Date of Hearing: July 1, 2024

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY Cottie Petrie-Norris, Chair SB 778 (Ochoa Bogh) – As Amended June 15, 2023

SENATE VOTE: 40-0

SUBJECT: Excavations: subsurface installations

SUMMARY: Revises provisions in the Dig Safe Act related to operator (i.e., the utilities that own and maintain underground infrastructure) and excavator (i.e., the companies doing the digging) responsibilities when preparing for, and conducting excavations, as well as broadens the criteria for Governor appointments to the California Underground Safety Board (Board). Specifically, **this bill**:

- Revises the definition of "legal excavation start date and time" to specify that an excavation may begin before the required two days if the excavator has received a response from all known operators, as specified. Revises the definition of "working day" by striking the reference to 7:00 a.m.-5:00 p.m.
- 2) Revises the operator's discretion to choose to not locate and field mark an area to be excavated if the area delineated does not match the ticket description and further requires the operator to contact the excavator to advise of the discrepancy and provide an "electronic positive response" (EPR). Prohibits an excavator from beginning an excavation without an EPR, or has otherwise confirmed response directly from all operators listed on the ticket, as specified, and changes the EPR to all installations that are listed on the ticket, instead of the delineated boundaries of the proposed area of the excavation.
- 3) Requires an excavator to contact the regional notification center to request a return trip for a number of specified reasons. Requires a return trip to occur within one business day, or on a mutually agreed-upon and documented date when the excavator cannot find the utility or standby observation required and within two working days when the EPR indicates a resend, as specified.
- 4) Provides requirements regarding operator representatives being onsite to monitor excavation activity, as specified.
- 5) Restates existing excavator and operator protocols around excavation specific to pavement grinding.
- 6) Establishes new requirements for excavator use of vacuum excavation devices, including requiring that the vacuum device is "purpose-built" for excavation, and requires the excavator to inform the regional notification center of their intent to use a vacuum excavation device when obtaining a ticket, as specified. Establishes that an operator not

agreeing to use vacuum excavation must include that information on the EPR, and failure of the operator to do so will automatically grant permission to the excavator to use the vacuum device.

- 7) Recasts various provisions of existing law regarding notification of 9-1-1 emergency services when an excavator discovers or causes excavation-related damage to a subsurface installation that may endanger life or cause serious bodily harm or damage to property. Requires an excavator discovering or causing any damage to a subsurface installation that causes immediate threat to notify the subsurface installation operator immediately, and to notify the Board of the damage within two hours.
- 8) Specifies immediate notification to the operator and a two-day notification window to the regional notification center if the excavator discovers or causes damage to a subsurface installation that does not immediately endanger life or cause serious bodily harm or damage property.
- 9) Deletes the Board's authority to impose more restrictive notification windows for damages to subsurface installations.
- 10) Requires a local agency that chooses to recover costs for providing locate and mark services of a subsurface installation via a fee to consider whether the fee could deter an excavator from contracting the regional notification center. Requires a local agency to consider recouping its costs via existing permit fees instead of a separate fee; requires a local agency to consider not charging a fee to an excavator on private property, as specified.
- 11) Requires the Board, instead of regional notification centers, to compile an annual report of incident events, and requires the California Regional Common Ground Alliance to provide statewide information to the Board by April 15 of each year.
- 12) Adds a definition of "approximate location" to mean a strip of land not more than 24 inches on either side of the exterior surface of the subsurface installation and does not mean depth.
- 13) Broadens the requirements involving three of the Governor's appointments to the Board.
- 14) Makes other technical and clarifying changes.

EXISTING LAW:

 Establishes the Board within the Office of Energy Infrastructure Safety (OEIS) to coordinate education and outreach activities that encourage safe excavation practices, along with developing standards and investigating violations, as specified. (Government Code § 4216.12)

2) Defines the following:

