	WEST ORANGE POLICE DEPARTMENT **WRITTEN DIRECTIVE SYSTEM**	**7A:17**
	RESPIRATORY PROTECTION PROGRAM	
	Effective Date: 12/10/08	**Supersedes:**

7A:17-1 PURPOSE

The PEOSH Respirator Protection Standard requires that if other means of reducing or eliminating exposure to the airborne hazards are not feasible and public employers provide employees with respirators to protect them from airborne hazards, then a respiratory protection program must be implemented incorporating all of the program components described in the standard (29 CFR 1910.134).

7A:17-2 SCOPE AND APPLICATION

This program covers equipment selection, medical screening, fit testing, training, use and maintenance of respirators to be used by the following types of officers:

- Officers who are issued respirators to be used for escape from hazardous atmospheres

- Officers who are issued respirators to be used while maintaining perimeters at hazardous materials incidents. These are officers who will be stationed in the support ("cold" or "green") zone, where contaminants are not expected to exceed levels deemed safe for unprotected persons, as determined by the incident commander

- Officers who are issued respirators for use in maintaining the perimeter at crowd control incidents where chemical agents (e.g. CS or CN tear gas) are used

- Officers who, in exigent or emergency situations, are required to enter an area where CS, CN, smoke or other tearing agents have been expelled

Employees participating in the respiratory protection program do so at no cost to them. The expense associated with training, medical evaluations and respiratory protection equipment will be borne by the Police Department.

Based on a review of the chemical, biological, radiological/ nuclear and explosive agents (CBRNE) to which law enforcement personnel in this department may be exposed, it has been determined that the following activities and agents require respiratory protection (Table 1):

Table 1: Department Respirators

Respirator Use	Manufacturer/ Model
Escape from chemical, biological, nuclear incidents	NSA/ Millennium CBRN Gas Mask Drager/ CDR 4500
Perimeter chemical, biological, nuclear incidents	NSA/ Millennium CBRN Gas Mask Drager/ CDR 4500
Perimeter crowd control (CS or CN tear gas)	NSA/ Millennium CBRN Gas Mask Drager/ CDR 4500
Activation within crowd control area (CS or CN tear gas)	NSA/ Millennium CBRN Gas Mask Drager/ CDR 4500
Contact with or transport of persons who are suspected of being actively infected with a serious respiratory disease such as tuberculosis or SARS (Severe Acute Respiratory Syndrome)	NSA/ Millennium CBRN Gas Mask Drager/ CDR 4500

7A:17-3 RESPONSIBILITIES

a. Program Administrator

The Chief of Police will appoint a Program Administrator who is responsible for administering the respiratory protection program (See Appendix A).

Duties of the Program Administrator include:

- Identifying work hazards requiring officers to wear respirators, and evaluating hazards
- Selection of the appropriate respiratory protection for each hazard determined to require use of a respirator
- Ensuring that employees and new hires who are assigned a respirator have received appropriate training, fit testing, and medical evaluation
- Ensuring that all Officers to be assigned a respirator have completed a medical evaluation form and received the medical approval prior to the assignment
- Coordinating quantitative fit testing
- Coordinating and/or conducting training
- Monitoring respirator use to ensure that respirators are used in accordance with their certifications
- Ensuring proper storage and maintenance of respiratory protection equipment
- Maintaining records required by the program

- Updating the written program, as needed, and evaluating the program annually

b. Supervisors

All Police Department Supervisors above the rank of patrolman are responsible for ensuring that the respiratory protection program is properly implemented. 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 the employees under their charge.

Duties of the supervisor include:

- Ensuring the availability of appropriate respirators and accessories
- Being aware of tasks requiring the use of respiratory protection
- Enforcing the proper use of respiratory protection when necessary
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan
- Ensuring that respirators fit well, work efficiently without seal leaks, and do not cause discomfort
- Continually monitor work areas and operations to identify respiratory hazards
- Observing employees to determine whether additional medical evaluations and fit testing would be required
- Coordinating with the Program Administrator on how to address respiratory hazards or other concerns regarding the program

c. Police Officers

Each officer has the responsibility to wear his or her respirator in the manner in which they were trained.

