
California Underground Facilities Safe Excavation Board

July 11-12, 2022

Agenda Item No. 14 Information Item – Staff Report

Abandoned Lines Standards Development Update

PRESENTERS

Tony Marino, Executive Officer

SUMMARY

This report presents Board staff analysis of the April workshop on safe excavation around abandoned lines. During the workshop, excavators identified that the current requirement for operators to indicate the presence of abandoned lines with an “A” in a circle is rarely used and of limited value. Staff research has identified that some local agencies have their own procedures and requirements regarding abandoned facilities, and the Safety Standards Committee has scheduled a virtual public workshop to learn more from local agencies on Thursday July 28 from 3-5 p.m., including their understanding and procedures regarding abandoned facility ownership. Board staff recommend that the Board and members of the public reach out to their contacts at local agencies to bring them to the upcoming.

STRATEGIC PLAN

2021 Strategic Plan Objective: Improve Excavation Safety and Location Practice Safety

Strategic Activity: Develop Safety Standards

BACKGROUND

Board staff presented on the issue of abandoned facilities at its June 2020 meeting. In that meeting, the Board determined that abandoned facilities would be best addressed through the Safety Standards Committee.¹ The Committee determined that abandoned facilities policy involves multiple aspects, such as mapping, facility marking, communication between parties, and determining the exact location of facilities. The Committee and brought the proposal to the Board to directly work on abandoned facilities at its November 2021 meeting, and the Board agreed to proceed.²

A November 2021 staff report titled “Update on Safety Standards – Next Steps” discussed two Board investigations which involved abandoned facilities and ways in which abandoned

¹ [June 8, 2020, Item No. 5, Abandoned Underground Facilities in California](#)

² [November 9, 2021, Item No. 5, Update on Safety Standards – Next Steps](#)

facilities undermine the 811 process by denying the excavator the ability to apply safe techniques to avoid the facility. Abandoned facilities are frequently unknown to the excavator and may only be discovered when the excavation process has begun, thus denying the excavator the opportunity to design around the line or apply appropriate safety techniques.

Inactive facilities are defined as those portions of facilities not in use and yet remain connected to facilities actively carrying service or as newly installed and not yet connected to active service.³ “Abandoned facilities” are undefined in Government Code 4216.

The CAL FIRE, Office of the State Fire Marshal, Pipeline Safety Division implemented the PHMSA-2016-0075 Advisory Bulletin recognizing only two status types for intrastate hazardous liquid pipelines: abandoned or active. An abandoned pipeline means the facility is permanently removed from service.⁴ The federal Pipes Act of 2020 additionally identified the status of an “idled” natural gas or hazardous materials pipeline and directed the Pipeline and Hazardous Materials Safety Administration to further determine applicable operations and maintenance requirements through regulation.⁵

Beginning on January 1, 2017, operators must retain records of abandoned facilities and amend and update that information as it becomes known.⁶ However, an operator may not be on a ticket if they do not have a record of the abandoned underground facility or are not included in the notification area for other active facilities. There is no statutorily mandated process for the update and retention of this information once an abandoned line or record is discovered.

Current law requires operators to mark the presence of known abandoned underground facilities in the delineated area with an “A” in a circle to notify an excavator of abandoned facilities in the delineated area.⁷ Without a statutory definition of what an abandoned facility is, it is unclear what an “A” marking indicates.

Statute requires the excavator, upon discovering or causing damage to a facility, to contact the one-call center if they do not know who owns the facility. If the discovery of the unknown facility takes place outside the working hours of the one-call center, the excavator can follow the instructions of the one-call center website or recorded message.⁸

An excavator must presume all subsurface installations are active,⁹ but the operator can inform the excavator that a facility is abandoned or inactive. However, with an unknown operator, no one can provide the excavator that information. Current law does not specify a process for communication between parties after the one-call centers provides instructions to the

³ [Cal. Gov. Code § 4216\(a\) and \(k\)](#)

⁴ [OSFM Pipeline Safety Pipeline Status Terminology Information Bulletin: OSFM Pipeline Safety Division Pipeline Abandonment](#)

⁵ [H.R. 133 – Consolidated Appropriations Act](#)

⁶ [Cal. Gov. Code § 4216.3\(a\)\(4\)](#)

⁷ [Cal. Gov. Code § 4216.3\(a\)\(1\)\(C\)](#)

⁸ [Cal. Gov. Code § 4216.4\(c\)\(1\)](#)

⁹ [Cal. Gov. Code § 4216.4\(a\)\(3\)](#)

excavator nor does it address the obligations of parties to determine the ownership, identity, and status of a facility.

