

## ILLINOIS STATE POLICE DIRECTIVE EQP-008, FM12 GAS MASKS

<b>RESCINDS:</b> EQP-008, 2005-036, revised 09-19-2005	<b>REVISED:</b> 06-02-2009 <b>2009-080</b>
<b>RELATED DOCUMENTS:</b> None	<b>DISTRIBUTION:</b> All employees maintaining an ISP Directives Manual All holders of the ISP Field Manual Office/desk copy
<b>RELATED CALEA STANDARDS:</b> 17.5.3, 46.1.9, 46.2.3	

### I. POLICY

The Illinois State Police (ISP) will provide officers with protective FM12 gas masks (FM12) that afford the wearer respiratory and eye protection against commonly used chemical agents.

### II. DEFINITIONS

II.A. Fit test – a test to ensure an issued FM12 mask is the proper size for the wearer and that an airtight seal is achieved between his/her face and the mask in order to determine a correct respirator size and fit.

II.A.1. Qualitative fit test (QLFT) – a pass/fail test to assess the adequacy of the FM12 fit that relies on the individual's response to a test agent.

II.A.2. Quantitative fit test (QNFT) – an assessment of the FM12 fit by numerically measuring the amount of leakage into the gas mask.

II.A.3. Negative pressure test – the procedure to check for a correct seal once the respirator has been donned.

II.B. FM12 Gas Mask

II.B.1. A mask used to protect the face, eyes, and respiratory tract of the wearer from field concentrations of riot control agents and is effective for emergency egress for chemical, biological, radiological, nuclear, and explosive (CBRNE) contaminants.

II.B.2. The FM12 does **not** protect the wearer against certain hazardous materials, ammonia, carbon monoxide, or other poisonous fumes, nor is it effective in confined spaces where the oxygen content of the atmosphere is too low to maintain functional capabilities (below 19.5%). The FM12 does not supply or replace oxygen.

### III. PROCEDURES

III.A. The Critical Incident Response Commander, or his/her designee, is responsible for overseeing the gas mask program.

III.B. Personnel with a history of heart or lung disorders should be examined and cleared by a physician before being permitted to become involved in situations in which they must wear a gas mask, especially for extended periods or under conditions of heavy exertion.

III.C. The FM12 is not designed for use with eyeglasses.

III.C.1. Officers who require corrective lenses may wear contact lenses with the FM12.

III.C.2. Upon graduation from the ISP Academy, new officers without contact lenses can receive monacles with corrective lenses installed in them for use with the FM12. Officers who require replacement monacles for deteriorating vision may contact the Quartermaster for information on replacement monacles.

III.C.3. Officers who need monacles with corrective lenses, and have not yet received them, will be given special consideration when deployment is necessary.

- III.C.4. Upon receipt of monacles, officers will ensure the monacles are properly inserted in the FM12. Special consideration should be made to ensure monacles are inserted and stored without any damage.
- III.D. As a matter of tactical policy, personnel will put on (don) their FM12 prior to the use of chemical agents and/or when possible, outside of the contaminated area.
- III.E. Any facial hair that may interfere with a clean seal between the user's face and the mask's face piece is prohibited.
- III.F. FM12 fitting instructions
  - III.F.1. At the time of initial issuance, and thereafter on an annual basis, an FM12 fit testing shall be used to determine the ability of each officer to obtain a satisfactory fit.
  - III.F.2. Remove the FM12 from its case and lengthen head harness straps to the maximum.
  - III.F.3. Place the chin of the person to be fitted in the chin cup, pull the head harness over the head, then brush back top harness with hands.
  - III.F.4. Seat FM12 and smooth the edges of the face piece on officer's face with upward and backward motions of hands, pressing out all bulges to obtain an airtight seal.
  - III.F.5. Adjust the FM12 as follows:
    - III.F.5.a. Hold the FM12 firmly against the chin with one hand and center head harness pad in the middle of the back of the head with the other hand.
    - III.F.5.b. The eyes should be positioned near the center of the eye lenses.
    - III.F.5.c. Place two fingers of one hand under the middle strap; pull the strap with the other hand until snug on the two fingers, then repeat on other side.
    - III.F.5.d. Next, tighten the lower straps in the above manner followed by the top straps.
- III.G. Leakage
  - III.G.1. Clear and check for leaks
    - III.G.1.a. Check for leaks by placing the palms of the hands over the inlet valve and breathe in lightly, holding the breath for 10 seconds. The FM12 should suck in toward the face and stay until exhaling.
    - III.G.1.b. A quantitative leak test will be performed by using a respirator fit testing instrument.
    - III.G.1.c. If the quantitative leak test is not satisfactory, a certified FM12 instructor will inspect the FM12 and/or fit the officer with another FM12.
    - III.G.1.d. After donning the FM12, the officer should ensure it has a proper seal by performing a negative pressure test.
      - III.G.1.d.1) Place the palm of the hand over the canister input port
      - III.G.1.d.2) Inhale deeply
      - III.G.1.d.3) The respirator should collapse onto the face
      - III.G.1.d.4) If the collapse does not occur, readjust the harness and attempt the previous three steps.
  - NOTE: If negative pressure test does not pass, do not enter a contaminated area.
  - III.G.2. If the FM12 is in good condition and properly fitted, it will provide adequate protection. Occasionally, the seal around the face area is broken during use; readjust the FM12 to a proper fit.

