
California Underground Facilities Safe Excavation Board

April 8-9, 2024

Agenda Item No. 10 (Action Item) – Staff Report

Emergency Excavation Notification Exemption

PRESENTER

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SUMMARY

The Dig Safe Act allows excavators to excavate without making notification to the 811 notification center in case of emergency. Review of recent investigations suggests that this notification exemption can lead to avoidable facility damages, and that it may be appropriate to modify statute to require notification even when the excavator must begin work prior to the legal start date and time due to emergency situations. It is not clear, however, that 811 notification is appropriate in the case of all emergency excavations, nor is it clear how operators should respond to emergency notifications. Staff recommends that the Board seek feedback from the 811 notification centers and stakeholders on these issues.

STRATEGIC PLAN

2020 Strategic Plan Direction: Improve Accessibility of Buried Infrastructure Location Knowledge and Understanding.

BACKGROUND

The Dig Safe Act requires, with limited exceptions, a person performing excavation to notify the 811 notification center prior to commencing excavation. One of those exceptions is in the case of an emergency.¹ Emergencies are broadly defined as “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” is further defined to include, but not be limited to, “a fire, flood, earthquake or other soil or geologic movement, riot, accident, damage to a subsurface installation requiring immediate repair, or sabotage.”²

In an emergency, a person need not wait until all operators have responded to an excavation

¹ Government Code § 4216.2(b), (d), & (g).

² § 4216(f).

notification prior to beginning work, nor do they need to make any 811 notification. If an excavator doesn't notify the 811 notification center, the operator does not perform a locate and mark or provide maps or other information.

The 811 notification centers have created an "emergency" ticket type to allow an excavator to alert operators in the vicinity that an excavation is taking place, even if the excavator does not need to wait for all operators to respond. The emergency ticket is processed as a regular ticket at the 811 notification centers including being assigned a ticket number and a legal start date and time. As a notice of pending excavation, these "emergency" notification tickets create an obligation for operators to respond and provide an electronic positive response.

Several Board investigations, including those initiated by complaints, have involved the emergency exemption. Board members have discussed the exemption during enforcement actions and in non-violation safety issues agenda items. On occasion, staff, members, and public commenters have questioned whether it is appropriate public policy to continue to exempt all emergency excavations from 811 notification.

The Dig Safe Act anticipates that the Board will have recommendations for the Governor and Legislature.³ Should the Board identify statutory changes required to further the safety, effectiveness, and fairness of California's excavation notification system, it can make recommendations to the Governor and Legislature to implement those changes.

DISCUSSION

The operations affected by the emergency exemption can be separated into the following four categories:

Category 1: No wait to excavate. Given that the excavator does not need to make a notification, they also do not need to wait for utility operator response prior to excavation.

Category 2: No 811 notification. Excavators are specifically exempt from 811 notification of intent to excavate.

Category 3: Operator response is unaffected by the exemption. If there is no notification, no operator needs to respond. If, however, the excavator makes a notification in an emergency, the operator must respond as if it were a new ticket; within two working days, not counting the date of notification.

Category 4: Limited processes contingent on 811 notification. These include excavator requirements to delineate, tolerance zone requirements, etc.

This report does not consider the following:

- Whether changes should be made regarding what constitutes an emergency
- Whether the set of individuals allowed use the emergency exemption should be limited.

³ [Gov Code § 4216.23\(b\)](#)

- The creation of excavator wait times (Category 1).
- Responsibilities contingent on 811 notification (category 4), as those can be addressed as needed once the Board addresses the 811 notification (category 2) and operator response (category 3) components.

Broadly, this report considers the following issues:

Issue 1: *Under what conditions should an excavator make an 811 notification even if it is an emergency and the excavator does not need to wait for operators to respond prior to beginning work?*

Issue 2: *How should an operator respond to a notification of emergency notification?*

Other states handle emergency 811 notification and operator response requirements in different ways, a sample of which may be reviewed in **Attachment 1**.

Value of 811 notification

The two primary benefits of the 811 notification are that it:

- a) Alerts a utility operator of proposed excavation and allows them to perform hazard mitigation activities, such as locate and mark.
- b) Alerts the excavator of buried facilities that may be in the area, including high-priority facilities.

These two benefits should be considered when considering the questions above.

Review of prior investigations

Four past investigations may inform the questions above.

1. 21LA01474: Ashe Road (Bakersfield) No 811 Complaint⁴
 - A pipeline company discovered a “no 811” excavation occurring near their heated crude oil transmission line. The excavation was performed in repairing an irrigation pipe. The investigation identified that the excavation was not an emergency.
2. C221950004: Highway 33 (Patterson) No 811 Complaint⁵
 - A person installed a large billboard at the side of Highway 33 without contacting 811. A pipeline company representative drove a probe rod into the ground around the base of the signposts with a slide hammer to probe the base of the signposts. The pipeline company representative also did not contact 811 before performing this excavation. The Board determined that

⁴ [21LA01474](#)

⁵ [C221950004](#)

the excavation was performed in response to an emergency and did not find the pipeline company in violation.

