
CHAPTER II Operations
SUBJECT 3 Emergency Operations
TOPIC 15 Cave-In and Manhole Rescues

Rev. 8/88

A. SCOPE

To cover procedures that first in fire companies and SQ. 52 are to follow when dealing with a cave-in or confined space rescue.

B. PRIORITIES

1. To prevent additional injury to the victim and to prevent injuries to the rescuers.
2. To remove the victim to a safe area.
3. To secure the area from additional accidents.

C. SAFETY

1. Keep apparatus and spectators a safe distance away to avoid further slides or cave-ins.
2. Shore up areas as necessary.
3. Use Kernmantle Life Lines whenever the victim or a rescuer must be secured to a rope.
4. Do not enter a manhole, even for a rescue, unless the electricity is shut off.
5. Do not enter a manhole or cave-in without a SCBA and Lifeline attached.
6. Have an adequate number of above ground support people standing-by. These people should be in SCBA's and ready to enter the manhole in an emergency.

C. SAFETY (continued)

Rev. 3/91

7. The atmosphere within any confined space shall be tested for flammable gases or vapors before entry.

D. CAVE-IN RESCUES

1. Determine the extent of victim injury and the need for additional equipment. Additional equipment may include Highway Department backhoes, air compressors and jack hammers, etc., which may be procured from Highway Maintenance, Water Works, other City agencies or possibly from private contractors.
2. Provide the victim with fresh air (preferably), or oxygen if necessary. A garden hose may be used to convey air from a SCBA air bottle. MAC-1 may be needed.
3. Keep the victim's chest area free, provide oxygen and reassurance.
4. Keep all unnecessary personnel away from the cave-in perimeter. Span the opening with a ladder or other device and work off this platform to prevent any additional caving in of materials.
5. Lowering fire personnel into the hole from the end of an aerial with a Lifeline may be a way to get to the victim without inducing additional cave-ins.
6. Solicit advice from construction personnel that may be at the scene.

E. MANHOLE RESCUES

1. Determine if there is a victim, if so condition of victim and location.
2. Notify C.G.& E. if electrical equipment is involved.
3. Provide sufficient personnel and fire equipment to handle any possible fire in the manhole or adjacent buildings.
4. Smoke ejectors, or High-Expansion Foam generators may be used to provide a positive air flow into the manhole.