Standard Operating Guidelines

Revised May 2009

Franklin Twp. Fire District 1
Standard Operating Guidelines

SECTION 1

FIREFIGHTER REQUIREMENTS

1.1 New Member Application Requirements

The officer in charge of new applications must ensure **ALL** items on this checklist are completed by the applicant and company. This includes **ALL** necessary signatures from the department.

- The following forms MUST be delivered to the District Office promptly and together:

  a) District Application
  b) Hepatitis B Vaccination Declination Statement
  c) VFIS Group Term Life Form
  d) VFIS Beneficiary Designation for Accident and Sickness Policy
  e) Franklin Township Life Insurance for Fire Company/First Aid Squad **YELLOW** Card
  f) Franklin Township Life Insurance for Fire Company/First Aid Squad Application
     (Form requires Company Officers' signatures)
  g) Drug and Alcohol Policy Acknowledgement
  h) Franklin Township Fire Company/First Aid Squad Background check form
     ***MUST be Notarized (can be notarized at District Office)**
     **** This form will be retained by FTPD**
  i) FTPD fingerprinting acknowledgement form
     ***Applicant must schedule fingerprinting with FTPD. Upon completion of fingerprinting, applicant MUST return receipt with FTPD signatures.**

Applicant will not be enrolled in **ANY** District insurance plan prior to receipt and approval of ALL application information, therefore,

Applicant is NOT eligible for ANY District functions prior to completed forms being received and approved by the District Office.

- Upon receipt and approval of the above application information, the applicant will be advised by the District Office to schedule an appointment with Urgent-Med for a District Physical.

The applicant must bring the following to Urgent-Med:

a) NJ State Firemen's form
b) OSHA Respirator Evaluation form
c) Firefighter Exam Satisfaction Survey

- Upon Urgent-Med's approval, the applicant will be enrolled in District benefits package (insurance, LOSAP, etc.) and may begin participation in Fire District No. 1 functions, i.e.: training, work details, firematics, etc. pending completion of the FTPD background check (*Reference Appendix 'G', Resolution 08-24*).
- Applicant will schedule appointment with District Office for Photo ID and accountability tags.

1.2 Firefighter's Requirements

- Must read, write, and speak English
- NJDFS Firefighter 1 certification
- ICS-100 course completion
- IS-700 course completion
- NJDFS approved HazMat Awareness course completion
- NJDFS approved HazMat Operations course completion
- Current in CPR/AED training
- Annual District #1 Physical
- Annual District #1 BBP/RTK/Hazmat refresher training
- Annual Live Burn recertification
- No facial hair that touches mask-sealing area

1.3 Firefighter Classifications

1.3.1 Firefighter in Training

- Age 18 or older, has not completed Firefighter 1 training yet
- Can ride and assist on scene after completion of SCBA training in FF1
- Completes annual District #1 Physical
- Completes annual District #1 BBP/RTK/Hazmat refresher training
- Completes annual Live Burn recertification
- No facial hair that touches mask-sealing area
- Assigned black helmet with yellow helmet shield
- Issued EXTERIOR accountability tag

1.3.2 Probationary Firefighter

- Age 18 or older, has successfully completed Firefighter I training
- Works under supervision until removed from probationary by the Chief.
- The minimum length of the probationary period is three months after successful completion of Firefighter 1. For NJDFS certified firefighters who join a District company the length of the probationary period is a minimum of three months after joining.
- Annual BBP / RTK training
- Annual Physical
- Annual Fit Test
- No facial hair that touches mask-sealing area
- Assigned black helmet with orange helmet shield
- Issued INTERIOR accountability tag

1.3.3 Firefighter

- Has successfully completed the Probationary Firefighter period
- Assigned black helmet with black helmet shield
- Meets all Fire District No. 1 Firefighter's requirements stated above
- Issued INTERIOR accountability tag

1.3.4 Junior Firefighter

- Age 16 - 17
- Eligible to participate in in-house training from age 16 – 17
- Begins Firefighter I course at age 17
- After turning age 18 the Junior Firefighter becomes a Firefighter in Training
- Annual BBP / RTK training
- Annual Physical
- Annual Fit Test
- No facial hair that touches mask-sealing area
- Assigned yellow helmet with yellow helmet shield
- Issued EXTERIOR accountability tag

1.3.5 Fire Police

- Age 18 or older
- Must meet the requirements set forth in the Fire Police section of this standard
- Annual BBP / RTK training
- Annual Physical
- Assigned red helmet with yellow helmet shield
- Issued EXTERIOR accountability tag

1.4 Firefighter Requirements for Out of State Training Requiring Overnight Stay

- Made LOSAP the previous year
- Attended Fire District One BBP/RTK training in the previous year
- Completed fire District One Physical in the previous year

***Note** the requirements of -standard 1.3 as agreed upon above may be exceeded by an individual company per that company's Chief*

1.5 Firefighter Requirements for Attendance at NJ State Firefighter's Convention

- Per individual Company's Chief's discretion or Company requirements

1.6 Failure to Meet Requirements of the Firefighter Classifications

- Any Firefighter in Training, Probationary Firefighter, Firefighter, Junior Firefighter, or Fire Police who does not meet the requirements of his/her classification shall not be allowed to respond to calls until the requirements of the classification are met.

SECTION 2

DRIVER / OPERATOR REQUIREMENTS

2.1 Driver Qualification Requirements:

2.1.1 Engines / Tanker-Pumpers / Ladder / Rescue / Utility

- 21 years old
- Valid driver's license
- Meets all requirements for the Fire District #1 Firefighter classification in Section 1
- NJDFS Incident Management Level 1 (IML-1) certification
- Successful completion of Pump Class
- Successful completion of CEVO / Defensive Driving Class
- Minimum of 5 hours drive time on specific apparatus
- Minimum of 2 hours pump time on specific apparatus
- Additional company specified training on Ladder / Rescue / Utility
- Pump refresher course every 3 years
- Annual review of activity by Chief
- Drivers wear at least bunker pants when responding to incidents

2.1.2 SCUBA, HAZMAT, and Field Truck

- 21 years old
- Valid driver's license
- Minimum of 1 hour driver training / 1 hour vehicle familiarization
- NJDFS Incident Management Level 1 (IML-1) certification
- Successful completion of CEVO / Defensive Driving Class
- Annual review of activity by Chief
- Drivers wear at least bunker pants when responding to incidents

2.1.3 ICV's, and Van's

- 21 years old
- Valid driver's license
- Minimum of 1 hour driver training / 1 hour vehicle familiarization
- Annual review of activity by Chief

2.1.4 EUV and Marine Vehicles

- 21 years old
- Valid driver's license
- Minimum of 1 hour operator training / 1 hour vehicle familiarization
- Annual review of activity by Chief

SECTION 3

FIRE OFFICER REQUIREMENTS

3.1 Lieutenant

3.1.1 Requirements for election to a Lieutenant's Position

- NJDFS Firefighter 1 certified for three years minimum from the date shown on the candidate's NJDFS firefighter 1 certification card.
- NJDFS Incident Management Level 1 (IML-1) certified
- ***Note** NJDFS IML1 certification requires three years firefighting experience, NJDFS firefighter I certification and successful completion of ICS 100 and 200 classes.*
- Successful completion of a Fire Officer class that meets the requirements of NFPA 1021 (most current edition), "Professional Qualifications for Fire Officers" (i.e. SCESTA "Fire Officer I") within 6 months of election.
- Successful completion of a NJDFS approved HazMat Operations class

3.2 Captain

3.2.1 Requirements for Election to a Captain's Position

Note the following requirements are to be completed prior to election to Captain's position

- Two (2) years prior experience as Lieutenant within Fire District #1
- Successful completion of National Level Curriculum Strategy and Tactics class (i.e. National Fire Academy, or other nationally recognized curriculum).
- Successful completion of a Building Construction for the Fire Service class
- Encouraged attendance at national level fire service conferences
- Successful completion of an NJDFS approved ICS300 class.

3.3 Chief Officer

3.3.1 Requirements for Election to a Chief Officer Position

Note the following requirements are to be completed prior to election to Chief / Deputy Chief position

- Two (2) years experience as Captain or above in Fire District #1 within the last 5 years or with the recommendation of the Fire District 1 Standards Committee
- Successful completion of an Advanced Fire Officer class that meets the requirements of NFPA 1021 (most current edition), "Professional Qualifications for Fire Officers"
- Successful completion of an NJDFS approved ICS400 class.
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3.4 Acting Officer

3.4.1 Firefighters Riding in Officer's Position

Members responding to incidents in the officer's position of the apparatus who are not elected officers shall meet the following minimum qualifications:

- Meets all requirements for the Fire District #1 Firefighter in Section **Error! Reference source not found.**
- NJDFS Incident Management Level 1 (IML-1) certification

SECTION 4

TRUCK STATUS GUIDELINE

4.1 Notifications

- Notification via text message or telephone call shall be made to all District Chiefs when apparatus is to be placed out of service. A pager tone shall be a last resort as notification.
- Somerset County Communications shall be notified via telephone or fax when any piece of apparatus is out of service. This procedure shall be followed when apparatus is back in service also.

SECTION 5

EVACUATION SIGNAL

Purpose: The purpose of this SOG is to establish a common procedure to safely evacuate a structure.

5.1 Evacuation

- The evacuation signal shall consist of repeated short blasts of an air horn for a period no longer than 10 seconds, followed by 10 seconds of silence. This sequence of repeated short air horn blasts for 10 seconds followed by a 10-second period of silence shall be done three times; the total evacuation signal, including periods of silence, shall last 50 seconds. This signal shall be used strictly for the notification of a building evacuation. Use of air horns for any other signal shall be avoided.
- Command shall notify Somerset County Communications to broadcast an evacuation message over Fire Main and Fire District #1
- Once an evacuation is completed a full Personnel Accountability Report (PAR) shall be conducted.
- No member shall enter any building after an evacuation without approval from command.

SECTION 6

MAYDAY PROCEDURE

Purpose: The purpose of this SOG is to establish a common procedure for the emergency evacuation and retrieval of a lost or downed firefighter. It is important to remember that a MAYDAY should be called immediately anytime a member(s) realizes that he has become lost, disoriented, trapped or is in immediate danger.

Definitions

Mayday

A term used to alert the Incident Commander or other persons on the emergency scene that personnel are in an imminent life-threatening situation.

Personnel Accountability Report (PAR)

A term used to track and report the location, status and welfare of personnel (Reference Section 7.2.8).

RIC

Rapid Intervention Crew (Reference Section 20). A crew specifically designated by the IC at the scene of an emergency beyond the initial stages. The RIC shall be primarily available for the rescue of Fire Department members should the need arise. Depending on the size and complexity of the incident, the Incident Commander shall establish one or more RIC's.

6.1 Mayday

6.1.1 Use of Mayday Signal

Upon a firefighter(s) becoming lost or trapped a MAYDAY protocol should be enacted as follows:

- Radio emergency identifier alert button (orange button) shall be activated (this will allow the radio to default to Fire Main and transmit the Mayday signal to SCC.
- A Mayday message per section 6.1.2 shall be transmitted via Radio repeatedly until acknowledged.
- PASS alarm shall be activated once the Mayday has been acknowledged.

6.1.2 Mayday Message

- A MAYDAY message must contain the following information; the words "MAYDAY, MAYDAY, MAYDAY, the radio ID number and name of who is calling (i.e. "261A, Firefighter Lipman"), where they believe they are and what their problem is (lost, trapped, low on air, etc.). A sample Mayday message would be "MAYDAY, MAYDAY, MAYDAY, 261A, Firefighter Lipman, I'm in the basement and I'm entangled".

6.1.3 IC Responsibility on receipt of Mayday

Upon the receipt of a MAYDAY the Incident Commander shall enact the following:

- Clear all radio traffic and attempt to contact the person(s) who called the MAYDAY.
- Dispatch the RIC to the location of the MAYDAY call.
- Request a second RIC to the scene.
- Keep firefighting operations on a separate frequency once communications with the MAYDAY has been established.
- **Note* Default channel for fireground is Fire Ops 1 and default channel once emergency button is activated is Fire Main*

6.1.4 Responsibility of Sector Officers upon receipt of MAYDAY

- All Sector Officers are responsible for a complete Personnel Accountability Report upon the receipt of an evacuation Signal or MAYDAY

6.1.5 Responsibility of Members Operating on Scene upon receipt of MAYDAY

- After transmission of a MAYDAY call all personnel will exit the building safely and report to their Sector Officer for PAR. Members actively engaged in firefighting shall exit the building as soon as they feel extinguishment efforts will not be adversely affected. These members shall not become involved in the MAYDAY rescue effort unless directed to do so by the Incident Commander. In accordance with the Accountability SOG, all members will return to the sector where they entered and check in with the Sector Officer to retrieve their accountability tag.

SECTION 7

FRANKLIN TOWNSHIP FIRE CHIEF'S ASSOCIATION

ACCOUNTABILITY SYSTEM GUIDELINE

7.1 Purpose

- The purpose of this SOG is to establish a common personnel accountability system to be used at all Franklin Twp. incidents, in conformance with the NJ State Uniform Fire Code.

7.2 Accountability System Procedure

7.2.1 Personnel Accountability Officer

- At each incident the Incident Commander shall designate a Personnel Accountability Officer (PAO).
- The Personnel Accountability Officer shall be responsible for ensuring that all personnel are accounted for.
- The Personnel Accountability Officer may serve other functions at an incident scene if he or she is able to safely perform the accountability function.
- At minor incidents the Incident Commander may retain this function as he or she sees fit.
- Multiple Personnel Accountability Officers may be required at larger incidents.
- As soon as command is made aware that there is a working fire or otherwise hazardous condition efforts will be made to secure enough accountability officers to effectively support the operation. If enough officers are not available a special call will be made to get them on scene.

7.2.2 Use of Sector Commanders for Accountability

- The PAO may designate sector officers to manage accountability for a group of crews. In this instance, once an Apparatus Officer has reported to the command post, dropped his crew's ring of "Command Post" tags and received his crew's assignment, the PAO will direct the Apparatus Officer to the appropriate sector commander who will retain the second set of tags while that crew is operating.

7.2.3 Accountability Tags

- Every member of the district will be issued two (2) personnel accountability tags (PAT).
- These tags will have the member's picture, ID number, station number and an interior or exterior qualification.
- Color-coding will be used as follows: RED will designate Exterior Firefighters and GREEN will designate Interior Firefighters.
- Special designations such as IM1, CFR, EMT, etc. shall be noted on tags for members holding such certifications.
- Current officer designations can be P-Touched to a member's tag.
- Each new Probationary Firefighter will be issued tags upon being accepted as a member of their fire company and trained in their use.
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7.2.4 Accountability Tag Rings

- Prior to arrival at an incident the Apparatus Officer will collect one tag from each firefighter on his/her apparatus onto the "Command Post" ring kept with that apparatus.
- Firefighters using PASS alarms with "Keys" shall attach the first PAT to their PASS alarm key, and place the two together onto the "Command Post" ring.
- The Apparatus Officer will as soon as is practical turn the "Command Post" ring into the command post.
- In the case of first arriving units, which must immediately engage in firefighting activities, the first ring will be left in the area of the officer's seat of their respective apparatus.
- The Apparatus Operator will deliver this ring of tags to the command post as soon as he is able to do so.
- It will be the responsibility of the Personnel Accountability Officer to retrieve the "Command Post" tags of these first arriving units and drop them at the command post if the Apparatus Officer or Operator was unable to do so.
- When a crew has been released and secured by command these tags will be retrieved and distributed back to the crew.

7.2.5 Accountability at Incidents

- For companies using separate radio ID tags, Firefighters / Officers of these companies shall attach the radio ID tag of the apparatus portable radio that they are using to their second PAT prior to arrival at the incident.
- Firefighters / Officers will surrender their second PAT to the appropriate sector officer or PAO upon entering a hazard area
- In the case of first arriving units, which must immediately engage in firefighting activities, the apparatus officers will place a PAT cone at the point of entry to the hazard zone, and attach the tags of the members making entry to it. Immediately upon being assigned, it will be the responsibility of the Personnel Accountability Officer or Sector Officer to retrieve and manage these second tags from the cone.
- The Personnel Accountability Officer and/or Sector Officer will keep track of each crew's assignment and approximate location.
- Upon exiting the hazard zone firefighters / officers shall retrieve their tags from the Personnel Accountability Officer or Sector Officer in preparation for their next assignment.

7.2.6 Incident Timekeeping

- In accordance with NJAC 5:75-2.10, the communications center will announce the elapsed time on scene from time of arrival in 15 minute intervals for time sensitive, high risk incidents such as structure fires, haz mat incidents, extrications, confined space incidents, etc..
- Incident Commander shall use the elapsed time from arrival to gauge the progress of the incident action plan and consider the need to change tactical operations.

7.2.7 Periodic Roll Call

- In accordance with NJAC 5:75-2.10, periodic roll call will be taken at 30 minute intervals at all incidents, with the first time period beginning at the time of arrival.
- Five minutes prior to each required roll call, the PAO or the officer maintaining overall responsibility for accountability at the incident will announce a five minute

warning to the roll call, to allow each group supervisor time to confirm that they have PAR with the groups that they are maintaining accountability for.

- Upon announcement of the Roll Call by the PAO or the officer maintaining overall responsibility for accountability at the incident shall request a personnel accountability report from each group supervisor operating at the incident. Group supervisors will confirm PAR for their group in accordance with 7.2.8 below. Once PAR has been confirmed or denied for each group, that group's supervisor will report back that his group has / does not have PAR (i.e. "Accountability from Rescue 56, we have PAR").
- In addition to periodic roll calls, the Incident Commander, PAO or officer in charge of accountability shall request an immediate roll call as described above in the following circumstances:
- 1) If there is a report of a firefighter missing.
- 2) When an emergency evacuation is ordered.
- 3) When the incident is declared under control.
- 4) When changing attack modes (i.e. offensive to defensive).
- 5) Anytime the Incident Commander feels it necessary.

7.2.8 Crew Officer Accountability Responsibilities

- The Apparatus Officer will be responsible for and must be prepared to give personnel accountability reports (PAR) when requested.
- Officers will have PAR when they have the members from their crew in sight.
- Efforts should be made to keep crews intact when possible.
- If crews are split, a second officer or group supervisor will be designated by the Apparatus Officer to be responsible for PAR for the second group. Upon a request for PAR, the apparatus officer must first confirm PAR from the supervisor of the second group, and then from his own group. Once both groups are accounted for, the apparatus officer can report back that he has PAR
- The use of apparatus portable radio ID's (i.e. 261A, 561B, etc.) instead of personal ID's (i.e. 5626, 2648, etc.) is encouraged when crews are split to help identify which apparatus that group was from.
- The Apparatus Officer will advise the PAO or responsible Sector Officer or Command when he has split his crew.

7.2.9 Emergency Roll Call

- If the need arises for an accountability roll call as noted in 7.2.7 above, all non-emergency radio traffic will cease.
- All members working at the scene will be directed via radio that a PAR will be taken in accordance with 7.2.7 above.
- If necessary an evacuation signal from apparatus for all interior personnel to vacate the structure will be given.
- Upon leaving the structure all personnel accountability tags must be retrieved from the Accountability Officer.

7.2.10 Missing Members

- The Accountability Officer/ Sector Officer will report to command if any tags are not retrieved.
- Those members will be contacted via radio.
- The MAYDAY or EVACUATION SOG should be followed if needed if members can not be accounted for.
- A FAS Team will be dispatched if members are unaccounted for.

7.2.11 Lost tags

- In the event a tag is lost or missing it is the responsibility of the firefighter to secure a new tag from the District Office.

7.2.12 Visitor tags

- Each company will have a series of visitor tags made for those who are not members of the district but are on scene in a working capacity.

SECTION 8

UNIFIED INCIDENT COMMAND GUIDELINE

Purpose: The purpose of this SOG is to implement and standardize the Incident Management System in Fire District #1.

The ICS system has 5 major functional areas:

- Command
- Operations
- Planning
- Logistics
- Finance

8.1 Command

- The Command function manages the incident including establishing strategic goals and ordering or releasing resources (personnel and equipment).
- The highest-ranking officer from each company shall comprise the Unified Command Team.
- These individuals should stand together at the command post (CP).

8.2 Establishing Command

- The first arriving unit shall establish command via radio (i.e., "Somerset County Car 26 on location establishing Davidson Avenue command").
- Should another incident occur on the same street or road, County should be made aware of the new incident name. This will lessen confusion for the incoming units receiving assignments.
- In the absence of an elected officer to assume command, only a member who meets all requirements for the Fire District #1 Firefighter classification in Section 1 and NJDFS Incident Management Level 1 (IML-1) certification may assume command.

8.3 Functional Officers

Command shall fill the following functional rolls as needed. Note: Command has responsibility for the 4 major functional areas until and if they are delegated.

8.3.1 Operations

- The Operations function directs all incident tactical resources to accomplish the goals and objectives developed by Command.
- Operations assures that the personnel and equipment at the scene are used to perform effective mitigation.

8.3.2 Planning

- The Planning function is responsible for the collection and evaluation of information important to the incident. This leads to the development of action plans. Planning is on-going.

8.3.3 Logistics

- The Logistics function provides the services and supplies needed to support tactical operations.

8.3.4 Finance

- The Finance function procures equipment deemed necessary on site
- This officer should be a Commissioner or an appointee of OEM with the authority to allocate funding.

8.3.5 Accountability Officer

- The Accountability Officer reports to Command.
- The Accountability Officer should be assigned to a person with no other duties, although in the early moments of an incident this may not be possible.

8.3.6 Safety Officer

- The Safety Officer reports to Command.
- The Safety Officer should be assigned to a person who meets the qualifications for Safety Officer as set forth in Section 15 of this Standard.

8.3.7 Public Information Officer

- The Public Information Officer reports to Command and is responsible for interacting with the public and the press.
- This person shall be located at the command post.

8.3.8 Staging Officer

- The Staging Officer reports to Operations.
- The Staging Officer is responsible for coordinating the incoming units and tracking available resources.
- The Staging Officer is also responsible for establishing a manpower pool and coordinating manpower at the scene in order to minimize freelancing.

8.3.9 Division Officer

- Division Officers report to Operations and are responsible for managing any Branch, Division, or Group they are assigned.
- Fire Officers on the scene shall be utilized as sector officers prior to assigning firefighters to this task.
- Divisions are defined as Roof, Interior, Floor (by number), Exposures (see 8.4 below), Rescue Division, etc.

8.3.10 RIC Officer

- The RIC Officer reports to Command or Operations.
- The RIC Officer is to oversee and coordinate the RIC.

8.3.11 Medical Officer

- The Medical Officer reports to Operations and is responsible for managing the EMS Branch.
- This officer should be the ranking EMS officer on the scene.
- This person shall be located at the command post.

8.3.12 Mutual Aid Coordinator

- This position should be given to a Township or County Mutual Aid Coordinator.
- Command shall appoint a temporary coordinator if one is not present.
- This person shall be located at the command post.

8.4 Division Designation

- The sides and sections of the building are assigned a letter to simplify locations around and in any building. Exposure divisions shall be defined beginning with the street address side (which may not necessarily be the front of the building) as A, then clockwise around the building B, C, D. Floors shall be defined numerically, i.e. "Division 3" for the third floor, etc. Surrounding buildings shall be recognized as Division A-1, A-2, B-1, etc.

8.5 Basement Designation

- In a building with a basement, "basement" shall be used to describe this division. If multiple levels exist they should be referred to as Basement 1, Basement 2, etc.

8.6 Manpower Pool

- A manpower pool shall be established for coordinating manpower at the scene and to control freelancing.

SECTION 9

PERSONAL PROTECTIVE EQUIPMENT GUIDELINE

9.1 PPE Use

- All district personnel shall properly wear all personal protective equipment (PPE) responding to and operating at incidents, and at all times when in designated areas.

9.2 Designated Areas for PPE and SCBA Use

- SCBA and PPE shall be worn in accordance with this guideline and the Fire District One Respiratory Protection Program (Reference Appendix 'E') during and after any structure fire, within any hazardous atmosphere or in close proximity of a hazard as directed by the Incident Commander or a Line Officer.

9.3 Enforcement of PPE Use guideline

- It shall be the responsibility of the Line Officers from the respective companies to enforce this guideline. If resistance is met, the firefighter in question shall be reported to the ranking officer from his or her company.

9.4 SCBA Use

- Any member wearing SCBA must comply with the regulations and standards set forth by the Fire District #1 respiratory protection program and these guidelines.

9.5 SCBA and PPE Weekly Inspection

9.5.1 Weekly checks of all PPE, including issued SCBA face pieces

- Is the responsibility of the member
- If any PPE is found to be unserviceable, the Chief shall be notified and the PPE shall be taken out of service and replaced.

9.5.2 Weekly checks of all SCBA

- Is the responsibility of the individual fire company.
- If any SCBA is found to be unserviceable, the Chief shall be notified and the SCBA shall be taken out of service and sent out for repair.

9.6 Officer's Authority

- The Incident Commander or Company Officer shall have the authority to deny emergency activity to any member who's PPE is in disrepair, missing or is not worn correctly.

SECTION 10

LADDER COMPANY GUIDELINE

10.1 Ladder Company Designation

- Station 26 will be considered the Ladder Company for Fire District #1, with Ladder 26.

10.2 Ladder Company Response

- Command will call for the dispatch of the Ladder Company to any reported structure fire or smoke condition in Fire District # 1 at schools, hotels, nursing homes or any other high occupancy building. Command will ensure that there is an open space for the ladder to set up.

10.3 Radio Channel Designation

- All Ladder Company operations will be conducted on an open talk group not being utilized for the incident operations, most preferable the Channel 4 Talk Group when available.

10.4 Ladder Company Operations

- Ladder Company operations shall include, but not be limited to search and rescue, ladders, overhaul ventilation, utility control, rope rescue and rigging or any other operation deemed necessary by the IC. Upon arrival, the Ladder Company officer will coordinate with the operations officer to determine what is needed of his crew, and to insure the safety of interior crews in the event that master streams or ventilation are required. Station 26 Ladder Company SOG's will govern the actions and requirements of the Ladder 26 crew.

SECTION 11

RESCUE COMPANY GUIDELINE

11.1 Rescue Company Designation

- Station 56 will be considered the Rescue Company for Fire District # 1, responding with Rescue 56.

11.2 Rescue Company Response

- Somerset Fire & Rescue Co. No. 1 shall be dispatched to all calls in Fire District No. 1 requiring specialized equipment and training (i.e., water rescue, vehicle extrication, mechanical entrapments, confined space rescue, high or low angle rescue, trench rescue, structural collapse, etc.).

11.3 Radio Channel Designation

- All Rescue Company operations will be conducted on an open talk group not being utilized for the incident operations, most preferable the Channel 4 Talk Group when available.

11.4 Rescue Operations Officer

- Due to the complex nature of these incidents, the ranking officer from Somerset Fire & Rescue shall assume the Operations function at all rescue incidents.

SECTION 12

TANKER GUIDELINE

12.1 Radio Channel Designation

- All district Tanker Operation communications shall be on Franklin Township channel #7. If tankers from outside of Franklin Township are being utilized Franklin Township channel #7 shall be used.

12.2 Use of District Tankers and Tanker Pumpers

- Command shall have sufficient tankers and/or Tanker Pumpers dispatched to reported structure fires in non-hydranted areas.

12.3 Tanker response to Mutual Aid Requests

- No more than three (3) Tankers / Tanker Pumpers shall be out of the district at one time. If there are more than two (2) Tankers / Tanker Pumpers out of the district then plans shall be made to arrange mutual aid tankers. The District Chiefs shall coordinate this request.

SECTION 13

EMS RESPONSE GUIDELINE

13.1 Use of EMS at High Life Hazard Incidents

- Command shall request two (2) BLS units upon the confirmation of a large fire, HazMat incident or smoke condition at schools in session or high hazard occupancies.

13.2 EMS Command

- Upon arrival the ranking EMS Officer shall report to the Command Post.

13.3 District use of Paid EMS

- If EMS is not available the Incident Commander has the authority to request a paid EMS service as per Commissioners of Fire District #1.

13.4 Command Coordination With Paid EMS

- Command shall assign an officer to the paid EMS service for coordination.

13.5 Operations Prior to EMS Arrival

- Until EMS units arrive on the scene it shall be the Incident Commanders responsibility to secure sufficient EMS units as the incident dictates.