3. D230130001: Lobos Avenue (Atascadero) Gas Line Strike⁶

- A natural gas pipeline company made an 811 notification for planned gas leak repair. In driving a probe rod to measure underground gas concentrations, the company representative struck and damaged one of its natural gas service lines.

4. D230030002: Thackeray Drive (Oakland) Gas Line Strike⁷

- A homeowner contacted a contractor to clear a blocked French drain to prevent rainwater from flowing into the home. The contractor struck a gas pipeline using shovels. Neither the homeowner nor the contractor had contacted 811 prior to excavation. The facts of the investigation indicate that the excavation was an emergency, and a “no 811” violation was not charged.

The investigation report for the Thackeray Drive (Oakland) Gas Line Strike case indicates that the excavation was covered by the emergency exemption, but the contractor had some measure of advanced notice before commencing excavation. In the time it took for the contractor to reach the work site and begin excavation, it is possible that the gas company could have located and marked prior to the commencement of excavation, greatly reducing the likelihood of damage.

In the Highway 33 (Patterson) No 811 Complaint case, the excavator believed that the land was owned by her brother. Review of the location using ParcelQuest indicates that the strip of land adjacent to the highway where the sign was installed was actually owned by a water district.

⁶ [D230130001](#)

⁷ [D230030002](#)



Image and data from ParcelQuest. Parcel "2" is listed as APN 048-017-001-000 with an owner of "PATTERSON WATER DIST."

The pipeline company representative probed the base of the signpost 34 inches away from the pipeline to determine the extent of its concrete footing. The water district was not informed of the sign installation or the subsequent probing, and likely was never made aware of either excavation.

Probing

Two of the cases discussed above involve probing by a utility operator. Probing is used for a variety of purposes, including locating buried infrastructure, creating a hole to test for methane concentrations, and checking soil compaction. During public comment before the Board discussed the Highway 33 (Patterson) No 811 Complaint case in a non-violation safety issue discussion, a representative from PG&E discussed reasons why 811 notification prior to emergency probing may not have been appropriate:

"had they contacted 8-1-1 then you have every potential utility company within that area then needing to respond out to mark that regardless of whether or not they found an emergency or they needed to excavate beyond using the probe. Then each utility company comes out there and the area that they're going to be probing in is relatively small around the sign. If there is an emergency the scope of the excavation has now changed much wider than what it would have originally been delineated, potentially hundreds of yards beyond that to conduct their work to section off the line and to do work beyond that. So the idea of contacting 8-1-1 to investigate the potential of an emergency...I think there are ripple effects of doing so, unintended

consequences of pulling utility companies away to respond out to mark this— maybe even multiple times.”

On the other hand, using a probe is like driving a rod into the ground. The most recent fatal dig-in incident in California was the 2019 explosion in Murrieta, when a rooftop solar installation contractor struck a Southern California Gas Company service line while installing a grounding rod near the gas meter. The house exploded 89 minutes later, killing a gas service representative.⁸

- Probing and driving a grounding rod are similar in the force that must be applied to penetrate the ground (at least for the first few feet) and thus are similar in the potential for damage, as can be seen in the Lobos Avenue (Atascadero) Gas Line Strike case. They differ, however, in that: The person driving a grounding rod is not likely to have been trained in buried utility safety, while the person probing is likely to have been trained in utility safety operations specifically related to their role of using a probe,⁹ and
- Driving a probe is used to acquire information about the state of the soil and facilities below the surface, while driving a grounding rod is an end unto itself.

Nonetheless, it should be noted that operator personnel using a probe rod likely have been exclusively trained in the equipment provided by, and the operation of buried facilities operated by their employer.



Image of slide hammer driving a probe rod from Southern California Gas Company procedures, Lobos Avenue (Atascadero) Gas

⁸ [19LA1062](#).

⁹ In the Patterson case, the petroleum company employee using the probe rod was trained pursuant to Subpart G (Qualification of Pipeline Personnel) of the federal hazardous liquid pipeline safety regulations (49 CFR 195.501 *et seq.*), and in the Atascadero case, the natural gas pipeline company employees onsite were trained in locate and mark and probe use pursuant to internal procedures.

