct a Fit Test.

- Medical clearances given by PSI will be issued at one of the following three levels as determined by the licensed physician.
  - Level One Member is cleared for all duties.
  - <u>Level Two</u> 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.
  - <u>Level Three</u> Member is not medically qualified to wear any type of respiratory equipment.
- Following completion of Fit Testing, the issuance of the respiratory equipment will be coordinated by the Education and Training Section and the Quartermaster Unit.
- Each individual wearer will store their individual respirator in the issued carrying case, which must be kept with the riot gear bag.
- All members of the Department will inspect their issued respiratory protection on a weekly basis.
- Each individual member will be responsible for the cleaning, care and maintenance of his/her respirator and respirator equipment.
- In the event that the respirator becomes damaged or needs repair, the member will respond directly to the Quartermaster Unit or Education & Training Section. Only members of these Units who are certified by the Drager Corporation can perform these repairs. In the event that the respiratory equipment cannot be repaired, an administrative report will be completed and the Quartermaster Unit will issue replacement 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 such a manner as to prevent them from wearing a respirator.
- Any member may request a medical evaluation to assess his or her ability to wear a respirator at any time.
- Members are reminded to follow the procedures put forth by General Order G-6, "Hazardous Materials Incidents."

### **EQUIPMENT**

• The primary respirator used by the Baltimore Police Department is the Drager Panorama Nova P Mask Model Number 4052955 used with a Rapid Adapter Model Number 4055251, and P100 Filter (disposable) along with the Drager NBC Escape Canister. This P100 Filter will remain sealed until use. (This will prevent damage). After each use, the P100 Filter will be properly discarded. The Quartermaster Unit will issue a new P100 Filter to the member.

- Specialized Units in the Baltimore Police Department may also use the Mine Safety Appliances Millennium Chemical-Biological Gas Mask, Model Number 10007423-24 used with Millennium CBA/RCA (Chemical, Biological Agent / Riot Control Agent) Canisters, Model Number 818264. Members of these specialized units will be issued and trained to use both types of masks, after being medically cleared and Fit Tested.
- No other type or make of unit will be used by any members while operating at emergencies, without the written permission of the Program Administrator.

### DONNING/DOFFING THE DRAGER MASK

See Annex A.

### DONNING/DOFFING THE SUIT

See Annex B.

### QUANTITATIVE FIT TEST PROCEDURE

• Only personnel approved by the Program Administrator, in accordance with the aforementioned standard, will perform a Fit Test.

**NOTE:** The Fit Test is <u>not optional</u>. In addition, each member is required to be Fit Tested annually by members of the Education and Training Section.

- No member will be Fit Tested until the Program Director at Education and Training Section receives a respiratory clearance letter from Mercy Medical Center's Public Safety Infirmary.
- No member will be Fit Tested if they have smoked any tobacco products within ½ hour of the start of the test. Members cannot have any foreign objects in their mouth during this test as it may cause them to choke.
- The Fit Test will be conducted using a Portacount machine and computer generated fit test report.

### **Quantitative Fit Test Procedure - Program Administrator**

- Before starting, the tester will ensure that the member has no facial hair that will interfere with the face piece seal.
- Members must follow proper donning and doffing techniques as outlined in Annex A and Annex B.
- If the member fails to employ proper techniques, the testers will educate the member as to the proper method.
- A user seal check will be completed prior to attaching the filter cartridge.

- The member will be referred to the PSI if he/she exhibits any difficulty in breathing.
- Each Fit Test will consist of seven exercises lasting one minute each. These exercises
  will simulate different types of physical activity that the member will experience while
  wearing this mask. If the member fails any one of these exercises, he/she will fail the
  test and a second test will be conducted. If the member fails a second time, he/she will
  be offered a third opportunity to take the test. If the members fail the third test, a
  documented failure record will be maintained.
- The Fit Test will be conducted using a Portacount machine and computer generated fit test report.

