California Underground Facilities Safe Excavation Board
("Dig Safe Board")

July 13-14, 2020

Agenda Item No. 4 (Action Item) – Staff Report

Resolution No. 20-07-02 Approving the Regulations for the Area of Continual Excavation Renewal Ticket Requirements and AB 1914 Implementation, and Authorization of the Rulemaking Proceedings after considering Public Comments Received During the 15-Day Written Comment Period

PRESENTER

Jeff Brooks, Attorney

DISCUSSION

Staff published, for public review and comment, the amended cost impact analysis supporting the Board's proposed regulations relating to contact information, renewal of tickets for Areas of Continual Excavation, and the use of power tools to locate underground facilities. The text of the regulations, which the Board approved during the January meeting, remains unchanged.

The sole purpose of the publication was to invite public review of the amended cost impact analysis. However, the Board received no comments on the cost impact analysis.

Three members of the public provided comments on the substance of the regulations. Although staff is grateful for the interest in the regulations, the time during which the Board received comments on the substance of the regulations closed in December, 2019.

Because the comments received are not related to the amended cost impact report, and because the Board has already approved the regulation text, the Board is not required to consider and respond to the comments to continue with the rulemaking process.

RECOMMENDATION

Staff recommends the approval of Resolution No. 20-07-02 approving the regulations and authorizing the executive officer to proceed as required by the Administrative Procedure Act to adopt the proposed regulations and submit the proposed regulations with the supporting documentation required by law to the Office of Administrative Law.

ATTACHMENTS

A: Resolution No. 20-07-02
B: Comments
C: Text of Regulations

CALIFORNIA UNDERGROUND FACILITIES SAFE EXCAVATION BOARD

RESOLUTION NO. 20-07-02

APPROVING REGULATIONS RELATING TO CONTACT INFORMATION, AREA OF CONTINUAL EXCAVATION TICKET REQUIREMENTS, AND THE USE OF POWER TOOLS IN THE TOLERANCE ZONE, AND AUTHORIZING RULEMAKING PROCEEDINGS

WHEREAS, Government Code section 4216.22 authorizes the Board to prescribe rules and regulations as may be necessary to carry out the purpose and intent of Government Code sections 4216 through 4216.24;

WHEREAS, the Board must adopt regulations to implement the provisions of Government Code section 4216 et seq., relating to investigation and enforcement;

WHEREAS, the Board has not received comments relevant to the amended regulatory material published for public review and comment during the 15-day public comment period,

THEREFORE, BE IT RESOLVED by the California Underground Facilities Safe Excavation Board as follows:

1. The proposed regulations are approved in substantially the form submitted to the Board. The Executive Officer is hereby authorized, for and on behalf of the Board, to proceed as required by the Administrative Procedrue Act to adopt the proposed regulation and to submit the regulation, with the required supporting documentation, to the Office of Administrative Law.

2. The Executive Officer is authorized, for and on behalf of the Board, to take such actions, including making or causing to be made such changes to the proposed regulation as may be required for approval thereof by the Office of Administrative Law, and to execute and deliver any and all documents, including STD. 399 and STD. 400, that the Executive Officer may deem necessary or advisable in order to effectuate the purposes of this resolution.

3. This resolution shall take effect immediately upon approval.

Date of Adoption: July 13, 2020

I hereby certify that the attached resolution is a true and exact copy of Resolution No. 20-07-02 adopted by the California Underground Facilities Safe Excavation Board on July 13, 2020: RESOLUTION OF THE CALIFORNIA UNDERGROUND FACILITIES SAFE EXCAVATION BOARD APPROVING THE ADOPTION OF THE REGULATIONS FOR THE AREA OF CONTINUAL EXCAVATION RENEWAL TICKET REQUIREMENT AND AB 1914 IMPLEMENTATION.

_____
Tony Marino
Executive Officer

_____
Carl Voss
Chair

Date: July 13, 2020

From:	Campbell, Fraser
To:	CALFIRE Dig Safe Regs
Subject:	15-Day Comments: Dig Safe - Insestigations and Enforcement
Date:	Monday, July 6, 2020 12:55:56 PM
Attachments:	image001.png

Warning: this message is from an external user and should be treated with caution.

Dig Safe Board Members,
I hope you all are healthy and faring well during these difficult times.