SECTION 14

MINIMUM AND MAXIMUM MANNING GUIDELINES

14.1 Manpower Requirements

14.1.1 Minimum Manpower

- A driver / operator (as specified in this guideline) plus two Firefighters or Probationary Firefighters (as specified in this guideline) to staff Engine / Ladder / Rescue.
- This may be modified as needed by the IC, but manpower of no less than a driver with one firefighter or probationary firefighter permitted.

14.1.2 Maximum Manpower

- Limit shall be set for all district apparatus in accordance with policy set forth by the Commissioners of Fire District #1.

14.1.3 Short Staffing

- For short-staff situations where the driver is the only IML1 certified member of the crew, he must advise the IC that his crew needs to report to another IML1 supervisor if he must remain with the apparatus that he drove. If there is no IC on scene the driver may have to assume a mobile command and advise County of such, and that he will be operating on portable radio only and may be unreachable via radio for a short period of time.

SECTION 15

SAFETY OFFICER GUIDELINE

15.1 Safety Officer Assignment

- An incident commander shall appoint a safety officer at every significant emergency event. Command shall expand the Safety Sector as the incident dictates.

15.2 Definitions

15.2.1 Significant Emergency Event

- Means any occasion or instance for which, in the determination of an incident commander, he or she cannot effectively monitor conditions to insure the safety of assigned personnel or he or she deems an operations section is needed or where firefighters are exposed to conditions immediately dangerous to life or health (IDLH).

15.2.2 Safety Officer

- A member of an incident command staff responsible for monitoring and assessing safety hazards and unsafe conditions, and for developing measures for ensuring personnel safety.

15.3 Safety Officer Authority

- In the event a dangerous situation exists the Safety Officer has the authority to respond appropriately to mitigate the situation without compromising the operation.

15.4 Safety Officer Qualifications

- Designated Safety Officers shall meet the following requirements:

  - FDSOA ISO Certification
  - The educational requirements for "Captain" per section 3.2.1
  - NJDFS FF1 certified for a minimum of five years
  - Approval of Fire District One Line Officers for District-wide response

15.5 Safety Officer Responsibility

- The Safety Officer should have no other duties but scene safety.
- A safety checklist shall be complied to ease the Safety Officer's responsibility.
- Any person acting as a Safety Officer shall be properly trained under the NJ State Safety Officers Program.
- The Safety Officer may also attend the accountability duties as the scene dictates.

SECTION 16

MVC (SPILL OR LEAK) GUIDELINE

16.1 Overview

It should be recognized that MVCs present many different hazards including but not limited to:

- Flammable liquids
- Propane and other hazardous materials
- Traffic
- Slip hazards
- Blood borne pathogens
- Air bags and other projectiles

Safety should rule every action. All PPE will be used including eye protection.

16.2 Roadway Safety

- The Incident Commander (IC) shall make every effort to insure the safety of those responding to this call. Road closures should be considered where appropriate. At a minimum, the use of fire apparatus to block the area where the responders are operation should always be employed.

16.3 Fluid Spills

- Dry chemical extinguishers should be brought up to the scene while members are working in or around the vehicle. Where appropriate, a foam hand line should be pulled and charged.
- Units should make every effort to stay out of the fluids. Efforts to contain the fluids and prevent it from entering a waterway or sewer shall be made. Water will not be used to wash the fuel down the sewer.
- If the spill is over 1 gallon, the IC will contact the NJDEP for a case number to be issued. Efforts shall be made to get as much information as possible about the drivers insurance so that any materials used can be billed to the carrier.
- Hazmat 26 will be dispatched for large leaks where pads or other absorbents may be required.
- In cases where the MVC is serious in nature or potentially fatal, every effort shall be made to preserve the scene for the police department. The use of speedy dry or other absorbents shall be delayed until requested to do so by the PD.

16.4 Operations On-Scene

- The battery shall be cut at all MVCs. The negative cable will be cut first followed by the positive cable. At least 1” sections shall be cut out of each cable.
- Units on scene will in no case attempt any offensive action for which they are not fully trained or comfortable in performing.

SECTION 17

ADDITIONAL ALARM GUIDELINE

17.1 Request for Additional Alarms

- All requests shall go through Command, and be based on the Somerset County mutual aid program box alarm assignment for that area of the fire district.

17.2 Additional Alarms at High Life hazard Occupancies

- Upon the report of a fire in a school in session, nursing home, hotel, or other high hazard occupancy the remainder of the District Companies shall be dispatched along with any other special units that are required. This procedure should be performed by County Communications automatically; the Incident Commander shall be responsible to assure that this dispatch procedure is carried out.

17.3 Cover Assignments

- When cover assignments are needed district companies should either be brought to their respective stations or notified that they will be dispatched on a first alarm basis for the effected companies.

17.4 District Five-Alarm Plan

- The mutual aid program box alarm assignments shall be maintained by District Line Officers annually for submission to County Mutual Aid program.

SECTION 18

HAZARDOUS MATERIALS OPERATIONS

Purpose: The purpose of this SOG is to establish a standard district response to hazardous material events.

18.1 Overview

The Incident Commander (IC) will make every effort to insure the safety of those responding to this call.

18.2 Duties of the IC

- Ensure that EMS has been dispatched to the incident.
- The County Hazardous Materials team has been dispatched.
- If the call warrants, evacuation will be considered.

18.3 En route to the call

The IC shall try to obtain

- The safest approach or the best access to the incident
- Identification of the material if known
- Amount of the spill or release
- Any victim information
- Type of container involved

All district firefighters are reminded that no actions that exceed their Hazardous Materials training are to be undertaken. All firefighters are further reminded that that level of training, for the most part, is at the operational level and as such offensive operations are limited.

18.4 Defensive Operations

NFPA 472 states that defensive operations are limited to

- Initiating protective actions
- Initiating the notification process
- Collecting hazard and response information
- Estimating the potential harm
- Establishing and enforcing scene control
- Performing such defensive control actions as: use of foam to control vapors, absorption, damming, diking, diluting, diverting, retaining or capturing. These actions should only be performed if the product has been identified.

18.5 Offensive Operations

- OSHA Allows limited offensive tasks (for operationally trained responders) who have demonstrated competency and who have the appropriate PPE and adequate resources
- These offensive operations involve flammable liquid and gas fire control of the following materials: Gasoline, Diesel fuel, Natural gas and LPG.

18.6 Hazmat Release into Waterway

Any release into any waterway HM-26 shall be dispatched along with the County Coordinator.

If a HazMat incident is beyond the scope of the initial responding units HM-26 shall be dispatched along with the County HazMat Coordinator

SECTION 19

FIRE GROUND OPERATIONS

Purpose: To safely and efficiently determine the cause of an activated fire alarm or hazard, or to extinguish a fire and protect life and property.

Scope: This guideline is intended to cover the following.

- Report of a fire in an area where a hydrant is present.
- Report of a fire in an area where there are no Hydrants.
- Report of an activated fire alarm.

19.1 Response

When responding the following should be considered

- Time of day (will traffic delay your response) should an alternate route be used?
- Apparatus should roll with a minimum crew in accordance with Section 14 Minimum Manpower SOG. All members inside the moving apparatus shall have their seatbelts fastened.
- Units should call "In Service" on Fire District 1 talk group using plain and proper language.
- Upon arrival the officer will institute the Incident Management System (IMS) if it has not already been instituted. If command has already been established the officer will contact command for an assignment. (Example: engine 561 arriving establishing Easton Ave. command) or command engine 561 approaching requesting assignment.
- All other units responding should call command on approach for their unit's assignment.
- Command will be on Fire District 1 talk group
- After units arrival radios should be switched to Fire Ops 1 talk group for operations.
- All members will follow the seating assignments (as per their company's policies for seating assignments) for all apparatus.

19.2 Size Up

During scene size up any preplan for the building should be reviewed and the following should be considered

- Building construction
- Time of day
- Weather conditions
- Occupancy
- Stand pipe/sprinkler location
- Control of elevators
- Control of stairways
- Control of HVAC and other utilities
- RIT location

- Upon arrival, a size up should be conducted and reported via radio to incoming units. The initial size up report shall include the following information – correct address, number of floors, construction type, occupancy and conditions found upon arrival. Meet with a key holder if available to determine the cause for activation and to locate the alarm panel.
- Consideration should be taken to block a roadway if personnel and apparatus are at risk of being struck by passing vehicles. See Roadway Operations SOG Section 26

Note: During the response companies should be aware of the presence of building management, engineering staff or other people that can be a resource to our operations. The individuals should be directed (escorted if necessary) to the command post.

19.3 Fire with Hydrant

- If the incident is a fire in an area where a Hydrant is present the first engine should spot Hydrant and leave room in front of the building for the Ladder truck.
- Using your best judgment the officer in charge will call for water supply to be made by the first engine or by the second due engine.
- Crews will get off the apparatus ready to make entry to the fire building wearing full PPE and carrying the proper tools and hose line
- The officer in charge will determine the hose line size. Hose size should be determined by building type and size of fire.
- The first arriving Ladder should be positioned to be available to set up where needed.
- The second arriving engine should take a position at the FDC (if building is equipped) and/or locate a water supply if not already done by first arriving engine, if done locate a second water source.
- All other arriving units should be staged and be ready for immediate assignment.

19.4 Fire with NO Hydrant – Pumper Tankers should respond first if available

- If the incident is in a Non Hydrant area the first arriving apparatus will determine the need for a Tanker Shuttle and Dump Tanks or the use of tankers to be used to Nurse water from the tankers to the engine.
- Consideration must be made in the placement of such an operation as to not hinder the placement of the Ladder Truck and access of the Tankers.
- Crews will get off the apparatus ready to enter the building wearing full PPE and carrying the proper tools and hose line.
- Officer in charge will determine hose line size. Hose size should be determined by building type and size of fire.
- The first arriving Ladder should be positioned to be available to set up where needed.
- The second arriving engine may have to pump to the first engine until a water source can be established and/or set up portable tanks for a water supply.
- All other arriving units should be staged and be ready for immediate assignment.

19.5 Responding to an Activated Fire Alarm

Objective

To safely and efficiently determine the cause of the alarm activation and / or hazard, determine if additional resources are needed, ensure the cause of the alarm or hazard is determined and mitigation completed to the best of our ability. Ensure the scene is left reasonably safe for occupants and or use and ensure proper notifications are made regarding the situation found.

- The crews will be directed to the floor or location of the activation and attempt to locate the source of the activation.
- The units on location will not attempt to reset the fire alarm, but may direct authorized building personnel on proper reset procedures, or advise a "Fire Watch" be posted if alarm cannot be reset.
- Fire Prevention should be notified of all alarm activations via FAAR and of alarm being reset prior to Fire dept. arrival via FAAR

Definitions

Automatic Alarm

An activation of a fire alarm (monitored or local) including pull stations, heat detectors, smoke detectors or other devices.

Trouble signal

An indication referencing ground fault, power outage, telephone problem or other non-emergency situation.

Water flow alarm

Sprinkler system charged, heads possibly activated, water surge

Pump Operation

Fire pump has activated.

Fixed System

Dry chemical, Halon or CO2

SECTION 20

RIC RESPONSE GUIDELINES

20.1 Purpose

- To provide general information on and provide general guidelines to follow while training for and performing as a RIC.

20.2 Definitions

- RIC stands for Rapid Intervention Crew

20.3 Scope

- Covers all aspects of RIC operations and training.
- The team is used by the incident commander for the sole purpose of assisting or rescuing downed firefighters.
- The team must therefore be capable of aiding, assisting, or rescuing a downed firefighter in a safe, timely and proficient manner.
- A line officer has the authority to modify this SOG as the emergency or training situation dictates.

20.4 Training

- All firefighters must successfully complete an approved firefighter 1 course
- All firefighters must successfully complete an approved RIC, FAST or RIT course
- All firefighters are encouraged to complete an approved advanced RIC, FAST or RIT course
- All firefighters shall familiarize themselves with the equipment used on RIC calls
- All firefighters shall attend at least one (1) approved refresher RIC, FAST or RIT course/yr

20.5 Response

20.5.1 Staffing

- The minimum personnel are 3 firefighters plus a driver.
- Firefighters with the appropriate RIC training are always given priority as the crew.
- If possible, these firefighters should have advanced medical training (e.g., first responder or EMT).
- Probationary firefighters are able to respond to assist the crew but they are not to be considered as part of the minimum crew.
- There should be a ratio of one (1) RIC trained firefighter to one (1) non-RIC trained firefighter or better at all times.

20.5.2 Senior Officer Responsibilities

- Call in service to the dispatch center that requested the RIC
- Notify SCC that the RIC is responding to the call (if the dispatch center requesting the RIC is not SCC.
- Ask what frequency the staging officer is operating on
- Ask the dispatch center what the best route or approach is to the fire scene
- The crew shall follow all accountability procedures as outlined in the Fire District No. 1 Accountability SOG.

20.6 On Scene Operations

- Upon arrival the officer should report to the incident commander to find out where to position the team and to receive an update on the incident.
- While the officer is talking to the incident commander the crew should start to assemble the necessary tools. The minimum recommended tools to be assembled by the members of the RIC team are listed below.

  - Stokes basket
  - Thermal imaging camera (TIC)
  - Flashlights
  - Personal lights attached to gear
  - Light box for each member
  - Set of irons
  - 6' or 8' hook (preferable with some type of prying head)
  - Hydra-Force tool (i.e., the rabbit tool)
  - Officers bag
  - Sledge hammer
  - Pick-head axe
  - Life-saving rope pack
  - Search rope pack
  - Power saw for cutting wood, such as the Partner saw with a wood or multi-purpose blade, the ECHO saw or Cutters Edge saw.
  - Circular saw with metal blade
  - First-aid bag, AED and oxygen kit
  - Additional equipment as needed based on building type and construction.
- All tools should be checked to ensure that they are functioning properly and all saws shall be started.
- The officer will brief the crew on its assignments, select a radio channel the crew will operate on (this channel will be known as the RIC tactical channel), and instruct the crew where to stage.
- All firefighters shall carry a portable radio that is set to the RIC tactical channel with the scan mode turned off. The officer is the only member of the crew responsible for communicating with the incident commander.
- Once briefed and staged, all firefighters should remain geared up and ready to go to work.
- The crew should continue to size up the incident and monitor the RIC tactical channel.
- Freelancing will not be tolerated.

- The crew shall remain geared up and ready to go to work until the officer received word that they have been released.
- Upon being released the crew should secure their equipment and advise the proper dispatch center that they will be clearing the fire scene and are available.

20.7 Requirements for Mutual Aid Companies

The following will serve as the minimum requirements for all mutual aid companies wishing to provide Fire District #1 with a RIC if requested. The safety of all firefighters is of top priority therefore if the minimum requirements cannot be met at any time, the company being requested must notify the Incident Commander immediately.

20.7.1 Training

- All firefighters must successfully complete an approved firefighter 1 course
- All firefighters must successfully complete an approved RIC, FAST or RIT course
- All firefighters are encouraged to complete an approved advanced RIC, FAST or RIT course
- All firefighters shall familiarize themselves with the equipment used on RIC calls
- All firefighters shall attend at least one (1) approved refresher RIC, FAST or RIT course/yr

20.7.2 Response

20.7.2.1 Staffing

- The recommended minimum personnel are 3 firefighters plus a driver.
- Firefighters with the appropriate RIC training are always given priority as the crew.
- If possible, these firefighters should have advanced medical training (e.g., first responder or EMT).
- Probationary firefighters are able to respond to assist the crew but they are not to be considered as part of the minimum crew.
- There should be a ratio of one (1)RIC trained firefighter to one (1) non-RIC trained firefighter or better at all times

20.7.2.2 Senior Officer Responsibilities

- The senior officer should call in service to the dispatch center that requested the RIC
- Notify SCC that the RIC is responding to the call (if the dispatch center requesting the RIC is not SCC.
- Ask what frequency the staging officer is operating on
- Ask the dispatch center what the best route or approach is to the fire scene
- Report to the command post upon arrival for briefing by IC / Operations Officer

SECTION 21

CO ALARM RESPONSE

21.1 Purpose

- To provide strategies and tactics to be used to thoroughly investigate an activated carbon monoxide (CO) alarm.

21.2 Scope

- This guideline covers all aspects of responding to activated CO alarms. The procedures are designed to protect of the safety of the responder while determining the level of CO in the home and to determine the level of assistance needed by the resident. The guideline also addresses when it is safe for occupants to re-enter the home.

21.3 Safety

- It is important to remember that CO is a colorless, odorless, and poisonous gas and is commonly known as the silent killer. CO is the leading cause of accidental poisonings in the US.
- CO is a by-product of incomplete combustion and therefore any appliance or equipment that burns fuel can give off CO.
- Often emergency responders respond to CO alarms and find no CO present in the home. All too frequently, this is dismissed as a defective alarm. A finding of no CO during an investigation does not mean no CO was present when the alarm originally sounded. It is imperative that all CO investigations never be taken lightly and that all investigations be through and complete.

21.4 Response

21.4.1 Calls for CO alarm with no illness

- Standard fire company response
- Units shall respond “Non-Emergency Response”

21.4.2 Calls for CO alarm with reported illness

- Standard fire company response plus dispatch of BLS unit
- Units shall respond as per any emergency response
- All firefighters shall have SCBA available and ready for use.

21.4.3 All CO alarm calls

- The crew shall turn on the 4-gas air monitors enroute to the call to ensure the monitors are functioning properly.
- Upon arrival the IC shall seek out the caller and begin to fill out the CO Response Checklist.
- Two 4-gas air monitors shall be used on all CO calls to provide for a redundant system.
- Take ambient air measurements in the center of the room
- Take measurements near CO sources but NOT in vents or flue pipes.
- The IC shall base all decisions and determinations on the CO Response checklist

21.5 Carbon Monoxide Detector Standards

- Under the latest UL standard (UL-2034 dated Oct. 1, 1998) a CO detector must sound if CO is present in the following concentrations:
- 70 ppm for 3 hours and 9 minutes
- 150 ppm for 50 minutes
- 400 ppm for 15 minutes
- The detector must ignore CO levels of 30 ppm or less for at least 30 days and ignore levels of 70 ppm or less for at least an hour but manufacturers do make detectors that alarm at lower levels. As a result, the possibility of nuisance alarms is decreased
- All detectors must have a silence button. Pushing it will silence the alarm for six minutes. If the concentrations stay above 70 ppm it will alarm again in six minutes.
- Detectors have only two alarms – a full alarm and a trouble alarm.
- Detectors are made to ignore certain levels of interfering gases.

21.6 Carbon Monoxide – Action Levels

The following levels of CO are guidelines to determine atmospheres that are safe, unsafe, or dangerous.

Levels	CO Level (ppm)	Reference
SAFE	Less than 35 ppm	EPA Ambient Air Std. = 9 ppm ACGIH TLV-TWA = 35 ppm
UNSAFE	Between 35 ppm and 1200 ppm	ACGIH TLV-STEL = 400 ppm
DANGEROUS	Greater than 1200 ppm	NIOSH IDLH = 1200 ppm

- SCBA must be available and ready for use anytime the level of CO exceeds 35 ppm.
- SCBA must be used anytime the level of CO exceeds 400 ppm.
- Household levels of CO greater than 9 ppm must be investigated.

References

- Street Smart HazMat Response by M. Callan
- Responding to Routine Emergencies by Frank C. Montagna (http://www.chiefmontagna.com)
- Underwriters Laboratories, UL-2034 (http://www.ul.com)
- Consumer Products Safety Commission (http://www.cpsc.gov/cpscpub/pubs/466.html) and (http://www.cpsc.gov/cpscpub/pubs/coguide.pdf)
- EPA Outdoor Ambient Standard for CO (http://epa.gov/air/criteria.html)

SECTION 22

FIRE POLICE GUIDELINES

22.1 Purpose

- The purpose of Fire Police activities are to protect Fire and EMS personnel by directing, monitoring, and controlling the flow of traffic at fires, automobile accidents, other emergencies, parades and special events. Fire Police will relinquish control of traffic operations if police units are available. Fire Police will also be available to assist Command in other ways such as crowd control, establishing fire lines, or in other ways as requested by Command. Fire Police shall be governed by the requirements of NJ Statute Title 15:8-4.

22.2 Requirements for Fire Police

- Must meet Fire District No. 1 Firefighter Requirements with the exception of the annual live burn recertification and the requirement to have no facial hair touching mask-sealing area.
- Must successfully complete an approved NJ State Fire Police training course.
- Must be sworn in as Fire Police by the Township Clerk every five years in accordance with State Law Title 15:8-4.
- Maintain Involvement in NJ State Fire Police Assoc. Meetings and attend any designated District No. 1 meetings.
- Coordinate with the Franklin Twsp. Police Department for Local training/guidelines.

22.3 Response Guidelines

- Fire Police shall use good judgment to determine if response is necessary, (i.e. consider type and location of incident)
- Fire Police shall respond with vans or auxiliary apparatus to the scene, not personal vehicles.
- Upon calling in service, Fire Police should identify the responding unit and "Fire Police" (i.e. "Brush 44 - Fire Police responding").
- Upon approach or arrival at the scene, the Fire Police unit should request an assignment from Command and provide Accountability Tags to the Personnel Accountability Officer.
- Fire Police shall be required to use proper personal protective equipment when operating at an incident. The fire police protective gear color is to be red with reflective trim, Labeled FIRE POLICE on rear of coat, helmet color to be red with yellow shield.

SECTION 23

RADIO USAGE

23.1 Purpose

- This is to establish the guidelines for the personnel of the Franklin Township Fire District 1 for the use of portable and mobile radios. The usage of such devices will comply with the rules, regulations, and guidelines of the Federal Communications Commission (FCC), Franklin Township Fire District 1, and Somerset County Communications (SCC).

23.2 Procedure

- The use of the radio is an important means of communication at an incident. It allows the user to report findings back to the incident commander (IC), and it allows other members operating at the scene to remain aware of the situation. Each member operating at an incident should have one radio. Use of the radio should follow these general guidelines:

    - Radio transmissions shall be clear, concise, necessary, and in a manner commensurate with the operation.
    - All messages received should be repeated by the receiving party to ensure accuracy of the transmission.
    - Listen before transmitting to ensure that the frequency is clear.
    - Wait 3 seconds for the radio to key up before transmission of a message.
    - Think about what you are going to say prior to using the radio.
    - Always speak in a calm voice and never shout.
    - Ensure all other radios and pagers are turned off when transmitting to prevent feedback.

23.3 Response / Command

- When a call is received via pager / radio from SCC, units shall call in service on Franklin Talk Group 2 (District 1) using plain language and proper radio designation. Ex: *SCC, Engine 281 is responding*.
- The first arriving fire unit will establish Fire Command on the appropriate operational channel and in plain language. Whenever possible a geographical location will be used to identify command. Ex: *Car 26 arrived, establishing Davidson Ave. Command*.
- All other In-Service units shall contact Fire Command, on the appropriate operational channel, prior to arrival and request an assignment. Ex: *Davidson Ave. Command from Engine 561, approaching and requesting an assignment*.
- It is not necessary for every fire unit to call SCC and inform them they are clear and available, returning to quarters, or out of service. This leads to an enormous amount of unnecessary radio transmission. Fire Command will be the only unit to inform SCC that units are clear and available.
- Fire Command will clear individual units from the scene as follows: *Engine 441 from Command you can return to Quarters*. Engine 441 replies: *Engine 441 received*."
- Fire Command will terminate the incident as follows:

- Somerset County Communications from Davidson Ave. Command, all units are clear and available and command is terminated.

23.4 Fireground Operations

- For normal emergency activity, Franklin Talk Group 2 (District 1) should be used on the scene as the fire command channel, while fire ground operations should utilize Franklin Talk Group 5 (Fire Ops 1). This will allow for personnel operating at an incident to communicate with the IC. In some situations (e.g., multiple calls in the district, too much radio traffic that could potentially adversely impact the safety of firefighters) an alternate Franklin fire ground channel may be necessary. Alternate fire ground channels shall also be requested for any incident where mutual aid or specialized resources are summoned to the scene (e.g., tanker shuttles, fast operations, truck company operations).

23.5 Trunked Radio Update†

23.5.1 Talk Group 1 "Fire Main"

- Used to simulcast dispatches
- Used as default Mayday channel

23.5.2 Talk Group 2 "District 1"

- Used by command at Fire District #1 calls
- Used to communicate with EMS at Fire District #1 calls

23.5.3 Talk Group 3 "District 2"

- Used by command at Fire District #2 calls
- Used to communicate with EMS at Fire District #2 calls

23.5.4 Talk Group 4 "District 3"

- Used by command at Fire District #3 calls
- Used to communicate with EMS at Fire District #3 calls

23.5.5 Talk Group 5 "Fire Ops 1"*

- Used by Fire District #1 for all Fire Ground Operations

23.5.6 Talk Group 6 "Fire Ops 2"

- Open channel used as needed

23.5.7 Talk Group 7 "Fire Inspectors"

- May be used for communication with the Township Fire Inspectors
-

**Talk Group 5 is not a dedicated Dist #1 Ops channel, but has been mutual agreed upon by the Chiefs Association of Franklin Township to be used primarily by Dist #1 **

†Somerset County Communication has the ability to only communicate on Talk Group 1 (Fire Main), Talk Group 2 (District 1), Talk Group 3 (District 2/4), and Talk Group 4 (District 3) †

23.6 Radio Designations

- The following is the listing of the approved radio designations

23.6.1 Station 26

- Car 26
- 26B - DCICV
- Engine 261
- Engine 263
- Ladder 26
- Unit 26 (Hazmat)
- Van 26

23.6.2 Station 28

- Car 28
- 28B - DCICV
- Squad 28
- Engine 28
- Air 28
- Brush 28
- Van 28

23.6.3 Station 44

- Car 44
- 44B - DCICV
- Engine 441
- Engine 442
- Tanker 44
- Brush 44
- Van 44

23.6.4 Station 56

- Car 56
- 56B - DCICV
- Engine 561
- Engine 562
- Rescue 56
- Unit 56 (Dive)
- Van 56

23.6.5 Fire District #1

- District 1 Fire Police

23.7 Trunk System Contingency Options:

- In the event of an outage of the trunk system, current radio equipment can be utilized. Talk Groups 11 (FT EMG SERV) and 12 (FT EMG T/A) are analog channels, Talk Group 11 is repeated while Talk Group 12 is local only.

SECTION 24

RESPONSE TO EMERGENCY AND NON-EMERGENCY INCIDENTS

24.1 Scope

This SOG covers the response to emergency and non emergency incidents. The response types are outlined in this document based on the nature of the call. Under the direct of the incident commander or his (her) designee response types can be altered as need. These up-dates will be communicated to all responding apparatus to ensure proper response types are followed.

Response to any calls not outlined in this SOG should follow an emergency response as defined below.

24.2 Response Types

24.2.1 Emergency

- All apparatus responding to the incident will utilize all visual and audible warning devices (lights and sirens). All apparatus will continue to the scene of the incident following the emergency response unless instructed by command or his (her) designee to change response type, (additional response types downgrade - *modified* or downgrade - *non-emergency*). During this response all posted traffic devises and laws will be followed.

24.2.2 Modified (Emergency / Non Emergency)

- The first arriving command vehicle, engine, and specialty apparatus (incident specific) will respond to the incident utilizing all visual and audible warning devices (*emergency* response). First arriving apparatus is determined by the first unit in service or the closest unit in service. All other apparatus responding to the incident will respond non-emergency. All apparatus will continue to the scene of the incident following the modified response unless instructed by command or his (her) designee to change response type, (additional response types, upgrade - *emergency* or downgrade - *non-emergency*). During this response all posted traffic devises and laws will be followed.
-

Example: Engine 44-1 is in-service first and responds with lights and sirens, engine 28-1 calls in-service next and is closer to the location of the incident, using the radio 28-1 would inform 44-1 that they will arrive first thus 28-1 would respond using lights and sirens while 44-1 would respond *non-emergency*.

24.2.3 Non-Emergency

- All apparatus responding to the incident will respond using **NO** visual and audible warning devices (lights and sirens). All apparatus will continue to the scene of the incident following the non-emergency response until instructed by command or his (her) designee to change response type, (additional response types, upgrade - *modified* or upgrade - *emergency*). During this response all posted traffic devises and laws will be followed.

