



Lexington County Fire Service

Standard Operating Procedures Equipment (ADM-012) Index

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

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Lexington County Fire Service

Standard Operating Guidelines
Equipment ADM-012
Fire Extinguisher Inspections ADM-012.01

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service personnel

PURPOSE: To outline the process for entering the monthly fire station extinguisher inspections into the Firehouse software program.

POLICY:

I. ENTERING MONTHLY FIRE EXTINGUISHER INSPECTIONS IN FIREHOUSE

All fire extinguishers for the Fire Service should be in the Firehouse software program and available for viewing in the inventory section. As monthly checks of extinguishers are performed, it is requested that information be entered into the inventory section under the appropriate extinguisher number. Access "inventory" and browse the extinguisher which monthly service has been performed. Click on the "maintenance/test" table and then the "add" button under the maintenance area. Under "job", the monthly inspection job is listed as 102A. Complete date and station where the inspection was performed. Once the information has been entered, save the program and move to the next fire extinguisher.



Lexington County Fire Service

Standard Operating Procedures
Equipment AMD-012

Approval of Use of Protective Equipment Form ADM-012.02

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service personnel

POLICY:

APPROVAL OF USE OF PROTECTIVE EQUIPMENT FORM

Any personal protective equipment not issued by Lexington County Fire Service and utilized for emergency response must meet or exceed the requirements for Interior Structural Firefighting as outlined in OSHA Standard 1910.156 and NFPA Standards #1971 (Clothing), # 1972 (Helmets), #1973 (Gloves), and/or #1974 (Boots) – Latest Editions.

A. The Approval of Use of Protective Equipment Form must be properly completed and approved for each component of personal protective equipment prior to being used.

1. Subsequent replacement components will be subject to this policy the same as the original component.

Example: If a firefighter wishes to replace a personally obtained and previously approved helmet with another helmet of the same make and manufacturer, the Approval of Use of Protective Equipment form must be properly completed and approved for the replacement helmet.

2. Approved Colors

Clothing – Natural, Yellow
Helmets – White (Officers), Yellow

3. The Lexington County Fire Service reserves the right to approve or not approve the use of non-County issued equipment for emergency response, at its discretion.



Lexington County Fire Service

Standard Operating Procedures
Equipment ADM-012
Personal Protective Equipment and Eye Protection ADM-012.03

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service Personnel

POLICY:

PERSONAL PROTECTIVE EQUIPMENT AND EYE PROTECTION

The section will establish an acceptable level of employee personal protective safety during station duties, emergency operations, medical response and training activities.

A. Structural Firefighting Gear

1. Shall not be permitted in any living space or sleeping area of any fire station.
2. The use of interior structural firefighting PPE is mandatory during the following:
 - (a) When responding to fire related emergencies or alarms.
Exception: Driver may don gear upon arrival at fire scene.
 - (b) Additional Safety Reflective vests must be worn when operating near or around traffic and hazards associated with traffic control.
 - (c) Does not include medical emergencies.
Exception: Gear may be worn if extra protection is needed as not to cause any respiratory discomfort to the patient.
 - (d) Must be worn at working vehicle extrications.
 - (e) Must be used when in conjunction with SCBA anytime a respiratory

hazard may be present, including but not limited to:

- * Interior firefighting
- * Salvage and overhaul
- * Ventilation
- * Search and Rescue

* **Exception:** Incident Commander may oversee the apparel chosen specifically designed for Hazmat mitigation and stabilization.

- (f) NFPA Approved Wildland and Extrication Gear permitted instead, *when using as it is intended*. (IE, Confined Space rescue, extrications and brush fires, *non interior firefighting*.)
- (g) Technical Rescue incident may call for specific PPE and equipment. Incident Commander and/or Incident Command may oversee the apparel chosen specifically designed for the Rescue Incident. (IE., high angle, swift water, confined space rescue.)
- (h) Shall not be worn at **ANY** water related incident. Anyone in structural gear may not be within 10 feet of the water. This includes *fire* helmet. Anyone within 10 feet of the water should have approved personal flotation device on and securely fastened. **Exception:** Incident Commander, at his discretion, may allow the operation near water if there are reasonable circumstances allowing the use of a PFD. (I.E. very shallow water, no potential inherent dangers, etc.)