### **EYE GLASSES**

- Use of standard eyeglasses within a Self-Contained Breathing Apparatus face piece is not permitted. Contact lenses or corrective lenses that can be worn within the face piece will be permitted. (Approved Drager Spectacle Kits are available for use with facepieces.) 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 issuance of the Spectacle Kit, the member will then take the Spectacle Kit to his/her optometrist and have the eyeglass prescription filled in accordance with the City of Baltimore Eyeglass Program.

### **TRAINING**

- All members that are medically cleared, and fit tested to wear a respirator will receive instruction on the respirator equipment that covers:
  - Methods of recognizing respiratory hazards.
  - o 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.

#### RETRAINING

- If a supervisor feels that a member needs retraining in respirator or Self-Contained Breathing Apparatus 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 the written documentation and, if necessary, with the member involved. If it is deemed that the member involved needs to be trained again, the member will not be allowed to wear Self-Contained Breathing Apparatus or respirator in the workplace until successful completion of the retraining.

# **Hazard Evaluation - Atmosphere**

- Any atmosphere that is proven to be potentially hazardous shall be considered to be an Immediately Dangerous to Life and Health area or structure until otherwise proven 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 discontinue the use of Self-Contained Breathing Apparatus or respirator until given direction to do so by the ranking officer at the scene. Command shall not give such an order until atmospheres can be tested and are shown to be safe.
- The parameters used to make decisions on the safety of atmospheres will be based on either Threshold Limit Values from American Conference of Governmental Industrial Hygienist or Permissible Exposure Limit from OSHA data.
- GAS DETECTION METERS WILL BE USED EXCLUSIVELY TO DETERMINE IF THE ATMOSPHERE IS SAFE, as determined by the Baltimore City Fire Department, or other City, State or Federal agencies using air monitoring or other equipment.
- Members should not wait to use respiratory protection in any situation in which they feel it is required. It is better for a member to err on the side of caution by wearing the respiratory protection, than not to wear the respiratory protection at all.
- No member will make entry into the Immediately Dangerous to Life and Health area or structure:
  - With less than a two-member team.
  - Until a back-up team is positioned outside the Immediately Dangerous to Life or Health area or structure.
- At least one member of the back-up team will have no other function at the incident scene except to monitor the first team. The second member of the back-up team will be allowed to function in other capacities on the incident scene, as necessary. Any other functions performed by the second member of the team should not interfere with his or her ability to aid in an immediate rescue operation, should it become necessary.
- The first team should remain in visual or audio contact at all times. All members of both teams shall always have in their control a portable transceiver.

**NOTE:** If a member wearing the Respirator Protective Equipment begins experiencing any nausea, sickness or any health related issues, the member should immediately notify their team member and the ranking officer at the scene. Duration of wearing the equipment can vary from each individual, depending on the weather, level of fitness and other factors.

# **RECISION**

Remove from files and destroy/recycle Police Commissioner's Memorandum 13-04, "Respiratory Protection Program," dated 22 July 2004.

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# **COMMUNICATION OF POLICY**

Supervisors shall be responsible for communication of this Order to their subordinates and to ensure compliance. This Order is effective on the date of publication and is to be read at all roll calls for five consecutive days and posted on Departmental Bulletin Boards.

By Order of Leonard D. Hamm, Police Commissioner

# **ANNEXES**

- A. Donning/Doffing the Drager Mask.
- B. Donning/Doffing the Suit.

# **ANNEX A**

# **Donning/Doffing the Drager Mask**

# **Equipment List**

One Drager Panorama Nova P Mask One RAP Adapter One P100 Filter (Disposable) One Drager NBC Escape Canister

### General

 Members must be clean-shaven and free of any facial hair that may come between the sealing surface of the mask and the face. The presence of facial hair will cause leaks. Examples of facial hair include, but are not limited to, beards, goatees, sideburns, and excessive long hair.

### **Procedure**

- Attach the RAP adapter to the bottom of the inlet covering until you hear it "click."
- Cup the respirator in your hand with the nosepiece at fingertips, allowing the headbands to hang freely below your hands.
- Position the respirator under your chin with the nosepiece up.
- Pull the top strap over your head and position it around the back of your head.
- Using two hands, mold the nosepiece to the shape of your nose by pushing inward while moving down both sides of the nosepiece. Pinching the nosepiece using one hand may result in less effective performance.