24.3 Outline of Response by Nature of Call (Alarm Type)

Alarm Type	Response Type		
	Emergency	Modified	Non-Emergency
Activated Alarm			
general		X	
water flow		X	
smoke detector no smoke		X	
with smoke or odor of smoke	X		
unknown / miscellaneous	X		
chemical alarm		X	
elevator (unconfirmed or confirmed person)		X	
CO Detector			
with no illness / sickness			X
with illness / sickness	X		
Electrical Hazards			
wires down or arcing (no fire)			X
wires down or arcing (with fire)		X	
wires down or arcing (on an object)	X		
electrical problem (inside structure)	X		
water removal (with electrical hazard)		X	
Fire			
commercial	X		
single or multi-family dwelling	X		
stove / oven (confined to container)	X		
out-building/barn/garage detached		X	
brush/woods/trash near structure	X		
dumpster standing alone		X	
dumpster attached or near structure	X		
chimney fire	X		
appliance / equipment	X		
confined vault / manhole	X		
Brush/woods/open burning away from structure		X	
controlled burning			X
motor vehicle (passenger)		X	
Motor vehicle (bus, truck, tractor-trailer)	X		
unknown / miscellaneous	X		
boiler/burner/furnace (fire confined)	X		
Miscellaneous Calls			
odor of smoke (inside structure)	X		
odor of smoke (outside / in the area)		X	
squad / lift assist			X
water removal			X
water removal (with electrical hazard)		X	
explosion (with or without fire)	X		

Alarm Type	Response Type		
	Emergency	Modified	Non-Emergency
Miscellaneous Calls Cont.			
lock-out / lock-in			**X**
search for person			**X**
extrication general (non-motor vehicle)	**X**		
Ice / water rescue	**X**		
aircraft standby (with patient)	**X**		
aircraft standby (no patient)			**X**
Motor Vehicle Crash			
with extrication	**X**		
with extrication, smoke, fire	**X**		
with smoke no extrication		**X**	
smoke, fuel spill, no extrication		**X**	
with fuel spill (10 gallons or less)		**X**	
with fuel spill (10 gallons of greater)	**X**		
Mutual Aid			
cover assignment / standby (at their quarters)			**X**
FAST assignment	**X**		
cover assignment / standby (on scene)			**X**
mutual aid (to the scene – suppression)	**X**		
mutual aid (to the scene – manpower)			**X**
Spill Release			
odor of gas (natural) in the area		**X**	
odor of gas (natural) in a structure	**X**		
gas (natural) line struck		**X**	
chemical odor in a structure	**X**		
chemical spill / leak	**X**		
chemical spill / leak outside		**X**	
chemical alarm		**X**	

24.4 Outline of Response by Response Type (Emergency)

Alarm Type	Response Type Emergency
Activated Alarm	
with smoke or odor of smoke	**X**
unknown / miscellaneous	**X**
CO Detector	
with illness / sickness	**X**
Electrical Hazards	
wires down or arching (on an object)	**X**
electrical problem (inside structure)	**X**
Fire	
commercial	**X**
single or multi-family dwelling	**X**
stove / oven (confined to container)	**X**
brush/woods/trash near structure	**X**
dumpster attached or near structure	**X**
chimney fire	**X**
appliance / equipment	**X**
confined vault / manhole	**X**
Miscellaneous Fire	
Open burning	**X**
Motor vehicle (bus, truck, tractor-trailer)	**X**
unknown / miscellaneous	**X**
boiler/burner/furnace (fire confined)	**X**
Miscellaneous Calls	
odor of smoke (inside structure)	**X**
explosion (with or without fire)	**X**
extrication general (non-motor vehicle)	**X**
ice / water rescue	**X**
aircraft standby (with patient)	**X**
Motor Vehicle Crash	
with extrication	**X**
with extrication, smoke, fire	**X**
with fuel spill (10 gallons of greater)	**X**
Mutual Aid	
FAST assignment	**X**
mutual aid (to the scene – suppression)	**X**
Mutual aid (to the scene – manpower)	**X**
Spill Release	
odor of gas (natural) in a structure	**X**
chemical odor in a structure	**X**
chemical spill / leak	**X**

24.5 Outline of Response by Response Type (Modified)

Alarm Type	Response Type Modified
Activated Alarm	
general	**X**
water flow	**X**
smoke detector no smoke	**X**
chemical alarm	**X**
elevator (unconfirmed or confirmed person)	**X**
Electrical Hazards	
wires down or arching (with fire)	**X**
water removal (with electrical hazard)	**X**
Fire	
out-building/barn/garage detached	**X**
brush/woods/trash	**X**
dumpster standing alone	**X**
Miscellaneous Fire	
motor vehicle (passenger)	**X**
Miscellaneous Calls	
odor of smoke (outside / in the area)	**X**
water removal (with electrical hazard)	**X**
Motor Vehicle Crash	
with smoke no extrication	**X**
smoke, fuel spill, no extrication	**X**
with fuel spill (10 gallons or less)	**X**
Spill Release	
odor of gas (natural) in the area	**X**
gas (natural) line struck	**X**
chemical spill / leak outside	**X**
chemical alarm	**X**

24.6 Outline of Response by Response Type (Non-Emergency)

Alarm Type	Response Type Non-Emergency
CO Detector	
with no illness / sickness	**X**
Electrical Hazards	
wires down or arching (no fire)	**X**
Miscellaneous Fire	
open burning	**X**
controlled burning	**X**
Miscellaneous Calls	
squad / lift assist	**X**
water removal	**X**
lock-out / lock-in	**X**
search for person	**X**
aircraft standby (no patient)	**X**
Mutual Aid	
cover assignment / standby (at their quarters)	**X**
cover assignment / standby (on scene)	**X**
mutual aid (to the scene – manpower)	**X**

SECTION 25

SOG Roadway Operations

25.1 Purpose

- To provide fire personnel with a uniform guide for safe operations while working on roadways and highways. This policy should apply to all personnel involved in fire department operations occurring on any roadway including but not limited to fires, medical emergencies, crashes, or any other call for the District apparatus.

25.2 Scope

- Fire personnel should utilize all safety equipment and methods available to provide a safe working area while operating on roadways and highways.

25.3 General

- Providing a safe working area is a priority at every scene. Personnel should appreciate the high risk while operating at an incident on a roadway and /or highway system. Personnel should operate in a defensive posture, always considering moving vehicles as a threat to safety. Personnel should be aware of the actions can make a scene more hazardous workplace (ex. white strobe lights, headlights, non reflective clothing, failure to properly identify and block work zones and saturation of the work area with non essential personnel.

25.4 Procedure

- All Fire District 1 personnel operating on or alongside any roadway will wear an ANSI Class 3 high visibility vest. Vests will be stored in each Fire District 1 vehicle for use by personnel. Vests are not required for those members who have donned SCBA as part of their assignment on or alongside the roadway. If those members are allowed to remove their SCBA while still on scene, they will immediately don the high visibility vest for the duration of the incident.
- Use visible and audible warning devices appropriately for mode of response.
- Median strip crossover by vehicle should only be attempted when absolutely necessary and when weather conditions allow, and when it can be completed with out risk to on scene personnel and other traffic.
- Jersey barrier cross over on foot should only be attempted when the maneuver is necessary and without risk for immediate live saving measures.
- Response in the opposing direction on one-way entrance or exit ramps shall not be permitted, unless it is confirmed that police have stopped oncoming traffic and it is safe to proceed.

25.5 Apparatus positioning

- The first officer on scene must assess the parking needs of arriving units. Units should be parked as to provide protective blocking of the scene and create the safest work area possible.
- First arriving apparatus should park to create a temporary work zone that protects personnel from traffic in at least one direction. Block the most critical or highest volume direction first. The apparatus should be placed at a 45 degree angle to the curb or shoulder no closer than 50' to the work zone. Whenever possible the angle should protect the pump panel or control area. Operators should turn the wheels away from the work area. First arriving units should only block lanes necessary to provide a safe work area.
- Second arriving apparatus should position at the next critical position, either further blocking the first arriving unit with appropriate distancing, widening the initial blocked area at least one lane wider, or boxing in the work area leaving appropriate room for a work area.

25.6 Exiting apparatus

- All personnel should take the following precautions.
- Always maintain an awareness of the high risk of working near traffic.
- Exit on curbside or non-traffic side whenever possible.
- Before exiting check to assure you are safely entering the roadway.
- Never turn your back on traffic. Never trust the traffic
- Police cars and command vehicles should not be used for blocking and should be positioned downstream and in the shadow of the blocking apparatus.

25.7 The Temporary Work Zone

- Should be considered the Hot Zone in which all personnel are at risk of being struck. The temporary work zone includes the path of travel from apparatus or support vehicles to the area of operations.

25.8 Scene safety

- During daytime operations, all visible warning lights should be on to provide warning to oncoming traffic. During nighttime operations, white strobes should be turned off if possible and response apparatus/unit headlights, if facing oncoming traffic should be turned off.
- For prolonged operations arrangement should be made to have traffic cones and or barricades utilized to give drivers of opposing vehicles early warning that they are approaching a work zone.

25.9 Poor Weather Conditions

- If weather conditions are poor, the above guidelines should be expanded accordingly, especially under icy conditions. Extra vehicles to warn of upcoming danger should be posted upstream, as soon as possible.

SECTION 26

Incident Rehabilitation

26.1 Purpose

- The purpose of this standard operating guideline is to ensure that the physical and mental condition of the members operating at the scene of an incident or training exercise does not deteriorate to the point that it affects the safety of any member or that jeopardizes the integrity of an operation. This guideline shall generally apply to those emergency operations and training exercises where strenuous physical activity or exposure to heat or cold exists.

26.2 Scope

- This Standard Operating Guideline shall apply to all members of Franklin Fire District 1 and Mutual Aid Responding Agencies.

26.3 Enforcement

- Enforcement of this standard operating guideline is the responsibility of the Fire District's officers.

26.4 Responsibilities

26.4.1 Incident Commander

- The Incident Commander shall consider the circumstances of each incident and make adequate provisions as early as practical in the incident for the rest and rehabilitation for members operating at the scene. These provisions should include medical evaluation, treatment and monitoring, food and fluid replacement, mental rest, and relief from heat or cold and other natural conditions that exist at the incident.

26.4.2 Fire Company

- All company officers/ Crew leaders should maintain an awareness of the condition of the members operating within their span of control and attempt to ensure that adequate steps are taken to provide for the members' safety and health. The Incident Command System shall be utilized to request relief and reassignment of fatigued personnel.

26.4.3 Members

- During an incident or training evolution, members should advise their supervisor when they believe that their level of fatigue or exposure to the climatic conditions is approaching a level that could adversely affect them, other crew members, or the operation in which they are involved. Members should always remain aware of the health and safety of other members of their crew.

26.5 Establishment of Rehabilitation Group

26.5.1 Indications

- During structural incidents, both rehabilitation and medical groups shall normally be assigned to a combined single group; usually the EMS agency assigned standby duties at the scene. Should the needs of either the rehabilitation or medical

functions exceed the available resources, separate group/divisions should be established.

26.5.2 Location

- The Incident Commander will normally designate the location for a rehabilitation area. If the Incident Commander does not designate a specific location, the Rehab Officer shall select the most appropriate location that is practical for the incident.

26.5.3 Design

- Rehab should be outside the incident parameters, be upwind of the incident protected from extremes in temperature and environment, and should allow for prompt re-entry to the scene. Rehab should not be accessible to the media and should have access to SCBA refill and a supply of drinking water.

26.5.4 Resources

- The Rehab Officer shall secure all necessary resources required to adequately staff and supply the rehabilitation area. The supplies could include fluids, food, medical supplies, dry protective clothing, and other materials. The most qualified and highly trained EMS personnel on scene should provide the treatment and care at a minimum an EMT should be in the rehab area.

26.6 Operational Guidelines

26.6.1 Hydration

- A critical factor in the prevention of heat related illness is the maintenance of water and electrolytes. Water should be replaced by members at emergency incidents. During heat stress, it is recommended that members should consume at least one quart of water per hour. Rehydration is important even during cold weather operations where, despite the outside temperature, heat stress may occur during emergency operations when protective clothing is worn. Caffeine and carbonated beverages should be avoided, water and sports drinks will be provided at the scene.

26.6.2 Nourishment

- The district should provide food at the scene of an incident.

26.6.3 Rest

- Rest is recommended for members who have utilized the air from (***2) 30-minute SCBA cylinders or have experienced 45 minutes of working time***. The objective evaluation of a members' fatigue level shall be the criteria for the amount of rehab time. Rest should normally be no less than **15 minutes**. Periods of as long as one hour may be required, most crews should be able to rehab and re-fill SCBA bottles in 20 minutes

26.6.4 Recovery

- Members in the rehabilitation area should maintain a high level of hydration. Members should not be moved from a hot environment directly into an air conditioned, cool environment. A cool environment is acceptable after a "cool down" in an ambient temperature area with sufficient air movement. A warm environment should be furnished during cold weather.

26.6.5 Medical Surveillance

- Medical surveillance should be performed on members when indicated by subjective and objective indicators. These indicators shall be utilized in order to make a proper disposition such as return to duty, continued rehabilitation, medical treatment, or transport to a medical facility. Continued rehabilitation should consist of additional monitoring of vital signs, providing rest, and providing fluid for rehydration. Medical treatment for members whose vital signs and/or symptoms indicate potential problems should be provided in accordance with the EMS medical protocols.

26.6.6 Heat Stress

- If a member's heart rate exceeds 110 beats per minute, systolic BP is over 200 or under 90, diastolic BP is over 110 after an appropriate period of rest, and the member's oral temperature exceeds 100.6 degrees, heat stress should be considered and an appropriate medical evaluation should be conducted. The EMS Rehabilitation Officer shall maintain a log of all personnel who are not within acceptable limits after 15 minutes of rest and report member's condition and treatment to the Incident Commander.

26.6.7 Hospital Evaluation

- Hospital evaluation should be considered for any of the following: chest pain, shortness of breath, altered mental status, irregular pulse, oral temperature above 101 degrees, pulse over 150 at any time, systolic BP over 200 after cool down, or diastolic BP over 130 at any time. If any of these symptoms occur start oxygen therapy and transport to the hospital for further evaluation.

26.6.8 Accountability and Release

- Members assigned to the Rehab Group shall ***turn in their accountability tag upon entering*** and when cleared shall retrieve the accountability tag and exit the rehab area as a company or crew. The exception would be when a company officer, crew leader, or EMS personnel has detailed a member to the Rehabilitation Group due to the observations of the member. An assigned individual should escort members sent individually to rehab. Companies, crews, and individuals shall not leave the rehabilitation area until authorized to do so by the EMS Rehabilitation Officer. The crew would report back to the Man Power Pool for re-deployment.

26.6.9 Incident Management

- The Rehabilitation Group and Officer shall function as a portion of the total Incident Command System and work within the framework as designated in other Standard Operating Guidelines of this District.

SECTION 27

Automatic Defibrillator Usage

Attachment and use of an AED (Automated External Defibrillator) is strictly limited to those trained in its use. In Franklin Township Fire District #1 that includes the following groups: Emergency Medical Technicians (EMTs), First Responders, and those trained in Public Access Defibrillation. All persons using the AED must maintain current certification associated with their level of training and the use of the AED.

The following procedures apply to use of Franklin Township Fire District #1 AEDs:

27.1 Age Guidelines

- AEDs with Adult pads are used on patients in cardiac arrest 8 years of age and older.
- AEDs with Pediatric Pads are used on cardiac arrest patients between 1 and 8 years of age.

27.2 Safety Considerations

- Moisture (rain, water, snow, and pools) – move patient away from the wet area and dry off chest.
- If patient is touching metal, move patient away from metal.
- If patient has on a Transdermal medication patch or paste, remove the patch or paste and wipe the area dry.
- Hairy skin – shave the area.
- Implanted Cardioverter-Defibrillator, Pacemaker or Central Lines – place pads away from area.
- Do not use alcohol on patient's skin.

27.3 Downloading Data

- Remove data card from AED and bring to the district office, along with the card reader provided with the AED.
- Insert data card into card reader, card reader into District 1 computer, open Defibtech software and download activity.
- Make copy of the event for patient and departmental records.

27.4 Documentation – see attached samples

- Using the Franklin Township Fire District #1 call sheet, document as much information regarding the patient and treatment provided as possible.
  - Make a copy of the call sheet and the AED event printout for the ALS/EMS unit that transports the patient to the hospital. Maintain a copy for Fire Department and District office records.
  - Fill out as much requested information as possible on the event printout.
- If ALS/EMS units are unavailable and Franklin Township Fire District # 1 personnel transport the patient, provide a copy of above mentioned documents to the hospital where the patient is transported.
- All documentation must be completed and forwarded to the appropriate location within 5 days of the incident.

27.5 EMS Coordinator Notification

- When the AED has been applied to a patient notify the EMS Coordinator immediately after the incident is complete.
- If there are questions regarding processing the paperwork, call the EMS Coordinator.

27.6 Questions/Issues

- Call the EMS Coordinator after use of the AED and with operational or procedural questions.

- Note 1: Extra copies of the call sheet and Operator's Maintenance Check List are available in the District office.
- Note 2: The following numbers may be used to contact the EMS Coordinator – Rich De Lisi: (732) 873-1411 (h), (607) 243-2314 (w), (732) 236-9750 (cell)

APPENDIX 'A'

CO Response Checklist

CO Response Checklist

Step 1 – Initial Interview of Residents			
1.	Are people inside residence?	Yes	No
1A.	If YES, evacuate all occupants. Occupants should remain outside until FD has inspected conditions inside the home and authorized re-entry.		
2A.	Resident's Name:		
2B.	Resident's Address:		
2C.	Resident's Phone Number:		
3.	Are members of the residence feeling ill?	Yes	No
3A.	If YES, begin first aid and request EMS or confirm EMS is responding		
3B.	If YES, what symptoms are they experiencing?		
	Headache	Yes	No
	Dizziness or drowsiness	Yes	No
	Nausea	Yes	No
	Shortness of breath or irregular breathing	Yes	No
	Confusion or disorientation	Yes	No
	Flu like symptoms	Yes	No
	Fever	Yes	No
	Note: *symptoms of moderate CO poisoning are similar to those of the flu but without the associated fever*		
4.	Collect information on potential sources of CO		
4A.	What fuel burning appliances or equipment were in use at the time of the alarm?		
4B.	What exhaust fans were in use at the time of the alarm?		
4C.	What fuel burning appliances or equipment were in use in the 24 hours before the alarm?		
4D.	Was any resident refinishing furniture or staining before the alarm activated?	Yes	No
4E.	Were any generators or portable heaters being used inside the residence?	Yes	No
4F.	Were any vehicles idling in an attached garage or anywhere near the residence prior to the alarm activation?	Yes	No
Step 2 – Initial Survey of Residence			
1.	Detector Information		
1A.	Confirm the activated detector is a CO detector	Yes	No

1B.	Check activated CO detector to see if it has digital readout or high level memory	(ppm)	
1C.	Remove activated CO detector from residence to outside – does unit reset?	Yes	No
2.	Measure and record CO readings throughout the residence		
2A.	CO measurement outside residence	(ppm)	
2B.	CO measurement in doorway	(ppm)	
2C.	Location:	(ppm)	
2D.	Location:	(ppm)	
2E.	Location:	(ppm)	
Step 3 – Identify Potential Sources of CO			
1.	Close all windows and doors to residence		
2.	Turn on all fuel burning appliances and all other potential CO sources in residence		
3.	Wait 15 minutes for sources to reach operating temperature and for CO to accumulate in residence (Note: cold appliances give off more CO than when warmed up)		
4.	Measure and record CO readings throughout the residence		
4A.	Location:	(ppm)	
4B.	Location:	(ppm)	
4C.	Location:	(ppm)	
4D.	Location:	(ppm)	
4E.	Location:	(ppm)	
4F.	Location:	(ppm)	
5.	Were elevated levels of CO detected? (Levels greater than 9 ppm are considered elevated)	YES	NO
5A.	If YES, go to Step 4, Line 1. If NO, follow steps below to create a worst case scenario to check for down drafting		
6.	Leave all fuel burning appliances and other CO sources ON Turn on all kitchen and bathroom exhaust fans, clothes dryer, and other exhaust fans Wait 10 minutes for CO to accumulate in residence		
7.	Measure and record CO readings throughout the residence. Check for down drafting near vents and flue pipes.		
7A.	Location:	(ppm)	
7B.	Location:	(ppm)	
7C.	Location:	(ppm)	
7D.	Location:	(ppm)	
7E.	Location:	(ppm)	
7F.	Location:	(ppm)	
8.	Inspect chimneys and vents for blockages, debris, corrosion, holes, rust, cracks and separations		

9.	Were elevated levels of CO detected? (Levels greater than 9 ppm are considered elevated)	YES	NO
9A.	If YES, go to Step 4, Line 1. If NO, go to Step 4, Line 2		
Step 4 – Incident Termination			
1.	Elevated Levels of CO found		
1A.	Shut off the suspect appliance or if source is unknown shut off all sources of CO		
1B.	Notify County Dispatch to have PSE&G respond		
1C.	Ventilate residence until CO levels are below 9 ppm and advise resident not to use suspect appliance(s)		
2.	No elevated CO levels are found		
2A.	Check residence for detector location problems.		
2B.	Detector located within 15 feet of a fuel burning appliances	YES	NO
2C.	Detector located near household chemicals or aerosols	YES	NO
2D	Detector located in an area subject to wide temperature and humidity swings	YES	NO
2E.	If no elevated CO levels are detected give residents advice based on information gathered. Advise resident it is a good idea to have multiple detectors. Advise resident that sometimes the source of CO is intermittent and difficult to track down. Never advise resident the detector is defective.		
3.	Leave passive CO Detector Tube on all CO calls. Sign and date all cards and fully explain to resident how the passive CO tube works.		

APPENDIX 'B'

Anti-Harassment Policy

FRANKLIN TOWNSHIP FIRE DISTRICT NO. 1

ANTI-HARASSMENT POLICY

I. Policy

The Commissioners of Fire District No.1 are committed to providing a work environment free from all forms of illegal discrimination including that which is based upon a person's sex. Accordingly, any practice or activity which constitutes harassment including sexual harassment is strictly forbidden within Township work places and shall, if substantiated in accordance with this policy, result in disciplinary actions.

Harassment may include, but is not limited to, the following (for illustrative purposes only):

-*Verbal* (sexual comments or insults)

-*Physical* (sexually suggestive or unwelcome touching or obscene gestures)

-*Visual* (sexual cartoons, sexually suggestive or lewd pictures or photographs)

Sexual harassment is defined as any unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when:

a) Submission to such conduct is made either explicitly or implicitly a term or condition of a person's employment; or

b) Submission to or rejection of such conduct by a person is used as a basis for employment decisions affecting that person; or

c) Such conduct has the purpose or effect; of unreasonably interfering with a person's work performance; or

d) Such conduct creates an intimidating, hostile or offensive work environment.

Franklin Township Fire District No. 1 will take all allegations of sexual harassment seriously and determine what constitutes sexual harassment based on a review of the facts and circumstances of each situation. Franklin Township Fire District No. 1 will make every effort to ensure that those named in the report, or are too closely associated with those involved in the report, will not be part of the investigative team. Franklin Township Fire

District No. 1 reserves the right and provides notice that third parties may be used to investigate harassment claims. Even conduct that is intended to be "innocent" may still constitute sexual harassment if it falls within the terms of this policy. If any member expresses concern that your behavior may be violated this policy, please respect his/her concerns. Regardless of your intent, how others interpret your behavior is important. This policy is not meant to interfere with or discourage friendships among members. However, members must be sensitive to acts or conduct that may be considered offensive by other members. Franklin Township Fire District No. 1 prohibits retaliation made against any member who lodges a good faith complaint of sexual harassment, or who participates in any related investigation.

Franklin Township Fire District No. 1 recognizes that making false accusations of harassment in bad faith can have serious consequences for those who are wrongly accused. Franklin Township Fire District No. 1 prohibits deliberately making false and/or malicious harassments allegations, as well as deliberately providing false information during an investigation. Anyone who violates this rule is subject to disciplinary action, up to and including termination of employment with Franklin Township Fire District No. 1 and revocation of individual Department or Company membership.

II. Sanctions

The Commissioners consider sexual harassment a serious violation of the work policy of Fire District No. 1 and, if proven, shall be grounds for the imposition of discipline, up to and including termination of employment.

III. Procedure for Filing a Complaint

Any employee who believes that he or she is the victim of harassment must report the incident. The incident should be reported within forty-eight (48) hours after the event. All complaints of harassment shall be filed with either an immediate supervisor, or Commissioner. If you feel uncomfortable doing so or your direct supervisor is the source of the complaint, condones or ignores the harassment, immediately report to your supervisor's supervisor. If neither of these alternatives is satisfactory to you, then you should immediately direct your reports to the Chief, President or any Franklin Township Fire District No. 1 Commissioner. You are not required to directly confront the person who is the source of your report before notifying any of those individuals listed. Nevertheless, you are required to make a reasonable effort to make the harassment known to the Organization.

The incident will be investigated. If you do not report harassment, it cannot be investigated. Therefore, your cooperation is critical. If you are unwilling, for unique and specific reasons, to report the incident to either your immediate supervisor, the incident should be reported to a Commissioner. Generally, all incidents should be reported to your immediate supervisor. No person filing a Complaint under this policy or who legitimately assists another in the prosecution of any such complaint shall be subjected to retribution or retaliation of any kind for doing so.

a) Complaints filed under this policy shall be promptly and thoroughly investigated by a designee of the Commissioner.

b) Upon completion of the investigation, the designee shall prepare a comprehensive report addressing all allegations in the complaint and objectively documenting all relevant factual findings of the investigation.

c) The investigative report shall be presented to the Commissioner upon completion and within fifteen (15) days after receipt of the complaint. This time requirement may be extended by the Commissioner in writing, upon request of the investigator and good cause shown for such an extension.

IV. Hearing

a) Upon receipt of the completed investigative report, the Commissioner shall conduct an administrative hearing at which the report shall be presented and considered. Hearings shall be conducted before a court reporter empowered to take testimony under oath. The court reporter shall require all witnesses to provide testimony under oath and Commissioner shall prepare a verbatim transcription/recording of the proceedings which shall serve as the official record of the hearing.

b) The accused employee shall be notified, in writing, at least ten (10) days before the hearing of the complaint and underlying allegations. The accused employee may request one (1) postponement of the hearing upon receipt of the notice in order to obtain legal counsel, however, the delay occasioned by such request shall not exceed thirty (30) days from the date of receipt of the notice by the accused employee.

c) The accused employee shall be entitled to attend the hearing and testify in his or her own behalf, and shall be entitled to confront and cross-examine the employee who filed the complaint. In the event that the complainant elects not to attend the administrative hearing and upon objection from the accused to the complainant's absence, the complaint

may be dismissed at the Commissioner's option, and the accused deemed innocent of the allegations or the Commissioners may elect to go forward with the complaint.

d) The accused employee shall be entitled to call witnesses in his or her own behalf and to introduce evidence which bears upon the issues presented by the complaint and investigative report.

e) At the conclusion of the hearing, or within five (5) days thereafter, the Commissioner shall make findings concerning the incident. If the accused employee is found to have committed act(s) of harassment the Commissioners shall set the penalty for the offense.

f) A finding of harassment must be supported by substantial, credible evidence that:

1. The facts alleged by the complainant are true; and

2. Those facts constitute sexual harassment within the meaning of this policy; and

3. The accused is the person who committed the acts amounting to sexual harassment.

V. Responsibility

Each supervisor has a responsibility to maintain the work place free of sexual harassment. This duty includes discussing this policy with all employees and assuring them that they are not to endure insulting, degrading or exploitative sexual treatment.

VI. False Accusations

Due to the serious and private nature of this offense, false accusations of sexual harassment are, and will be treated as, a disciplinary offense and will result, in the same level of punishment as that applied to one who engages in such behavior.

Acknowledgement Receipt and Understanding of Anti-Harassment Policy

I acknowledge that I have received and read the anti-harassment policy and have had it explained to me. I also acknowledge that I understand that no employee, member, or third party, up to and including a Board member has the authority to commit sexual harassment. I understand that it is my responsibility to abide by all rules contained in the policy. I also understand how to report incidents of harassment as set forth in the anti-harassment policy, including not retaliating against any employee/member exercising his or her rights under the policy.

Employee's/Member's Printed Name

Employee's/Member's Signature

Date

Date of Annual Review:

APPENDIX 'C'

Drug and Alcohol Policy

FRANKLIN TOWNSHIP FIRE DISTRICT NO. 1 DRUG and ALCOHOL POLICY

I. Policy

The Fire District has a strong commitment to the health, safety and welfare of its employees, their families, and the residents of Franklin Township. Widely available statistics and information establish that the incident of drug and alcohol abuse is increasing and that the effect is devastating to lives, business and the community at large. The Fire District is concerned that due to the potential for abuse among some of our employees, the safety of our employees and the general public could be endangered. Our commitment to maintaining a safe and secure work place requires a zero tolerance policy with supportive programs relating to the prevention, detection and treatment of substance abuse by employees.