3. Incident Commander at his discretion may allow the removal of PPE.

4. Gear must adhere to the following:

- (a) Only firefighting turnouts issued by department may be used unless approved in writing by the Lexington County Fire Service Coordinator
- (b) Shall be kept clean and free of defects.
- (c) Bunker gear shall be cleaned (washed) a minimum of twice a year, with one of those cleanings by extraction at one of the approved County fire stations with an appropriate machine designed for bunker gear scrubbing with a soft bristle brush. Do not use a power washer. All cleaning must be documented.
- (d) Bunker gear shall be cleaned an additional minimum of once yearly (not necessarily extracted, but may be) and properly documented

5. No modifications may be made to gear unless approved by the Lexington County Fire Service Coordinator.

6. Under no circumstances should any bunker gear be brought into the home, washed in home laundries, or washed in public laundries. Commercial dry cleaning is also not an approved method for cleaning of gear.

7. Bunker gear that has been contaminated with biological agents shall be isolated, bagged, and tagged. The contaminated gear shall be removed from

service and sent to an appropriate station for cleaning.

8. Bunker gear that has been contaminated with a hazardous material shall be isolated, bagged, and tagged. The contaminated gear shall be removed from service and receive specialized cleaning as necessary, to remove the specific contaminate if possible. Gear should be handled in accordance with County hazardous materials SOPs. This may include leaving the bunker gear on site of the incident.
9. The end user shall be responsible for the routine cleaning of their issued bunker gear and protective equipment.
10. Attachments to the helmet are allowed if they meet the following conditions:
 - (a) They serve to assist the firefighter in the duties of emergency operations (IE, flashlights, bands to hold items such as door chocks.)
 - (b) They do not pose a safety hazard.
 - (c) Questionable items shall be approved by the Operations Chief. Any safety concerns should be addressed to the Lexington County Fire Service Coordinator.
11. Stickers will be allowed to be placed on the helmet provided that they meet ANY of the following conditions:
 - (a) They are of a reflective material and serve identification purposes.
 - (b) They are not obscene or offensive in any way.
 - (c) They are approved by the Operations Chiefs.
 - (d) Questionable items shall be approved by the Operations Chief. Any Safety concerns should be addressed to the Lexington County Fire Service Coordinator.
12. Specific Incident Apparel:
 - (a) Specific items may be required during special operations, haz-mat, and technical rescue incidents.
 - (b) Items must meet *or exceed* response specific safety requirements.
 - (c) Incident Commander shall oversee use and selection of incident specific protective equipment.
 - (d) Purchased items may be allowed if the Lexington County Fire Service Coordinator and the Operations Chief have given expressed written consent to the employee. If request is granted, it must be processed in accordance with the Approval of Use of Protection Equipment Guidelines.
 - (e) Purchased items may include, but are not limited to the following:
 - a. Helmets
 - b. Turnout Boots
 - c. Flash hoods
 - d. Firefighting Gloves

- e. Safety Glasses (ANSI Approved)
- f. Specialized Rescue Equipment

13. Repairs

Bunker gear repair requests should be made through the Lexington County Fire Service Logistics Officer.