A May 2022 staff report presented Board research on the safety issues associated with abandoned facilities and related law in California as well as other states, Common Ground Alliance (CGA) Best Practices, and announced the Board's April 26, 2022, workshop.¹⁰ Due to the abbreviated timeline between the April workshop and May staff report, staff analysis of the workshop is included in this report.

DISCUSSION

Abandoned Facilities Workshop Results

The Safety Standards Committee held a workshop on Safe Excavation Around Abandoned Facilities on April 26, 2022, and brought together 32 representatives of operators, locators, excavators, and call-centers in addition to Board staff.

The key takeaways from the workshop are that 1) there is a lack of a standard process to document, identify, and verify the status of possible abandoned facilities which places a burden on excavators working around the facility, 2) some abandoned facilities go unclaimed by any operator once discovered, and 3) there is mixed utility of the "A" field marking required by statute, which alone is insufficient and leaves excavators looking for additional information from the operator.

First, the Committee learned of the lack of standard communication practices between operators and excavators upon the discovery of an unknown line. This lack of standard communication practice can create additional costs for all parties through additional unexpected communication and field meetings, but the burden heavily falls on the excavator that must always determine how to safely excavate around the facility.

Excavators spoke to the general burden of costs and delays to projects to verify the identity and status of a possibly abandoned facility. Without a standard process, excavators can reach out to operators directly, through comments on the ticket, or could use other ticket options such as remark or no-response tickets. Even then, one attendee spoke to an inability to secure cooperation from operators. There is no statutory timeline for an operator to provide additional information to an excavator nor is there a standard process for verification and identification of unknown and possibly abandoned facilities. An excavator must treat every facility as active, and without an operator to identify and verify the activity of a facility, the excavator bears the increased risk of excavating around an unidentified facility. An excavator does not know what the facility is unless an operator identifies it and subsequently notifies the excavator.

Second, the Committee learned that abandoned facilities can go unclaimed by any operator.

¹⁰ [May 9-10, 2022, Agenda Item No. 14, Abandoned Lines Standards Development Update.](#)

The unresolved ownership and identity of abandoned facilities perpetuates the safety issues, as the same unsafe situation will repeat when another excavation takes place in the same area. If a facility is reclaimed by an operator and the Board is not aware of that information, then there is no means for the Board to enforce record keeping practices and laws requiring an operator to notify the excavator of the facility.

If no operator claims a facility as their own, then the excavator is left to rebury the exposed facility. These facilities may be documented by excavators, but excavators do not have a legal obligation to record these facilities, and there is not a standard practice for the documentation, reporting, or recording of discovered abandoned facilities unclaimed by an operator.

Third, attendees reported mixed usefulness of the practice required by Government Code 4216 to mark an “A” in a circle when abandoned facilities are known to exist in the area.¹¹ One attendee said that any information was better than no information. Another reported that in their experience they did not often see the “A” field marking used. There was support from one attendee to mark all facilities to the same standard including abandoned lines, and another attendee would like to at least see the facility size and material or other information that an operator could provide.

Without facility feature information—such as the material, size, number of facilities, and centerline—provided by an operator for a known abandoned line, an excavator will have difficulty distinguishing between the abandoned and active facilities. For instance, one workshop attendee spoke to an abandoned facility of the exact specifications as the active facility in the same location. In that case, the excavator could not work safely without knowing there were two identical facilities in that location. This additional information not only helps an excavator but can be the difference between safe excavation and one resulting in damage or injury.

A representative of USA North 811 reported that facility abandonment is increasing, and an excavator stated that they encounter at least one abandoned facility a year and have encountered up to four in a year. Without a standard process for the reporting of abandoned facilities or data from operators on their abandoned facilities, Board staff cannot determine the rate of abandonment or of excavator encounter with abandoned facilities.

An operator reported that the ownership of abandoned facilities changes hands and may be subsequently abandoned by the new owner or may change hands to a property owner at the time of abandonment, a process which could involve quitclaim legal procedures. Transfer of ownership would involve owners of the right-of-way or property, such as local government. If ownership changes hands, then the obligations of Government Code 4216 such as to provide an “A” field marking would be the responsibility of the new facility owner. If these facilities are transferred to local government, then the cost burden of locate and mark activities may be shifted from the operators that installed the facility and placed on residents or other municipal fee payers.