Timeframes of Emergency Excavation

There will be times when an operator can respond to a notification of emergency excavation prior to the completion of—or even the commencement of—an emergency excavation. For instance, if an excavator needs to drive to the site where an emergency excavation is to take place, an operator may be able to reach the site earlier or concurrent with the excavator. While the excavation in the Oakland case was an emergency, the time between the decision that an excavation was necessary and the beginning of the excavation may have been sufficient for operators to respond. Had the gas company been notified, they may have chosen to respond to the emergency ticket, which may have prevented the natural gas pipeline damage.

Questions for Consideration and Discussion

With the background of the legal framework, the value of the 811 notification, and the specifics of recent investigations to help inform it, the Board can consider specific aspects of the questions posed at the beginning of the Discussion section:

Issue 1: Under what conditions should an excavator make an 811 notification even if it is an emergency and the excavator does not need to wait for operators to respond prior to beginning work?

- *Given the ability of operators to perform locate and mark activities for some emergency notifications, should notifications be required if the excavation will not happen for a certain period of time (e.g. the excavator needs to drive to the site)?*
 - *If so, is there a clear line to allow excavators to understand when they need to make a notification? (and therefore, would the distinction be enforceable?)*
- *Given the benefit to the excavator of knowing what operators have lines may be in the areas, should the excavator always be required to provide an 811 notification, regardless of whether the operator can respond before the excavation is complete?*

After answering those questions, the Board can consider specific aspects of the second issue:

Issue 2: How should an operator respond to a notification of emergency notification?

- *Should operators be required to respond to an emergency ticket?*
 - *If so, should operators be allowed to respond differently based on whether the excavation is imminent, ongoing, or complete? How would operators know this information?*
 - *If not, should excavators be made aware of what operators will and will not be responding, and in what timeframe?*

- *Should operators have electronic positive response options tailored to 811 emergency notifications?*
- *Should operators be required to respond more quickly to an 811 notification in case of an emergency?*
 - *If so, would this shortened timeframe apply to all operators, or only operators of a certain facility type?*
 - *If so, could some excavators make unwarranted claims of emergency to improve their operator response time?*
 - *Would excavators need to justify use of the emergency 811 notification?*
 - *Could operators refuse to respond if they deem the excavation not to be an emergency?*
 - *Is the definition of an emergency clear enough that an excavator and operator would have a similar understanding of whether an excavation merited an emergency ticket?*

RECOMMENDATION

Staff recommends that the Board discuss the issue of emergency ticket excavation notification requirements and seek feedback from the 811 notification centers and stakeholders on the specific issues and questions raised above, as well as any other questions the Board deems appropriate.

Staff recommends that, based on these answers, staff develop for review and discussion a draft recommendation to the Governor and Legislature for amending statute to limit or eliminate the 811 notification exemption for emergency excavations.

ATTACHMENT

- 1) Emergency notification requirements in other states

Attachment 1: Emergency notification requirements in other states

Different states handle emergency 811 notification and operator response requirements in different ways. Many states limit “emergencies” to those events involving buried facilities. As they do not consider actions taken to prevent or mitigate loss of, or damage to, life, health, or property in response to earthquakes, imminent flooding, or wildfire, or other non-utility causes to be “emergency.” These states therefore only exempt excavators from the waiting period if they are fixing an operator’s facilities. Some states further conflate emergencies and damage notifications, identifying an emergency as an excavator damaging a buried facility, requiring immediate operator action.

811 Notification in Emergency

Emergency tickets are required in some states and are not in other states. Virginia and Maryland both require an emergency ticket upon discovery or causing damage to underground utilities.¹⁰ In Oregon, an emergency notification is not required if an assessment of the emergency determines that hand tools can be used for the work.¹¹

Timeframes for Operator Response

Emergency tickets in other states generally fall under two categories: 1) the operator either has a timeframe to respond to emergency locate requests or 2) the no emergency response timeframe is specified.

1. Timeframes specified. Generally, an operator is required to respond to an emergency ticket as soon as possible to prevent harm and damage to life, health, or property. In addition, these emergency tickets involve the operator having a certain timeframe to respond to the requests. The timeframe can range from as soon as possible, to two hours¹², to two working days¹³ from the transmission of the ticket.
2. Timeframes not specified. With these tickets, the operator responds to the ticket at their earliest convenience.¹⁴ The operator may attempt to respond to emergency locate requests as soon as possible but there is no requirement for responding within a certain timeframe in recognition of the variety in service areas, weather, traffic, and other constraints.¹⁵

¹⁰ [Virginia § 56-265.24. Duties of excavator.](#)

¹¹ [Oregon 811 Standards Manual](#)

¹² [Maryland 811 §12–121. Emergency Excavation and Demolition](#)

¹³ [Arizona 811 40-360.24. Notice of damage to underground facility](#)

¹⁴ [Florida 811 Emergency Procedures](#)

¹⁵ [Oregon 811 Standards Manual](#)