B. Eye Protection

1. All protective eyewear shall meet the minimum *ANSI Z87.1* compliant standard.
2. Proper eye protection shall be used during activities that may cause eye injury. Examples given but not limited to:
 - a. Checking underneath fire apparatus during morning safety inspection.
 - b. Using hammers, axe or forcible entry tools.
 - c. During overhaul in PPE when respirator protection is not required.
 - d. Checking or using hydraulic equipment.
 - e. Personnel in contact with patients/victims will have examination gloves and eye protection with them at all times.
3. MSA face piece shall be used anytime respiratory protection is necessary and will act as full face/eye protection.
4. When the MSA face piece is not required, safety glasses or goggles may be used.
5. Goggles may be of the quick connect/disconnect style used in conjunction with a fire helmet.
6. Goggles should not be kept on the fire helmet since this will lead to smoke, fire and prolonged storage damage of the goggle. Goggles shall be kept in a soft sleeve (sock) and placed in the inside fire coat pocket or side pant pocket. **Exception:** Goggles may be kept on the helmet if covered in a NFPA approved cover, specifically made for this application, paid for by the individual. No written approval needed.
7. It will not be necessary to have both helmet shield and goggles. However, the use of a shield **will** require additional eye protection in the form of safety glasses, goggles or MSA face piece to provide for adequate eye protection.
8. Safety glasses used during medical calls shall be clear lens when used at night or used in the interior of a building.
9. **WARNING:** *Do not wear goggles on the face during structural firefighting. Always use a SCBA while operating in close proximity to an active structural fire or when there is an IDLH atmosphere present.*



Lexington County Fire Service

Standard Operating Procedures
Equipment ADM-012
Equipment Issued/Returned Form ADM-012.04

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service personnel

POLICY:

EQUIPMENT ISSUED/RETURNED FORM

- A. Any equipment issued by the Lexington County Fire Service will be documented on a properly completed Lexington County Fire Service Equipment Issued/Returned Form.
- B. Any equipment that needs to be turned in to the Lexington County Fire Service will be documented on a properly completed Lexington County Fire Service Equipment Issued/Returned Form.
- C. Under no circumstances will any gear be transferred from one employee to another employee without completing a Lexington County Fire Service Equipment Issued/Returned Form that indicates the equipment being turned in and another properly completed Lexington County Fire Service Equipment Issued/Returned Form that indicates the equipment being reissued.
- D. When returning bunker gear, an Equipment Issued/Returned Form should be sent it with the gear. This will assist with accountability for bunker gear and its location at all times. Information needed includes firefighter's name and gear identification number. Any spare gear returned should be listed as spare.

Lexington Fire Station personnel will verify information to assure accuracy of identification numbers. All gear needs to be returned in a timely manner.



Lexington County Fire Service

Standard Operating Guidelines

Equipment ADM-012

Wildland Firefighting / Extrication Protective Clothing ADM-012.05

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service personnel

POLICY:

Wildland Firefighting/Vehicle Extrication Protective Clothing

The following standard has been set as a minimum level of protection for wildland firefighting gear. This standard is based from the NFPA 1977 Standard on Protective Clothing and Equipment for Wildland Firefighting, 1998 Edition. This standard also meets the minimum level of protective clothing that may be worn while performing vehicle extrication. This standard is intended to provide the highest level of safety possible for the firefighters in Lexington County. All protective clothing worn during wildland firefighting must meet the minimum levels as outlined in NFPA 1977, 1998 Edition.

Certification of NFPA approval must be provided and maintained on file for any protective clothing not provided by Lexington County.

- A. Helmets
 - 1. Structural firefighting helmets will meet the minimum level of protective with the ear flaps down.
 - 2. Wildland firefighting helmets may be worn during wildland firefighting. Helmets must have the following equipment: ear and neck protection (ear flaps) that must be in the down position, firefighter approved goggles, and

reflective striping on the helmet. A flash hood may be substituted for the near and neck flaps.

B. Gloves

1. Structural firefighting gloves will meet the minimum level of protection for the purpose of this standard.
2. Approved wildland gloves may be worn in place of structural firefighting gloves. NOTE: Standard work gloves do not meet NFPA standards for wildland firefighting.