Officers must also:

- Care for and maintain their respirators as instructed, and store them in a clean sanitary location in accordance with their training and this program
- Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly
- Inform their supervisor if the respirator needs repair or replacement
- Inform their supervisor that a change conditions that would necessitate an additional medical evaluation

- Inform their supervisor or the Program administrator of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program

7A:17-4 PROGRAM ELEMENTS

a. Selection Procedures

The Program Administrator will select respirators to be used based on the hazards to which workers are exposed and in accordance with all PEOSH standards. The Program Administrator will conduct a hazard evaluation for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency.

The hazard evaluation will include:

- Identification and development of a list of hazardous substances that may be encountered.

- Assessment of potential hazardous exposures. Periodic assessments will be conducted.

b. Updating the Hazard Assessment

The Program Administrator must revise and update the hazard assessment as needed (i.e. any time work process changes may potentially affect exposure). If an employee feels that respiratory protection is needed during a particular activity, he/she is to contact his or her supervisor or the Program Administrator. The Program Administrator will evaluate the potential hazard, arranging for outside assistance as necessary. The Program Administrator will then communicate the results of that assessment back to the employees. If it is determined that respiratory protection is necessary, all other elements of this program will be in effect for those tasks and this program will be updated accordingly.

7A:17-5 RESPIRATOR USE

The following definition applies to personal Air-purifying respirator (APR) equipment that will be issued to officers under this program:

- Air-purifying respirator (APR) means a respirator that works by removing gas, vapor, or particulate, or combinations of gas, vapor, and/or particulate from the air through the use of filters, cartridges, or canisters that have been tested and approved for use in specific types of contaminated atmospheres by NIOSH. This respirator does not supply oxygen and therefore cannot be used to enter an atmosphere that is oxygen deficient

a. **Escape:** For escape from the release of hazardous materials, officers will be provided with a CBRNE approved air purifying respirator.

b. **Entry:** Respirators issued under this program shall not be used to enter any area that is designated as the exclusion ("hot" or "red") zone, or the contaminant reduction ("warm" or "yellow") zone of a hazardous materials incident. They also should not be used to enter any areas that are known or suspected to be oxygen deficient, or that contain concentrations of hazardous substances that are unknown or are immediately dangerous to life or health (IDLH). Respirator use shall not conflict with the agency's emergency response plan.

c. **Continuous duty:** For continuous duty in maintaining the perimeter of hazardous materials or crowd control incidents, approved gas masks and other air purifying respirators shall be used. Respirators shall be selected that are approved for the contaminants that are believed to be present and wearers shall not be located in atmospheres in which concentrations exceed the protection factor of the respirator. Perimeters should be in the cold zone. The program administrator or incident commander shall determine a cartridge change schedule.

d. **Breakthrough:** Breakthrough is an APR malfunction where leakage occurs in the mask. If an officer detects breakthrough, the officer shall exit the area immediately, or as soon as safety conditions permit, remove the respirator and perform decontamination procedures. Breakthrough shall be reported to the incident commander or officer in charge. The incident commander or officer in charge shall re-evaluate potential exposures and determine whether it is necessary to redefine the incident perimeter.

e. **NIOSH Certification:** All respirators must CBRNE approved and be certified by the National Institute for Occupational Safety and Health (NIOSH), and shall be used in accordance with the terms of that certification. Also, all filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while it is in use.

7A:17-6 RESPIRATOR MALFUNCTION

For any malfunction of an APR (e.g., such as breakthrough, face piece leakage, or improperly working valve), the respirator wearer should inform his or her supervisor that the respirator no longer functions as intended, and go to the designated safe area to maintain the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator, or is provided with a new respirator.

7A:17-7 MEDICAL EVALUATION

a. Law enforcement personnel assigned to tasks that require respiratory protection must be physically able to perform the tasks while wearing a respirator. Medical clearance to wear the respirator is required before an employee is fit-tested.

b. An OSHA Respirator Medical Evaluation Questionnaire will be given to officers who must wear a respirator. Employees are required to fill out the questionnaire in private and send or give it to the designated health care provider who will

evaluate the questionnaire (See Appendix A for the designated health care provider as defined in 29 CFR 1910.134b).