- a) "Active subsurface installation" to mean a subsurface installation currently in use or currently carrying service;
- b) "Delineate" to mean to mark in white the location or path of the proposed excavation using specified guidelines, and also includes the physical identification of the area to be excavated using alternative marking methods, as specified;
- c) "Electronic positive response" to mean an electronic response from an operator to the regional notification center providing the status of an operator's statutorily required response to a ticket.
- d) "Excavation" to mean any operation in which earth, rock, or other material in the ground is moved, removed, or otherwise displaced by means of tools, equipment, or explosives in any of the following ways: grading, trenching, digging, ditching, drilling, auguring, tunneling, scraping, cable or pipe plowing and driving, or any other way.
- e) "Legal excavation start date and time" to mean two working days, not including the date of notification, unless the excavator specifies a later date and time, which cannot be more than six months from the date of notification.
- f) "Subsurface installation" to mean any underground pipeline, conduit, duct, wire, or other structure, except non-pressurized sewer lines, non-pressurized storm drains, or other nonpressurized drain lines (Government Code § 4216(a)(d)(e)(g)(k)(l))
- Requires every operator of a subsurface installation, except the Department of Transportation (Caltrans), to become a member of, participate in, and share in the costs of a regional notification center, as specified. (Government Code § 4216.1(a))
- 4) Requires an excavator planning to conduct an excavation to delineate the area to be excavated before notifying the appropriate regional notification center, and if the area is not delineated, an operator may, at its own discretion, choose not to locate and field mark until the area to be excavated has been delineated. (Government Code § 4216.2(a))
- 5) Prohibits, unless an emergency exists, an excavator from beginning an excavation until the excavator receives a response from all known operators of subsurface installations, as specified, and until the completion of any required onsite meeting. (Government Code § 4216.2(g))
- 6) Allows an excavator to use a vacuum excavation device to expose subsurface installations within the tolerance zone if the operator has marked the subsurface installation, the excavator has contacted any operator whose subsurface installations may be in conflict with the excavation, and the operator has agreed to the use of a vacuum excavation device. (Government Code § 4216.4(a)(2)(A))
- 7) Requires an excavator discovering or causing damage to a subsurface installation, including, all breaks, leaks, nicks, dents, gouges, grooves, or other damage to subsurface installation lines, conduits, coatings, or cathodic protection, to immediately notify the subsurface installation operator, as specified. (Government Code § 4216.4(3)(c))

- 8) Requires each excavator, operator, or locator to communicate with each other and respect the appropriate safety requirements and ongoing activities of the parties, if known, at an excavation site. (Government Code § 4216.4(4)(d))
- 9) Requires the provisions of the Dig Safe Act to apply to state agencies and local agencies, except Caltrans, and authorizes a local agency to charge a fee in an amount sufficient to recover the cost of providing the services. (Government Code § 4216.5(a))
- Requires statewide information provided by operators and excavators regarding incident events reported by excavators and operators be compiled and made available in an annual report by regional notification centers and posted on the internet website of the board. (Government Code § 4216.6(g))

FISCAL EFFECT: According to the Senate Committee on Appropriations, this bill will result in ongoing, annual costs of \$154,000 for additional staff at OEIS.

BACKGROUND:

8-1-1 and Underground Safety – Much of California's essential services travel through underground infrastructure, such as water mains, conduit carrying telecommunications cabling or electric lines, or natural gas or oil pipelines. Many California industries work beside this underground infrastructure, from the utilities themselves doing maintenance or installation work, to landscapers, construction companies, homeowners, or farmers. As a result, the potential for these various workers to strike underground infrastructure poses a unique and ever-present safety risk.

To minimize the chance of striking underground infrastructure, a calling system was established around the 8-1-1 "*Call Before You Dig*" phone number.¹ Excavators – the landscapers, farmers, homeowners – call 8-1-1 before beginning work. The 8-1-1 call is routed to the nearest "one-call center,"² a nonprofit association providing operators – i.e., the utilities that own and maintain the underground infrastructure – information about the excavator's planned dig site. The one-call center assigns a "ticket" to the excavator's information. The one-call center then communicates the ticket information to the appropriate operators, sometimes multiple operators, with known infrastructure in the planned dig area. Statute prohibits one-call centers from charging excavators a fee for obtaining a ticket.³

Once operators receive a ticket, they have two working days,⁴ not including the date of notification, to visit the excavation site and mark the areas above underground infrastructure, in a process known as "locate and mark." After the operator locate and mark occurs, the excavator is

¹ Created in March 2005 by the FCC; https://docs.fcc.gov/public/attachments/DOC-257293A1.pdf

² Also known as a "regional notification center". In California there are two : the Underground Service Alert-North (USA North) and Underground Service Alert South (DigAlert)

³ Government Code §4216.1

⁴ Government Code §4216(l)

able to commence digging but must maintain a tolerance zone⁵ around the marked underground infrastructure.

A "dig-in" occurs when an excavator strikes underground utility infrastructure. Dig-ins can result in fatalities and injuries – such as the explosions in November 2015 in Bakersfield, California⁶ and in July 2019 in Murrieta, California⁷ – as well as property damage, environmental damage, significant cost, and fire. Any error in the 8-1-1 chain could result in a dig-in, from the excavator never calling 8-1-1, to the operator never marking or incorrectly marking the area.