¹¹ [Cal. Gov. Code § 4216.3\(a\)\(1\)\(C\)](#)

Abandoned Facilities Definition Survey Results

One question not discussed in the April workshop was the definition of an abandoned facility. The Board will need a clear definition of abandoned facility to develop a standard and focus future discussions. To clarify that question, staff released a 2-question survey to understand how stakeholders across the industry understand the term “abandoned facility.” The survey was open for responses from May 9 to May 20 and received a total of 83 responses.

The survey asked for the respondents’ primary industry role and for them to either select one of 4 options that best reflected what they consider to be an abandoned facility or to provide another definition. The proposed definitions considered the following: facilities not in use, and those disconnected from other facilities, or those no longer owned by a facility operator.

The results show that a significant majority of more than 75% of survey respondents include the two factors in their definition that an abandoned facility is no longer in use and disconnected from other facilities.

Overall, 45% of respondents define an abandoned facility as no longer in use and disconnected from other facilities. Respondents differed whether ownership should be part of the definition with another 30% of respondents identifying an abandoned facility as both disconnected and no longer owned by a facility operator.

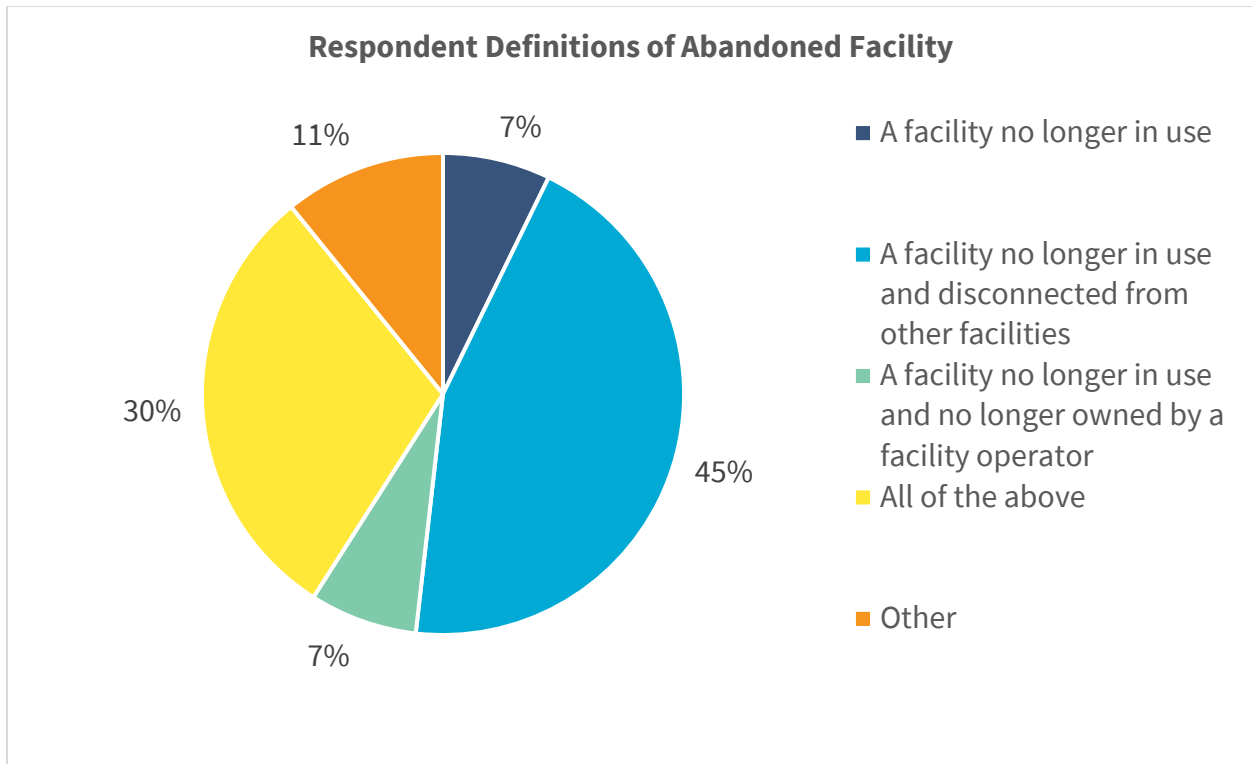


Figure 1: Forty-five percent of survey respondents selected facilities not in use and disconnected from other facilities while another 30% selected “All of the Above” features which includes disconnection with the addition of a lack of ownership.