The OSHA Respirator Medical Evaluation Questionnaire shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. Questionnaires are considered confidential medical information and will not be reviewed by management.

c. The designated health care provider shall provide a medical evaluation to determine the officer's ability to use a respirator before the employee is fit tested or required to use the respirator in the workplace. The employer will discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.

d. Medical evaluation procedures:

1. The designated health care provider shall use the OSHA Respirator Medical Evaluation Questionnaire (Appendix C of this document) to gather pertinent medical information.

2. The Township of West Orange shall provide an opportunity for the employee to discuss the questionnaire and/or examination/medical results with the PLHCP.

3. The Township of West Orange shall provide a follow-up examination to any employee who gives a positive response to any question among questions 1 through 8 in Section 2, Part A of the OSHA Respirator Medical Evaluation Questionnaire, or whose initial medical exam demonstrates the need for a follow-up medical examination.

4. The follow-up medical examination shall include any medical tests, consultation, or diagnostic procedures that the PLHCP deems necessary to make a final determination.

e. Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so. Any employee refusing the medical evaluation will not be allowed to wear a respirator.

f. After an officer has received clearance, been fit tested, trained, and assigned a respirator, additional medical evaluations will be provided under the following circumstances:

- Employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains or wheezing

- A supervisor informs the Program Administrator that the employee needs to be reevaluated

- Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation

- A change occurs in workplace conditions that may result in an increased physiological burden on the employee

7A:17-8 FIT TESTING

a. Employees will be fit tested with the make, model, and size of respirator that they will actually wear. Employees will be provided with several sizes of respirators so that they may find an optimal fit.

b. The Program Administrator will arrange for annual fit tests following the OSHA approved quantitative fit test protocol (QNFT) in Appendix E of the Respiratory Protection standard using a Portacount fit testing instrument.

c. The Program Administrator will arrange for additional fit tests in if required. This is in addition to the annual scheduled fit test.

7A:17-9 TRAINING

a. The Program Administrator will insure training is provided to respirator users and their supervisors on the contents of the Police Department Respiratory Protection Program and their responsibilities under it, and on the PEOSH Respiratory Protection standard. Workers will be trained prior to using a respirator in the workplace. Supervisors will also be trained prior to using a respirator in the workplace or prior to supervising employees that must wear respirators. Training will be administered by the qualified agency personnel as determined by the Program Administrator, or by qualified external contractors.

b. The training course of instruction will cover the following topics:

- The Police Department Respiratory Protection Program
- The OSHA Respiratory Protection standard
- Respiratory hazards encountered in the workplace
- Proper use of respirators
- Limitations of respirators
- Respirator donning and user seal (fit) checks
- Fit testing
- Respirator maintenance, storage, inspection, and repair
- Medical signs and symptoms limiting the effective use of respirators

c. Employees must demonstrate their understanding of the topics covered in the training through hands-on exercises. Respirator training will be documented by

the Program Administrator and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested.

7A:17-10 CLEANING, MAINTENANCE, CHANGE SCHEDULES AND STORAGE

a. Cleaning

- Respirators are to be regularly cleaned and disinfected as demonstrated during employee training
- Respirators issued for the exclusive use of an employee shall be cleaned as often as necessary.
- Respirators must be checked and cleaned after each use and at least monthly.
- All respirators of the Police Department are personally issued and not to be shared between employees.

b. The following procedure is to be used when cleaning and disinfecting respirators:

- Wear non-latex, non-powdered gloves
- Remove canister and discard properly.
- Wash components in warm (110°F maximum) water with a 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.
- Rinse components thoroughly in clean, warm (110°F maximum), preferably running water. Drain the components.
- When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in warm (110°F maximum) water with a mild detergent or with a cleaner recommended by the manufacturer.
- Rinse components thoroughly in clean, warm (110°F maximum), preferably running water. Drain the components. The importance of thorough rinsing cannot be overemphasized. Detergents or 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.
- Components should be hand-dried with a clean, lint-free cloth, or air-dried.
- Never allow the mask or any components to be dried in direct sun light as deterioration will result.
- Test the respirator to ensure that all components work properly.

- INSPECTION. To ensure the continued reliability of respiratory equipment, it must be inspected on a regular basis. Respirators designated for use in an emergency situation are to be inspected at least monthly and in accordance with the manufacturer's instructions, and checked for proper function before and after each use.