Excavation near underground facilities is a persistent threat to utilities, contractors, farmers, and homeowners. Despite the presence and availability of the one-call centers and 8-1-1 resources, dig-ins continue to damage underground infrastructure, leave residents without vital utility service, and put workers and civilians at risk. The causes for excavation damage are varied and may arise from any break in the 8-1-1 chain. Many excavators still fail to call 8-1-1 ahead of their project, meaning they embark on an excavation project without any markings to indicate the location of underground facilities. This failure to call may be due to lack of information about the 8-1-1 service, or due to the excavator thinking their project does not necessitate a call. Even if 8-1-1 is called, operators may still fail to respond promptly to the excavator's ticket. Operators who do respond may incorrectly mark underground facilities, either due to their own error or because they were relying on records that are obsolete or inaccurate.

Although the causes are varied, the common thread in excavation incidents is a lack of communication between parties along the 8-1-1 chain. Legislative efforts to limit the risk in the 8-1-1 system established statutory liability provisions centered on enforcement.⁸ In response to the disparity between liability and safety in the dig space, as well as the lack of a single authority coordinating education and outreach surrounding safe excavation practices, the Legislature adopted SB 661 (Hill, Chapter 809, Statutes of 2016) in 2016. SB 661 established the "Dig Safe Act" and the Board to regulate the Act. The purpose of SB 661 was to update California's excavation safety laws and practices and establish the centralized authority to enforce those laws. The Board, under OEIS, is charged with investigating accidents, developing excavation safety standards, and coordinating education and outreach programs.

COMMENTS:

1) *Author's Statement*. According to the author, "The state's *Call Before You Dig Law* serves a dual purpose: to protect the people working around potentially dangerous underground lines and protect the utility lines themselves. In its simplest explanation, the law requires excavators to contact a notification center and disclose their intent to dig. The notification center in turn notifies the utility operators who might have infrastructure in the area.

⁵ Statute maintains 24 inches as the tolerance zone; Government Code §4216(u)

 $^{^{6}\} https://www.bakersfield.com/news/one-dead-and-three-injured-in-pg-e-natural-gas-line-explosion-southwest-of-bakersfield/article_98f3c442-fef3-541a-a2d6-fc77f6e22b00.html$

⁷ https://www.nbclosangeles.com/news/local/SoCal-Gas-Technician-Killed-in-Explosion--512805811.html

⁸ Government Code §4216.7

Operators with underground infrastructure near the excavation site are required to locate and mark them using paint or flags within two days of receiving notification. The provisions contained in SB 778 originated from the California Common Ground Alliance (CCGA), which identified several shortcomings in California's 811 law. These are the functional and clarifying issues addressed in SB 778. In short, all of the changes contained in SB 778 are clarifications and codifications of either existing law, existing regulations, or existing practice."

- 2) Technical Solutions. This bill proposes various clarifying and technical changes to the Dig Safe Act, largely driven by recent Board regulations or stakeholder discussions. Most changes are modest and helpful. However a few proposed changes establish circular statutory references, restate existing law for specific use cases that seem to duplicate rather than clarify, or inadvertently remove existing safety protections. As discussed with this committee, these technical issues are counter to the author's intent. As such, the author and committee may wish to provide technical amendments that address these provisions, including: reverting the definition of "legal excavation start date and time" in § 4216(l) to existing law; subsequently specifying that an excavator may begin excavation prior to the legal excavation start date and time if certain conditions are met; maintaining existing law regarding an operator's discretion to not locate and field mark in § 4216.2(a) but clarifying that the operator is obligated to contact the excavator if the operator has any confusion regarding the excavation area; rephrasing amendments in § 4216.2(g) to tie excavation to the operator's response and not solely the receipt of an EPR; and striking § 4216.2(j), § 4216.2(l) and § 4216.3(a)(1)(D).
- 3) *Vacuuming Allowances*. Vacuum excavation is a technique that utilizes high-pressure water to dig into the ground, break up the material, and then suction up the debris to be removed from the excavation hole. For any excavation within the tolerance zone (meaning 24 inches on either side of the operator's marking) of a subsurface installation, the excavator is directed to use hand tools to determine the exact location of the subsurface installation. The aim is to avoid accidental underground line damage from a power tool.

Current law also allows the use of a vacuum excavation device in the tolerance zone under limited circumstances: 1) the operator has marked the subsurface installation and the excavator has contacted all subsurface installation operators in the area; 2) the operators agree to the use of a vacuum excavation device; and, 3) the excavator notifies the regional notification center of the desire to use a vacuum excavation device at the time of requesting a ticket for marking an excavation site.