This policy applies to all employees of the Fire District while on the job and to situations wherein employee's off-the-job or off-premises conduct impairs work performance or undermines the public confidence in, or harms the reputation of, the Fire District.

Although the Fire District has no intention of intruding into the private lives of its employees, we recognize that involvement with alcohol or other drugs off the job eventually takes its toll in job performance. Our concern is to assure that employees report to work in condition to perform their duties safely and efficiently in the interest of their fellow workers and taxpayers, as well as themselves.

II. Goal

It is the goal of the Fire District to provide a safe work place by eliminating the hazards to health and job safety created by alcohol and other drug abuse. We believe this goal to be in the best interest of our employees and the taxpayers of Franklin.

III. Definitions

a) The term "illegal drug" means drugs and controlled substances, the possession or use of which is unlawful, pursuant to the laws of any county and federal, state and local laws and regulations in the United States.

Drugs and controlled substances that are not legally obtainable, or that are legally obtainable, but have not been legally obtained, are considered

to be illegal drugs. Examples include street drugs such as cocaine, heroin, marijuana and phencyclidine and controlled substances such as amphetamine and methamphetamine, and barbiturates.

b) The term “controlled substance abuse” includes prescribed drugs not being used for prescribed purposes or in a prescribed manner

IV. Sanctions

The Fire District will not tolerate or condone substance abuse and any employee who engages in the sale, use, possession or transfer of illegal drugs or controlled substances, or who offer to buy or sell such substances; the use of alcohol during working hours; or the abuse of prescribed drugs will be subject to disciplinary action up to and including termination.

V. Employee Responsibility

No firefighter shall use alcohol within four (4) hours preceding the performance of firefighting functions.

No firefighter required to perform a firefighting function shall report for, or remain on duty while having an alcohol concentration greater than 0.00.

No supervisor having actual knowledge that a firefighter has used alcohol within four (4) hours of performing a firefighting function or has an alcohol concentration greater than 0.00 shall permit that person to perform or continue to perform firefighting functions.

No firefighter who will be required to undergo post accident alcohol/drug testing shall use alcohol for eight (8) hours following the accident or until he/she undergoes the post accident test; whichever occurs first.

No firefighter shall refuse to submit to any alcohol/drug test required by this policy.

Penalties for refusal shall be indicated below.

The Fire District believes that each employee has the responsibility to:

Report to work at all times free of alcohol or other drugs and their affects;

Seek assistance for alcohol and/or drug abuse related problems through an approved program before job performance is affected; and

Support the Fire District’s efforts to eliminate alcohol and other drug abuse among employees where it exists.

VI. Assistance in Overcoming Illegal Drug Use or Controlled Substance Abuse

Early recognition in treatment of illegal drug use or controlled substance abuse is important for successful rehabilitation, return to productive work and reduced personal, family and social disruption. The Fire District encourages the earliest possible diagnosis and treatment for illegal drug use or controlled substance abuse. The Fire District supports sound treatment efforts. Whenever feasible, and subject to the limitations described herein, the Fire District will assist employees in overcoming illegal drug use or controlled substance abuse. However, the decision to seek diagnosis and accept treatment

for illegal drug use or controlled substance abuse is definitely the individual employee's responsibility as the Fire District does not have an established assistance program.

A. Self Referral

Employees with personal alcohol, drug or controlled substance abuse problems should request assistance from the Board of Commissioners or Line Officers. Assistance will be provided on a confidential basis, and each employee will be afforded the opportunity to seek treatment and counseling services. Employees who voluntarily request assistance in dealing with a substance abuse problem will do so without jeopardizing their continued employment with the Fire District.

B. District Referral

Employees who test positive for illegal drug use or controlled substance abuse and who are referred, at the Fire District's request, for testing will be limited to one opportunity for counseling or treatment to cease the use of illegal drugs. A second positive test for the use of illegal drugs will result in immediate termination.

VII. Authorized Use of Prescribed Medicine

An employee undergoing prescribed medical treatment with any drug or controlled substance that may impair his/her physical or mental ability should report this treatment to the Supervisor. The Supervisor, in consultation with Management, will determine whether the Fire District should temporarily change the employee's job assignment during the period of treatment.

VIII. Testing

The Fire District will test all applicants, whether new employees or re-hires. The Fire District requires that every newly hired and re-hired employee be free of illegal drug use and controlled substance abuse. Each offer of employment will be conditioned upon the successful completion of the test for illegal drugs and controlled substances as prescribed by the Fire District. Any applicant who tests positive in the pre-employment drug test shall be rejected and shall be ineligible for hire unless the applicant adequately established a legal basis for the use of drug or controlled substances with respect to which the applicant tested positive.

The Fire District will test all current firefighters on a yearly basis as part of the annual Fire District Physical.

Applicants and employees subject to testing must, prior to testing, sign an approved form agreeing to the testing, authorizing the release of test results to the Commissioner and authorizing the disclosure of the results to any other persons the Commissioner determines needs to know for the safety and welfare of the other employees and the residents of the Fire District.

Whenever a Commissioner or Line Officer has reasonable suspicion that an employee is under the influence of alcohol or drugs, then the following procedure shall immediately be applied:

An employee reasonably believed to be under the influence of alcohol or drugs shall be prevented from engaging in further work by his/her District Line Officer and shall be instructed to wait for a reasonable amount of time until a Commissioner and/or Chief Officer can transport the employee from the work site.

The District Line Officer in charge shall document incident on Fire District No. 1 Alcohol and Drug Policy Incident Report provided by District. (Form attached).

The employee shall be transported to a qualified testing facility where a drug and/or alcohol test would be required. If an employee refuses to sign the approved form agreeing to the testing, that individual shall be notified that he/she may be subject to appropriate disciplinary action. Disciplinary action may include termination.

The Fire District will afford the applicant and/or employee subject to testing the opportunity, prior to testing, to list all prescription and non-prescription drugs and controlled substances they have used and to explain the circumstances surrounding the use of such drugs and controlled substances. Failure of any employee to establish adequately a legal basis for the use of any drug or controlled substance with respect to which the employee tests positive shall constitute a violation of this policy.

The Fire District's officers, employees, agents and representatives may use such information in connection with Fire District business and for purposes of employment and disciplinary actions, and disclose it when required to government agencies and to others upon valid legal requests, legal proceedings and other situations to protect the interests of and otherwise in accordance with policies on employee data.

The Fire District prior to taking any action, will give all employees who test positive the opportunity for a hearing before the Board of Commissioners. adequate notice shall be given the employee prior to the hearing.

The Fire District will establish and maintain any and all additional testing programs and requirements that may be necessary or appropriate to comply with applicable rules and regulations of all governments.

IX. Hearing

a) Upon receipt of the completed investigative report, the District Commissioners shall conduct a hearing with notice to the employee.

b) The accused employee shall be notified, in writing, at least ten (10) days before the hearing of this matter. The accused employee may request one (1) postponement of the hearing upon receipt of the notice in order to obtain legal counsel, however, the delay occasioned by such request shall not exceed thirty (30) days from the date of receipt of the notice by the accused employee.

It is recommended that the accused employee seek legal counsel.

c) The accused employee shall be entitled to attend the hearing and testify in his/her own behalf. If allegations were made by another employee against the accused employee, the accused employee shall be entitled to confront and cross-examine the employee who reported the drug use.

d) The accused employee shall be entitled to call witnesses in his/her own behalf and to introduce evidence which bears upon the issues presented by the investigative report.

e) At the conclusion of the hearing, the Board of Commissioners shall have the sole discretion to impose discipline, which may include the termination of employment of such employee.

X. Severability

The provisions of this policy are severable and if any of these provisions shall be held to be unconstitutional, or otherwise invalid by any Court of competent jurisdiction, the decision of such Court shall not affect or impair the remaining provisions.

Alcohol and Drug Policy Incident Report

Section I: *To be completed by officer in charge*

Incident Date: _____**Incident Time**: _____

Incident Location: _____

Name of Person being reported: _____

Narrative:_____
_____
_____
_____
_____

Section II: *To be completed by Chief Officer*

Date Received: _____**Time Received**: _____

Name of Chief Officer: _____

Name of Officer making report: _____

Narrative:_____
_____
_____
_____
_____

Section III: *To be completed by Board of Commissioners, Fire District No. 1.*

Date Received: _____**Time Received**: _____

Name of Chief Officer: _____

Was person sent for drug/alcohol testing? YES NO

Results of drug/alcohol test: PASS FAIL

Disposition:

_____
_____
_____

APPENDIX 'D'

Anti-Violence Policy

Date of Annual Review:

FRANKLIN TOWNSHIP FIRE DISTRICT NO. 1

ANTI-VIOLENCE POLICY

I. Policy

Franklin Township Fire District No. 1 is committed to preventing workplace violence and providing a safe work environment. Franklin Township Fire District No. 1 prohibits and does not tolerate violent acts or threats of violence against employees, volunteers, visitors, guests, community members or other individuals within its facilities or during any Franklin Township Fire District No. 1 related activity.

II. Definitions

Violence may be described as verbal or physical threats, intimidation, and/or aggressive physical contact. Prohibited conduct includes, but is not limited to the following:

a) Intimidation, harassment, assault, stalking, or other conduct that causes a person to reasonably believe that he or she is under a threat of bodily injury or death.

b) Threatening, attempting, or inflicting injury or damage to another person (member), member's family or property.

c) Possessing a dangerous weapon such as a firearm, explosive, or hazardous device, or using an object as a weapon on Franklin Township Fire District No. 1 property or during any Franklin Township Fire District No. 1-related activity. *This definition, in regard to possession of a firearm only, shall not apply to sworn law enforcement officers who are permitted to carry a firearm as part of their job related duties as empowered by the State of New Jersey.*

d) Using obscene or abusive language or gestures in a threatening manner. Because of the potential for misunderstanding, joking about any of the above conduct is also prohibited. Members are also expected to refrain from fighting, "horseplay" or other conduct that may be dangerous to others.

III. Restraining Orders

Any member who obtains a restraining order against any person should immediately notify Franklin Township Fire District No. 1 management. Management shall be defined as either the Chief or President of the affected Department or Departments and a representative of the Board of Fire Commissioners of Franklin Fire District No.1. Franklin Township Fire District No. 1 has made a commitment to provide a safe workplace and can only do so if it receives information concerning individuals who have been ordered to maintain a distance from its facilities and/or members.

IV. Warning Signs of Potential Violence

There are often signs serving as a warning that violence in the workplace may occur. Please review the following list of early warning signs that an individual may act out violently, keeping in mind that demonstration of one or many of the actions on the below list do not automatically point to certain violence. However, activities should be noted and Franklin Township Fire District No. 1 will assist in detecting and defusing a potential workplace incident.

a) Increase in use of alcohol or using drugs.

b) History of violent or aggressive behavior or frequent physical fighting off or on duty.

c) Displaying a loss of control, (i.e., loss if temper on a frequent basis, frequently for unsubstantiated reasons, or over minor issues).

d) Either joking or making serious direct or veiled threats.

e) Physically, verbally or emotionally intimidating others or instilling fear, for example via harassing phone calls, emails and/or stalking.

f) Being obsessed with one's job and having no known outside interests.

g) Being a loner and/or expressing a strong desire for a personal or romantic relationship with a co-worker. Under these circumstances, the co-worker may feel threatened and report the unwanted attention.

h) Obsession with weapons or militia, particularly if this is new behavior for a member.

i) Feeling constantly disrespected, demonstrating a "me versus the world" attitude. Experiencing difficulty with authority, for example, feeling discriminated against, harassed, or intentionally targeted. Does not accept criticism well and commonly harbors resentment.

j) Expressing desperation, significant frustration or depression over recent professional, personal, or financial problems.

k) Fascination with other recent incidents of violence and approval of the use of violence.

l) Disregard for safety, thus presenting a risk to self and others.

m) Demonstrates a lack of conscience and/or abuse towards other persons or animals.

n) Vandalism or property damage.

o) Failing to acknowledge the feelings or rights of others.

p) Having been a victim of violence or bullying.

V. What to Do

If you witness a potentially violent situation, or are dealing with a threatening or violent person, do not place yourself in danger or try to intercede. You should not attempt to challenge or disarm the individual. If possible, escape the scene and immediately contact local law enforcement authorities.

Tips proven to be effective in this type of situation are as follows:

a) Try to remain calm.

b) Keep a distance of 4-6 feet.

c) Do not touch the threatening or violent individual.

d) Make constant eye contact, but do not try to "stare down" the threatening or violent person.

e) Actively listen and respond to the individual.

f) Ask the person making the threats or acting violently for solutions.

g) If a supervisor or other appropriate authority can be safely notified of the need for assistance without endangering your safety or that of others, do so. Otherwise, cooperate and follow the instructions given. Please see reporting procedures below.

VI. Reporting Procedure

All threats of (or actual) violence, both direct and indirect, MUST be reported as soon as possible to your immediate supervisor or any other member of Franklin Township Fire District No. 1 management. Members are encouraged to contact the appropriate law enforcement authorities without first informing their immediate supervisor if they reasonably believe that imminent danger to their own safety or that of others exists members shall then immediately report to their supervisor or others in the chain of command. A reportable incident can be an act or threat from Franklin Township Fire District No. 1 members, as well as others from the public and includes those threats or acts that may be perceived, actually experienced, or witnessed. When reporting an act or threat of violence, you should be as specific and detailed as possible. Members must also report all threats or violent acts they witness or experience while on duty away from Franklin Township Fire District No. 1 premises or during any Franklin Township Fire District No. 1-related activity, or which related to the member or legitimate business interest of Franklin Township Fire District No. 1. The identity of the individual making a report will be protected as much as is practical. In order to maintain workplace safety and the integrity of its investigation, Franklin Township Fire District No. 1 may suspend members suspected or violence or threats of violence pending investigation. In no instance will a member be disciplined, retaliated against or discharged for good faith reporting of any reasonably perceived act or threat of violence. Anyone reasonably believed to have engaged in retaliation of any kind will be subject to disciplinary action up to and including termination of employment with Franklin Township Fire District No. 1 or membership, and prosecution for any criminal behavior linked to retaliatory activity. False or intentionally misleading reports are unacceptable and will be handled through Franklin Township Fire District No. 1 personnel procedures regarding disciplinary measures up to and including employment termination or revocation of membership. All acts or threats of violence will be thoroughly investigated and disciplinary action and/or legal prosecution to the fullest extent possible will be pursued against members, and non-members for violating this policy.

APPENDIX 'E'

Respiratory Protection Plan

FRANKLIN TOWNSHIP FIRE DISTRICT #1

RESPIRATORY PROTECTION

PROGRAM

Approved Jan., 2003

Prepared in conjunction with New Jersey Department of Health and Senior Services Occupational Health Service Public Employees Occupational Safety and Health Program

The revised Public Employees Occupational Safety and Health (PEOSH) Respiratory Protection Standard (29CFR1910.134) was adopted on September 21, 1998, with a compliance date of March 21, 1999 (see Appendix G for a copy of the Respiratory Protection Standard). At the same time, the PEOSH Standards for Firefighters (N.J.A.C. 12:100-10.10) were amended. The amendments included:

deleting the requirement that fire departments establish and maintain a respiratory protection program meeting the requirements of ANSI Z88.5-1981, Practice for Respiratory Protection for the Fire Service; and

adding the requirement that fire departments establish and maintain a respiratory protection program meeting the requirements of the revised PEOSH Respiratory Protection Standard.

To assist fire departments in complying with PEOSH Respiratory Protection Standard requirements, the New Jersey Department of Health and Senior Services, PEOSH Program and the New Jersey Department of Labor, Office of Public Employees Safety have updated the Model Fire Department Respiratory Protection Program. The Model Fire Department Respiratory Protection Program must be tailored to the specific needs of each fire department. The program alone does not ensure compliance with the respiratory protection requirements. The program must be fully implemented as presented in the completed document.

This model program and other PEOSH information are available at the PEOSH website, www.state.nj.us/health/eoh/peoshweb.

The PEOSH Program would like to receive your comments and suggestions about the Model Fire Department Respiratory Protection Program. Our address is;

PEOSH Program

New Jersey Department of Health and Senior Services PO Box 360 Trenton, New Jersey 08625-0360

Note:

The information contained in this document is not considered a substitute for any provisions of the PEOSH Act or for any PEOSH standards.

Table of Contents

SECTION 1 - INTRODUCTION

Policy

It is the policy of Franklin Township Fire District #1, Somerset County NJ, to maintain comprehensive occupational safety and health programs based upon sound engineering, education, and enforcement. This document establishes a District policy, its responsibilities, and its requirements for the protection of the firefighters of Fire District #1 whose job requires the use of respiratory protection.

This document will also provide assistance to the firefighter in the use and care of respiratory protection.

The Franklin Township Fire District #1 Board of Fire Commissioners is solely responsible for all facets of this program and has full authority to make the necessary decisions to the ensure the success of this program. The Board will appoint a program administrator to develop a written detailed set of instructions covering each of the basic elements in this program, who will report directly to the designated Commissioner for this program. Only the Board by resolution will have the authorization to amend these instructions.

SECTION 2 - STANDARD OPERATING PROCEDURES

General

Firefighters shall wear a self contained breathing apparatus (SCBA) under the following conditions:

- while engaged in interior structural firefighting;
- while working in confined spaces where toxic products or an oxygen deficient atmosphere may be present;
- during emergency situations involving toxic substances; and
- during all phases of firefighting and overhaul.

Firefighters wearing an SCBA must activate the personal alert safety system (PASS) device before entering an area where respiratory protection is required.

Firefighters wearing SCBA shall conduct a seal check prior to each use.

Firefighters shall not remove the SCBA at any time in the dangerous atmosphere. SCBA shall be used in accordance with the manufacturer's instructions (see Appendix A).

All firefighters shall continue to wear an SCBA until the Incident Commander determines that respiratory protection is no longer required.

The use of a airline assisted respirator located on Rescue 56 or Special Services 285 shall only be used for exterior firefighting operations or assisting in Confined Space Operations. The airline respirator shall be worn in combination with an auxiliary SCBA or an appropriate escape type SCBA.

Protective Clothing

Firefighters wearing an SCBA shall be fully protected with the use of approved structural firefighting clothing that meet the requirements of the PEOSH Standards for Firefighters (N.J.A.C.12:100-10). Protective clothing shall include turnout coat, bunker pants, gloves, boots, helmet, fire resistant hood, and PASS device.

Procedures for Interior Structural Firefighting

In interior structural fires, the fire department shall ensure that:

. At least two firefighters enter the immediately dangerous to life and health (IDLH) atmosphere and remain in visual or voice contact with one another at all times;

. At least two firefighters will be located outside the IDLH atmosphere; and

. All firefighters engaged in interior structural firefighting will use SCBAs.

Note:

One of the two firefighters located outside the IDLH atmosphere may be assigned to an additional role, such as incident commander in charge of the emergency or safety officer, so long as the firefighter is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the incident.

Nothing in this section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

There must always be at least two firefighters stationed outside during interior structural firefighting. They must be trained, equipped, and prepared to enter if necessary to rescue firefighters inside. However, the incident commander has the responsibility and flexibility to determine when more than two outside firefighters are necessary given the circumstances of the fire. The two-in/two-out rule does not require an arithmetic progression for every firefighter inside, i.e. the rule should not be interpreted as four-in/four-out, eight-in/eight-out, etc.

Firefighters will wait to commence interior structural firefighting, until the proper number of firefighters can be assembled on scene as required by the response. During this time, the fire will be attacked only from the outside, sizing-up operations will occur and emergency rescue necessary to save lives may take place.

One of the standby firefighters may have other duties such as serving as the incident commander, safety officer, or operator of fire apparatus. However, one of the outside firefighters must actively monitor the status of the inside firefighters and will not be assigned additional duties. The second outside firefighter may be involved in a wide variety of activities. Both of the outside firefighters must be able to provide support and assistance to the two interior firefighters; any assignment of additional duties for one of the outside firefighters must be weighed against the potential for interference with this requirement. Proper assignment of firefighting activities at an interior structural fire must be determined by the incident commander and is dependent on the existing firefighting situation. Consideration of all worksite variables and conditions, and the judgement of the incident commander is critical.

The two firefighters entering an IDLH atmosphere to perform interior structural firefighting must maintain visual or voice communication at all times. Electronic methods of communication such

as the use of radios shall not be substituted for direct visual contact between team members in the danger area. However, reliable electronic communication devices are not prohibited and certainly have value in augmenting communication and may be used to communicate between inside team members and outside standby firefighters.

SECTION 3 - TRAINING

SELF CONTAINED BREATHING APPARATUS TRAINING

Firefighters wearing respiratory protection shall be trained in proper use, cleaning and maintenance. No firefighter shall wear respiratory protection without training as specified in this document.

Training in the use of respiratory protection shall be done in two phases. Each new firefighter will be given initial training at an District recognized Fire School before using a Self Contained Breathing Apparatus for respiratory protection and annual training thereafter.

New Recruit Training

Initial training is to be provided during the Fire Fighter I Course at a State approved training academy. No firefighter is to use respiratory protection unless training has been successfully completed. Firefighters trained at other than a state approved fire academy must be certified as a firefighter according to the requirements of District #1 before wearing an SCBA.

Annual Training

On-going training shall be provided to all firefighters of each Department.

Each firefighter must pass a facepiece fit-test during initial and annual training. Appendix B of this program contains the fit-test protocol and example fit-test record.

Course Content

Initial and annual training in respiratory protection shall be conducted as specified in Appendix C.

FILL STATION TRAINING

SCBA cylinders will be filled only by firefighters who have completed a SCBA Bottle filling Course approved by the Board of Fire Commissioners. Retaining this training will be provided annually.

Course Content

Initial and annual fill station training shall be conducted as specified in Appendix D.

SECTION 4 - RESPIRATOR FITTING AND SEAL CHECK

Each firefighter must pass a facepiece fit-test during initial and annual training. Appendix B of this program contains an example of a fit-test record.

Inspection Before Use

When using SCBA, each firefighter shall select and wear the correct size facepiece as determined by initial and annual fit testing. A firefighter shall not wear respiratory protection

unless the proper size facepiece is available and the equipment is in proper working condition according to the manufacturer's specifications.

Effective Seal Required

An effective face-to-facepiece seal is extremely important when using respiratory protective equipment. Minor leakage can allow contaminants to enter the facepiece, even with a positive pressure SCBA. Any outward leakage will increase the rate of air consumption, reducing the time available for use and safe exit. The facepiece must seal tightly against the skin, without penetration or interference by any protective clothing or other equipment.

Nothing can be between the sealing surface of the mask and the face of the wearer, including but not limited to, eyeglasses, protective hoods, and beards or other facial hair.

Firefighters shall perform a seal check prior to every SCBA use. SCBA can only be worn when an adequate seal is achieved. (NOTE: The required seal check procedures are found in Appendix B-1 of the PEOSH Respiratory Protection Standard. The PEOSH Respiratory Protection Standard is found in Appendix G of this document).

SECTION 5 - INSPECTION, STORAGE, MAINTENANCE AND AIR SUPPLY

Inspection

Regular periodic inspections are required to ensure that all respiratory protection equipment is properly operating and available for use.

Inspection Schedule

All SCBA and spare cylinders shall be inspected after each use and at least monthly. Guidelines for inspection are in the manufacturer's instructions found in Appendix A of this program.

After each inspection, the appropriate forms (see Appendix E) shall be completed. SCBA units determined to be unfit for use shall be taken out of service, and tagged with a description of the particular defect.

In the event replacement or repair of SCBA components is necessary, it shall be performed according to manufacturer's instructions and only by persons trained and certified by the manufacturer or returned to the manufacturer's service facility.

Firefighters will not subject SCBA units to unnecessary abuse due to neglect and/or carelessness. Caution must especially be exercised to protect the facepiece section of the mask from being scratched or damaged.

Each SCBA shall be cleaned and disinfected after each use. Only cleaning/sanitizing solutions for respiratory equipment will be used for cleaning and disinfection. (NOTE: The required SCBA cleaning procedures are found in Appendix B-2 of the PEOSH Respiratory Protection Standard. The PEOSH Respiratory Protection Standard is found in Appendix G of this document). SCBA cylinders shall be hydrostatically tested within the period specified by the manufacturer and applicable governmental agencies. Metal cylinders must be tested every five (5) years and composite cylinders every three (3) years. Composite cylinders will be removed from service after 15 years from the first hydrostatic test date.

Storage

All units shall be stored so that they are protected against direct sunlight, dust accumulation, severe temperature changes, excessive moisture, fumes, and damaging chemicals. Care is to be taken so that the means of storage does not distort or damage rubber or elastomeric components.

Air Supply

Breathing air in the SCBA cylinder shall meet the requirements of the Compressed Gas Association G-7.1-1989, COMMODITY SPECIFICATION FOR AIR, with a minimum air quality of Grade D. The Fire Department shall ensure that private vendors supplying compressed breathing air provide a copy of the most recent inspection and certification.

The purity of the air from the Fire Department's air compressor shall be checked by a competent laboratory at least annually.

The District shall assure that sufficient quantities of compressed air are available to refill SCBA for all emergencies. This shall be accomplished through the use of Special Services 285 and with the use of the air compressors located in each firehouse.

Air cylinders for SCBA shall be filled only by personnel who have completed fill station training.

Compressed oxygen shall not be used in open-circuit SCBA.

SECTION 6 - MEDICAL EVALUATION

A medical evaluation to determine the firefighter's ability to wear a SCBA will be provided. Only firefighters that are medically able to wear SCBA will be allowed to do so. Appendix F contains the medical evaluation protocol.

SECTION 7 - RECORDKEEPING

Completed SCBA inspection forms will be maintained by each Department in Log Book Form and will be available for inspection by the Program Administrator or the Board. Records/results of air quality tests will be maintained by the Maintenance Commissioner at the District Office.

Completed fit test records will be maintained by each Department in Log Book Form and will be available for inspection by the Program Administrator or the Board. Each firefighter will have access to his/her fit test record.

Records for both recruit training as well as on-going SCBA training records will be maintained by each Department.

Certificates of completion for Fire Fighter I courses will be maintained by each Department.

Fill station training records will be maintained by each Department.

Medical Evaluation Results Forms will be maintained by the District at the District Office.

SUMMARY OF RESPIRATORY PROTECTION PROGRAM RECORDS

Type of Record	Keep Records For
SCBA Inspection Records After Use Monthly	Until replaced One month
SCBA Maintenance/Repair Records	Life of equipment
Air Quality Tests	1 Year
Fit Test	1 Year
Medical Evaluation	Length of employment, plus Thirty
Training	years5 Years
Records Documenting Training for Those Who Fill Cylinders	1 Year

SECTION 8 - PROGRAM EVALUATION

Evaluation Requirements

The effectiveness of the SCBA program shall be evaluated and corrective actions taken to ensure the respiratory protection program is properly implemented. The fire department will regularly consult with firefighters to assess their views on the effectiveness of the program and to identify any problems.

The evaluation will be conducted by the Program Administrator, who then will report to the Commissioner in Charge of Training. The evaluation will ensure:

. Procedures for purchasing of approved equipment are in place; **.**

All firefighters are being properly fitted with respiratory protection; **.**

All firefighters are properly trained; **.**

The proper equipment, cleaning, inspection, and maintenance procedures are implemented; **.**

The required records are being kept;

Changes are implemented to correct deficiencies.

Program Monitoring

Periodic monitoring of the respiratory protection program is necessary to ensure that all firefighters are adequately protected. Random inspections shall be made by the Program Administrator who reports to the Commissioner in Charge of Training to ensure that the provisions of the program are being properly implemented.

Appendix A - Manufacturer's Instructions

NOTE: A copy of the manufacturer's instructions for the SCBA can be included here or a statement where the instructions are kept and how someone could obtain or borrow a copy.