Thank you for this opportunity to comment on Contact Information, Continual Excavation Ticket, Use of Power Tools Near Subsurface Installations. As for Contact Information, LADWP's USA Operations Offices (Valley & Metro) have already been complying to this change. In regards to Continual Excavation Ticket, LADWP has no issue with this type of ticket. But when it comes to the Use of Power Tools Near Subsurface Installations, This change in excavation law is very important to LADWP as an Operator of a Utility and as an Excavator. When I first started with LADWP as a backhoe operator in the 1980's, I would hear the "Old Timers" speak of hand digging vault excavations (underground concrete rooms for splicing cable) using scaffold platforms to shovel the deeper excavation soil up to the mid-level platform, then from that platform up to the street to be hauled away or to be stockpiled and used as backfill. This type of job took days, and took a toll on the human labor performing this work. I remember one "Old Timer" named Cato saying, "the first day I saw a backhoe on the job man, I hugged and kissed that puppy"! Even though the first backhoe was invented in 1947, it still took another twenty some years to become the work horse of modern excavation. So here we are now in the Twenty-First Century, and we are finally getting a chance to give the excavation Laborer an ergonomic tool that they can use legally that won't break down their bodies like the "Old Timers" of LADWP. Digging by hand always will be a very laborious endeavor, but it can be lessened by these ergonomic tools. I can see in the workforce that I manage today has some repetitive motion ailments, but not as severe as back in the day. I believe the damage has been lessened to the human body over the years by the use of ergonomic pneumatic tools. These power driven tools have been available since the turn of the Twentieth Century, but they were deemed unsafe back in the 1970's when 4216 was

created. Reason being that for “Hand Locating Substructures”, the idea was to use hand tools under human power, for fear of damage to underground utilities by untrained users of pneumatic tools. We at LADWP have been using these pneumatic tools on our own infrastructure for years. From using pneumatic chipping guns to chip through concrete encasement to locate conduits containing energized High Voltage Cables, to clay spading through the soil to locate our water substructures. Our Department Training has been in place for well over thirty years. Once called “Annual Chipping School”, it is now known as “Utility Certification Annual Refresher”. LADWP is a Utility Operator, and an Excavator. We want trained excavators digging around our infrastructure. As we train our personnel to excavate safely we feel the Excavation Industry should train their personnel to use these tools safely when locating substructures. We are asking that a power tool operator has had the training, and the experience to be competent with the tool to locate and work around LADWP infrastructure. Our final ask on this topic is with our in house training we have proven to have the experience and the competency over the years to use power tools on our own facilities. As an excavator, LADWP would like to be allowed to use power tools to locate and work around other utilities infrastructure safely. Thank you again for allowing me to give you my opinion on this important issue.

Fraser Campbell
Manager of Underground Transmission
& Distribution Conduit Construction &
Underground Service Alert Operations
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From: Susen Doubrava
To: CALFIRE Dig Safe Regs
Subject: 15-day Comments: Dig Safe - Investigations and Enforcement
Date: Friday, June 26, 2020 8:01:41 AM
Attachments: image001.png

Warning: this message is from an external user and should be treated with caution.

Hello – This is regarding the proposed verbiage related to the use of power tools within the tolerance zone. We are supportive of all of the changes as proposed with the exception of the following verbiage:

The definition of Type A soil precludes any type of subsurface installation in the tolerance zone. Any soil that has been previously disturbed cannot be Type A. Therefore, there would be no subsurface installations marked or present so hand-digging would be moot.

With respect to soil classification in general, OSHA is specific with respect to the proper techniques for classifying soil. An excavator cannot classify the soil without first excavating. The soil is classified using both visual and manual tests. Manual tests include taking a clump of spoil from the excavation. Test results can change over the depth of the excavation. An excavator will not have adequate information on soil classification prior to locating the subsurface installations.

Many utility lines may be located at depths at less than 5 feet. Cal/OSHA requires soils classification by a competent person to determine the type of protective system for trenches 5 feet or more. A trench or excavation less than 4 feet would most likely not require the use of a protective system or soils classification. A great number of underground utility lines are located at a depth of 2 – 4 feet. In these cases, it would be rare and not typically required for a soils classification to be performed by a competent person before excavating.

Lastly, soil may be cohesive but could be classified as Type C for a variety of reasons including seeping water, fissures, sources of vibration, etc. Type C soil may be cohesive, hard, dense, or difficult to excavate with hand tools.

For the reasons stated above, Section 4501 (a) (5), should be removed in its entirely, and all other conditions remain.

Thank you.

Susen Doubrava
Safety/Risk Administrator
Helix Water District
619.596.1335 Office
619.504.1530 Cell

From:	Peter Kuchinsky
To:	CALFIRE Dig Safe Regs
Subject:	15 Day Comments: Dig Safe - Investigations and Enforcement Section 4501 (a) (5)
Date:	Wednesday, June 24, 2020 1:23:24 PM
Attachments:	image001.jpg

Warning: this message is from an external user and should be treated with caution.