### **Face Fit Check**

- The respirator seal shall be checked before each use. To check the fit, place both hands completely over the respirator and exhale. If air leaks around your nose, adjust the nosepiece as described in the last step above. With your hands still cupped completely over the respirator, inhale deeply. The front respirator should collapse slightly. If air leaks around the edges, adjust the straps back along the sides of your head and recheck.
- Take the Drager NBC Escape Canister and screw it on.
- If you cannot achieve a proper fit, **do not enter the isolation area**. Use another respirator.

### **Removal Instructions**

• Cup the respirator in your hand to maintain its position on face. Pull bottom strap over your head.

- Still holding the respirator in position, pull the top strap over your head.
- Remove respirator from your face.
- Properly dispose of the Drager NBC Escape Canister filter after use.

# **Cleaning the Mask and RAP Adapter**

In the event of a bio-hazardous incident, the Baltimore City Fire Department will provide
a decontamination area for all members exposed. After an exposure or possible
exposure each member is to properly discard the Drager NBC Escape Canister filter
and properly clean the mask and RAP adapter with the A-33 liquid provided at the
scene.

**NOTE:** If a member wearing the Respirator Protective Equipment begins experiencing any nausea, sickness or any health related issues, the member should immediately notify their team member and the ranking officer at the scene. Duration of wearing the equipment can vary from each member, depending on the weather, member's level of fitness or other factors.

# **Supervisors**

- Include the respiratory equipment as a part of the equipment inspectional process.
- Inspect members once they have been suited.

### **ANNEX B**

# **Donning/Doffing the Suit**

# **Equipment List**

One Tychem suit with hood
One pair of gloves
Boots
One roll of yellow adhesive tape

### General

- A buddy system will be used in donning the suit.
- Remove the suit from your riot bag. (This bag also contains your riot helmet.)
- Remove any personal items (wallet, keys, jewelry, etc.), including your badge, which may puncture the suit.
- Remove your gun belt.
- Have a place where you can sit to put on the suit.
- While it is not intended to place members into the "hot zone" (direct exposure to a hazardous material), it is possible that members may be exposed to the hazard through wind shift, secondary devices and exigent circumstances. Decontamination, conducted by the Baltimore City Fire Department, will be necessary. Any personal items will be deposited into decontamination bins and you will walk out with a Tychem suit only at the end of the decontamination line.

### **Procedures**

- Using the buddy system to help don the suit, members will begin by placing their feet into the one-piece suit, pull the suit up to the waist, and then sit down. Members with large feet will have to remove their shoes or boots before placing their feet into the suit. The suit has a built-in boot; however, you should not walk around without the outer boot. This will avoid damage to the inner boot. Place the outer boot on each foot.
- While standing up, your partner will assist you in getting the suit over your shoulders and inserting your arms. The front of the suit is zipped shut, and the flap is taped down over the zipper by placing yellow adhesive tape over the zipper.
- Don the Drager Mask See Annex A.
- Place your gun belt on. Keepers are not needed.
- Have your partner place the yellow adhesive tape around your mask area, where it
  meets the hood. Place the black rubber Butyl gloves on your hands. Have your partner
  tape your wrists where the gloves meet your suit area; do the same with both legs. Your
  entire suit should be completely sealed.

- Have both arms and legs extended, before taping, to allow bending and reaching
  without breaking the seal. If a small tear occurs in the suit while performing this
  exercise, place a piece of adhesive over the tear to complete the seal.
- Once this has been completed, assist your partner in donning his/her suit.

**NOTE:** If a member wearing the Respirator Protective Equipment begins experiencing any nausea, sickness or any health related issues, the member should immediately notify their team member and the ranking officer at the scene. Duration of wearing the equipment can vary from each member, depending on the weather, member's level of fitness or other factors.

# **Supervisors**

- Include the respiratory equipment as a part of the equipment inspectional process.
- Inspect the members once they have been suited.