

****CSRMA ALERT******CalOSHA Adopts New Excavation Requirements**

The Cal/OSH Standards Board adopted revisions to Construction Safety Orders §1541 on excavation safety, the regulatory response to the deadly November 2004 pipeline catastrophe in Walnut Creek.

Who Will Be Impacted?

Any organization that owns or has responsibility for subsurface installations, such as sewer, telephone, fuel, electric, water lines, or any other subsurface installations that reasonably may be expected to be encountered during excavation work **and** any organization performing excavation activities that may reasonably expect to encounter subsurface installations during excavation work.

What Are The Revisions?

NOTE: The terms excavator and operator as used in Section 1541(b) shall be as defined in Government Code Section 4216(c) and (h) respectively. The term "owner/operator" means an operator as the term "operator" is defined in Government Code Section 4216(h).

1. Excavator Responsibilities:

- A. The approximate location of subsurface installations, such as sewer, telephone, fuel, electric, water lines, or any other subsurface installations that reasonably may be expected to be encountered during excavation work, shall be determined by the excavator prior to opening an excavation.
- B. Excavation shall not commence until:
 - i. The excavation area has been marked as specified in Government Code Section 4216.2 by the excavator; and
 - ii. The excavator has received a positive response from all known owner/operators of subsurface installations within the boundaries of the proposed project; those responses confirm that the owner/operators have located their installations, and those responses either advise the excavator of those locations or advise the excavator that the owner/operator does not operate a subsurface installation that would be affected by the proposed excavation.
- C. When the excavation is proposed within 10 feet of a high priority subsurface installation:
 - i. The excavator shall be notified by the facility owner/operator of the existence of the high priority subsurface installation before the legal excavation start date and time in accordance with Government Code Section 4216.2(a),
 - ii. An onsite meeting involving the excavator and the subsurface installation owner/operator's representative shall be scheduled by the excavator and the owner/operator at a mutually agreed on time to determine the action or activities required to verify the location of such installations.

NOTE: High priority subsurface installations are high pressure natural gas pipelines with normal operating pressures greater than 415 kPA gauge (60 p.s.i.g), petroleum pipelines, pressurized sewage pipelines, conductors or cables that have a potential to ground of 60,000 volts or more, or hazardous materials pipelines that are potentially hazardous to employees, or the public, if damaged.

- D. All Regional Notification Centers as defined by Government Code Section 4216(j) in the area involved and all known owners of subsurface facilities in the area who are not members of a Notification Center shall be advised of the proposed work at least 2 working days prior to the start of any digging or excavation work.

EXCEPTION: Repair work to subsurface facilities done in response to an emergency as defined in

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Government Code Section 4216(d) - "Emergency" means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Unexpected occurrence" includes, but is not limited to, fires, floods, earthquakes or other soil or geologic movements, riots, accidents, damage to a subsurface installation requiring immediate repair, or sabotage.

- E. When excavation or boring operations approach the approximate location of subsurface installations, the exact location of the installations shall be determined by safe and acceptable means that will prevent damage to the subsurface installation, as provided by Government Code Section 4216.4.
- F. While the excavation is open, subsurface installations shall be protected, supported, or removed as necessary to safeguard employees.
- G. An excavator discovering or causing damages to a subsurface installation immediately shall notify the facility owner/operator or contact the Regional Notification Center to obtain subsurface installation operator contact information immediately after which the excavator shall notify the facility operator. All breaks, leaks, nicks, dents, gouges, grooves, or other damages to an installation's lines, conduits, coatings or cathodic protection shall be reported to the subsurface installation operator. If damage to a high priority subsurface installation results in the escape of any flammable, toxic, or corrosive gas or liquid or endangers life, health or property, the excavator responsible shall immediately notify 911, or if 911 is unavailable, the appropriate emergency response personnel having jurisdiction. The facility owner/operator shall also be contacted.

2. Subsurface Installation Owner/Operator Responsibilities:

- A. Respond to all requests from excavators to:
 - i. Locate their installations and either advise the excavator of those locations or advise the excavator that the owner/operator does not operate a subsurface installation that would be affected by the proposed excavation.
 - ii. Provide notification of the existence of any high priority subsurface installations before the legal excavation start date and time in accordance with Government Code Section 4216.2(a).

NOTE: An onsite meeting involving the excavator and the subsurface installation owner/operator's representative shall be scheduled by the excavator and the owner/operator at a mutually agreed on time to determine the action or activities required to verify the location of such installations.

[Who Can Perform Subsurface Installation Locating Activities?](#)

Only **qualified persons** shall perform subsurface installation locating activities, and all such activities shall be performed in accordance with this section and Government Code Sections 4216 through 4216.9.

Persons who complete a training program in accordance with the requirements of Section 1509, Injury and Illness Prevention Program (IIPP) that meets the minimum training guidelines and practices of the following shall be deemed qualified for the purpose of this section:

- The Common Ground Alliance (CGA) Best Practices, Version 3.0, published March 2006, or
- The standards of the National Utility Locating Contractors Association (NULCA), Standard 101: Professional Competence Standards for Locating Technicians, 2001, First Edition, which are incorporated by reference.

[How Can CSRMA Help?](#)

CSRMA is working with NULCA to provide a range of training options to meet the **Qualified Person** requirements for subsurface installation locating activities. A training registration flier will be sent to your Agency in late February for classes beginning in May, 2007.

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