Dear Dig Safe Board:

The following comments are offered for your consideration and action.

It is recommended that (a) (5) of Section 4501, highlighted below, be removed from the proposed regulation requiring soils classification prior to the use of power hand tools in its entirety based on the following:

Section 4501. Use of Equipment Other Than Hand Tools to Determine the Exact Location of a Subsurface Installation
(a) (5) The excavator has classified the soil within the tolerance zone as Type A or Type B, as provided in Appendix A of Section 1541.1 of Title 8.

Soils cannot be classified by an employer's "competent" person without excavating. The proposed regulation puts the cart before the horse.

Soil must be classified when it being excavated, does it come out in clumps, or is it granular, rocky, etc? Does it hold a vertical edge. These are some of the visible observations and tests used by a competent person to determine if soil type. A competent person also has to perform manual tests. Soil samples used must be from soil freshly excavated, and additional samples should be taken as the excavation gets deeper. It is recommended to take a large clump from the excavated pile, as long as the soil in the pile is fresh and hasn't been compacted. Test results can change the excavation gets deeper or as the soil dries up, so for the best results, samples should be taken and tested as soon as practical. What is originally B soil could change to C soil for any number of reasons. These are just some of the requirements for soil testing by a competent person required by CalOSHA under 1541.

There are three main types of soil tests. The plasticity test, which is sometimes called the pencil test, is used to determine if the soil is cohesive. Any soil that is not cohesive is automatically classified as Type C, although some Type C soils are cohesive. To perform the thumb penetration test, one presses the end of your thumb into a fresh clump of soil. If the soil sample is Type C, your thumb will sink all the way into the soil clump. For a more numeric measurement, the pocket penetrometer test can be used. It's important to recognize that a penetrometer may give false results if the soil contains rocks or pebbles, which won't compress. Again, excavation must be performed to classify the soil and determine the use of a protective system.

Many utility lines may be located at depths at less than 5 feet. CalOSHA requires soils classification by a competent person to determine the type of protective system for trenches 5 feet or more. A trench or excavation less than 4 feet would most likely not require the use of a protective system or

soils classification. A great number of underground utility lines are located at a depth of 2 – 4 feet. In these cases, it would be rare and not typically required for a soils classification to be performed by a competent person before excavating.

- Are there sources of vibration near the excavation?
- Are there signs of previously disturbed soil, such as utility lines? Because excavation will be done within two feet of a marked utility, A soil will become B, B soil will become C.
- Are there signs of water seeping through the soil? Is the soil fissured?
- Signs of fissuring include crack-like openings, or chunks of soil that crumble off the side of a vertical excavation wall.

If any of these conditions are met, the soil may be cohesive, but would need to be classified as Type C. Just because soil is classified as C does not mean that it is not cohesive, hard or difficult to excavate with hand tools.
Any one or more of these conditions would prevent the use of powered hand tools. Under this proposed regulation, any city public works, water district, wastewater agency or contractor excavating in a public street (near source of vibration – traffic/equipment), near other utilities (previously disturbed soil), and /or responding to a leak (seeping water) or broken line, they would never be allowed to use a powered hand tool for excavation within 2 feet of a marked line even though the soil is likely to be hard, dense, compacted, cohesive and difficult to excavate with hand tools.

For the all reasons stated above, Section 4501 (a) (5) The excavator has classified the soil within the tolerance zone as Type A or Type B, as provided in Appendix A of Section 1541.1 of Title 8., should be removed in its entirely, and all other conditions remain.

Please contact me if you have any questions or need additional information. Please inform me directly of any additional hearing, review periods and final action regarding my comment.

40th_anniversary_logo

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Section 4501. Use of Equipment Other Than Hand Tools to Determine the Exact Location of a Subsurface Installation

