



Lexington County Fire Service

Standard Operating Guidelines
Special Consideration for Incident Responses OPS-010
Special Consideration for Incident Responses OPS-010.01

EFFECTIVE: December 1, 2007 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: All Previous Policies

SCOPE: All Lexington County Fire Service Personnel

POLICY:

I. Water Points

A. Selection of Water Site

It will be the station's responsibility to select the location of a water site and owner permission, also, it will be the responsibility of the station to list any problems pertaining to a water site.

EXAMPLE: Water site at Black's Creek and Highway 378 needs a drive built between the old highway and the present highway.

B. The County will approve any and all water sites selected by all departments.

C. The station will be responsible for obtaining owner permission to use water site. This permission will be in writing and on a county water source consent form, and must be notarized before water site can be used.

D. The County will be responsible for getting permission for use of State Highway Department right-of-way property.

- E. The station will supply County Communications with a water map showing water point sites.
- F. County Communications will develop a master water map showing all water sites selected.

II. CERTIFICATION OF WATER SITES AND EQUIPMENT

- A. The County Engineer will certify all water points selected and approval by the County Fire Service Coordinator and Director of Public Safety.
- B. The County will be responsible for water point signs.
- C. The Station will be responsible for installing water shots or dry hydrants.
- D. The County will be responsible for any all-weather roads.
- E. The County will furnish any equipment needed for jet-dump operations.
- F. The Station will be responsible for maintaining water site and doing semi-annual inspections.

III. WATER SUPPLY

Engines will proceed toward incident address until command advises to:

- A. Stage
- B. Go to water site
- C. Return to station
- D. Proceed to incident address

IV. NARROW LANE OPERATIONS

The first arriving engine will lay a supply line on all roads or lanes too narrow for tankers to pass one another. This will be done whenever there is any indication of a working fire. For example: smoke showing or Communications reports possible Signal 2, etc.

V. ATTACK ENGINES

Attack engines should be positioned with porta-tank operations in mind. Apparatus Operator should refill booster tank as soon as sufficient water is available. If being

supplied by hose, lay from supply pumper or tanker. Intake pressure should not be over 40 PSI.

VI. TANKERS

Tanker drivers should pull out jet-dump and tank-to-pump valve before leaving station. Driver should not leave cab of truck at any time during operations. Tanker drivers shall obey road guard signals. Personnel should not ride tanker tailboards.

Horn Signals are: One – Stop if tanker is moving
 Two – Start accelerating – pumping water
 Two – Stop accelerating – stop pumping
 One – Go

Quarter turn valves will be opened at fill-site prior to hydrant gate being opened and will be closed only after hydrant gate is closed. If working from a hydrant, hydrant gate should be placed on hydrant by first arriving tanker along with a fill hose. First arriving tanker will, at the discretion of the Incident Commander, either connect up 2½” discharge line to the attack pumper (NOTE: Porta-tank could be set up for later tankers), or set up porta-tank and first load of water dumped.

VII. REMOVAL OF ELECTRICAL POWER METERS

As recommended by all major utility companies in Lexington County, the following policy concerning removal of electrical power service meters will be implemented.

The removal of electrical power service meters shall be done strictly as a last resort for personnel safety. Every effort should be made to contact the utility company to assist in this endeavor.

Any personnel removing electrical power service meters must have the proper training and be aware of the possible hazards involved with such an operation.

If meter is removed, the following information must be obtained for the utility company:

- * Name and address
- * Time the meter was removed
- * Where the meter can be located

VIII. EXTINGUISHMENT OF CHIMNEY FIRES

There is a new tool available for use at extinguishing chimney fires - quart plastic bags with ABS fire extinguisher powder inside.

They work by dropping the bag down the chimney, the heat in the chimney will melt the bag and allow the powder to disperse and extinguish the fire. This can be used when you are unable to discharge an ABC extinguisher at the base of a chimney due to an obstruction such as a fire place insert. When using this method the firefighter will need to be in full protective clothing and SCBA working on a roof ladder for safety.

Do not make these bags by discharging a fire extinguisher at your station. South Congaree Fire Station has the powder available to make the bags. You will need to provide a container to store them in to contain any powder that may leak from the bags. Contact South Congaree to have the bags made up for you.



Lexington County Fire Service

Standard Operating Procedures
Special Consideration for Incident Responses OPS – 010
Carbon Monoxide Alarm Response – 010.02

EFFECTIVE: August 11, 2009 **ISSUED BY:** Russell R. Rawl, Fire Service Coordinator

RECINDS: All Previous Policies

SCOPE: All Fire Service Personnel

PURPOSE: To document and outline the procedures for responding to and managing a Carbon Monoxide incident

POLICY:

- A. The reporting party will be instructed to evacuate all people from the structure and relocate to a safe location. (This may be completed by Lexington County Communications or may need to be completed by the first arriving emergency responders.)
- B. The initial response will consist of the appropriate first due Engine and the closest Battalion Captain for a Carbon Monoxide monitor. Response will be “non-emergent” unless there is information of special circumstances such as, but not necessary limited to, occupants that can not self-evacuate, a furnace burning out of control or other emergency conditions.
- C. Upon arrival of first emergency responder, confirm evacuation has occurred. If the occupants are unwilling to leave the structure, note this in the Firehouse Report. Perform any rescue operations that may be necessary for occupants that can not self-evacuate, insuring personal protective equipment is utilized by rescuers. **Do NOT enter the structure to investigate UNTIL monitoring equipment is available.**
- D. Request Emergency Medical Services if any occupant reports symptoms or shows signs of adverse health conditions that may possibly related to Carbon Monoxide exposure (headache, nausea, weakness or cramps, appears to be confused, dizzy or sleepy).