Appendix B - Dist. #1 Respirator Fit Test Record

Date: (of fit test)_____

Firefighter:_____ SCBA

Manufacturer:_____

Model:_____ NIOSH Approval

Number:_____ Facepiece Size Small_____ Medium_____

Large_____

Conditions which could affect respirator fit: __ Clean Shaven __ Facial Scar __

Dentures Absent __ 1 -2 Day Beard Growth __ 2+ Day Growth __ Moustache __

Glasses

Comments: _____ Fit Test Protocol Used

_____ __ Pass __ Fail

Comments:_____

Employee Acknowledgment of Test Results:

Employee Name (Print):_____ Employee

Signature_____ Date:_____ Test Conducted By

(Print:):_____

(Signature):_____

NOTE: Appendix A of the PEOSH Respiratory Protection Standard contains all the mandatory fit test protocols. Appendix G of this document contains the PEOSH Respiratory Protection Standard. One of those protocols must be used.

Appendix C - District #1 SCBA Training Outline

At a minimum, the following topics are to be covered in the SCBA training.

1 Why the SCBA is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
2 What the limitations and capabilities of the SCBA are.
3 How to use the SCBA effectively in emergency situations, including situations were the SCBA malfunctions.
4 Instruction on recognizing medical signs and symptoms that may limit or prevent the effective use of the SCBA.
5 How to inspect, put on and remove, use, and check the seals of the SCBA.
6 What the procedures are for maintenance, and storage of the SCBA.
7 The general requirements of the PEOSH Respiratory Protection Standard.

APPENDIX D - Dist. #1 FILL STATION TRAINING OUTLINE

At a minimum the following topics are to be covered in the fill station training:

1 Procedures for inspecting the SCBA cylinder for damage.
2 Information to ensure that the cylinder has the proper hydrostatic test date.
3 Information to ensure that composite cylinders older than 15 years are not refilled and are removed from service.
4 Procedures for safely operating the fill station.
5 Information on the importance of using at least grade D air.
6 Information on the consequences of cylinder failure.
7 The manufacturer's instructions for the fill station.
8 Record keeping requirements.

APPENDIX E - Dist. #1 AFTER USE/DAILY INSPECTION FORM

SCBA Inspection Checklist Type of Check: _ Weekly __ Monthly __ After Use Checked by: _____

Date: _____

Regulator No.	R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
Bottle No.	B-	B-	B	B	B	B	B-	B-	B-
Mask No.	M-	M-	M	M	M	M	M-	M-	M-
Harness Check									
Conditions of Straps, Buckles, Backplate									
O-Ring in Place									
High Pressure Hose									
Low Pressure Hose									
Operational Check									
Bottle Condition									
Cylinder Pressure (PSI)									
Harness Gauge Pressure									
Pressure Function									
Bypass Function									
Pack Alarm									
PASS Device									
Mask Check									
Regulator									
Exhalation Valve									
General Condition									
Cleanliness									

SEE ADDITIONAL COMMENTS ON BACK OF CHECKLIST

COMMENTS

1 _____ _
2 _____ _
3 _____ _
4 _____ _
5 _____ _
6 _____ _
7 _____ _
8 _____ _
9 _____ _
10 _____ _

SPARE MASKS

Number	Condition
M-	
M-	
M-	
M-	
M-	

SPARE CYLINDERS

APPENDIX F - Dist. #1 MEDICAL EVALUATION PROTOCOL

Medical evaluation will be provided to firefighters before they are fit tested for respirator use. UrgentMed of South Bound Brook, NJ will provide medical evaluations. Medical evaluation procedures are as follows:

Medical examinations to determine the firefighter's ability to wear an SCBA will be provided by UrgentMed of South Bound Brook, NJ.

The medical evaluation will be conducted using the required PEOSH ***questionnaire***. The questionnaire is provided in Appendix C of the PEOSH Respiratory Protection Standard (the respiratory protection standard is found in Appendix G of this document). The Program Administrator will provide a copy of this questionnaire to all firefighters requiring medical evaluations. All affected firefighters will be given a copy of the questionnaire to fill out, along with a stamped and addressed envelope for mailing the questionnaire to UrgentMed of South Bound Brook, NJ. Firefighters will be permitted to fill out the questionnaire during work time.

Firefighters will receive follow-up medical evaluations as required by the PEOSH Respiratory Protection Standard, and/or as deemed necessary by UrgentMed of South Bound Brook, NJ.

Upon request, the firefighter will have the opportunity to speak with the health care professional about their medical evaluation.

The Program Administrator has provided UrgentMed of South Bound Brook, NJ with a copy of this program, a copy of the PEOSH Respiratory Protection Standard, information on the type of SCBA used by the fire department, information on the frequency and length of SCBA use, potential temperature and humidity extremes, and information on turn-out gear used for firefighting.

Additional medical evaluations will be provided to firefighters under the following circumstances:

- The firefighter reports signs and/or symptoms related to their ability to wear to use an SCBA, such as shortness of breath, dizziness, chest pains, or wheezing;

- UrgentMed of South Bound Brook, NJ being the health care provider or a supervisor will inform the Program Administrator that the firefighter needs to be reevaluated;

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

All examinations and questionnaires are to remain confidential between the firefighter and the health care provider. All medical records and completed questionnaires will not be kept by the fire department. The medical records and questionnaires will be under the control of UrgentMed of South Bound Brook, NJ.

UrgentMed of South Bound Brook, NJ will provide the Program Administrator and firefighter with a written recommendation regarding the firefighter's ability to wear a respirator. Only the following information will be provided:

· A statement on the firefighter's ability to wear a respirator,

. The need for follow-up medical evaluation if any are necessary, and

. A statement that the medical provider has provided the firefighter with a copy of the recommendation.

Medical records will be maintained in compliance with the PEOSH Access to Employee Exposure and Medical Records (29CFR1910.1020).

The Fire District will provide employees access to their medical records. Access means the right and opportunity to examine and copy records.

APPENDIX G - PEOSH RESPIRATORY PROTECTION STANDARD - 29CFR1910.134

(a) Permissible practice. (a)(1) In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to this section.

(a)(2) Respirators shall be provided by the employer when such equipment is necessary to protect the health of the employee. The employer shall provide the respirators which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protection program which shall include the requirements outlined in paragraph (c) of this section...1910.134(b).

(b) Definitions. The following definitions are important terms used in the respiratory protection standard in this section. Air-purifying respirator means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element. Assigned protection factor (APF) [Reserved] Atmosphere-supplying respirator means a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units. Canister or cartridge means a container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container. Demand respirator means an atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation. Emergency situation means any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant. Employee exposure means exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection. End-of-service-life indicator (ESLI) means a system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective. Escape-only respirator means a respirator intended to be used only for emergency exit. Filter or air purifying element means a component used in respirators to remove solid or liquid aerosols from the inspired air. Filtering facepiece (dust mask) means a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. Fit factor means a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn. Fit test means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.) Helmet means a rigid respiratory inlet covering that also provides head protection against impact and penetration. High efficiency particulate air (HEPA) filter means a filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.

Hood means a respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso. Immediately dangerous to life or health (IDLH) means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere. Interior structural firefighting means the physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage. (See N.J.A.C.12:100-10) Loose-fitting facepiece means a respiratory inlet covering that is designed to form a partial seal with the face. Maximum use concentration (MUC) [Reserved]. Negative pressure respirator (tight fitting) means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator. Oxygen deficient atmosphere means an atmosphere with an oxygen content below 19.5% by volume. Physician or other licensed health care professional (PLHCP) means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by paragraph (e) of this section. Positive pressure respirator means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator. Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering. Pressure demand respirator means a positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation. Qualitative fit test (QLFT) means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent. Quantitative fit test (QNFT) means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator. Respiratory inlet covering means that portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It may be a facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp. Self-contained breathing apparatus (SCBA) means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user. Service life means the period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer. Supplied-air respirator (SAR) or airline respirator means an atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user. This section means this respiratory protection standard. Tight-fitting facepiece means a respiratory inlet covering that forms a complete seal with the face. User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.

(c) Respiratory protection program. This paragraph requires the employer to develop and implement a written respiratory protection program with required worksite-specific procedures and elements for required respirator use. The program must be administered by a suitably trained program administrator. In addition, certain program elements may be required for voluntary use to prevent potential hazards associated with the use of the respirator. The Small Entity Compliance Guide contains criteria for the selection of a program administrator and a sample program that meets the requirements of this paragraph. Copies of the Small Entity Compliance Guide will be available on or about April 8, 1998 from the Occupational Safety and Health Administration's Office of Publications, Room N 3101, 200 Constitution Avenue, NW, Washington, DC, 20210 (202-219-4667).

(c)(1) In any workplace where respirators are necessary to protect the health of the employee or whenever respirators are required by the employer, the employer shall establish and implement a written respiratory protection program with worksite-specific procedures. The program shall be updated as necessary to reflect those changes in workplace conditions that affect respirator use. The employer shall include in the program the following provisions of this section, as applicable:

(c)(1)(i) Procedures for selecting respirators for use in the workplace;

(c)(1)(ii) Medical evaluations of employees required to use respirators;

(c)(1)(iii) Fit testing procedures for tight-fitting respirators;

(c)(1)(iv) Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations;

(c)(1)(v) Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators;

(c)(1)(vi) Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators;

(c)(1)(vii) Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations;

(c)(1)(viii) Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance; and

(c)(1)(ix) Procedures for regularly evaluating the effectiveness of the program.

(c)(2) Where respirator use is not required:

(c)(2)(i) An employer may provide respirators at the request of employees or permit employees to use their own respirators, if the employer determines that such respirator use will not in itself create a hazard. If the employer determines that any voluntary respirator use is permissible, the employer shall provide the respirator users with the information contained in Appendix D to this section ("Information for Employees Using Respirators When Not Required Under the Standard"); and

(c)(2)(ii) In addition, the employer must establish and implement those elements of a written respiratory protection program necessary to ensure that any employee using a respirator voluntarily is medically able to use that respirator, and that the respirator is cleaned, stored, and maintained so that its use does not present a health hazard to the user. Exception: Employers are not required to include in a written respiratory protection program those employees whose only use of respirators involves the voluntary use of filtering facepieces (dust masks).

(c)(3) The employer shall designate a program administrator who is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness.

(c)(4) The employer shall provide respirators, training, and medical evaluations at no cost to the employee.

(d) Selection of respirators. This paragraph requires the employer to evaluate respiratory hazard(s) in the workplace, identify relevant workplace and user factors, and base respirator selection on these factors. The paragraph also specifies appropriately protective respirators for use in IDLH atmospheres, and limits the selection and use of air-purifying respirators.

(d)(1) General requirements.

(d)(1)(i) The employer shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.

(d)(1)(ii) The employer shall select a NIOSH-certified respirator. The respirator shall be used in compliance with the conditions of its certification.

(d)(1)(iii) The employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH.

(d)(1)(iv) The employer shall select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

(d)(2) Respirators for IDLH atmospheres.

(d)(2)(i) The employer shall provide the following respirators for employee use in IDLH atmospheres:

(d)(2)(i)(A) A full facepiece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or

(d)(2)(i)(B) A combination full facepiece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.

(d)(2)(ii) Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

(d)(2)(iii) All oxygen-deficient atmospheres shall be considered IDLH. Exception: If the employer demonstrates that, under all foreseeable conditions, the oxygen concentration can be maintained within the ranges specified in Table II of this section (i.e., for the altitudes set out in the table), then any atmosphere-supplying respirator may be used.

(d)(3) Respirators for atmospheres that are not IDLH.

(d)(3)(i) The employer shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations.

(d)(3)(i)(A) Assigned Protection Factors (APFs)
[Reserved]

(d)(3)(i)(B) Maximum Use Concentration (MUC)
[Reserved]

(d)(3)(ii) The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.

(d)(3)(iii) For protection against gases and vapors, the employer shall provide:

(d)(3)(iii)(A) An atmosphere-supplying respirator, or

(d)(3)(iii)(B) An air-purifying respirator, provided that:

(d)(3)(iii)(B)(1)
(1) The respirator is equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or

(d)(3)(iii)(B)(2) If there is no ESLI appropriate for conditions in the employer's workplace, the employer implements a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life. The employer shall describe in the respirator program the information and data relied upon and the basis for the canister and cartridge change schedule and the basis for reliance on the data.

(d)(3)(iv) For protection against particulates, the employer shall provide:

(d)(3)(iv)(A) An atmosphere-supplying respirator; or

(d)(3)(iv)(B) An air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR part 11 as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR part 84; or

(d)(3)(iv)(C) For contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least 2 micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.

TABLE I. -- Assigned Protection Factors [Reserved]

TABLE II

Altitude (ft.)	Oxygen deficient atmospheres (%O_2) for which the employer may rely on atmosphere-supplying respirators
Less than 3001	16.0 - 19.5
3001 - 4000	16.4 - 19.5
4001 - 5000	17.1 - 19.5
5001 - 6000	17.8 - 19.5
6001 - 7000	18.5 - 19.5
7001 - 8000 [1]	19.3 - 19.5

[1] Above 8000 feet the exception does not apply. Oxygen- enriched breathing air must be supplied above 14000 feet.

(e)Medical evaluation. Using a respirator may place a physiological burden on employees that varies with the type of respirator worn, the job and workplace conditions in which the respirator is used, and the medical status of the employee. Accordingly, this paragraph specifies the

minimum requirements for medical evaluation that employers must implement to determine the employee's ability to use a respirator.

(e)(1) General. The employer shall provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. The employer may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.

(e)(2) Medical evaluation procedures.

(e)(2)(i) The employer shall identify a physician or other licensed health care professional (PLHCP) to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire.

(e)(2)(ii) The medical evaluation shall obtain the information requested by the questionnaire in Sections 1 and 2, Part A of Appendix C of this section.

(e)(3) Follow-up medical examination.

(e)(3)(i) The employer shall ensure that a follow-up medical examination is provided for an employee who gives a positive response to any question among questions 1 through 8 in Section 2, Part A of Appendix C or whose initial medical examination demonstrates the need for a follow-up medical examination.

(e)(3)(ii) The follow-up medical examination shall include any medical tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination.

(e)(4) Administration of the medical questionnaire and examinations.

(e)(4)(i) The medical questionnaire and examinations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire shall be administered in a manner that ensures that the employee understands its content.

(e)(4)(ii) The employer shall provide the employee with an opportunity to discuss the questionnaire and examination results with the PLHCP.

(e)(5) Supplemental information for the PLHCP.

(e)(5)(i) The following information must be provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator:

(e)(5)(i)(A)
(A) The type and weight of the respirator to be used by the employee;

(e)(5)(i)(B) The duration and frequency of respirator use (including use for rescue and escape);

(e)(5)(i)(C) The expected physical work effort;

(e)(5)(i)(D) Additional protective clothing and equipment to be worn; and

(e)(5)(i)(E) Temperature and humidity extremes that may be encountered.

(e)(5)(ii) Any supplemental information provided previously to the PLHCP regarding an employee need not be provided for a subsequent medical evaluation if the information and the PLHCP remain the same.

(e)(5)(iii) The employer shall provide the PLHCP with a copy of the written respiratory protection program and a copy of this section. Note to Paragraph (e)(5)(iii): When the employer replaces a PLHCP, the employer must ensure that the new PLHCP obtains this information, either by providing the documents directly to the PLHCP or having the documents transferred from the former PLHCP to the new PLHCP. However, OSHA does not expect employers to have employees medically reevaluated solely because a new PLHCP has been selected.

(e)(6) Medical determination. In determining the employee's ability to use a respirator, the employer shall:

(e)(6)(i) Obtain a written recommendation regarding the employee's ability to use the respirator from the PLHCP. The recommendation shall provide only the following information:

(e)(6)(i)(A) Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator;

(e)(6)(i)(B) The need, if any, for follow-up medical evaluations; and

(e)(6)(i)(C) A statement that the PLHCP has provided the employee with a copy of the PLHCP's written recommendation.

(e)(6)(ii) If the respirator is a negative pressure respirator and the PLHCP finds a medical condition that may place the employee's health at increased risk if the respirator is used, the employer shall provide a PAPR if the PLHCP's medical evaluation finds that the employee can use such a respirator; if a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the employer is no longer required to provide a PAPR.

(e)(7) Additional medical evaluations. At a minimum, the employer shall provide additional medical evaluations that comply with the requirements of this section if:

(e)(7)(i) An employee reports medical signs or symptoms that are related to ability to use a respirator;

(e)(7)(ii) A PLHCP, supervisor, or the respirator program administrator informs the employer that an employee needs to be reevaluated;

(e)(7)(iii) Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation; or

(e)(7)(iv) A change occurs in workplace conditions (e.g., physical work effort, protective clothing, and temperature) that may result in a substantial increase in the physiological burden placed on an employee.

(f) Fit testing. This paragraph requires that, before an employee may be required to use any respirator with a negative or positive pressure tight-fitting facepiece; the employee must be fit tested with the same make, model, style, and size of respirator that will be used. This paragraph specifies the kinds of fit tests allowed, the procedures for conducting them, and how the results of the fit tests must be used.

(f)(1) The employer shall ensure that employees using a tight-fitting facepiece respirator pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT) as stated in this paragraph.

(f)(2) The employer shall ensure that an employee using a tight-fitting facepiece respirator is fit tested prior to initial use of the respirator, whenever a different respirator facepiece (size, style, model or make) is used, and at least annually thereafter.

(f)(3) The employer shall conduct an additional fit test whenever the employee reports, or the employer, PLHCP, supervisor, or program administrator 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.

(f)(4) If after passing a QLFT or QNFT, the employee subsequently notifies the employer, program administrator, supervisor, or PLHCP that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator facepiece and to be retested.

(f)(5) The fit test shall be administered using an OSHA-accepted QLFT or QNFT protocol. The OSHA-accepted QLFT and QNFT protocols and procedures are contained in Appendix A of this section.

(f)(6) QLFT may only be used to fit test negative pressure air-purifying respirators that must achieve a fit factor of 100 or less.

(f)(7) If the fit factor, as determined through an OSHA-accepted QNFT protocol, is equal to or greater than 100 for tight-fitting half facepieces, or equal to or greater than 500 for tight-fitting full facepieces, the QNFT has been passed with that respirator.

(f)(8) Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators shall be accomplished by performing quantitative or qualitative fit testing in the negative pressure mode, regardless of the mode of operation (negative or positive pressure) that is used for respiratory protection.

(f)(1)(8)(i) Qualitative fit testing of these respirators shall be accomplished by temporarily converting the respirator user's actual facepiece into a negative pressure respirator with appropriate filters, or by using an identical negative pressure air-purifying respirator facepiece with the same sealing surfaces as a surrogate for the atmosphere-supplying or powered air-purifying respirator facepiece.

(f)(1)(8)(ii) Quantitative fit testing of these respirators shall be accomplished by modifying the facepiece to allow sampling inside the facepiece in the breathing zone of the user, midway between the nose and mouth. This requirement shall be accomplished by installing a permanent sampling probe onto a surrogate facepiece, or by using a sampling adapter designed to temporarily provide a means of sampling air from inside the facepiece.

(f)(1)(8)(iii) Any modifications to the respirator facepiece for fit testing shall be completely removed, and the facepiece restored to NIOSH-approved configuration, before that facepiece can be used in the workplace.

(g) Use of respirators. This paragraph requires employers to establish and implement procedures for the proper use of respirators. These requirements include prohibiting conditions that may result in facepiece seal leakage, preventing employees from removing respirators in hazardous environments, taking actions to ensure continued effective respirator operation throughout the work shift, and establishing procedures for the use of respirators in IDLH atmospheres or in interior structural firefighting situations.

(g)(1) Facepiece seal protection.

(g)(1)(i) The employer shall not permit respirators with tight-fitting facepieces to be worn by employees who have:

(g)(1)(i)(A) Facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function; or

(g)(1)(i)(B) Any condition that interferes with the face-to-facepiece seal or valve function.

(g)(1)(ii) If an employee wears corrective glasses or goggles or other personal protective equipment, the employer shall ensure that such equipment is worn in a manner that does not interfere with the seal of the facepiece to the face of the user.

(g)(1)(iii) For all tight-fitting respirators, the employer shall ensure that employees perform a user seal check each time they put on the respirator using the procedures in Appendix B-1 or procedures recommended by the respirator manufacturer that the employer demonstrates are as effective as those in Appendix B-1 of this section.

(g)(2) Continuing respirator effectiveness.

(g)(2)(i) Appropriate surveillance shall be maintained of work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, the employer shall reevaluate the continued effectiveness of the respirator.

(g)(2)(ii) The employer shall ensure that employees leave the respirator use area:

(g)(2)(ii)(A) To wash their faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use; or

(g)(2)(ii)(B) If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece; or

(g)(2)(ii)(C) To replace the respirator or the filter, cartridge, or canister elements.

(g)(2)(iii) If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece, the employer must replace or repair the respirator before allowing the employee to return to the work area.

(g)(3) Procedures for IDLH atmospheres. For all IDLH atmospheres, the employer shall ensure that:

(g)(3)(i) One employee or, when needed, more than one employee is located outside the IDLH atmosphere;

(g)(3)(ii) Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere;

(g)(3)(iii) The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue;

(g)(3)(iv) The employer or designee is notified before the employee(s) located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue;

(g)(3)(v) The employer or designee authorized to do so by the employer, once notified, provides necessary assistance appropriate to the situation;

(g)(3)(vi) Employee(s) located outside the IDLH atmospheres are equipped with:

(g)(3)(vi)(A) Pressure demand or other positive pressure SCBAs, or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA; and either

(g)(3)(vi)(B) Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry; or

(g)(3)(vi)(C) Equivalent means for rescue where retrieval equipment is not required under paragraph (g)(3)(vi)(B).

(g)(4) Procedures for interior structural firefighting. In addition to the requirements set forth under paragraph (g)(3), in interior structural fires, the employer shall ensure that:

(g)(4)(i) At least two employees enter the IDLH atmosphere and remain in visual or voice contact with one another at all times;

(g)(4)(ii) At least two employees are located outside the IDLH atmosphere; and

(g)(4)(iii) All employees engaged in interior structural firefighting use SCBAs.

Note 1 to paragraph (g): One of the two individuals located outside the IDLH atmosphere may be assigned to an additional role, such as incident commander in charge of the emergency or safety officer, so long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the incident. **Note 2 to paragraph (g):** Nothing in this section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

(h) Maintenance and care of respirators. This paragraph requires the employer to provide for the cleaning and disinfecting, storage, inspection, and repair of respirators used by employees.

(h)(1) Cleaning and disinfecting. The employer shall provide each respirator user with a respirator that is clean, sanitary, and in good working order. The employer shall ensure that respirators are cleaned and disinfected using the procedures in Appendix B-2 of this section, or procedures recommended by the respirator manufacturer, provided that such procedures are of equivalent effectiveness. The respirators shall be cleaned and disinfected at the following intervals:

(h)(1)(i) Respirators issued for the exclusive use of an employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition;

(h)(1)(ii) Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals;

(h)(1)(iii) Respirators maintained for emergency use shall be cleaned and disinfected after each use; and

(h)(1)(iv) Respirators used in fit testing and training shall be cleaned and disinfected after each use.

(h)(2) Storage. The employer shall ensure that respirators are stored as follows:

(h)(2)(i) All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the facepiece and exhalation valve.

(h)(2)(ii) In addition to the requirements of paragraph (h)(2)(i) of this section, emergency respirators shall be:

(h)(2)(ii)(A) Kept accessible to the work area;

(h)(2)(ii)(B) Stored in compartments or in covers that are clearly marked as containing emergency respirators; and

(h)(2)(ii)(C) Stored in accordance with any applicable manufacturer instructions.

(h)(3) Inspection.

(h)(3)(i) The employer shall ensure that respirators are inspected as follows:

(h)(3)(i)(A) All respirators used in routine situations shall be inspected before each use and during cleaning;

(h)(3)(i)(B) All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with the manufacturer's recommendations, and shall be checked for proper function before and after each use; and

(h)(3)(i)(C) Emergency escape-only respirators shall be inspected before being carried into the workplace for use.

(h)(3)(ii) The employer shall ensure that respirator inspections include the following:

(h)(3)(ii)(A) A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, connecting tube, and cartridges, canisters or filters; and

(h)(3)(ii)(B) A check of elastomeric parts for pliability and signs of deterioration.

(h)(3)(iii) In addition to the requirements of paragraphs (h)(3)(i) and (ii) of this section, self-contained breathing apparatus shall be inspected monthly. Air and oxygen cylinders shall be maintained in a fully charged state and shall be recharged when the pressure falls to 90% of the manufacturer's recommended pressure level. The employer shall determine that the regulator and warning devices function properly.

(h)(3)(iv) For respirators maintained for emergency use, the employer shall:

(h)(3)(iv)(A) Certify the respirator by documenting the date the inspection was performed, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator; and (B) Provide this information on a tag or label that is attached to the storage compartment for the respirator, is kept with the respirator, or is included in inspection reports stored as paper or electronic files. This information shall be maintained until replaced following a subsequent certification.

(h)(4) Repairs. The employer shall ensure that respirators that fail an inspection or are otherwise found to be defective are removed from service, and are discarded or repaired or adjusted in accordance with the following procedures:

(h)(4)(i) Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator;

(h)(4)(ii) Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed; and

(h)(4)(iii) Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

(i) Breathing air quality and use. This paragraph requires the employer to provide employees using atmosphere-supplying respirators (supplied-air and SCBA) with breathing gases of high purity.

(i)(1) The employer shall ensure that compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration accords with the following specifications:

(i)(1)(i) Compressed and liquid oxygen shall meet the United States Pharmacopoeia requirements for medical or breathing oxygen; and 1910.134(i)(1)(ii)

(i)(1)(ii) Compressed breathing air shall meet at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:

(i)(1)(ii)(A) Oxygen content (v/v) of 19.5-23.5%;

(i)(1)(ii)(B) Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;

(i)(1)(ii)(C) Carbon monoxide (CO) content of 10 ppm or less;

(i)(1)(ii)(D) Carbon dioxide content of 1,000 ppm or less; and

(i)(1)(ii)(E) Lack of noticeable odor.

(i)(2) The employer shall ensure that compressed oxygen is not used in atmosphere-supplying respirators that have previously used compressed air.

(i)(3) The employer shall ensure that oxygen concentrations greater than 23.5% are used only in equipment designed for oxygen service or distribution.

(i)(4) The employer shall ensure that cylinders used to supply breathing air to respirators meet the following requirements:

(i)(4)(i) Cylinders are tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 173 and part 178);

(i)(4)(ii) Cylinders of purchased breathing air have a certificate of analysis from the supplier that the breathing air meets the requirements for Grade D breathing air; and

(i)(4)(iii) The moisture content in the cylinder does not exceed a dew point of -50 deg.F (-45.6 deg.C) at 1 atmosphere pressure.

(i)(5) The employer shall ensure that compressors used to supply breathing air to respirators are constructed and situated so as to:

(i)(5)(i) Prevent entry of contaminated air into the air-supply system;

(i)(5)(ii) Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (5.56 deg.C) below the ambient temperature;

(i)(5)(iii) Have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacturer's instructions.

(i)(5)(iv) Have a tag containing the most recent change date and the signature of the person authorized by the employer to perform the change. The tag shall be maintained at the compressor.

(i)(6) For compressors that are not oil-lubricated, the employer shall ensure that carbon monoxide levels in the breathing air do not exceed 10 ppm.

(i)(7) For oil-lubricated compressors, the employer shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.

(i)(8) The employer shall ensure that breathing air couplings are incompatible with outlets for nonrespirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing air lines.

(i)(9) The employer shall use breathing gas containers marked in accordance with the NIOSH respirator certification standard, 42 CFR part 84.

(j) Identification of filters, cartridges, and canisters. The employer shall ensure that all filters, cartridges and canisters used in the workplace are labeled and color coded with the NIOSH approval label and that the label is not removed and remains legible.

(k) Training and information. This paragraph requires the employer to provide effective training to employees who are required to use respirators. The training must be comprehensive, understandable, and recur annually, and more often if necessary. This paragraph also requires the employer to provide the basic information on respirators in Appendix D of this section to employees who wear respirators when not required by this section or by the employer to do so.

(k)(1) The employer shall ensure that each employee can demonstrate knowledge of at least the following:

(k)(1)(i) Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;

(k)(1)(ii) What the limitations and capabilities of the respirator are;

(k)(1)(iii) How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;

(k)(1)(iv) How to inspect, put on and remove, use, and check the seals of the respirator;

(k)(1)(v) What the procedures are for maintenance and storage of the respirator;

(k)(1)(vi) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and

(k)(1)(vii) The general requirements of this section.

(k)(2) The training shall be conducted in a manner that is understandable to the employee.

(k)(3) The employer shall provide the training prior to requiring the employee to use a respirator in the workplace.