(a) An excavator may use equipment other than hand tools within the tolerance zone of a subsurface installation for the purpose of determining the exact location of
the subsurface installation if all of the following conditions are satisfied:
(1) The operator has responded to the excavator with a locate and field mark as provided in Government Code section 4216.3, subdivision (a)(1)(A)(i).
(2) The equipment conforms to the requirements as specified in subdivision (b) and has not been modified to function outside those requirements.
(3) The field mark does not indicate a subsurface installation type classified under the orange category of the "Guidelines for Operator Facility Field Delineation" in Appendix B of the most recent version of the Best Practices Guide of the Common Ground Alliance and in conformance with the uniform color code of the American Public Works Association.
(4) The field mark as identified using abbreviations in the "Guidelines for Operator Facility Field Delineation" in Appendix B of the most recent version of the Best Practices Guide of the Common Ground Alliance does not indicate street lighting or traffic signal.
(5) The excavator has classified the soil within the tolerance zone as Type A or Type B, as provided in Appendix A of Section 1541.1 of Title 8.
(b) An excavator may use equipment other than hand tools within the tolerance zone of a subsurface installation for the purpose of determining the exact location of a subsurface installation consistent with the requirements of subdivision (a) if the equipment and the equipment's manner of use conform to the following requirements:
(1) Equipment configuration and specifications:
(A) The tool shall be a handheld percussive pneumatic, electric, or hydraulichammer that drives a bit.
(B) The tool weight without accessory shall not exceed 40 lbs.
(C) The bit used shall be no less than 4 inches wide, have a rounded edge, and present no sharp surfaces.
(2) Manner of equipment use:
(A) The equipment must be used according to the manufacturer's instructions.
(B) The bit edge shall be placed parallel, not perpendicular, to the orientation of the subsurface installation as indicated by the field mark.
(c) An excavator shall request consultation with the operator of the subsurface installation to determine how to safely proceed if the use of hand tools, or equipment other than hand tools as permitted in this section, is not a safe and effective means of determining the exact location of the subsurface installation. The operator of the subsurface installation shall respond to such a request within two working days not including the date the operator received the request and shall discuss with the excavator how the excavator can safely and effectively proceed. An excavator may use equipment other than as permitted in subdivisions (a) and
(b), if the excavator and operator agree in writing upon the equipment to be used and the manner in which it will be used.
(d) This section shall not apply to the use of a vacuum excavation device, which isdetermined by Government Code 4216.4, subdivision (a)(2)(A).

15 DAY TEXT OF PROPOSED REGULATIONS

California Code of Regulations
Title 19. Public Safety
Division 4. California Underground Facilities Safe Excavation Board

The 45-day text proposed to be added appears in underline.
No changes are being made to the 45-day text.

Chapter 1. General
Article 1. General

Section 4003. Valid and Current Contact Information for Members of Regional Notification Centers

(a) Members of regional notification centers shall maintain valid and current contact information, including phone number, email, and address, with the appropriate regional notification center, and shall promptly inform the appropriate regional notification center of any changes to the contact information.

(1) Each member shall provide at least one valid and current contact that includes the name, telephone number, and email address of an individual or business unit that can reach a person authorized to respond to inquiries regarding the determination of the exact location of subsurface installations operated by the member.

(b) Regional notification centers shall provide updated contact information for their members to the Board upon request by the Board.

Authority cited: Sections 4216.4 and 4216.22, Government Code.

Reference: Sections 4216.1, 4216.4, and 4216.12, Government Code.

Chapter 4. Area of Continual Excavation Article 1. General

Section 4305. Persons Eligible to Work Under a Continual Excavation Ticket

An excavator who contacts a regional notification center to request a continual excavation ticket shall communicate information about the extent of the area of excavation, the location of subsurface infrastructure within the area of continual excavation, and the type of work described within the continual excavation ticket to all workers, including any subcontractors, authorized by the excavator to perform work within the area of continual excavation.

Authority cited: Sections 4216.10, 4216.11 and 4216.22, Government Code.

References: Sections 4216.10 and 4216.12, Government Code.

Section 4310. Continual Excavation Ticket Renewal Reminder Notifications

(a) In response to a request from an excavator for a continual excavation ticket, a regional notification center shall provide the excavator with a continual excavation ticket and information or tools to assist the excavator with renewing the ticket.

(b) (1) If the excavator requesting a continual excavation ticket has provided electronic contact information to the regional notification center and the excavator has granted the regional notification center permission to use the electronic contact information to provide a reminder notification in advance of ticket expiration, the regional notification center shall use the excavator's electronic contact information to provide one or more notifications to the excavator as a reminder to alert the excavator of the need to renew the ticket.

(2) At least one reminder notification shall be sent no earlier than two months before ticket expiration and no later than ten days prior to ticket expiration. The reminder notification shall include the continual excavation ticket number and expiration date of the ticket. The reminder notification may include a hyperlink or other

means by which the excavator may access a portal for electronic ticket renewal.

(c) For the purposes of this section "electronic contact information" means an email address, a short message service (SMS) number, or another means of electronic communication offered by a regional notification center.

Authority cited: Sections 4216.10, 4216.11, and 4216.22, Government Code.