This bill aims to enhance the safety measures when a vacuum device is being utilized during an excavation, by ensuring that the equipment used is appropriate. However, this bill creates a new requirement on the operators to determine what devices would be appropriate, or "purpose-built." It is not clear how operators would determine the intent behind a product's design, or whether operators across the various utility sectors would consistently agree to certain products' usage. This could create a scenario where some operators agree to some vacuum device usage, while other operators do not, creating a hodge-podge approval landscape and sowing confusion amongst excavators. The author notes the intent behind these statutory changes is to create a baseline standard for what is considered appropriate vacuum devices, given anecdotal instances where improper use of vacuum equipment and untrained personnel have led to unsafe excavations and potential damage. Yet, if a baseline standard for safe vacuum devices is the goal, it may be more appropriate to have the Board adopt regulations to that effect.

Additionally, this bill would require that if an operator does not agree to the use of vacuum equipment that they shall include that information on the EPR back to the excavator. Yet the bill goes a step further and grants permission to excavators to use vacuum devices if the operator fails to respond on the EPR to the request for these devices' usage. There are various reasons an operator may not respond to a request for usage of a vacuum device, simplest amongst them is that the operator did not see the request listed on the 8-1-1 ticket; a ticket which is often busy with other information the operator may be more focused on, such as the excavation area. Moreover, it seems discordant to limit vacuum device types due to safety concerns around their inappropriate usage in one part of this bill, while granting universal permission to their usage due to a lack of operator response in another part of this bill. *As such, the author and committee may wish to consider amendments that strike the requirement that vacuum excavation equipment be "designed, engineered, and purposebuilt." Further, the author and committee may wish to strike the presumption of permission granted to excavators for vacuum device use.*

4) Prior Legislation.

SB 1345 (Ochoa Bogh, 2022) sought to revise provisions in the Dig Safe Act related to operator and excavator responsibilities when preparing for and conducting excavations, add non-pressurized sewer lines and storm drains to the definition of a "subsurface installation," and require the California Department of Transportation (CalTrans) to comply with the requirements of the Dig Safe Act beginning January 1, 2025. Status: Held in the Senate Committee on Appropriations.

SB 297 (Durazo) increased penalties for operators or excavators who cause damage to a gas or hazardous liquid pipeline subsurface installation that results in the escape of any flammable, toxic or corrosive gas or liquid, as specified. Status: Chapter 726, Statutes of 2021.

SB 895 (Hill) made a number of changes to the Dig Safe Act of 2016 including: requiring new subsurface installations be mapped using geographic information systems, as specified; renaming the California Underground Facilities Safe Excavation Board as the "Dig Safe Board"; moving the Board from the Office of the State Fire Marshall to OEIS; and requiring an excavator to notify the Regional Notification Center within 48 hours of discovering or causing damage, among other things. Status: Chapter 307, Statues of 2020.

SB 1198 (Durazo, 2020) would have increased penalties for contractors who cause damage to subsurface installations for failing to provide notice for a gas corporation to locate its subsurface installations, as specified; placed new requirements on gas corporations by the California Public Utilities Commission (CPUC); required the CPUC to review and publish specified safety plans of gas corporations no later than June 30, 2021; and, required gas corporations to establish formal training for workers. Status: This bill was never heard in a policy committee of the Legislature.

AB 1166 (Levine) required every operator of subsurface installations to supply an electronic positive response through a regional notification center before the legal excavation start date, as specified. Status: Chapter 453, Statutes of 2019.

AB 1914 (Flora) authorized an excavator to use power-operated or boring equipment prior to determining the exact location of a subsurface facility, as specified. Status: Chapter 708, Statutes of 2018.

SB 92 (Committee on Budget and Fiscal Review) among other changes to the Budget Act of 2017, clarified the intent and requirements for an "area of continual excavation," extends the dates by which the Board is required to complete their regulations and begin enforcement, from November 2017 to July 2020, and makes other technical changes. Status: Chapter 26, Statutes of 2017.

SB 661 (Hill) enacted the Dig Safe Act of 2016 to modify laws governing excavations near subsurface installations. Status: Chapter 809, Statutes of 2016.

SB 119 (Hill, 2015) would have modified "call before you dig" laws governing excavations near underground pipelines, conduit, duct, wire, or other structures (collectively known as subsurface installations). Among other things, this bill would have enhanced the existing enforcement powers of specified state entities, revised liability provisions that apply to the pre-excavation notification and subsurface installation marking requirements for operators and excavators, and would have established the California Underground Facilities Safe Excavation Advisory Committee to coordinate education and outreach, develop standards, and investigate violations of laws pertaining to excavation. Status: *Vetoed by Governor Brown*.

REGISTERED SUPPORT / OPPOSITION:

Support

Southern California Contractors Association Underground Service Alert of Northern California and Nevada (USA North) Underground Service Alert of Southern California

Opposition

None on file.

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