

**North Carolina Department of Labor
Occupational Safety and Health Division**

Raleigh, North Carolina

Field Information System

Standards Notice 54A

Subject: Standby Personnel at Telecommunications Manhole

A. Standards.

1. **29 CFR 1910.268(d)(1):** Employee protection in public work areas. Before work is begun in the vicinity of vehicular or pedestrian traffic which may endanger employees, warning signs, and/or flags or other traffic control devices shall be placed conspicuously to alert and channel approaching traffic. Where further protection is needed, barriers shall be utilized. At night, warning lights shall be prominently displayed and excavated areas shall be enclosed with protective barricades.
2. **29 CFR 1910.268(o)(1)(i):** When covers of manholes or vaults are removed, the opening shall be promptly guarded by a railing, temporary cover, other suitable temporary barrier which is appropriate to prevent an accidental fall through the opening and to protect employees working in the manhole from foreign objects entering the manhole.
3. **29 CFR 1910.268(o)(1)(ii):** While work is being performed in the manhole, a person with basic first aid training shall be immediately available to render assistance if there is cause for believing that a safety hazard exists and if the requirements contained in paragraphs (d)(1) and (o)(1)(i) of this section do not adequately protect the employee(s). Examples of manhole worksite hazards which shall be considered to constitute a safety hazard include, but are not limited to:
 - a. Manhole worksites where safety hazards are created by traffic patterns that cannot be corrected by provisions of paragraph (d)(1) of this section.
 - b. Manhole worksites that are subject to unusual water hazards that cannot be abated by conventional means.
 - c. Manhole worksites that are occupied jointly with power utilities as described in paragraph (o)(3) of this section.

B. Discussion.

1. North Carolina OSHA's enforcement experience with 29 CFR 1910.268, Telecommunications, has shown that the standards listed above should be clarified to enable Compliance Safety and Health Officer's (CSHO's) to properly administer the standard and to provide employers and employees with adequate guidance in the requirements of these standards.
2. An analysis of the standard 29 CFR 1910.268(o)(1)(ii) reveals three primary issues for interpretation.

- a. A person must be available to render such assistance if there is "cause for believing that a safety hazard exists."
- b. The standard requires a person with basic first aid training to be immediately available to "render assistance."
- c. If the requirements of paragraphs (d)(1) and (o)(1)(i) of 29 CFR 1910.268 adequately protect employees, a person with basic first aid training is not required to be immediately available.

C. Factors.

The following factors should be considered in determining if a person with basic first aid training must be immediately available to satisfy the requirements of 29 CFR 1910.268(o)(1)(ii):

1. Cause for believing that a safety hazard exists.

In making this evaluation many factors must be considered. The degree of hazard will vary significantly based upon the conditions inside and outside the telecommunications manhole, the type of work being performed inside and outside the manhole, weather conditions, location of the manhole, and other factors. Potential hazards which may be confronted and must be evaluated to determine the need for a person with basic first aid training to be immediately available to render assistance include but are not limited to the following:

- traffic (large quantity or dangerous traffic patterns);
- energized electrical cables and equipment;
- water (accumulated or flowing);
- manhole configurations which may hinder egress;
- poor walking and working surfaces;
- combustible or toxic gases or chemicals;
- oxygen deficiency;
- vermin (snakes, spiders, etc.);
- extreme heat or cold;
- noise;
- hazardous mechanical equipment; or
- material handling problems.

2. A person with basic first aid training must be immediately available to render assistance.
 - a.. After the hazards associated with a particular telecommunications manhole worksite have been assessed, a determination must be made of the need for a person with basic first aid training to render assistance.
 - b. A determination must also be made that there is a reasonable probability that the presence of a person with basic first aid training will protect employees from the hazards to which they are exposed. In making these determinations, the following questions must be answered:
 - i. What assistance is the additional person required to render?

- ii. Is the additional person properly trained, equipped, located or otherwise prepared to render the appropriate assistance?

Note: If the hazards can be eliminated through practices, means, methods or techniques other than making a person with basic first aid training immediately available, such practices, means, methods, and techniques should be utilized and can be accepted in lieu of providing a person with basic first aid training. The purpose of the standard is to provide an acceptable level of safety. The use of innovative techniques to accomplish this objective is encouraged.

- c. The phrase "immediately available to render assistance" should be applied in consideration of the hazards encountered at a manhole worksite. Some circumstances may dictate that visual contact is maintained or safety lines be constantly attended. In other circumstances voice communications or a periodic assurance that no problems have arisen may be adequate.
3. If the requirements in paragraphs 29 CFR 1910.268(d)(1) and 29 CFR 1910.268(o)(1)(i) adequately protect employees.
- a. Compliance with the standards will be accepted in lieu of a person with basic first aid training being made immediately available to render assistance.
 - b. Paragraphs (d)(1) and (o)(1)(i) address only the hazards of vehicular or pedestrian traffic or foreign objects entering the manhole. If other hazards exist at the manhole worksite, paragraph (d)(1) and (o)(1)(i) may not adequately protect employees. Examples of other hazards are listed under 1910.268 (o)(1)(ii). They include water hazards and manhole worksites occupied jointly with power utilities. There are many other hazards which are covered by the standards and some of them are listed under paragraph C of this notice.
 - c. Some hazards to which employees working in manholes may be exposed are addressed by other standards such as 29 CFR 1910.268 (o)(2). Paragraph (o)(2) requires that appropriate tests be performed of the atmosphere in the manhole and that proper ventilation be provided to ensure the quality of the air within the manhole is acceptable. Under no circumstances is the employer exempt from meeting the requirements of paragraph (o)(2), but compliance with the requirements of paragraph (o)(2) may (in the absence of other hazards) eliminate the need for compliance with 29 CFR 1910.268 (o)(1)(ii). An evaluation of a manhole worksite must always consider the factors addressed in 29 CFR 1910.268 (o)(2).

D. **Interpretation.**

- 1. Citations will issued for 29 CFR 1910.268(o)(1)(ii) when the immediate availability of an additional person trained in basic first aid can be reasonably expected to safeguard employees from manhole worksite hazards and the

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employer has not utilized alternative measures which adequately safeguard employees.

2. Citations for lack of appropriate personal protective equipment, rescue equipment and employee training, etc., will be issued when an additional employee is available [as required by 29 CFR 1910.268(o)(1)(ii)] but is improperly trained or equipped to provide the adequate safeguards.

E. **Expiration.**

SN 54 is canceled. This SN is effective on the date of signature. It will remain in effect until revised or canceled by the Director.

Signed on Original
Jack Forshey
Standards Supervisor

Signed on Original
Allen McNeely
Director

8/09/05
Date of Signature