(k)(4) An employer who is able to demonstrate that a new employee has received training within the last 12 months that addresses the elements specified in paragraph (k)(1)(i) through (vii) is not required to repeat such training provided that, as required by paragraph (k)(1), the employee can demonstrate knowledge of those element(s). Previous training not repeated initially by the employer must be provided no later than 12 months from the date of the previous training.

(k)(5) Retraining shall be administered annually, and when the following situations occur:

(k)(5)(i) Changes in the workplace or the type of respirator render previous training obsolete;

(k)(5)(ii) Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill; or

(k)(5)(iii) Any other situation arises in which retraining appears necessary to ensure safe respirator use.

(k)(6) The basic advisory information on respirators, as presented in Appendix D of this section, shall be provided by the employer in any written or oral format, to employees who wear respirators when such use is not required by this section or by the employer.

(l) Program evaluation. This section requires the employer to conduct evaluations of the workplace to ensure that the written respiratory protection program is being properly implemented, and to consult employees to ensure that they are using the respirators properly.

(l)(1) The employer shall conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

(l)(2) The employer shall regularly consult employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:

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

(l)(2)(ii) Appropriate respirator selection for the hazards to which the employee is exposed;

(l)(2)(iii) Proper respirator use under the workplace conditions the employee encounters; and

(l)(2)(iv) Proper respirator maintenance.

(m) Recordkeeping. This section requires the employer to establish and retain written information regarding medical evaluations, fit testing, and the respirator program. This information will facilitate employee involvement in the respirator program, assist the employer in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA.

(m)(1) Medical evaluation. Records of medical evaluations required by this section must be retained and made available in accordance with 29 CFR 1910.1020.

(m)(2) Fit testing.

(m)(2)(i) The employer shall establish a record of the qualitative and quantitative fit tests administered to an employee including:

(m)(2)(i)(A) The name or identification of the employee tested;

(m)(2)(i)(B) Type of fit test performed;

(m)(2)(i)(C) Specific make, model, style, and size of respirator tested;

(m)(2)(i)(D) Date of test; and

(m)(2)(i)(E) The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs.

(m)(2)(ii) Fit test records shall be retained for respirator users until the next fit test is administered.

(m)(3) A written copy of the current respirator program shall be retained by the employer.

(m)(4) Written materials required to be retained under this paragraph shall be made available upon request to affected employees and to the Assistant Secretary or designee for examination and copying.

(n)
Dates.

(n)(1) Effective date. This section is effective September 21, 1998.

(n)(2) Operative date. All obligations of this section commence on March 21, 1999.

(n)(3) The provisions of 29 CFR 1910.134 and 29 CFR 1926.103, contained in the 29 CFR parts 1900 to 1910.99 and the 29 CFR part 1926 editions, revised as of July 1, 1997, are in effect and enforceable until March 21, 1999, or during any administrative or judicial stay of the provisions of this section.

(n)(4) Existing Respiratory Protection Programs. If, in the 12 month period proceeding September 21, 1998, the employer has conducted annual respirator training, fit testing, respirator program evaluation, or medical evaluations, the employer may use the results of those activities to comply with the corresponding provisions of this section, providing that these activities were conducted in a manner that meets the requirements of this section.

(o)
Appendices.

(o)(1) Compliance with Appendix A, Appendix B-1, Appendix B-2, and Appendix C of this section is mandatory.

(o)(2) Appendix D of this section is non-mandatory and is not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

Appendix A: Fit Testing Procedures (Mandatory)

Part I. OSHA-Accepted Fit Test Protocols

A. Fit Testing Procedures -- General Requirements

The employer shall conduct fit testing using the following procedures. The requirements in this appendix apply to all OSHA-accepted fit test methods, both QLFT and QNFT.

1. The test subject shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
2. Prior to the selection process, the test subject shall be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine an acceptable fit. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, because it is only a review.
3. The test subject shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.
4. The test subject shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.
5. The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least five minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item A.6. If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.
6. Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:

(a) Position of the mask on the nose
(b) Room for eye protection
(c) Room to talk
(d) Position of mask on face and cheeks

7. The following criteria shall be used to help determine the adequacy of the respirator fit:

(a) Chin properly placed;
(b) Adequate strap tension, not overly tightened;
(c) Fit across nose bridge;
(d) Respirator of proper size to span distance from nose to chin;
(e) Tendency of respirator to slip;
(f) Self-observation in mirror to evaluate fit and respirator position.

8. The test subject shall conduct a user seal check, either the negative and positive pressure seal checks described in Appendix B-1 of this section or those recommended by the respirator manufacturer which provide equivalent protection to the procedures in Appendix B-1. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the test subject fails the user seal check tests.

9. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.

10. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while performing her or his duties.

11. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.

12. Exercise regimen. Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.

13. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.

14. Test Exercises. (a) The following test exercises are to be performed for all fit testing methods prescribed in this appendix, except for the CNP method. A separate fit testing exercise regimen is contained in the CNP protocol. The test subject shall perform exercises, in the test environment, in the following manner:

(1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.
(2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.
(3) Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.
(4) Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).

(5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

(6) Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for QLFT)
(7) Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.
(8) Normal breathing. Same as exercise (1).

(b) Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become

unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

B. Qualitative Fit Test (QLFT) Protocols

1. General

(a) The employer shall ensure that persons administering QLFT are able to prepare test solutions, calibrate equipment and perform tests properly, recognize invalid tests, and ensure that test equipment is in proper working order.

(b) The employer shall ensure that QLFT equipment is kept clean and well maintained so as to operate within the parameters for which it was designed.

2. Isoamyl Acetate Protocol Note: This protocol is not appropriate to use for the fit testing of particulate respirators. If used to fit test particulate respirators, the respirator must be equipped with an organic vapor filter.

(a) Odor Threshold Screening Odor threshold screening, performed without wearing a respirator, is intended to determine if the individual tested can detect the odor of isoamyl acetate at low levels.

(1) Three 1 liter glass jars with metal lids are required.
(2) Odor-free water (e.g., distilled or spring water) at approximately 25 deg. C (77 deg. F) shall be used for the solutions.
(3) The isoamyl acetate (IAA) (also known at isopentyl acetate) stock solution is prepared by adding 1 ml of pure IAA to 800 ml of odor-free water in a 1 liter jar, closing the lid and shaking for 30 seconds. A new solution shall be prepared at least weekly.
(4) The screening test shall be conducted in a room separate from the room used for actual fit testing. The two rooms shall be well-ventilated to prevent the odor of IAA from becoming evident in the general room air where testing takes place.
(5) The odor test solution is prepared in a second jar by placing 0.4 ml of the stock solution into 500 ml of odor-free water using a clean dropper or pipette. The solution shall be shaken for 30 seconds and allowed to stand for two to three minutes so that the IAA concentration above the liquid may reach equilibrium. This solution shall be used for only one day.
(6) A test blank shall be prepared in a third jar by adding 500 cc of odor-free water.
(7) The odor test and test blank jar lids shall be labeled (e.g., 1 and 2) for jar identification. Labels shall be placed on the lids so that they can be peeled off periodically and switched to maintain the integrity of the test.
(8) The following instruction shall be typed on a card and placed on the table in front of the two test jars (i.e., 1 and 2): "The purpose of this test is to determine if you can smell banana oil at a low concentration. The two bottles in front of you contain water. One of these bottles also contains a small amount of banana oil. Be sure the covers are on tight, and then shake each bottle for two seconds. Unscrew the lid of each bottle, one at a time, and sniff at the mouth of the bottle. Indicate to the test conductor which bottle contains banana oil." (9) The mixtures used in the IAA odor detection test shall be prepared in an area separate from where the test is performed, in order to prevent olfactory fatigue in the subject. (10) If the test subject is unable to correctly identify the jar containing the odor test solution, the IAA qualitative fit test shall not be performed.

(11) If the test subject correctly identifies the jar containing the odor test solution, the test subject may proceed to respirator selection and fit testing.

(b) Isoamyl Acetate Fit Test

(1) The fit test chamber shall be a clear 55-gallon drum liner suspended inverted over a 2-foot diameter frame so that the top of the chamber is about 6 inches above the test subject's head. If no drum liner is available, a similar chamber shall be constructed using plastic sheeting. The

inside top center of the chamber shall have a small hook attached.
(2) Each respirator used for the fitting and fit testing shall be equipped with organic vapor cartridges or offer protection against organic vapors.
(3) After selecting, donning, and properly adjusting a respirator, the test subject shall wear it to the fit testing room. This room shall be separate from the room used for odor threshold screening and respirator selection, and shall be well-ventilated, as by an exhaust fan or lab hood, to prevent general room contamination.
(4) A copy of the test exercises and any prepared text from which the subject is to read shall be taped to the inside of the test chamber.
(5) Upon entering the test chamber, the test subject shall be given a 6-inch by 5-inch piece of paper towel, or other porous, absorbent, single-ply material, folded in half and wetted with 0.75 ml of pure IAA. The test subject shall hang the wet towel on the hook at the top of the chamber. An IAA test swab or ampule may be substituted for the IAA wetted paper towel provided it has been demonstrated that the alternative IAA source will generate an IAA test atmosphere with a concentration equivalent to that generated by the paper towel method.
(6) Allow two minutes for the IAA test concentration to stabilize before starting the fit test exercises. This would be an appropriate time to talk with the test subject; to explain the fit test, the importance of his/her cooperation, and the purpose for the test exercises; or to demonstrate some of the exercises.
(7) If at any time during the test, the subject detects the banana-like odor of IAA, the test is failed. The subject shall quickly exit from the test chamber and leave the test area to avoid olfactory fatigue.
(8) If the test is failed, the subject shall return to the selection room and remove the respirator. The test subject shall repeat the odor sensitivity test, select and put on another respirator, return to the test area and again begin the fit test procedure described in (b) (1) through (7) above. The process continues until a respirator that fits well has been found. Should the odor sensitivity test be failed, the subject shall wait at least 5 minutes before retesting. Odor sensitivity will usually have returned by this time.
(9) If the subject passes the test, the efficiency of the test procedure shall be demonstrated by having the subject break the respirator face seal and take a breath before exiting the chamber.
(10) When the test subject leaves the chamber, the subject shall remove the saturated towel and return it to the person conducting the test, so that there is no significant IAA concentration buildup in the chamber during subsequent tests. The used towels shall be kept in a self-sealing plastic bag to keep the test area from being contaminated.

3. Saccharin Solution Aerosol Protocol

The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) Taste threshold screening. The saccharin taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of saccharin.
(1) During threshold screening as well as during fit testing, subjects shall wear an enclosure about the head and shoulders that is approximately 12 inches in diameter by 14 inches tall with at least the front portion clear and that allows free movements of the head when a respirator is worn. An enclosure substantially similar to the 3M hood assembly, parts # FT 14 and # FT 15 combined, is adequate.
(2) The test enclosure shall have a 3/4-inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.
(3) The test subject shall don the test enclosure. Throughout the threshold screening test, the test subject shall breathe through his/her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a sweet taste.
(4) Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the threshold check solution into the enclosure. The nozzle is directed away from the nose and mouth of the person. This nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.

(5) The threshold check solution is prepared by dissolving 0.83 gram of sodium saccharin USP in 100 ml of warm water. It can be prepared by putting 1 ml of the fit test solution (see (b) (5) below) in 100 ml of distilled water.
(6) To produce the aerosol, the nebulizer bulb is firmly squeezed so that it collapses completely, then released and allowed to fully expand. (7) Ten squeezes are repeated rapidly and then the test subject is asked whether the saccharin can be tasted. If the test subject reports tasting the sweet taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes actually completed.
(8) If the first response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the saccharin is tasted. If the test subject reports tasting the sweet taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes actually completed.
(9) If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the saccharin is tasted. If the test subject reports tasting the sweet taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes actually completed.
(10) The test conductor will take note of the number of squeezes required to solicit a taste response.
(11) If the saccharin is not tasted after 30 squeezes (step 10), the test subject is unable to taste saccharin and may not perform the saccharin fit test. Note to paragraph 3. (a): If the test subject eats or drinks something sweet before the screening test, he/she may be unable to taste the weak saccharin solution.
(12) If a taste response is elicited, the test subject shall be asked to take note of the taste for reference in the fit test.
(13) Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.
(14) The nebulizer shall be thoroughly rinsed in water, shaken dry and refilled at least each morning and afternoon or at least every four hours.

(b) Saccharin solution aerosol fit test procedure.

(1) The test subject may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test.
(2) The fit test uses the same enclosure described in 3. (a) above.
(3) The test subject shall don the enclosure while wearing the respirator selected in section I. A. of this appendix. The respirator shall be properly adjusted and equipped with a particulate filter(s).

(4) A second DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinguish it from the screening test solution nebulizer.
(5) The fit test solution is prepared by adding 83 grams of sodium saccharin to 100 ml of warm water.
(6) As before, the test subject shall breathe through the slightly open mouth with tongue extended, and report if he/she tastes the sweet taste of saccharin.
(7) The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of saccharin fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test. A minimum of 10 squeezes is required.
(8) After generating the aerosol, the test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.
(9) Every 30 seconds the aerosol concentration shall be replenished using one half the original number of squeezes used initially (e.g., 5, 10 or 15).
(10) The test subject shall indicate to the test conductor if at any time during the fit test the taste of saccharin is detected. If the test subject does not report tasting the saccharin, the test is passed.

(11) If the taste of saccharin is detected, the fit is deemed unsatisfactory and the test is failed. A different respirator shall be tried and the entire test procedure is repeated (taste threshold screening and fit testing).

(12) Since the nebulizer has a tendency to clog during use, the test operator must make periodic checks of the nebulizer to ensure that it is not clogged. If clogging is found at the end of the test session, the test is invalid.

4. BitrexTM (Denatonium Benzoate) Solution Aerosol Qualitative Fit Test Protocol

The BitrexTM (Denatonium benzoate) solution aerosol QLFT protocol uses the published saccharin test protocol because that protocol is widely accepted. Bitrex is routinely used as a taste aversion agent in household liquids which children should not be drinking and is endorsed by the American Medical Association, the National Safety Council, and the American Association of Poison Control Centers. The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) Taste Threshold Screening. The Bitrex taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of Bitrex.

(1) During threshold screening as well as during fit testing, subjects shall wear an enclosure about the head and shoulders that is approximately 12 inches (30.5 cm) in diameter by 14 inches (35.6 cm) tall. The front portion of the enclosure shall be clear from the respirator and allow free movement of the head when a respirator is worn. An enclosure substantially similar to the 3M hood assembly, parts # FT 14 and # FT 15 combined, is adequate.
(2) The test enclosure shall have a \3/4\ inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle. (3) The test subject shall don the test enclosure. Throughout the threshold screening test, the test subject shall breathe through his or her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a bitter taste
(4) Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the Threshold Check Solution into the enclosure. This Nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.
(5) The Threshold Check Solution is prepared by adding 13.5 milligrams of Bitrex to 100 ml of 5% salt (NaCl) solution in distilled water.
(6) To produce the aerosol, the nebulizer bulb is firmly squeezed so that the bulb collapses completely, and is then released and allowed to fully expand.
(7) An initial ten squeezes are repeated rapidly and then the test subject is asked whether the Bitrex can be tasted. If the test subject reports tasting the bitter taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes actually completed.
(8) If the first response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the Bitrex is tasted. If the test subject reports tasting the bitter taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes actually completed.
(9) If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the Bitrex is tasted. If the test subject reports tasting the bitter taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes actually completed.
(10) The test conductor will take note of the number of squeezes required to solicit a taste response.
(11) If the Bitrex is not tasted after 30 squeezes (step 10), the test subject is unable to taste Bitrex and may not perform the Bitrex fit test.
(12) If a taste response is elicited, the test subject shall be asked to take note of the taste for reference in the fit test.
(13) Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.
(14) The nebulizer shall be thoroughly rinsed in water, shaken to dry and refilled at least each morning and afternoon or at least every four hours.

(b) Bitrex Solution Aerosol Fit Test Procedure.

(1) The test subject may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test.
(2) The fit test uses the same enclosure as that described in 4. (a) above.
(3) The test subject shall don the enclosure while wearing the respirator selected according to section I. A. of this appendix. The respirator shall be properly adjusted and equipped with any type particulate filter(s).
(4) A second DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinguish it from the screening test solution nebulizer.
(5) The fit test solution is prepared by adding 337.5 mg of Bitrex to 200 ml of a 5% salt (NaCl) solution in warm water.
(6) As before, the test subject shall breathe through his or her slightly open mouth with tongue extended, and be instructed to report if he/she tastes the bitter taste of Bitrex.
(7) The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of the fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test.

(8) After generating the aerosol, the test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.
(9) Every 30 seconds the aerosol concentration shall be replenished using one half the number of squeezes used initially (e.g., 5, 10 or 15).
(10) The test subject shall indicate to the test conductor if at any time during the fit test the taste of Bitrex is detected. If the test subject does not report tasting the Bitrex, the test is passed.
(11) If the taste of Bitrex is detected, the fit is deemed unsatisfactory and the test is failed. A different respirator shall be tried and the entire test procedure is repeated (taste threshold screening and fit testing).

5. Irritant Smoke (Stannic Chloride) Protocol

This qualitative fit test uses a person's response to the irritating chemicals released in the "smoke" produced by a stannic chloride ventilation smoke tube to detect leakage into the respirator.

(a) General Requirements and Precautions

(1) The respirator to be tested shall be equipped with high efficiency particulate air (HEPA) or P100 series filter(s).
(2) Only stannic chloride smoke tubes shall be used for this protocol.
(3) No form of test enclosure or hood for the test subject shall be used.
(4) The smoke can be irritating to the eyes, lungs, and nasal passages. The test conductor shall take precautions to minimize the test subject's exposure to irritant smoke. Sensitivity varies, and certain individuals may respond to a greater degree to irritant smoke. Care shall be taken when performing the sensitivity screening checks that determine whether the test subject can detect irritant smoke to use only the minimum amount of smoke necessary to elicit a response from the test subject.

(5) The fit test shall be performed in an area with adequate ventilation to prevent exposure of the person conducting the fit test or the build-up of irritant smoke in the general atmosphere.

(b) Sensitivity Screening Check The person to be tested must demonstrate his or her ability to detect a weak concentration of the irritant smoke.

(1) The test operator shall break both ends of a ventilation smoke tube containing stannic chloride, and attach one end of the smoke tube to a low flow air pump set to deliver 200 milliliters per minute, or an aspirator squeeze bulb. The test operator shall cover the other end of

the smoke tube with a short piece of tubing to prevent potential injury from the jagged end of the smoke tube.
(2) The test operator shall advise the test subject that the smoke can be irritating to the eyes, lungs, and nasal passages and instruct the subject to keep his/her eyes closed while the test is performed.
(3) The test subject shall be allowed to smell a weak concentration of the irritant smoke before the respirator is donned to become familiar with its irritating properties and to determine if he/she can detect the irritating properties of the smoke. The test operator shall carefully direct a small amount of the irritant smoke in the test subject's direction to determine that he/she can detect it.

(c) Irritant Smoke Fit Test Procedure

(1) The person being fit tested shall don the respirator without assistance, and perform the required user seal check(s).
(2) The test subject shall be instructed to keep his/her eyes closed.
(3) The test operator shall direct the stream of irritant smoke from the smoke tube toward the faceseal area of the test subject, using the low flow pump or the squeeze bulb. The test operator shall begin at least 12 inches from the facepiece and move the smoke stream around the whole perimeter of the mask. The operator shall gradually make two more passes around the perimeter of the mask, moving to within six inches of the respirator.
(4) If the person being tested has not had an involuntary response and/or detected the irritant smoke, proceed with the test exercises.
(5) The exercises identified in section I.A. 14. of this appendix shall be performed by the test subject while the respirator seal is being continually challenged by the smoke, directed around the perimeter of the respirator at a distance of six inches.
(6) If the person being fit tested reports detecting the irritant smoke at any time, the test is failed. The person being retested must repeat the entire sensitivity check and fit test procedure.
(7) Each test subject passing the irritant smoke test without evidence of a response (involuntary cough, irritation) shall be given a second sensitivity screening check, with the smoke from the same smoke tube used during the fit test, once the respirator has been removed, to determine whether he/she still reacts to the smoke. Failure to evoke a response shall void the fit test.
(8) If a response is produced during this second sensitivity check, then the fit test is passed.

C. Quantitative Fit Test (QNFT) Protocols The following quantitative fit testing procedures have been demonstrated to be acceptable: Quantitative fit testing using a non-hazardous test aerosol (such as corn oil, polyethylene glycol 400 [PEG 400], di-2-ethyl hexyl sebacate [DEHS], or sodium chloride) generated in a test chamber, and employing instrumentation to quantify the fit of the respirator; Quantitative fit testing using ambient aerosol as the test agent and appropriate instrumentation (condensation nuclei counter) to quantify the respirator fit; Quantitative fit testing using controlled negative
pressure and appropriate instrumentation to measure the volumetric leak rate of a facepiece to quantify the respirator fit.

1. General

(a) The employer shall ensure that persons administering QNFT are able to calibrate equipment and perform tests properly, recognize invalid tests, calculate fit factors properly and ensure that test equipment is in proper working order.

(b) The employer shall ensure that QNFT equipment is kept clean, and is maintained and calibrated according to the manufacturer's instructions so as to operate at the parameters for which it was designed.

2. Generated Aerosol Quantitative Fit Testing Protocol

(a) Apparatus.

(1) Instrumentation. Aerosol generation, dilution, and measurement systems using particulates (corn oil, polyethylene glycol 400 [PEG 400], di-2-ethyl hexyl sebacate [DEHS] or sodium

chloride) as test aerosols shall be used for quantitative fit testing.
(2) Test chamber. The test chamber shall be large enough to permit all test subjects to perform freely all required exercises without disturbing the test agent concentration or the measurement apparatus. The test chamber shall be equipped and constructed so that the test agent is effectively isolated from the ambient air, yet uniform in concentration throughout the chamber.
(3) When testing air-purifying respirators, the normal filter or cartridge element shall be replaced with a high efficiency particulate air (HEPA) or P100 series filter supplied by the same manufacturer.
(4) The sampling instrument shall be selected so that a computer record or strip chart record may be made of the test showing the rise and fall of the test agent concentration with each inspiration and expiration at fit factors of at least 2,000. Integrators or computers that integrate the amount of test agent penetration leakage into the respirator for each exercise may be used provided a record of the readings is made.
(5) The combination of substitute air-purifying elements, test agent and test agent concentration shall be such that the test subject is not exposed in excess of an established exposure limit for the test agent at any time during the testing process, based upon the length of the exposure and the exposure limit duration.
(6) The sampling port on the test specimen respirator shall be placed and constructed so that no leakage occurs around the port (e.g., where the respirator is probed), a free air flow is allowed into the sampling line at all times, and there is no interference with the fit or performance of the respirator. The in-mask sampling device (probe) shall be designed and used so that the air sample is drawn from the breathing zone of the test subject, midway between the nose and mouth and with the probe extending into the facepiece cavity at least 1/4 inch.
(7) The test setup shall permit the person administering the test to observe the test subject inside the chamber during the test.
(8) The equipment generating the test atmosphere shall maintain the concentration of test agent constant to within a 10 percent variation for the duration of the test.
(9) The time lag (interval between an event and the recording of the event on the strip chart or computer or integrator) shall be kept to a minimum. There shall be a clear association between the occurrence of an event and its being recorded.
(10) The sampling line tubing for the test chamber atmosphere and for the respirator sampling port shall be of equal diameter and of the same material. The length of the two lines shall be equal.
(11) The exhaust flow from the test chamber shall pass through an appropriate filter (i.e., high efficiency particulate filter) before release.
(12) When sodium chloride aerosol is used, the relative humidity inside the test chamber shall not exceed 50 percent.
(13) The limitations of instrument detection shall be taken into account when determining the fit factor.
(14) Test respirators shall be maintained in proper working order and be inspected regularly for deficiencies such as cracks or missing valves and gaskets.

(b) Procedural Requirements.

(1) When performing the initial user seal check using a positive or negative pressure check, the sampling line shall be crimped closed in order to avoid air pressure leakage during either of these pressure checks.
(2) The use of an abbreviated screening QLFT test is optional. Such a test may be utilized in order to quickly identify poor fitting respirators that passed the positive and/or negative pressure test and reduce the amount of QNFT time. The use of the CNC QNFT instrument in the count mode is another optional method to obtain a quick estimate of fit and eliminate poor fitting respirators before going on to perform a full QNFT.
(3) A reasonably stable test agent concentration shall be measured in the test chamber prior to testing. For canopy or shower curtain types of test units, the determination of the test agent's stability may be established after the test subject has entered the test environment.
(4) Immediately after the subject enters the test chamber, the test agent concentration inside the respirator shall be measured to ensure that the peak penetration does not exceed 5 percent for a half mask or 1 percent for a full facepiece respirator.

(5) A stable test agent concentration shall be obtained prior to the actual start of testing.
(6) Respirator restraining straps shall not be over-tightened for testing. The straps shall be adjusted by the wearer without assistance from other persons to give a reasonably comfortable fit typical of normal use. The respirator shall not be adjusted once the fit test exercises begin.
(7) The test shall be terminated whenever any single peak penetration exceeds 5 percent for half masks and 1 percent for full facepiece respirators. The test subject shall be refitted and retested.
(8) Calculation of fit factors.
(i) The fit factor shall be determined for the quantitative fit test by taking the ratio of the average chamber concentration to the concentration measured inside the respirator for each test exercise except the grimace exercise.

(ii) The average test chamber concentration shall be calculated as the arithmetic average of the concentration measured before and after each test (i.e., 7 exercises) or the arithmetic average of the concentration measured before and after each exercise or the true average measured continuously during the respirator sample.
(iii) The concentration of the challenge agent inside the respirator shall be determined by one of the following methods:
(A) Average peak penetration method means the method of determining test agent penetration into the respirator utilizing a strip chart recorder, integrator, or computer. The agent penetration is determined by an average of the peak heights on the graph or by computer integration, for each exercise except the grimace exercise. Integrators or computers that calculate the actual test agent penetration into the respirator for each exercise will also be considered to meet the requirements of the average peak penetration method.
(B) Maximum peak penetration method means the method of determining test agent penetration in the respirator as determined by strip chart recordings of the test. The highest peak penetration for a given exercise is taken to be representative of average penetration into the respirator for that exercise.
(C) Integration by calculation of the area under the individual peak for each exercise except the grimace exercise. This includes computerized integration.
(D) The calculation of the overall fit factor using individual exercise fit factors involves first converting the exercise fit factors to penetration values, determining the average, and then converting that result back to a fit factor. This procedure is described in the following equation:

$$\text{Overall fit factor} = \frac{\text{Number of exercises}}{1/ff_1 + 1/ff_2 + 1/ff_3 + 1/ff_4 + 1/ff_5 + 1/ff_6 + 1/ff_7}$$

Where ff1, ff2, ff3, etc. are the fit factors for exercises 1, 2, 3, etc.

(9) The test subject shall not be permitted to wear a half mask or quarter facepiece respirator unless a minimum fit factor of 100 is obtained, or a full facepiece respirator unless a minimum fit

(10) Filters used for quantitative fit testing shall be replaced whenever increased breathing resistance is encountered, or when the test agent has altered the integrity of the filter media.

3. Ambient aerosol condensation nuclei counter (CNC) quantitative fit testing protocol. The ambient aerosol condensation nuclei counter (CNC) quantitative fit testing (Portacount TM) protocol quantitatively fit tests respirators with the use of a probe. The probed respirator is only used for quantitative fit tests. A probed respirator has a special sampling device, installed on the respirator, which allows the probe to sample the air from inside the mask. A probed respirator is required for each make, style, model, and size that the employer uses and can be obtained from the respirator manufacturer or distributor. The CNC instrument manufacturer, TSI Inc., also provides probe attachments (TSI sampling adapters) that permit fit testing in an employee's own respirator. A minimum fit factor pass level of at least 100 is necessary for a half-mask respirator and a minimum fit factor pass level of at least 500 is required for a full facepiece negative pressure respirator. The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test. (a) Portacount Fit Test Requirements.
(1) Check the respirator to make sure the sampling probe and line are properly attached to the facepiece and that the respirator is fitted with a particulate filter capable of preventing significant

penetration by the ambient particles used for the fit test (e.g., NIOSH 42 CFR 84 series 100, series 99, or series 95 particulate filter) per manufacturer's instruction.
(2) Instruct the person to be tested to don the respirator for five minutes before the fit test starts. This purges the ambient particles trapped inside the respirator and permits the wearer to make certain the respirator is comfortable. This individual shall already have been trained on how to wear the respirator properly.
(3) Check the following conditions for the adequacy of the respirator fit: Chin properly placed; Adequate strap tension, not overly tightened; Fit across nose bridge; Respirator of proper size to span distance from nose to chin; Tendency of the respirator to slip; Self-observation in a mirror to evaluate fit and respirator position.
(4) Have the person wearing the respirator do a user seal check. If leakage is detected, determine the cause. If leakage is from a poorly fitting facepiece, try another size of the same model respirator, or another model of respirator.
(5) Follow the manufacturer's instructions for operating the Portacount and proceed with the test.
(6) The test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.
(7) After the test exercises, the test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried.