- III.G.3. Should the officer experience any physical discomfort due to a defective FM12 or improper fitting, and if the officer feels this problem seriously interferes with his/her mission, the officer should, with the supervisor's permission, withdraw from the contaminated area and check the mask.
- III.H. Donning the FM12
  - III.H.1. Whenever an officer reasonably believes that an imminent threat of a CBRNE nature exists, he/she should don the FM12 along with the appropriate canister that was provided with it.
  - III.H.2. The respirator must have a canister fitted.
  - III.H.3. The top four harnesses should have been pre-adjusted as prescribed in the fitting instructions (refer to paragraph III.G.).
  - III.H.4. Insert chin into the chin cup of the FM12.
  - III.H.5. Pull the harness over the head.
  - III.H.6. Tighten the bottom two harness straps by grasping the free ends and pulling until a light tension is felt.
  - III.H.7. Run hands quickly over the harness and the edge of the respirator to ensure it is correctly fitted to the head and there are no twisted straps.
  - III.H.8. Blow out hard.
- III.I. Breathing
  - III.I.1. The filtering elements of the FM12 reduce breathing efficiency and create a resistance to normal breathing.
  - III.I.2. During long periods of strenuous activity, wearing the FM12 will hasten fatigue.
  - III.I.3. Once an officer is assigned to a detail involving the use of a FM12, the officer should immediately notify the supervisor of any disorder that would adversely affect his/her performance.
- III.J. Specialized units may use the FM12 in accordance with their policy and procedures.
- III.K. Removing (Doffing) the FM12
  - III.K.1. If possible, the officer should remove himself/herself from the area of the threat before doffing the FM12. If the officer is unable to be removed from the threat area, it is imperative the FM12 remains intact and that it properly seals the face throughout the duration of the incident.
  - III.K.2. Do not doff the FM12 until given the signal of "all clear" by the on-scene supervisor.
    - III.K.2.a. Loosen the lower straps by pushing the tabs forward.
    - III.K.2.b. Grasp the FM12 by the primary speech module; pull it forward and up over the head.
    - III.K.2.c. If the officer wore the FM12 due to a CBRNE incident, the on-scene commander, or designee, will collect the mask and filters for proper decontamination or disposal.
- III.L. Storage
  - III.L.1. When the FM12 is not being worn, place it in the proper carrier with the canister not attached.

- III.L.2. Canisters will be stored in their factory-sealed containers.
  - III.L.3. Do not store other items on the FM12 carrier.
  - III.L.4. Be sure the FM12 is free of oil or organic solvents and is dry before storing in the carrier.
  - III.L.5. Keep the interior of the carrier free from dirt and sand.
  - III.L.6. Officers will make note of the expiration date on the filters of their mask. When the expiration date is within 30 days of the actual date, notify the Quartermaster.
- III.M. Care and cleaning
- III.M.1. Officers are responsible for cleaning the FM12 after each use and replacing the filters when necessary. Additionally, they are responsible for the issued FM12 and supporting equipment and shall report any problems or maintenance issues to their supervisor as soon as possible.
  - III.M.2. An FM12 that has been contaminated should be cleaned with liquid dishwashing soap and warm water prior to storing.
    - III.M.2.a. Remove the filter canister first; under no circumstances should the canister be immersed in water.
    - III.M.2.b. Totally immerse the FM12 in a solution of warm water and liquid dishwashing soap.
      - III.M.2.b.1) No abrasives of any kind should be used.
      - III.M.2.b.2) Do not use spirit, solvent cleaners, or undiluted detergents.
    - III.M.2.c. The cleaned FM12 should then be totally immersed in clean, warm water and agitated until all soap is removed from the mask.
    - III.M.2.d. Lift out the FM12 and shake off excess water.
    - III.M.2.e. Invert the FM12 and peel back the reflex seal to allow any water to escape out of the mask.
    - III.M.2.f. Let the FM12 dry naturally at room temperature or a clean, dry, lint-free cloth may be used.
  - III.M.3. Lenses
    - III.M.3.a. Avoid scratching the eye lenses of the FM12 and refrain from touching the lenses to prevent oily smudges, which may impair vision when the FM12 is worn.
    - III.M.3.b. Do not use alcohol or ammonia-based cleaners, such as Windex, on the lenses.
    - III.M.3.c. Wash lenses with warm soapy water and dry with a lint-free cloth or soft paper towel.
  - III.M.4. Filter canisters
    - III.M.4.a. Filter canisters provide protection against riot control agents and/or CBRNE.
    - III.M.4.b. Filter canisters should be replaced under the following conditions:
      - III.M.4.b.1) If they have been immersed in water or have gotten wet through cleaning or inclement weather.
      - III.M.4.b.2) If the air you are inhaling has any particular taste or odor.
      - III.M.4.b.3) Following a CBRNE incident, the officer will turn in the canister to the on-scene commander, or designee, for proper disposal.
    - III.M.4.c. Procedures shall be enacted to be sure no FM12 leaves the site of an incident involving a CBRNE.
    - III.M.4.d. The supervisor shall ensure no FM12 or canister is removed from the scene or site of a CBRNE until arrangements for disposal of contaminated equipment can be made.

III.M.4.e. When excessive breathing resistance is experienced, the filter canister should be inspected and replaced as necessary.

III.N. Inspection

III.N.1. Each officer who has been issued a FM12 will keep it in his/her assigned vehicle during his/her regular tour of duty and inspect the FM12 quarterly, in conjunction with Control and Arrest Tactics (CAT) training.

**NOTE:** Officers assigned to the Springfield area may request the assistance of the Academy FM12 instructors.

III.N.2. Each District FM12 instructor will inspect his/her District's FM12s for wear and serviceability at least once a year.

III.N.3. Any FM12 that appears to be defective will be tagged as to the nature of the defect and sent to the Quartermaster to determine the need for replacement.

III.N.4. The District FM12 instructors and/or the Quartermaster will maintain a supply of replacement filter canisters in a state of operational readiness.

| Indicates new or revised items.

**-End of Directive-**