- E. Insure that the Carbon monoxide monitor is fully operational and functioning properly, is calibrated and shows appropriate readings in “clean” environment before entering the suspected hazardous area.
- F. Entry to monitor the hazardous environment should be conducted by a minimum of two fire fighters in complete personal protective equipment, to include appropriate respiratory protection. Monitoring should be conducted in a slow and methodical manner to insure that monitoring is being conducted thoroughly. One firefighter should be responsible for operating the monitor and additional entry personnel should be recording the readings given by the monitor operator and the location where the reading was taken from. Any readings recorded will be documented in the narrative section of the Firehouse Report. Monitoring should begin outside at the entrance of the structure before entry and proceed throughout the structure, surveying near floor level, at face level and near ceiling level at various points within the structure. Monitor close to heat ducts and fireplaces or other heating equipment if operating.
- G. **Low Hazard Level (reading below 5 ppm):** If readings of below 5 ppm are taken, the occupant(s) should be advised that – **the Carbon Monoxide hazard is low at the moment, according to the monitoring device that we are using, but it is recommended that you (the occupant) have the heating system (or other suspected source) checked by a qualified service person as soon as possible. Even though the Carbon Monoxide readings we obtained are not immediately dangerous, the monitoring device can not check for every possible hazard nor can it predict what may happen later with regards to Carbon Monoxide levels as they may rise if an undiscovered problem exists and continues and the effects of Carbon Monoxide exposure may be cumulative. The occupant(s) must decide if they are comfortable with the structure being safe to use.**
- H. **Moderate Hazard Level (reading 5ppm to 20 ppm):** If readings of 5ppm to 20 ppm are taken, the occupant(s) should be advised that – **the Carbon Monoxide hazard is higher than usually found inside structures and it is recommended that the heating system (or other suspected source) be checked by a qualified service person before the structure is used again. Carbon Monoxide could cause illness or death to persons breathing the atmosphere inside the structure.**
- I. **High Hazard Level (reading above 20ppm):** If readings above 20 ppm are taken, the occupant(s) should be advised that - **the Carbon Monoxide hazard is at a level that can cause harmful health effects in people. It is strongly recommended that the building not be used until it is thoroughly ventilated and the source is found and repaired by a qualified service person.**
- J. If the monitor indicates a reading for flammable vapors above the lower explosive limit or a reading above 22% Oxygen, evacuate the structure until the hazard is no longer present.

- K. Ventilation fans may be used to reduce the level of contamination, but this will not prevent Carbon Monoxide from reaching harmful levels again later if the source is not identified and repaired. Ventilation fans with internal combustion engines may **contribute** Carbon Monoxide to the atmosphere being ventilated. **DO NOT USE VENTILATION FANS TO REMOVE FLAMMABLE ATMOSPHERE.**
- L. Advise occupant(s) to contact the manufacturer or refer to the manufacturer's instructions as to the resetting or replacement of their Carbon Monoxide detector(s).



Lexington County Fire Service

Standard Operating Procedures
Special Consideration for Incident Responses OPS – 010
Air Monitoring Oxygen Levels at Incident Scenes OPS – 010.03

EFFECTIVE: August 11, 2009

ISSUED BY: Russell R. Rawl, Fire Service Coordinator

RECINDS: All Previous Policies

SCOPE: All Fire Service Personnel

PURPOSE: To outline and document the guideline for air monitoring considerations at incident scenes.

POLICY:

- I. Effective immediately, Fire Service personnel will conduct air monitoring procedures as an ongoing operation at all incident scenes with potential IDLH conditions. This shall include any incident that requires the use of respiratory protection equipment.
- II. Air monitoring equipment response shall be the responsibility of the Battalion Captains.
- III. Air monitoring shall not hinder the initial efforts of life safety, rescue nor initial fire suppression / containment , but should be initiated as soon as possible without interfering with the preceding operations.
- IV. Air monitoring shall be performed throughout all stages of the incident operations including, but not limited to, : Search and rescue, Fire Suppression, Salvage and overhaul, and Investigation.
- V. Respiratory protection must remain in use until such time that acceptable levels of monitored atmospheric components are reached. Air monitoring must continue until all incident operations have been completed and the scene is released to the owner / occupant. Acceptable levels of oxygen are between 19.5% and 23.5%, according to OSHA standards.