Reference: Sections 4216.10 and 4216.12, Government Code.

Section 4345. Onsite Meeting and Plan Following Renewal of a Continual Excavation Ticket Near High Priority Subsurface Installations

An excavator may continue excavation pursuant to an Area of Continual Excavation Agreement (Agricultural Operations) or an Area of Continual Excavation Agreement (Flood Control Facilities) for thirty days following the renewal of a continual excavation ticket to allow the excavator and the operator of the high priority subsurface installation to set up an onsite meeting at a mutually agreed upon time to renew or to develop and agree to a new area of continual excavation plan pursuant to Section 4351 or Section 4361.

Authority cited: Sections 4216.11 and 4216.22, Government Code.

Reference: Sections 4216.10, 4216.11, and 4216.12, Government Code.

Chapter 5. Pre-Excavation Responsibilities
Article 1. Responsibilities of Excavators

Section 4401. Valid and Current Contact Information for Excavators Using the Regional Notification Centers

(a) When notifying a regional notification center of intent to excavate pursuant to Government Code section 4216.2, subdivision (b) or Government Code section

4216.10, subdivision (a), an excavator shall provide the contact information of a person knowledgeable in the proposed excavation activities so that an operator may contact the person regarding excavation activities that may occur around subsurface installations in the area of proposed excavation.

(1) The contact information shall include a name, telephone number, and an email address.

(2) The contact information shall be accurate during the period in which the ticket is valid. If either the person knowledgeable in the proposed excavation activities or the contact information for the person knowledgeable in the proposed excavation activities changes during the period in which the ticket is valid, the excavator shall provide updated contact information to the regional notification center.

Authority cited: Sections 4216.11 and 4216.22, Government Code.

Reference: Sections 4216.2, 4216.3, 4216.11, and 4216.12, Government Code.

Section 4501. Use of Equipment Other Than Hand Tools to Determine the Exact Location of a Subsurface Installation

(a) An excavator may use equipment other than hand tools within the tolerance zone of a subsurface installation for the purpose of determining the exact location of the subsurface installation if all of the following conditions are satisfied:

(1) The operator has responded to the excavator with a locate and field mark as provided in Government Code section 4216.3, subdivision (a)(1)(A)(i).

(2) The equipment conforms to the requirements as specified in subdivision (b) and has not been modified to function outside those requirements.

(3) The field mark does not indicate a subsurface installation type classified under the orange category of the "Guidelines for Operator Facility Field Delineation" in Appendix B of the most recent version of the Best Practices Guide of the Common

Ground Alliance and in conformance with the uniform color code of the American Public Works Association.

(4) The field mark as identified using abbreviations in the "Guidelines for Operator Facility Field Delineation" in Appendix B of the most recent version of the Best Practices Guide of the Common Ground Alliance does not indicate street lighting or traffic signal.

(5) The excavator has classified the soil within the tolerance zone as Type A or Type B, as provided in Appendix A of Section 1541.1 of Title 8.

(b) An excavator may use equipment other than hand tools within the tolerance zone of a subsurface installation for the purpose of determining the exact location of a subsurface installation consistent with the requirements of subdivision (a) if the equipment and the equipment's manner of use conform to the following requirements:

(1) Equipment configuration and specifications:

(A) The tool shall be a handheld percussive pneumatic, electric, or hydraulic hammer that drives a bit.

(B) The tool weight without accessory shall not exceed 40 lbs.

(C) The bit used shall be no less than 4 inches wide, have a rounded edge, and present no sharp surfaces.

(2) Manner of equipment use:

(A) The equipment must be used according to the manufacturer's instructions.

(B) The bit edge shall be placed parallel, not perpendicular, to the orientation of the subsurface installation as indicated by the field mark.

(c) An excavator shall request consultation with the operator of the subsurface

installation to determine how to safely proceed if the use of hand tools, or equipment other than hand tools as permitted in this section, is not a safe and effective means of determining the exact location of the subsurface installation. The operator of the subsurface installation shall respond to such a request within two working days not including the date the operator received the request and shall discuss with the excavator how the excavator can safely and effectively proceed. An excavator may use equipment other than as permitted in subdivisions (a) and (b), if the excavator and operator agree in writing upon the equipment to be used and the manner in which it will be used.

(d) This section shall not apply to the use of a vacuum excavation device, which is determined by Government Code 4216.4, subdivision (a)(2)(A).

Authority cited: Sections 4216.4, 4216.12, 4216.18, and 4216.22, Government Code.

Reference: Sections 4216.2, 4216.4, 4216.10, and 4216.12, and 4216.18, Government Code.