- Note: The Program Administrator will ensure an adequate supply of appropriate cleaning and disinfection material at the designated cleaning station. If supplies are low, employees should contact their supervisor, who will inform the Program Administrator.

c. Maintenance

Respirators are to be properly maintained at all times in order to ensure that they function properly and adequately protect the employee. Cleaning and storage should be in accordance to the manufacturers recommendations (manufacturer recommendations are located in the Program Administrator's file).

Maintenance involves a thorough visual inspection for cleanliness and defects. Worn or deteriorated parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer.

The following checklist will be used when inspecting respirators:

- Face Piece:

  - Cracks, tears, or holes

  - Face mask distortion

  - Cracked or loose lenses/face shield

- Head Straps:

  - Breaks or tears

  - Broken buckles

- Valves:

  - Residue or dirt

  - Cracks or tears in valve material

  - Filters/Cartridges

- Gaskets:

  - Cracks or dents in housing

  - Proper cartridges

d. Change Schedules

Employees wearing APRs shall change the cartridges on their respirators when they first begin to experience difficulty breathing (i.e. resistance) while wearing their masks or as specified by the manufacturer.

e. Storage

Each officer will clean and inspect their own air-purifying respirator in accordance with the provisions of this program and will store their respirator in their assigned carrier. Each employee will have his/her name or ID number on or inside the carrier, and that carrier will only be used to store that employee's respirator.

Respirators must be stored in a clean, dry area. Respirators must be protected against sunlight, heat, extreme cold, excessive moisture, damaging chemicals or other contaminants.

Respirators shall be packed or stored so that the facepiece and exhalation valves will rest in a normal position and not be crushed.

f. Defective Respirators

Respirators that are defective or have defective parts shall be taken out of service immediately. If, during an inspection, an employee discovers a defect in a respirator, he/she is to bring the defect to the attention of his or her supervisor. The supervisors will decide whether to:

- Temporarily take the respirator out of service until it can be repaired
- Perform a simple fix on the spot such as replacing a head strap
- Dispose of the respirator due to an irreparable problem or defect

g. Requests for repairs, replacement, etc. shall be documented on a miscellaneous report and Administrative Event entry **905 DAMAG/EQ** and forwarded to the Program Administrator for action.

7A:17-11. **Program Evaluation**

a. The Program Administrator will conduct an annual evaluation of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections, and a review of records. This evaluation should minimally include:

- Talking with employees who wear respirators about their respirators.
- Checking results of fit-tests and health provider evaluations.
- Periodically checking employee job duties for changes in exposure.

- Periodically checking how employees use their respirators.
- Periodically checking maintenance and storage of respirators.

d. Problems identified will be noted in an inspection log and addressed by the Program Administrator. These findings will be reported to the Police Chief, and the report will list plans to correct deficiencies in the respirator program and target dates for the implementation of those corrections.

7A:17-12 DOCUMENTATION AND RECORD KEEPING

a. The following records shall be developed and maintained by the Program Administrator: written copy of this program and OSHA 29 CFR 1910.134 (see Appendix B). *These records will be physically stored in the Office of Professional Responsibility (OPR) and will be available to all employees who wish to review it*.

b. Also maintained by the Program Administrator and stored in OPR will be:

- Copies of training records. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted.
- Inspection Records
- Repair Records
- Maintenance Records

c. The County of Essex Department of Health will maintain the medical records for all employees covered under the respirator program. The completed medical questionnaire and the physician's documented findings are confidential and will remain at the County of Essex Department of Health. The Program Administrator will only retain the physician's written recommendation regarding each employee's ability to wear a respirator.

7A:17-13 APPENDIX

a. RESOURCE DIRECTORY
b. 29 CFR 1910.134
c. MEDICAL SURVEY FORM
d. MEDICAL DETERMINATION FORM
e. FIT TEST PROTOCOL
f. MSA MILLENNIUM MASK MANUAL
g. DRAEGER DR4500 MANUAL
h. GAS MASK INSTRUCTION CARD

APPENDIX A

Resource Directory

Program Administrator: Sergeant John DeMars

Designated Health Care Provider: Dr. Anthony Quartell
316 Eisenhower Parkway, Suite 202
Livingston, NJ 07039
(973) 716-9600