Lexington County Fire Service

Standard Operating Procedures
Special Consideration for Incident Responses OPS – 010
Air Monitoring LEL Levels at Incident Scenes OPS – 010.04

EFFECTIVE: August 11, 2009

ISSUED BY: Russell R. Rawl, Fire Service Coordinator

RECINDS: All Previous Policies

SCOPE: All Fire Service Personnel

PURPOSE: To outline and document the guideline for air monitoring considerations at incident scenes.

POLICY:

- I. Effective immediately, Fire Service personnel will conduct air monitoring procedures as an ongoing operation at all incident scenes with potential IDLH conditions. This shall include any incident that requires the use of respiratory protection equipment.
- II. Air monitoring equipment response shall be the responsibility of the Battalion Captains.
- III. Air monitoring shall not hinder the initial efforts of life safety, rescue nor initial fire suppression / containment , but should be initiated as soon as possible without interfering with the preceding operations.
- IV. Air monitoring shall be performed throughout all stages of the incident operations including, but not limited to, : Search and rescue, Fire Suppression, Salvage and overhaul, and Investigation.
- V. Respiratory protection must remain in use until such time that acceptable levels of monitored atmospheric components are reached. Air monitoring must continue until all incident operations have been completed and the scene is released to the owner / occupant. The acceptable reading for lel is below 10% and our equipment is set to alarm at this reading.



Lexington County Fire Service

Standard Operating Procedures
Special Consideration for Incident Responses OPS – 010
Air Monitoring Carbon Monoxide Levels at Incident Scenes OPS – 010.05

EFFECTIVE: August 11, 2009

ISSUED BY: Russell R. Rawl, Fire Service Coordinator

RECINDS: All Previous Policies

SCOPE: All Fire Service Personnel

PURPOSE: To outline and document the guideline for air monitoring considerations at incident scenes.

POLICY:

- I. Effective immediately, Fire Service personnel will conduct air-monitoring procedures as an ongoing operation at all incident scenes with potential IDLH conditions. This shall include any incident that requires the use of respiratory protection equipment.
- II. Air monitoring equipment response shall be the responsibility of the Battalion Captains.
- III. Air monitoring shall not hinder the initial efforts of life safety, rescue nor initial fire suppression / containment, but should be initiated as soon as possible without interfering with the preceding operations.
- IV. Air monitoring shall be performed throughout all stages of the incident operations including, but not limited to, : Search and rescue, Fire Suppression, Salvage and overhaul, and Investigation.
- V. Respiratory protection must remain in use until such time that acceptable levels of monitored atmospheric components are reached. Air monitoring must continue until all incident operations have been completed and the scene is released to the owner / occupant. The acceptable level of Carbon Monoxide is below 35 ppm, according to NIOSH standards for the recommended exposure level.



Lexington County Fire Service

Standard Operating Procedures
Special Consideration for Incident Responses OPS – 010
Air Monitoring Hydrogen Cyanide Levels at Incident Scenes OPS – 010.06

EFFECTIVE: October 1, 2009

ISSUED BY: Russell R. Rawl, Fire Service Coordinator

RECINDS: All Previous Policies

SCOPE: All Fire Service Personnel

PURPOSE: To outline and document the guideline for air monitoring considerations at incident scenes.

POLICY:

- I. Effective immediately, Fire Service personnel will conduct air monitoring procedures as an ongoing operation at all incident scenes with potential IDLH conditions. This shall include any incident that requires the use of respiratory protection equipment.
- II. Air monitoring equipment response shall be the responsibility of the Battalion Captains.
- III. Air monitoring shall not hinder the initial efforts of life safety, rescue nor initial fire suppression / containment , but should be initiated as soon as possible without interfering with the preceding operations.
- IV. Air monitoring shall be performed throughout all stages of the incident operations including, but not limited to: Search and rescue, Fire Suppression, Salvage and overhaul, and Investigation. Monitoring should be conducted in a slow and methodical manner to insure that monitoring is being conducted thoroughly. One firefighter should be responsible for operating the monitor and additional entry personnel should be recording the readings given by the monitor operator and the location where the reading was taken from. Any readings recorded will be documented in the narrative section of the Firehouse Report. Monitoring should begin outside at the entrance of the structure before entry and proceed throughout the

structure, surveying near floor level, at face level and near ceiling level at various points within the structure.

- V. Respiratory protection must remain in use until such time that acceptable levels of monitored atmospheric components are reached. Air monitoring must continue until all incident operations have been completed and the scene is released to the owner / occupant. The recommended exposure limit (REL), per NIOSH for hydrogen cyanide is 4.7 ppm and our equipment is set to alarm at this reading.
- VI. Monitoring of PPE for Hydrogen Cyanide contamination will be conducted once the call is placed under control and acceptable levels of monitored atmospheric components are reached. If PPE has a reading of higher than 5 ppm, a hose line is to be used to decontaminate the gear.
 - a. Briefly rinse gear with a soft fog pattern to prevent saturation. Recheck gear, if readings are still higher than 5 ppm repeat the rinsing process until proper readings are reached.
 - b. Turnout gear, gloves, flash hood and helmet ear flaps should be washed as soon as possible in an approved gear extract per NFPA 1851.
 - c. Personnel should practice good personal hygiene by washing hands prior to eating or drinking in rehab.