(b) Portacount Test Instrument.

(1) The Portacount will automatically stop and calculate the overall fit factor for the entire set of exercises. The overall fit factor is what counts. The Pass or Fail message will indicate whether or not the test was successful. If the test was a Pass, the fit test is over.
(2) Since the pass or fail criterion of the Portacount is user programmable, the test operator shall ensure that the pass or fail criterion meet the requirements for minimum respirator performance in this Appendix.
(3) A record of the test needs to be kept on file, assuming the fit test was successful. The record must contain the test subject's name; overall fit factor; make, model, style, and size of respirator used; and date tested.
4. Controlled negative pressure (CNP) quantitative fit testing protocol. The CNP protocol provides an alternative to aerosol fit test methods. The CNP fit test method technology is based on exhausting air from a temporarily sealed respirator facepiece to generate and then maintain a constant negative pressure inside the facepiece. The rate of air exhaust is controlled so that a constant negative pressure is maintained in the respirator during the fit test. The level of pressure is selected to replicate the mean inspiratory pressure that causes leakage into the respirator under normal use conditions. With pressure held constant, air flow out of the respirator is equal to air flow into the respirator. Therefore, measurement of the exhaust stream that is required to hold the pressure in the temporarily sealed respirator constant yields a direct measure of leakage air flow into the respirator. The CNP fit test method measures leak rates through the facepiece as a method for determining the facepiece fit for negative pressure respirators. The CNP instrument manufacturer Dynatech Nevada also provides attachments (sampling manifolds) that replace the filter cartridges to permit fit testing in an employee's own respirator. To perform the test, the test subject closes his or her mouth and holds his/her breath, after which an air pump removes air from the respirator facepiece at a pre-selected constant pressure. The facepiece fit is expressed as the leak rate through the facepiece, expressed as milliliters per minute. The quality and validity of the CNP fit tests are determined by the degree to which the in-mask pressure tracks the test pressure during the system measurement time of approximately five seconds. Instantaneous feedback in the form of a real-time pressure trace of the in-mask pressure is provided and used to determine test validity and quality. A minimum fit factor pass level of 100 is necessary for a half-mask respirator and a minimum fit factor of at least 500 is required for a full facepiece respirator. The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) CNP Fit Test Requirements.
(1) The instrument shall have a non-adjustable test pressure of 15.0 mm water pressure.
(2) The CNP system defaults selected for test pressure shall be set at -- 15 mm of water (-0.58

inches of water) and the modeled inspiratory flow rate shall be 53.8 liters per minute for performing fit tests. (Note: CNP systems have built-in capability to conduct fit testing that is specific to unique work rate, mask, and gender situations that might apply in a specific workplace. Use of system default values, which were selected to represent respirator wear with medium cartridge resistance at a low-moderate work rate, will allow inter-test comparison of the respirator fit.)

(3) The individual who conducts the CNP fit testing shall be thoroughly trained to perform the test.

(4) The respirator filter or cartridge needs to be replaced with the CNP test manifold. The inhalation valve downstream from the manifold either needs to be temporarily removed or propped open. (5) The test subject shall be trained to hold his or her breath for at least 20 seconds.

(6) The test subject shall don the test respirator without any assistance from the individual who conducts the CNP fit test.

(7) The QNFT protocol shall be followed according to section I.C. 1. of this appendix with an exception for the CNP test exercises.

(b) CNP Test Exercises.

(1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally for 1 minute. After the normal breathing exercise, the subject needs to hold head straight ahead and hold his or her breath for 10 seconds during the test measurement.

(2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply for 1 minute, being careful not to hyperventilate. After the deep breathing exercise, the subject shall hold his or her head straight ahead and hold his or her breath for 10 seconds during test measurement.

(3) Turning head side to side. Standing in place, the subject shall slowly turn his or her head from side to side between the extreme positions on each side for 1 minute. The head shall be held at each extreme momentarily so the subject can inhale at each side. After the turning head side to side exercise, the subject needs to hold head full left and hold his or her breath for 10 seconds during test measurement. Next, the subject needs to hold head full right and hold his or her breath for 10 seconds during test measurement.

(4) Moving head up and down. Standing in place, the subject shall slowly move his or her head up and down for 1 minute. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling). After the moving head up and down exercise, the subject shall hold his or her head full up and hold his or her breath for 10 seconds during test measurement. Next, the subject shall hold his or her head full down and hold his or her breath for 10 seconds during test measurement.

(5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song for 1 minute. After the talking exercise, the subject shall hold his or her head straight ahead and hold his or her breath for 10 seconds during the test measurement.

(6) Grimace. The test subject shall grimace by smiling or frowning for 15 seconds.

(7) Bending Over. The test subject shall bend at the waist as if he or she were to touch his or her toes for 1 minute. Jogging in place shall be substituted for this exercise in those test environments such as shroud-type QNFT units that prohibit bending at the waist. After the bending over exercise, the subject shall hold his or her head straight ahead and hold his or her breath for 10 seconds during the test measurement.

(8) Normal Breathing. The test subject shall remove and re-don the respirator within a one-minute period. Then, in a normal standing position, without talking, the subject shall breathe normally for 1 minute. After the normal breathing exercise, the subject shall hold his or her head straight ahead and hold his or her breath for 10 seconds during the test measurement. After the test exercises, the test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of a respirator shall be tried.

(c) CNP Test Instrument.

(1) The test instrument shall have an effective audio warning device when the test subject fails to hold his or her breath during the test. The test shall be terminated whenever the test subject failed to hold his or her breath. The test subject may be refitted and retested. (2) A record of the test shall be kept on file, assuming the fit test was successful. The record must contain the test subject's name; overall fit factor; make, model, style and size of respirator used; and date tested.

Part II. New Fit Test Protocols

A. Any person may submit to OSHA an application for approval of a new fit test protocol. If the application meets the following criteria, OSHA will initiate a rulemaking proceeding under section 6(b)(7) of the OSH Act to determine whether to list the new protocol as an approved protocol in this Appendix A. B. The application must include a detailed description of the proposed new fit test protocol. This application must be supported by either:

1. A test report prepared by an independent government research laboratory (e.g., Lawrence Livermore National Laboratory, Los Alamos National Laboratory, the National Institute for Standards and Technology) stating that the laboratory has tested the protocol and had found it to be accurate and reliable; or
2. An article that has been published in a peer-reviewed industrial hygiene journal describing the protocol and explaining how test data support the protocol's accuracy and reliability.

Appendix B-1: User Seal Check Procedures (Mandatory)

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 appendix, or the respirator manufacturer's recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

I. 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 cover before closing off 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 ten 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.

II. Manufacturer's Recommended User Seal Check Procedures

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 provided that the employer demonstrates that the manufacturer's procedures are equally effective.

Appendix B-2: Respirator Cleaning Procedures (Mandatory)

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here in Appendix B- 2. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth in Appendix B-2, i.e., 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.

I. Procedures for Cleaning Respirators

A. Remove filters, cartridges, or canisters. Disassemble facepieces 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 deg. C [110 deg. 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.

C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
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 iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,
3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces 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. Test the respirator to ensure that all components work properly.

Appendix C: Respirator Medical Evaluation Questionnaire (Mandatory)

To the employer: Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:

Can you read (circle one): Yes/No

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date: _____
2. Your name: _____
3. Your age (to nearest year):_____
4. Sex (circle one): Male/Female
5. Your height: _____ ft. _____ in.
6. Your weight: _____ lbs.
7. Your job title: _____
8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code):
9. The best time to phone you at this number: _____
10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No
11. Check the type of respirator you will use (you can check more than one category):

. _____ N, R, or P disposable respirator (filter-mask, non- cartridge type only).
. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).

12. Have you worn a respirator (circle one): Yes/No

If "yes," what type(s):_____
_____?

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you currently smoke tobacco, or have you smoked tobacco in the last month: Yes/No
2. Have you ever had any of the following conditions?

. Seizures (fits): Yes/No
. Diabetes (sugar disease): Yes/No
. Allergic reactions that interfere with your breathing: Yes/No

. Claustrophobia (fear of closed-in places): Yes/No
. Trouble smelling odors: Yes/No

3. Have you ever had any of the following pulmonary or lung problems?
. Asbestosis: Yes/No
. Asthma: Yes/No
. Chronic bronchitis: Yes/No
. Emphysema: Yes/No
. Pneumonia: Yes/No
. Tuberculosis: Yes/No
. Silicosis: Yes/No
. Pneumothorax (collapsed lung): Yes/No
. Lung cancer: Yes/No
. Broken ribs: Yes/No
. Any chest injuries or surgeries: Yes/No
. Any other lung problem that you've been told about: Yes/No

4. Do you currently have any of the following symptoms of pulmonary or lung illness?
. Shortness of breath: Yes/No
. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
. Have to stop for breath when walking at your own pace on level ground: Yes/No
. Shortness of breath when washing or dressing yourself: Yes/No
. Shortness of breath that interferes with your job: Yes/No
. Coughing that produces phlegm (thick sputum): Yes/No
. Coughing that wakes you early in the morning: Yes/No
. Coughing that occurs mostly when you are lying down: Yes/No
. Coughing up blood in the last month: Yes/No
. Wheezing: Yes/No
. Wheezing that interferes with your job: Yes/No
. Chest pain when you breathe deeply: Yes/No
. Any other symptoms that you think may be related to lung problems: Yes/No

5. Have you ever had any of the following cardiovascular or heart problems?
. Heart attack: Yes/No
. Stroke: Yes/No
. Angina: Yes/No
. Heart failure: Yes/No
. Swelling in your legs or feet (not caused by walking): Yes/No
. Heart arrhythmia (heart beating irregularly): Yes/No
. High blood pressure: Yes/No
. Any other heart problem that you've been told about: Yes/No

6. Have you ever had any of the following cardiovascular or heart symptoms?
. Frequent pain or tightness in your chest: Yes/No
. Pain or tightness in your chest during physical activity: Yes/No
. Pain or tightness in your chest that interferes with your job: Yes/No
. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
. Heartburn or indigestion that is not related to eating: Yes/ No
. Any other symptoms that you think may be related to heart or circulation problems: Yes/No

7. Do you currently take medication for any of the following problems?

. Breathing or lung problems: Yes/No
. Heart trouble: Yes/No
. Blood pressure: Yes/No
. Seizures (fits): Yes/No

8. If you've used a respirator, have you ever had any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)

. Eye irritation: Yes/No
. Skin allergies or rashes: Yes/No
. Anxiety: Yes/No
. General weakness or fatigue: Yes/No
. Any other problem that interferes with your use of a respirator: Yes/No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you ever lost vision in either eye (temporarily or permanently): Yes/No

11. Do you currently have any of the following vision problems?

. Wear contact lenses: Yes/No
. Wear glasses: Yes/No
. Color blind: Yes/No
. Any other eye or vision problem: Yes/No

1. Have you ever had an injury to your ears, including a broken ear drum: Yes/No
2. Do you currently have any of the following hearing problems?

. Difficulty hearing: Yes/No
. Wear a hearing aid: Yes/No
. Any other hearing or ear problem: Yes/No

1. Have you ever had a back injury: Yes/No
2. Do you currently have any of the following musculoskeletal problems?

. Weakness in any of your arms, hands, legs, or feet: Yes/No
. Back pain: Yes/No
. Difficulty fully moving your arms and legs: Yes/No
. Pain or stiffness when you lean forward or backward at the waist: Yes/No
. Difficulty fully moving your head up or down: Yes/No
. Difficulty fully moving your head side to side: Yes/No
. Difficulty bending at your knees: Yes/No
. Difficulty squatting to the ground: Yes/No
. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes/No
. Any other muscle or skeletal problem that interferes with using a respirator: Yes/No

Part B Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes/No If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes/No
2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes/No If "yes," name the chemicals if you know them: _____
3. Have you ever worked with any of the materials, or under any of the conditions, listed below:

. Asbestos: Yes/No
. Silica (e.g., in sandblasting): Yes/No
. Tungsten/cobalt (e.g., grinding or welding this material): Yes/No
. Beryllium: Yes/No
. Aluminum: Yes/No
. Coal (for example, mining): Yes/No
. Iron: Yes/No
. Tin: Yes/No
. Dusty environments: Yes/No
. Any other hazardous exposures: Yes/No If "yes," describe these exposures: _____

1. List any second jobs or side businesses you have: _____
2. List your previous occupations: _____
3. List your current and previous hobbies: _____
4. Have you been in the military services? Yes/No If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes/No
5. Have you ever worked on a HAZMAT team? Yes/No
6. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes/No If "yes," name the medications if you know them: _____
7. Will you be using any of the following items with your respirator(s)?

. HEPA Filters: Yes/No
. Canisters (for example, gas masks): Yes/No
. Cartridges: Yes/No

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?

. Escape only (no rescue): Yes/No
. Emergency rescue only: Yes/No
. Less than 5 hours per week: Yes/No
. Less than 2 hours per day: Yes/No
. 2 to 4 hours per day: Yes/No
. Over 4 hours per day: Yes/No

12. During the period you are using the respirator(s), is your work effort:

. Light (less than 200 kcal per hour): Yes/No If "yes," how long does this period last during the average shift: _____hrs._____mins. Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.

. Moderate (200 to 350 kcal per hour): Yes/No If "yes," how long does this period last during the average shift: _____hrs._____mins. Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

. Heavy (above 350 kcal per hour): Yes/No If "yes," how long does this period last during the average shift:_____hrs._____mins. Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

1. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: Yes/No If "yes," describe this protective clothing and/or equipment: _____
2. Will you be working under hot conditions (temperature exceeding 77 deg. F): Yes/No
3. Will you be working under humid conditions: Yes/No
4. Describe the work you'll be doing while you're using your respirator(s):
5. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):
6. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s): Name of the first toxic substance: _____ Estimated maximum exposure level per shift: _____ Duration of exposure per shift_____ Name of the second toxic substance: _____

Estimated maximum exposure level per shift: _____ Duration of exposure per shift: _____ Name of the third toxic substance: _____ Estimated maximum exposure level per shift: _____ Duration of exposure per shift: _____ The name of any other toxic substances that you'll be exposed to while using your respirator:

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, and security):

Appendix D (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, of if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

APPENDIX 'F'

Displaying of Award Ribbons

FRANKLIN TOWNSHIP FIRE DISTRICT # 1

DISPLAYING OF AWARD RIBBONS

Fire District #1 award ribbons shall be worn on Class A/Dress uniform jackets only. The ribbons are to be worn on the members left chest area in a location horizontally equal to the top 1/3 of the member's badge (see picture)

Award ribbons shall be affixed horizontally in maximum groups of three.

Award ribbons shall be arranged so that the highest ranking award is located on the upper most row closest to the center of the chest. Additional ribbons will be arranged in descending order.

District awards by rank:

Fire Medal of Honor

Fire Life Saving Cross

Wounded in Action Purple Heart

Exceptional Service Award

Distinguished Volunteer Service Award

Honorable Service Award

Fire District No. 1 Unit Citation

Note: If you have received an Honorable Service Award, the gold number attached to your old award bar must be removed and attached to your new award ribbon. This is easily accomplished by carefully straightening the small wires located behind the award bar and removing the number. Once removed these wires can be pushed through the fabric in the center of the new award ribbon and bent open to hold it in place. If you have more than one award ribbon you must first slide the ribbon off of the ribbon holder, install the number and slide it back on the holder.

If you have any questions please contact Chris Weniger through the District office.

APPENDIX 'G'

Resolution 08-24

Commissioners of Fire District No. 1
Franklin Township • Somerset County
New Jersey

RESOLUTION 08-24
APPLICATION POLICY

WHEREAS, the Board of Fire Commissioners (Board) of Franklin Township (NJ) Fire District No. 1 (the District) recognizes that the primary mission of the District and its members is the protection of the health, safety and welfare of the citizens and businesses of the District; and

WHEREAS, the Board recognizes that a part of this mission includes the protection and safety of all property, real and personal, within the District; and

WHEREAS, the Board has determined that because its firefighters must often enter unprotected businesses and residences of the District, it is necessary that the character and integrity of the firefighters of this District be of the highest quality.

The disqualifying factors for applicants to our organization are:

Any charge of or pending indictment for a first, second, third, or fourth degree, or disorderly persons offense as defined by NJSA Title 2C; including any first, second, third, or fourth degree, or disorderly persons offense convictions reduced to a fine as defined in NJSA 2C:43-3;

Any outstanding criminal complaint against the applicant;

Any registration of the candidate as a sexual offender, and/or any endangerment, lewdness, predatory, or sexual offense charge;

Any possessory charges against the candidate, including but not limited to, controlled dangerous substances, weapons and/or firearms;

Any criminal charge resulting in a conditional discharge;

Any outstanding arrest warrant for the candidate, including but not limited to traffic warrants, criminal warrants, child support warrants, and NCIC/SCIC warrants;

Any temporary or final restraining order against the candidate;

A currently suspended or revoked NJ drivers license; and

Any recorded contacts between the candidate and FTPD or any other local, county or state law enforcement agency that would otherwise disqualify that candidate based on the above-listed factors, but have not yet appeared in any other database or system.

James Wickman, Chairman	YES	NO	ABSTAIN
Timothy Szymborski, Clerk	YES	NO	ABSTAIN
William H. Cullen III, Treasurer	YES	NO	ABSTAIN
Rich De Lisi, Commissioner	YES	NO	ABSTAIN
Louis L. Hajdu-Nemeth Jr., Commissioner	YES	NO	ABSTAIN

I HEREBY CERTIFY THAT THIS IS A TRUE COPY OF THE RESOLUTION APPROVED BY THE COMMISSIONERS OF FIRE DISTRICT NO. 1, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY AT THEIR REGULAR MEETING HELD ON AUGUST 25, 2008

TIMOTHY SZYMBORSKI, CLERK

Application Policy

APPENDIX 'H'

EXPOSURE CONTROL PLAN

OSHA BLOODBORNE PATHOGENS STANDARD

TITLE 29 CODE OF FEDERAL REGULATIONS 1910.1030

ELIZABETH AVENUE FIRE CO., STA. 26

MIDDLEBUSH FIRE CO., STA. 44

MILLSTONE VALLEY FIRE CO., STA. 28

SOMERSET FIRE & RESCUE CO., STA. 56

FIRE DISTRICT NO. 1

FRANKLIN TOWNSHIP

SOMERSET COUNTY

NEW JERSEY

Last Update: April 10, 2009

INDEX

POLICY STATEMENT

The Commissioners of Fire District No. 1, Franklin Township, Somerset County, New Jersey are committed to providing a safe and healthful work environment for the district's firefighters. In pursuit of this endeavor, the following Exposure Control Plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with the OSHA Bloodborne Pathogens Standard, Title 29 Code of Federal Regulations 1910.1030. This ECP describes how to implement and comply with the standard. This ECP applies to all firefighters and junior firefighters who are members of the four fire companies in Fire District No. 1. This ECP is effective immediately.

Throughout this ECP the term **Fire District No. 1** will refer to Fire District No. 1, Franklin Township, Somerset County, NJ; **Commissioners** will refer to the Commissioners of Fire District No. 1; **District** will refer to Fire District No. 1; **chiefs** will refer to the individual chiefs of the four fire companies in Fire District No. 1; and **firefighters** will refer to the individual members of any of the four fire companies in Fire District No. 1, specifically, Elizabeth Ave. Volunteer Fire Company, Millstone Valley Fire Department, Middlebush Volunteer Fire Department, and Somerset Fire & rescue Company No. 1 .

PROGRAM ADMINISTRATION

The Commissioners, as the employeer, and the District chiefs are responsible for the implementation of the ECP.

The Commissioners or their designate(s) will maintain and update the written ECP at least annually and whenever necessary to include new or modified tasks and procedures.

The Commissioners or their designate(s) will be responsible for training, documentation of training, and making the written ECP available to firefighters, OSHA and NIOSH representatives.

A copy of this Exposure Control Plan will be located in each District firehouse and at the Commissioner's Office.

All firefighters will receive an explanation of this ECP during their initial training session. The ECP will also be reviewed in their annual refresher training. Training on the ECP is mandatory for all firefighters.

All firefighters will have an opportunity to review this ECP at any time by contacting their respective chief or the Commissioners. Firefighters seeking copies of the ECP may contact Mrs. Debi Nelson at the Commissioner's Office. A copy of the Plan will be made available free of charge and within 15 days of the request to any District firefighter.

The Commissioners will provide all necessary personal protective equipment (PPE), engineering controls, labels, red bags, exposure control kits, exposure report forms and housekeeping items as required by the standard. The chiefs will ensure that adequate supplies of the aforementioned equipment are available and maintained at their firehouse.

The chiefs will also be responsible for notifying the Commissioners of any new members requiring vaccination and training (this includes members who had previously declined the vaccination), for ensuring that all medical actions required are performed, and that appropriate medical records are maintained and forwarded to the Commissioner's office.

Any firefighters who may contact or have exposure to blood or other potentially infectious materials are required to comply with the procedures and work practices outlined in this ECP. The **ultimate responsibility** for safety and the use of PPE lies with the individual firefighters.

OSHA's Bloodborne Pathogens Standard, Title 29 Code of Federal Regulations 1910.1030 was adopted on December 6, 1991. The standard was adopted by New Jersey Public Employees Occupational Safety and Health (NJPEOSH) Program and published in the New Jersey Register on July 6, 1993. The Standard became operative on October 4, 1993.

The Schedule of Implementation of the Standard in Fire District No. 1 is as follows:

Exposure Control Plan - May 1994

Recordkeeping - May 1994

Information and Training - May 1994

Methods of Compliance - May 1994

Hepatitis B Vaccination/Post Exposure Evaluation and follow-up - May 1994

Labels and Signs - May 1994

The methods for implementation of these elements of the Standard are discussed in the subsequent pages of this Exposure Control Plan.

EXPOSURE DETERMINATION

All firefighters may encounter occupational exposure to bloodborne pathogens during any aspect of emergency response, including in station operations

Occupational exposure may occur and is not limited to:

while administering emergency medical care to a victim or an injured firefighter

during rescue of victims from hostile environments, including burning structures or vehicles, water contaminated atmospheres, or oxygen deficient atmospheres

during extrication of persons from vehicles, machinery, or collapsed excavations or structures

at all accidents and fires where trauma is present

during recovery and/or removal of bodies from any situation

during response to hazardous materials emergencies, both transportation and fixed site, involving potentially infectious substances.

while handling discarded emergency medical items such as needles and sharps, bandages, gauze, etc.

NOTE: all exposure risks listed above were made without regard to the use of PPE.

METHODS OF IMPLEMENTATION AND CONTROL

All firefighters who may contact or have exposure to blood or other potentially infected materials are required to comply with the procedures and work practices outlined in this ECP.

This section of the ECP covers:

Universal Precautions

Engineering Controls and Work Practices Controls

Personal Protective Equipment

Training

Hepatitis B Vaccination

Housekeeping

Labeling

Recordkeeping

Universal Precautions

Universal precautions is an infection control method which requires employees to assume that all human blood and certain specified human body fluids are infectious for HIV, HBV, HCV, and other bloodborne pathogens and must be treated accordingly.

Specific body fluids (in addition to blood) to which universal precautions apply include:

any body fluids containing visible blood

semen

vaginal secretions

tissues

cerebrospinal fluid (CSF)

synovial fluid

pleural fluid

peritoneal fluid

pericardial fluid

amniotic fluid

All firefighters will utilize Universal Precautions at all times.

The Center for Disease Control's (CDC) guidelines state that it is difficult or impossible to differentiate between body fluids. They recommend that all body fluids be treated as if they are potentially hazardous and to regard all patient contacts as potentially infectious.

Body Substance Isolation (BSI) goes a step beyond Universal Precautions and says that all body substances are potentially infectious. This includes feces, nasal secretions, sputum, sweat, tears, urine, and vomitus.

Engineering Controls and Work Practice Controls

Engineering controls and work practice controls will be the primary methods used to prevent or minimize exposure to bloodborne pathogens.

Engineering controls reduce exposure in the workplace by either removing the hazard or isolating the worker from exposure. Engineering controls that will be used in the District include:

disposable airway and oxygen equipment

disposable resuscitation bags

pocket mouth to mouth resuscitation masks

Work practice controls alter the manner in which a task is performed in order to make the task safer. Work Practice controls that will be used in the District include:

All procedures involving blood or other potentially infectious materials shall be performed in a manner as to minimize spattering, generating droplets, splashing and spraying.

NO eating, drinking, smoking, and touching of the eyes, lips or mucous membranes in locations where contamination is present

Hands and any other exposed skin area must be washed with soap and water and mucous membranes flushed with water as soon as possible following contact with potentially infectious materials

Hands must be washed after removing PPE. If no hand washing facilities are available (i.e. at the scene): firefighters must wash with antiseptic hand cleaner and clean paper towels or antiseptic hand towelettes. Firefighters must wash their hands with soap and running water as soon thereafter as possible.

All equipment will be checked for contamination. Any non-disposable equipment contaminated during the call will be decontaminated if possible. A 10% solution of bleach in water can be used as an effective decontamination agent for contaminated equipment. Additionally, equipment can be decontaminated using a spray disinfectant according to the manufacturer's recommendations. If the equipment can not be decontaminated in the station, it should be labeled and sent out for cleaning or disposed of as per the

OSHA standard. Any contaminated equipment that needs to be shipped out for servicing or cleaning must be decontaminated. Items will be labeled per the OSHA standard if not completely decontaminated.

Any bags containing disposable items contaminated with body fluids must be labeled and color-coded according to the OSHA standard

Appropriate PPE, including gloves and safety glasses, must be worn when performing decontamination of equipment

Personal Protective Equipment

Personal protective equipment must be used if occupational exposure remains after instituting engineering and work practice controls, or if controls are not feasible. Training will be provided in the use of the appropriate PPE for firefighters tasks.

Appropriate PPE does not permit blood or other potentially infectious substances and contaminated materials to pass through to, or reach a firefighter's work clothes, street clothes, skin, eyes, mouth or other mucous membranes under normal conditions of use and for the time the PPE is in use.

PPE items include:

gloves

face shields

eye protection (splash proof goggles, safety glasses with side shields)

masks

gowns

PPE should be donned by all personnel prior to initiating any emergency patient care.

Gloves should be used when it can be reasonably anticipated that you may have contact with blood or other potentially infectious materials and when handling or touching contaminated items or surfaces.

Replace gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised.

Face and eye protection should be used when splashes, sprays, spatters, or droplets of infectious materials pose a hazard to the eyes, nose or mouth.

Appropriate PPE for the following tasks:

Fireground search and rescue - firefighting gloves

Extrications - latex gloves with firefighting or leather gloves on top, safety glasses.

Patient handling - latex gloves

Trauma patient handling - latex gloves

Selection of PPE

Gloves should be selected for fit, dexterity, durability, and the tasks that will be undertaken while the gloves are worn. Gloves should carry FDA approval for use in medical procedures.

Face and eye protection include goggles, glasses with solid side shields, or chin-length face shields and masks.

Location of PPE

All District fire apparatus will have kits containing impervious gloves, pocketmask with 1 way check valve, masks with face shield, gowns, disinfectant towelettes for hand washing, and red biohazard-labeled bags. These kits must remain stocked at all times.

Each vehicle will contain at minimum:

2 - Infection control kits (gown, gloves, mask with face shield, biohazard bag, biohazard sticker, antimicrobial towelettes)

Antimicrobial towelettes

1 box of P2 High Risk gloves

CPR pocket mask with 1 way valve

Removal of PPE

Remove garments penetrated by blood or other potentially infectious substances immediately or as soon as possible. If the blood penetrates the garment, the penetration itself is considered exposure. Following any contact of body areas with blood or any other infectious materials, you must wash your hands and any other exposed skin with soap and water as soon as possible. Flush any exposed mucous membranes (eyes, mouth, etc.) with water for at least 20 minutes.