C. Jumpsuits, Coats and Trousers

1. Complete structural firefighting gear will meet the minimum level of protection for the purpose of this standard. NOTE: Complete under this standard requires coat and trousers. Jumpsuits or coats and trousers are both acceptable levels of protection for wildland firefighting.
2. A two-inch (2") reflective trim will be required around the arms, waist and cuff. A three-inch (3") reflective lettering "LCFS" will be required on the back of the coat/jumpsuit.
3. Color – yellow
4. Jumpsuits or coats and trousers will be completely donned during wildland firefighting activities.

D. Boots

1. Rubber bunker boots will meet the minimum level of protective under this standard.
2. A minimum of eight-inch (8") all leather boot is required to be worn during wildland firefighting. Steel toe boots are optional, however steel toes are encouraged.



Lexington County Fire Service

Standard Operating Guidelines

Equipment ADM-012

Proper Maintenance of Gas Monitoring Equipment ADM-012.06

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service personnel

POLICY:

Proper Maintenance of Gas /Monitoring Equipment

This is an outline for the proper procedure of “exercising” the gas monitoring equipment as recommended by Industrial Scientific, manufacturer of monitoring equipment that we use.

Each monitor shall be operated daily for at least ten (10) minutes in order to keep the battery and sensors active. It is acceptable to let the monitor operate for longer than ten minutes, just remember to check the power level of the battery before shut down.

Each charger base shall have the “charge cycle” switch in the “discharge/charge” position. This will discharge the battery completely before applying the charge, preventing “memory” effect in the battery.

The battery shall be charged when the power indicator shows four (4) points or less.

Accurate records are to be kept at each station to document proper maintenance of gas monitoring equipment is being performed.



Lexington County Fire Service

Standard Operating Procedures
Equipment ADM-012
Portable Equipment Safety – ADM-012.07

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service Personnel

POLICY:

Portable Equipment Safety

- A. All equipment carried on fire apparatus or designated for training shall be visually inspected at least monthly and within 24 hours after any use. Inventory records shall be maintained for the equipment carried on each vehicle. Records shall also be maintained for equipment designated for training.
- B. All equipment carried on fire apparatus or designated for training shall be tested at least annually in accordance with manufacturer's instructions and applicable standards.
- C. Firefighting equipment found to be defective or in unserviceable condition shall be removed from service and repaired or replaced.
- D. All ground ladders shall be inspected and tested as specified in NFPA 1932, Standard on Use, Maintenance, and Service Testing of Fire Department Ground Ladders.
- E. All fire hose shall be inspected and service tested as specified in NFPA 1962, Standard on Care, Maintenance, and Use of Fire Hose including Connections and Nozzles.

- F. All fire extinguishers shall be inspected and tested as specified in NFPA 10, Standard for Portable Fire Extinguishers.
- G. The Insurance Service Office has required that all rated pumpers in the Fire Service be certified annually as to the ability of the pump to deliver the minimum volume of water that it was designed to deliver. Should any pump require major repairs or overhaul, it shall be recertified before returning to the Fire Service. All certification tests shall be conducted by individuals within the Fire Service system who have been qualified to do so through state certified training on standard pumper tests.
- H. All hose used in Lexington County Fire Service shall:
- (1) Be properly cleaned, dried and inspected before being placed in service on any apparatus.
 - (2) Not be allowed to remain on an apparatus for a period of more than six months without being removed and relocated, with care taken to relocate all folds in the hose.
 - (3) Be identified by station markings and shall be further identified by number for the purpose of hose history and annual certification by the respective stations.
 - (4) Have a hose record card maintained for each section in service and in reserve.
 - (5) Hose shall be tested annually with NFPA Standard 1962 (formerly 198).
- I. Hydrant Maintenance and Records
- All hydrants in a station's primary response area shall be checked for ease of operations, as well as any obstructions or missing or damaged caps annually. Any damaged or inoperable hydrant shall be reported to the respective water department for service. All hydrants and water points shall be tested annually.



Lexington County Fire Service

Standard Operating Procedures
Equipment ADM-012
Life Safety Ropes, Harnesses, and Hardware ADM-012.08

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service Personnel

POLICY:

Life Safety Ropes, Harnesses, and Hardware

- A. All life safety ropes, harnesses, and hardware used by fire departments shall meet the requirements of NFPA 1983, Standard on Fire Service Life Safety Rope, Harnesses, and Hardware.
- B. Class I life safety harnesses shall only be used for firefighter attachment to ladders and aerial devices.
- C. Class II and Class III life safety harnesses shall be utilized for fall arrest and rappelling operations.
- D. Rope used to support the weight of members or other persons during rescue, firefighting, other emergency operations, or during training evolutions shall be life safety rope. Life safety rope used for any other purpose shall be removed from service and destroyed.
- E. Life safety rope used for rescue at fires or other emergency incidents shall be previously unused and shall be destroyed after each use.

- F. Life safety rope used for training evolutions shall be designed as training rope and may be reused if inspected before and after each such use in accordance with the manufacturer's instructions. Training ropes shall be destroyed if subjected to impact loading, or if signs of weakness or wear are detected. Records shall be maintained to record the use of each life safety rope used for training.



Lexington County Fire Service

Standard Operating Procedures
Equipment ADM-012
Fire Hose ADM-012.09

EFFECTIVE: September 16, 2009 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy Dated September 27, 2007

SCOPE: All Lexington County Fire Service Personnel

POLICY:

A. Preconnect Hose Colors

In an effort to comply with the NFPA recommendations for marking of preconnect hose lines, we are distributing new color hoses for the preconnects on all first-out pumpers. The following hose placements shall be followed:

- All front jump lines are ORANGE
- All front crosslays are RED
- All rear crosslays are YELLOW
- All third rear crosslays are BLUE (on FMCs ONLY)
- Rear preconnects are WHITE

These colors match the handles on the pumpers.

B. Hose Testing

The following is the proper method to use when testing hose. Service testing of hose is undertaken to confirm its suitability for continued use. The hose test machine is to be used testing hose. Equipment can be damaged during testing when an engine is used and

not the tester. Hose test machines are located in Logistics Office at Fire Training Center. Machines can be scheduled for hose testing by calling Logistics Officer.

All hose should be tested per NFPA 1962 latest edition



Lexington County Fire Service

Standard Operating Procedures
Equipment ADM-012
Ground Ladder Maintenance ADM-012.10

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service Personnel

POLICY:

Ground Ladder Maintenance

NFPA 1932 requires regular cleaning and lubrication of all ground ladders. This should be completed after ladders have been used at a fire. After ladders have been washed with soap and water, they are to be rinsed and dried, then all moving parts are to be lubricated. It is suggested that spray silicone lubricant be used for lubricating.

Ladders that are not used on fire should be removed and cleaned and lubricated every six months



Lexington County Fire Service

Standard Operating Procedures
Equipment ADM-012
Pagers ADM-012.11

EFFECTIVE: September 27, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: Previous Policy

SCOPE: All Lexington County Fire Service Personnel

PROCEDURE:

Pagers

The following will ensure proper maintenance and care for Fire Service pagers

- A. Personnel should be issued a pager near the conclusion of the Orientation to Lexington County Fire Service. A pager case will be issued with every station pager that is issued. Pagers should be kept in the pager case whenever it is not in the charger base.
- B. Pager batteries should be rotated between the pager and the charger base on a regular basis in an attempt to maintain both sets of batteries in an optimum condition.
- C. Only the appropriate County issued batteries should be used in the pagers.
- D. Programming of pagers should be handled through the proper chain of command and must ultimately be approved by the appropriate Operations Chief.
- E. Pagers are the property of Lexington County Fire Service. If a person transfers to another station, the Station Officer or designee will determine if the pager is to be transferred or not.