Wash hands immediately or as soon as feasible after removal of gloves or other PPE. If no hand washing facilities are available (at the scene), wash with antiseptic hand cleaner and clean paper towels, or antiseptic hand towelettes. Firefighters must wash their hands with soap and running water as soon thereafter as possible.

Decontamination of PPE

Never attempt to decontaminate disposable PPE.

Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised and their ability to function as a barrier is not compromised. Discard utility gloves when they show signs of cracking, peeling, tearing, puncturing, or deterioration.

Disposal of PPE

ALWAYS place PPE contaminated with blood or other potentially infectious materials in containers or red bags clearly labeled as Biohazards.

PPE that is not contaminated with blood or other potentially infectious materials can be disposed of as normal waste EXCEPT for Sharps. Sharps must ALWAYS be placed in hard plastic red containers marked SHARPS.

Repair and/or replacement of PPE is the responsibility of the chiefs.

Housekeeping

The following housekeeping protocols will be followed in order to protect against occupational exposure at the station house.

Decontaminate all first responder equipment immediately after use then decontaminate any contaminated work surfaces. Never use kitchen sinks to decontaminate equipment.

Disposable items contaminated with blood or any other body fluids must be placed in the red biohazard bags. All red biohazard bags or containers labeled as biohazardous must be discarded according to federal, state and local regulations. Contact a Commissioner if you are unsure of how to dispose of any item. Approved methods include giving the biohazard bags to the first aid squad or local hospital for proper disposal.

Contaminated clothing should be removed as soon as possible and washed. Gloves will be used when handling contaminated laundry. Contaminated laundry should be handled as little as possible and with a minimum of agitation. Never bring contaminated clothing home to wash. Contaminated laundry or linens should be bagged at the scene in red biohazard bags before transporting back to the station. Contaminated laundry will never be sorted or rinsed on the scene. Clothing and linens should be washed with detergent in

water at least 140°F-160°F for 25 minutes. If low temperature (<140°F) laundry cycles are used, chemicals suitable for low temperature washing at proper use concentration should be used. The use of the District in-station washing machines is approved for washing contaminated turn out gear and clothing.

Labeling

All bags or containers used to hold contaminated equipment or linens must be appropriately labeled. A fluorescent red or orange bag with the words "BIOHAZARD" on the bag shall be used whenever possible. If the contaminated items are too large to be placed in a biohazard bag another suitable container may be used. These containers must be labeled "BIOHAZARD" and contain the biohazard symbol (see Appendix H). This can be accomplished by attaching a biohazard label to the container. The label must be attached to the container by string, wire, adhesive, or another method to prevent loss or unintentional removal of the label.

Standard unlabeled garbage bags shall not be used as biohazard bags.

Training

All firefighters who are reasonably anticipated to have occupational exposure to bloodborne pathogens, must receive initial training conducted by the Commissioners or their designate(s). Any firefighter who does not attend the training will no longer be allowed to ride the apparatus and perform firefighting duties. Annual refresher training will be conducted and must be attended by all firefighters. Any firefighter who does not attend the annual refresher training will no longer be allowed to ride the apparatus and perform firefighting duties.

The Fire Commissioners will maintain a listing of all firefighters who have taken the annual refresher training and in the case of new members, the initial training. A list of those members who did not attend the yearly training will be sent to each Chief after the last class of the year.

The initial training program will cover, at a minimum, the following elements:

A copy and explanation of the standard

Epidemiology and symptoms of bloodborne pathogens

Modes of transmission

Our exposure Control Plan and how to obtain a copy

Methods to recognize exposure tasks and other activities that may involve exposure to blood

Use and limitations of Engineering Controls, Work Practices, and PPE

PPE - types, the basis for selection, use, location, removal, handling, decontamination, and disposal

Hepatitis B Vaccine - offered free of charge. Training will be given prior to vaccination on its safety, effectiveness, benefits, and method of administration

Emergency procedures - for blood and other potentially infectious materials

Exposure incident procedures

Post-exposure evaluation and follow-up

Signs and labels - and/or color coding

Ryan White Act

Questions and answer session

An education and training record will be completed for each firefighter upon completion of training. This document will be kept at the Commissioner's Office.

Recordkeeping

The bloodborne pathogens standard requires that medical and training records be kept on all District firefighters.

Medical records

A confidential medical record for each firefighter with the potential for exposure must be preserved and maintained by the Commissioners according to OSHA's rule governing access to employee exposure and medical records, Title 29 CFR, Part 1910.20(e). The chiefs and the Commissioners are responsible for maintenance of the required medical records and they are to be kept at the Commissioners' office. Under the bloodborne pathogens standard, medical records also must include the following information:

Hepatitis B vaccination record,

dates of all vaccinations,

any medical records relating to the firefighters ability to receive vaccinations (if applicable),

results of any examinations, medical testing, and post-exposure evaluation and followup procedure (if applicable),

the firefighter's copy of the health care professional's written opinion,

a copy of information provided to any health care professional (if applicable).

All firefighter medical records will be kept strictly confidential and will not be disclosed or reported without the firefighter's express written consent to any person within or outside the workplace, except as required by the standard or as otherwise may be required by law, regulations, etc..

Firefighter medical records shall be maintained for at least the duration of that firefighter's service in the District, plus 30 years in accordance with 29CFR1910.20.

Firefighter medical records shall be provided upon request of the firefighter, or to anyone having written consent of the firefighter, within 15 working days.

Training Records

Bloodborne pathogen training records will be maintained by the Commissioners of Fire District No. 1 at the Commissioner's Office.

The training record shall include:

dates of the training session,

contents or a summary of the training sessions,

names and qualifications of persons conducting the training,

names and job titles of all persons attending the training sessions.

Training records will be maintained for a minimum of three (3) years from the date on which the training occurred.

Firefighter training records will be provided upon request to the firefighter or the firefighter's authorized representative within 15 working days.

If the Commissioners of Fire District No. 1 cease to do business and there is no successive employer to receive and retain the records for the prescribed period, the employer shall notify the Director of the National Institute for

Occupational Safety and Health (NIOSH) at least (3) months prior to scheduled record disposal and prepare to transmit them to the director.

Upon request, both medical and training records must be made available to the director of the National Institute for Occupational Health (NIOSH) and to the Assistant Secretary of Labor for Occupational Safety and Health. Training records must be available to firefighters or firefighter representatives upon request.

Hepatitis B Vaccination

The Hepatitis B vaccination series will be made available at no cost to firefighters who may have occupational exposure to blood or other potentially infectious materials unless:

the firefighter has previously received the vaccination series,

antibody testing reveals that the firefighter is immune,

medical reasons prevent the firefighter from taking the vaccination, or

the firefighter chooses not to participate.

All firefighters are strongly encouraged to receive the Hepatitis B vaccination series. Participation in pre-screening is not a prerequisite for receiving the Hepatitis B vaccination. If a firefighter chooses to decline the Hepatitis B vaccination, then the firefighter must sign a statement to this effect. Firefighters who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal (see Appendix C) of the Hepatitis B vaccination will be kept in the Commissioners of Fire District No. 1 Office.

The Hepatitis B Vaccine is manufactured using one of two methods:

1.) Plasma derived vaccine is made from HBV particles that have been purified from the blood of carriers. The method used to prepare the plasma-derived hepatitis vaccine kills all types of viruses found in human blood, including the virus that causes AIDS.

2.) Recombinant vaccines are made from common baker's yeast cells through genetic engineering. The yeast-derived vaccines do not contain human blood products.

The recombinant type vaccine will be the one administered to the District's firefighters. The vaccine is given by intra-muscular injection on three separate dates. The first dose is given, the second dose 1 month later and then the last dose 5 months after the second dose. After the three doses, the hepatitis B vaccine is 85% - 95% effective in preventing hepatitis B infection. All doses are the same. Protection increases over the course of the vaccination schedule. Protection for normal, healthy adults and children given the vaccine lasts at least 7 years. Booster doses of vaccine are not routinely recommended at the present time. If Hepatitis B vaccination booster doses are required in the future by the United States Public Health Service (USPHS), they must be made available to the District's firefighters at no cost.

The Hepatitis B vaccination will be administered in accordance with the United States Public Health Service (USPHS) recommended protocol.

The vaccination will be administered by:

Jeffrey Kaladas, MD Urgent Med

141 Main St.

South Bound Brook, NJ

732-560-1234

The most common side effect of the vaccination is soreness at the site of injection. Illnesses, such as neurologic reactions, have been reported after the vaccine is given, but the Hepatitis B vaccine is not believed to be the cause of these illnesses.

As with any drug or vaccine, there is a rare possibility that allergic or more serious reactions or even death could occur. No deaths, however, have been reported in persons who have received this vaccine.

Giving Hepatitis B vaccine to persons who are already immune or to carriers will not increase the risk of side effects.

For additional information on the Hepatitis B vaccination and its safety, benefits, efficacy, methods of administration and availability, see Appendices B and I.

POST EXPOSURE EVALUATION AND FOLLOW-UP

This section describes the procedures for reporting, documenting, evaluating and following up on occupational exposure incidents.

An **exposure incident** is a **specific contact** of the eyes, mouth or mucous membranes, OR of non-intact skin with blood or other potentially infectious materials that results during the performance of a firefighters duties.

Parenteral contact (through injection) is also considered an exposure incident.

Should an exposure incident occur:

Immediately remove any contaminated clothing and begin washing with soap and water.

Immediately contact the chief of your fire company. In the absence of the Chief, any line officer or other District officer.

The chief will immediately contact one of the Commissioners.

Each exposure must be documented by the firefighter on an "Exposure Report Form" (see Appendix D).

The chief and the Commissioners will immediately review the "Exposure Report Form" and add any additional information as needed.

Following an exposure incident, prompt medical evaluation and prophylaxis is imperative. Timeliness is, therefore, an important factor in effective medical treatment. A confidential medical evaluation performed by a physician and a follow-up meeting between the firefighter and physician will be conducted immediately.

As soon as possible following an exposure, the firefighter should be taken to Dr. Kaladas at Urgent Med, or if the exposure occurs after normal business hours, directly to one of the local area hospitals for evaluation.

The following elements, at very least, will be performed in the Post-exposure Evaluation and Follow-up:

Document the routes of exposure and how exposure occurred.

Identify and document the source individual on the "Documentation and Identification of Source Individual Form" and "Request for Source Individual Evaluation Form" (see Appendix E), unless identification is infeasible or prohibited by State or local law (See Note #1).

Obtain consent (See Note #1) and test source individual's blood as soon as possible to determine HIV and HBV infectivity and document the source's blood test results.

If the source individual is known to be infected with either HIV or HBV, testing need not be repeated to determine the known infectivity.

Provide the exposed firefighter with the source individual's test results and information about applicable disclosure laws and regulations concerning the source identity and infectious status (See Note #1).

After obtaining consent, collect exposed firefighter's blood as soon as feasible after the exposure incident and test blood for HBV and HIV serological status.

If the firefighter does not give consent for HIV serological testing during the collection of blood for baseline testing, the baseline blood sample must be preserved for at least 90 days. If, during this time,

the exposed firefighter elects to have the baseline sample tested for HIV, testing shall be done as soon as feasible.

The following forms have been provided to assist in gathering information that is required by the standard:

"Exposure Incident Report" (Appendix D)

"Documentation and Identification of Source Individual Form" (Appendix E)

"Request For Source Individual Evaluation Form" (Appendix E)

"Employee Exposure Follow-Up Record" (Appendix F)

These forms will be provided to the firefighter so they may bring them along with any additional relevant medical information to the medical evaluation. Original copies of these forms will be maintained with the firefighter's medical records at the Commissioner's Office.

Following the post-exposure evaluation, the physician will provide a written opinion to the Commissioners of Fire District No. 1. This opinion is limited to a statement that the firefighter has been informed of the results of the evaluation and told of the need, if any, for further evaluation or treatment. All other findings are confidential. The Commissioners of Fire District No. 1 must provide a copy of the written opinion to the firefighter within 15 days of the evaluation.

The Commissioners or their designate(s) and the District chiefs will review the circumstances of the exposure incident to determine if procedures, protocols, and/or training needs to be revised.

Note #1: LEGAL CONSIDERATIONS

New Jersey Law (N.J.S.A. 26-5C et. seq.) and Regulation (N.J.A.C. 8:57-2) requires information about AIDS and HIV to be kept confidential. While the law requires reporting of positive HIV results to the State Health Department, the law strictly limits disclosure of HIV-related information. When disclosure of HIV-related information is authorized by a signed release, the person who has been given the information MUST keep it confidential. Redisclosure may occur ONLY with another authorized signed release. Redisclosure may occur ONLY with another authorized signed release.

See Appendix K for a copy of the Ryan White Comprehensive AIDS Resources Emergency Act (CARE) of 1990. This Act was issued through the US Department of Health and Human Services, Centers for Disease Control and Prevention. It became effective as of April 20, 1994. Provisions of the Ryan White Law were published in the Federal Register on March 21, 1994. The law establishes a system for notifying emergency responders who, while performing their duties, have been exposed to certain diseases through the patient they TRANSPORTED to a medical facility. The diseases covered by the law are: Infectious Pulmonary Tuberculosis, Hepatitis B, HIV/AIDS, Diphtheria, Meningococcal disease, Plaque, Hemmorrhagic Fevers, and Rabies. The law does not mandate that patients be tested for these diseases. The law requires an officer be established who will act as a liaison between the medical facility and the emergency responders. If the post exposure evaluation and follow up procedures, described in this ECP and mandated by the Bloodborne Pathogens Standard, are followed what the Ryan White law should do is make it easier to obtain information from the medical facility.

Highlights of Post Exposure and Follow-Up Requirements

Documentation of incident

Prompt medical surveillance

Identification and documentation of source individual's infectivity

Collection and testing of firefighter's blood for HBV and HIV serological status

Physician's evaluation

Post-exposure prophylaxis when medically indicated

Counseling when medically indicated

Evaluation of incident

DEFINITIONS

The following section contains definitions of common terms contained in the Exposure Control Plan and in the OSHA Standard. Other definitions can be found in the beginning of the OSHA standard.

Blood: human blood, human blood components, and products made from human blood.

Bloodborne Pathogens: pathogenic micro-organisms that are present in human blood and blood products and can infect and cause disease in humans. These pathogens include, but are not limited to, Hepatitis B virus (HBV), and Human Immunodeficiency virus (HIV).

Body Fluids: Fluids that the body produces including but not limited to: blood semen, mucus, feces, urine, vaginal secretions, breast milk, amniotic fluid, cerebrospinal fluid, synovial fluid, pericardial fluid, sputum, and any other fluids that may contain pathogens.

Contaminated: the presence or the reasonably anticipated presence of blood or other potentially infectious material on an item or surface.

Decontamination: The use of physical or chemical means to remove, inactivate or destroy Bloodborne, airborne or foodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling use or disposal.

Exposure Incident: a specific eye, mouth, other mucous membrane, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

Exposure Control Kits: A pre-packaged kit containing: gloves, face shield, gown, biohazard bags and antimicrobial towelette.

Junior Member: A member of one of a Fire Company who is under the age of 18 and has not completed Fire Fighter 1 certification.

Occupational Exposure: reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Other Potentially Infectious Materials (OPIM):

a.)include the following human body fluids:

semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva, any body fluid visibly contaminated with blood, all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

b.) Any unfixed tissue or organ (other than intact skin) from a human (living or dead)

c.) HIV-containing cells or tissue cultures, organ cultures, and HIV or HBV-containing cultures medium or other solutions

d.) Blood, organs, or other tissue from experimental animals infected with HIV or HBV.

Personal Protective Equipment: Specialized clothing or equipment worn by a member for protection from a hazard.

Regulated Waste:

a.) liquid or semi-liquid blood or OPIM

b.) contaminated items that would release blood or OPIM in a liquid or semi-liquid state is compressed

c.) items that are caked with dried blood or OPIM and are capable of releasing these materials during handling

d.) contaminated sharps

e.) pathological and microbiological wastes containing blood or OPIM

Universal Precautions: an approach to infection control whereby all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

BLOODBORNE DISEASES

The following section is offered to provide some background on bloodborne diseases. It is not meant to be a comprehensive text but rather some basic definitions and explanations.

Most infectious diseases are caused by either viruses or bacteria.

Viruses: reside in a living host and cannot multiply outside of a living cell

Bacteria: can multiply outside the body on most surfaces or objects

There is a difference between infectious and communicable diseases. Not all infectious diseases are communicable diseases.

Infectious disease results from the invasion of a host by disease producing organisms

Communicable (contagious) disease is one that can be transmitted from one person to another

A communicable disease may be spread directly or indirectly

Direct transmission occurs through direct contact with the blood or other body substances of an infected individual

Indirect transmission occurs without person to person contact; the disease producing organism passes from the infected individual to an inanimate object. Another person contacts the object and contracts the disease

A communicable disease may be bloodborne or airborne.

Bloodborne diseases are spread by direct contact with the blood or other body substances of an infected individual. Bloodborne diseases of most concern to emergency responders include Human Immunodeficiency Virus (HIV) and Hepatitis B Virus (HBV) and Hepatitis C Virus (HBC)

Airborne diseases are spread by droplets of the disease producing organism being expelled into the air by a cough or sneeze or by direct contact with infected body secretions. Airborne diseases include tuberculosis (TB), meningitis, mumps, rubella (German Measles), and chickenpox

Any exposure to a communicable disease carries a certain risk. This risk is influenced by many factors. These factors are:

Communicability

Dosage of the disease producing organism

Virulence of the disease producing organism

Host Resistance

Duration of exposure (airborne diseases only)

Ventilation (airborne diseases only)

With bloodborne diseases the risk of infection also varies according to the **type** of exposure. The chart below illustrates this point:

Blood/Body Fluid contact to intact skin	LOWER RISK
Blood/Body Fluid contact the mucous membrane surface of the eyes, nose, or mouth	¬
Blood/Body Fluid contact with an open area of the skin	¬
Cuts with sharp objects covered with blood/body fluid	¬
Contaminated needle stick injury	HIGHER RISK

This section discusses the Epidemiology of two bloodborne diseases, AIDS and HEPATITIS-B

Acquired Immune Deficiency Syndrome (AIDS)

AIDS is an infectious, communicable, bloodborne disease caused by the Human Immunodeficiency Virus (HIV). AIDS causes the immune system to breakdown. HIV type 1 virus (HIV-1) causes most cases of AIDS. A second form of the virus, HIV-2, is a less common cause of the disease. The virus itself dies when exposed to light and air (virulence = low). The modes of transmission are needlestick, blood splash into mucous membranes, blood contact with an open wound and sexual transmission. There is NO vaccine available against AIDS. Some of the signs and symptoms of AIDS include fever, night sweats, weight loss, and cough.

Hepatitis

Hepatitis is caused by certain drugs, toxins, or infectious agents, including viruses. Hepatitis causes an inflammation or swelling of the liver. Viral Hepatitis is an infectious, communicable disease. There are several types of Viral Hepatitis. Viral hepatitis includes Hepatitis A, Hepatitis B, Hepatitis D and Hepatitis Non-A Non-B (Non-A Non-B includes hepatitis C, hepatitis E, and yet unclassified types)

Hepatitis A Virus (HAV)

Also called infectious hepatitis. Its mode of transmission is fecal contamination. HAV is not a significant risk for emergency responders

Hepatitis B Virus (HBV)

Also called serum hepatitis. Its modes of transmission are needlestick, blood splash into mucous membranes or blood contact with an open wound and sexual transmission. HBV infection may result in death, chronic hepatitis, liver cancer, or cirrhosis of the liver. There is a vaccine available for HBV. Some of the signs and symptoms of HBV include fever, fatigue, loss of appetite, nausea, headache, and jaundice. HBV has been shown to live on a surface for days to weeks and still be infectious (virulence = high). HBV poses a significant risk for emergency responders.

Hepatitis C Virus (HCV)

Its mode of transmission is blood contact. It is a recently identified viral form of hepatitis. There is no vaccine for HCV and as such prevention is key.

Hepatitis D Virus (HDV)

Also called delta hepatitis. It is a viral infection occurring in people with present or past HBV infection. Delta hepatitis is a complication of HBV infection and can increase the severity of HBV infection

Hepatitis, Non-A Non-B (NANB)

Is viral hepatitis caused by a virus other than hepatitis A or B, there are probably several viruses responsible. Its mode of transmission is blood contact.

BIBLIOGRAPHY

This bibliography contains the names of any materials used to construct this exposure control plan. Consult these references for further sources of information on bloodborne pathogens and the bloodborne pathogens standard.

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Smithkline Beecham, **Hepatitis B: What Public Safety Workers Need to Know**, March 1993.

U.S. Department of Health and Human Services, **Protection Against Viral Hepatitis, Recommendations of the Immunization Practices Advisory Committee**, *Morbidity and Mortality Weekly Report*, 1990: Vol. 39, No. RR-2.

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U.S. Department of Labor, Occupational Safety and Health Administration**, Occupational Exposure to Bloodborne Pathogens: Precautions for Emergency Responders**, 1992.

United States Fire Administration, **Guide to Developing and Managing an Emergency Service Infection Control Program**, March 1992.

APPENDIX A

COMMISSIONERS OF FIRE DISTRICT NO. 1

Franklin Township, Somerset County, New Jersey

FIREFIGHTER EDUCATION & TRAINING RECORD

Firefighter _____

Fire Company _____

Date of Training _____

Time of Training _____

Location of Training _____

Trainers _____

Firefighter Signature: _____ Date _____

APPENDIX B

COMMISSIONERS OF FIRE DISTRICT NO. 1

Franklin Township, Somerset County, New Jersey

CONFIDENTIAL

HEPATITIS B VACCINE IMMUNIZATION RECORD

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine at no charge to myself. I have chosen to receive the vaccination and I understand that I must receive all 3 doses in order to complete the vaccination process.

Firefighter Name: _____

Fire Company: _____

Firefighter Signature: _____ Date _____

Do not write below this line. For official use only.

Date of first dose: _____

Date of second dose: _____

Date of third dose: _____

APPENDIX C

COMMISSIONERS OF FIRE DISTRICT NO. 1

Franklin Township, Somerset County, New Jersey

CONFIDENTIAL

HEPATITIS B VACCINATION DECLINATION STATEMENT

Please check appropriate box:

☐

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine I can receive the vaccination series at no charge to me.

☐

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I am declining the vaccination because I have already received my Hepatitis B vaccination

Note: I understand that if I am involved in an exposure incident while working for Fire District #1 I must provide proof of my Hepatitis B vaccination series to assist the District #1 physician in my treatment.

☐

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I am declining the vaccination because I have already received my Hepatitis B vaccination from _____ on or about the following date: _____. I am providing documented proof of my vaccination history.

Firefighter Name: _____

Fire Company: _____

Firefighter Signature: _____ Date _____

EXPOSURE INCIDENT REPORT

(ROUTES AND CIRCUMSTANCES OF EXPOSURE INCIDENT)

Please Print

DATE COMPLETED _____

EMPLOYEE'S NAME _____ **SS#**_____

HOME PHONE _____ **BUSINESS PHONE** _____

DOB _____ **JOB TITLE** _____

EMPLOYEE VACCINATION STATUS _____

DATE OF EXPOSURE _____ **TIME OF EXPOSURE** _____**AM** _____ **PM** _____

LOCATION OF INCIDENT (HOME, STREET, CLINIC, ETC. – BE SPECIFIC): _____

NATURE OF INCIDENT (AUTO ACCIDENT, TRAUMA, MEDICAL EMERGENCY) – BE SPECIFIC: _____

_____

_____

_____

DESCRIBE WHAT TASK(S) YOU WERE PERFORMING WHEN THE EXPOSURE OCCURRED (BE SPECIFIC):

_____

_____

_____

WERE YOU WEARING PERSONAL PROTECTIVE EQUIPMENT (PPE)? YES _____ **NO** _____

IF YES, LIST:

_____

DID THE PPE FAIL? YES _____ **NO** _____

IF YES, EXPLAIN HOW:

_____

_____

WHAT BODY FLUID(S) WERE YOU EXPOSED TO (BLOOD OR OTHER POTENTIALLY INFECTIOUS MATERIAL)?
BE SPECIFIC: _____

_____

_____

_____

Continued on back

APPENDIX D

Continued from front **Side 2 of 2-sided form**

WHAT PARTS OF YOUR BODY BECAME EXPOSED? BE SPECIFIC: _____

_____

ESTIMATE THE SIZE OF THE AREA OF YOUR BODY THAT WAS EXPOSED: _____

_____

FOR HOW LONG?

_____

DID A FOREIGN BODY (NEEDLE, NAIL, AUTO PART, DENTAL WIRES, ETC.) PENETRATE YOUR BODY?

YES _____ NO _____

IF YES, WHAT WAS THE OBJECT? _____

WHERE DID IT PENETRATE YOUR BODY? _____

WAS ANY FLUID INJECTED INTO YOUR BODY? YES _____ NO _____

IF YES, WHAT FLUID? _____ HOW MUCH? _____

DID YOU RECEIVE MEDICAL ATTENTION? YES _____ NO _____

IF YES, WHERE? _____

WHEN _____

BY WHOM _____

IDENTIFICATION OF SOURCE INDIVIDUAL(S) _____

NAME(S) _____

DID YOU TREAT THE PATIENT DIRECTLY? YES _____ NO _____

IF YES, WHAT TREATMENT DID YOU PROVIDE? BE SPECIFIC: _____

_____

OTHER PERTINENT INFORMATION: _____

_____

_____

CONFIDENTIAL

DOCUMENTATION AND IDENTIFICATION

OF SOURCE INDIVIDUAL

NAME OF EXPOSED EMPLOYEE _____

NAME AND PHONE NUMBER OF MEDICAL PROVIDER WHO SHOULD BE CONTACTED: _____

_____

INCIDENT INFORMATION

DATE: _____

NAME OR MEDICAL RECORD NUMBER OF THE INDIVIDUAL WHO IS THE SOURCE OF THE EXPOSURE:

_____

NATURE OF THE INCIDENT

_____ **CONTAMINATED NEEDLESTICK INJURY**

_____ **BLOOD OR BODY FLUID SPLASH ONTO MUCOUS MEMBERANE OR NON-INTACT SKIN**

OTHER: _____

REPORT OF SOURCE INDIVIDUAL EVALUATION

CHART REVIEW BY: _____ **DATE:** _____

SOURCE INDIVIDUAL UNKNOWN _____ **RESEARCHED BY** _____ **DATE:** _____

TESTING OF SOURCE INDIVIDUAL'S BLOOD CONSENT OBTAINED _____ **REFUSED** _____

CHECK ONE:

_____ **Identification of source individual infeasible or prohibited by state or local law. State why if infeasible.**

_____ **Evaluation of the source individual reflected no known exposure to Bloodborne Pathogen**

_____ **Evaluation of the source individual reflected possible exposure to Bloodborne Pathogen and medical follow-up is recommended.**

PERSON COMPLETING REPORT: _____ **DATE:** _____

NOTE: Report the results of the source individuals blood tests to the medical provider named above who will inform the exposed employee. Do not report blood test findings to the employer.

HIV-related information cannot be released without the written consent of the source individual

APPENDIX F

CONFIDENTIAL

EMPLOYEE EXPOSURE FOLLOW-UP RECORD

EMPLOYEE'S NAME _____ **JOB TITLE** _____

OCCURRENCE DATE _____ **REPORTED DATE** _____

OCCURRENCE TIME _____

SOURCE INDIVIDUAL FOLLOW-UP:

REQUEST MADE TO _____

DATE _____ **TIME** _____

EMPLOYEE FOLLOW-UP:

EMPLOYEE'S HEALTH FILE REVIEWED BY _____ **DATE** _____

INFORMATION GIVEN ON SOURCE INDIVIDUAL'S BLOOD TEST RESULTS YES _____ **NOT OBTAINED** _____

REFERRED TO HEALTHCARE PROFESSIONAL WITH REQUIRED INFORMATION:

NAME OF HEALTHCARE PROFESSIONAL _____

BY WHOM _____ **DATE** _____

BLOOD SAMPLING/TESTING OFFERED

BY WHOM _____ **DATE** _____

VACCINATION OFFERED/RECOMMENDED

BY WHOM _____ **DATE** _____

COUNSELLING OFFERED

BY WHOM _____ **DATE** _____

EMPLOYEE ADVISED OF NEED FOR FURTHER EVALUATION OF MEDICAL CONDITION:

BY WHOM _____ **DATE** _____