These responses are consistent across industry groups with Engineers, Excavators, Operators,

and the sum of the other industry roles all selecting these definitions in similar proportion to one another. All industry groups agree on the ambiguity of the meaning of abandoned lines, which points to the need for a standard definition or definitions that encompass the different features used for abandoned facilities.

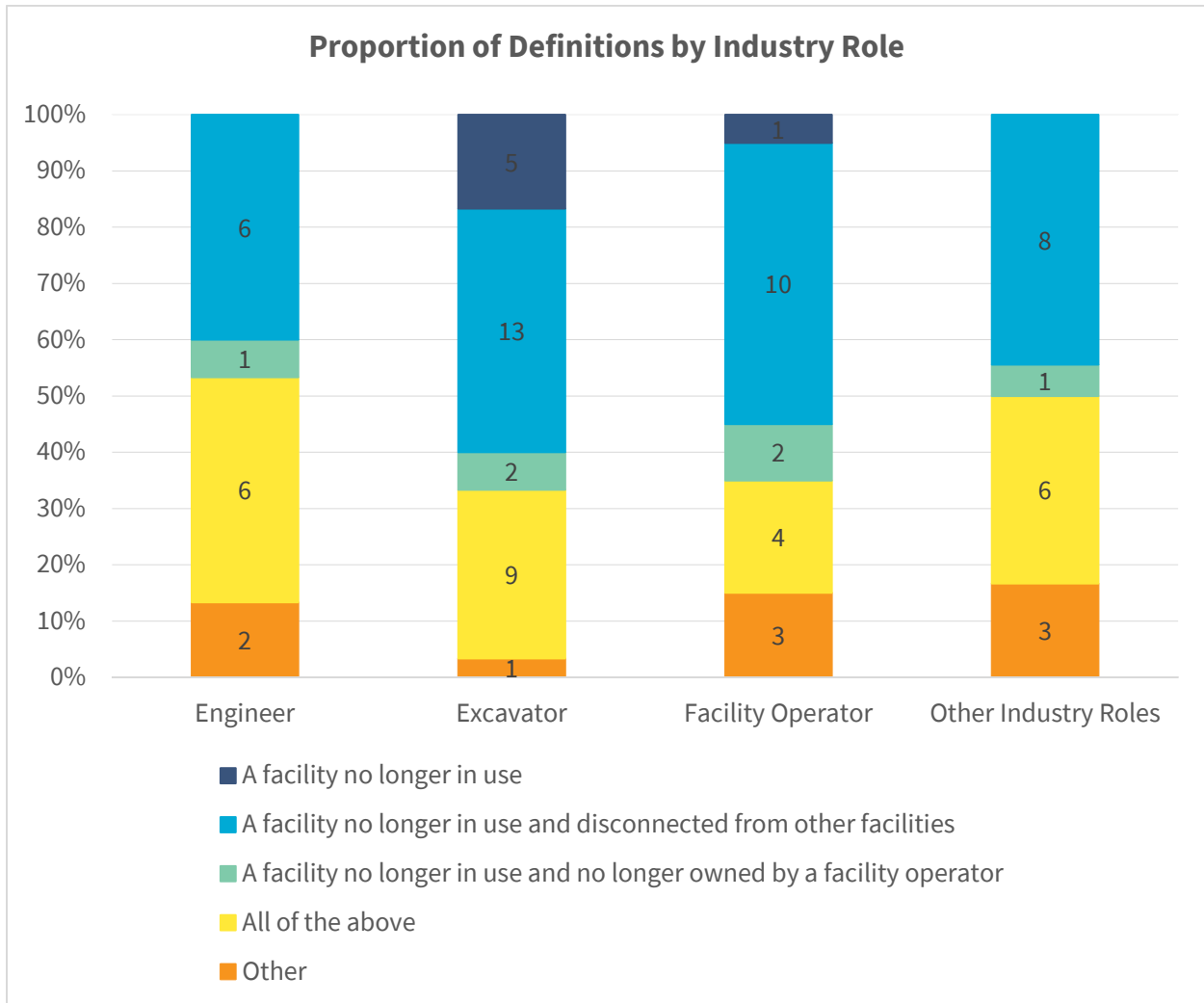


Figure 2: Comparing definition responses by role shows a similar proportion of definitions across the industry.

This information can inform the Board’s standards development as Government Code 4216 lacks a definition of an “abandoned facility” despite using the term in the obligation for operators to use the “A” field marking.¹² This feedback highlights the need to differentiate these three factors (disuse, disconnection, non-ownership) when discussing abandoned facilities. For instance, if an excavator uncovers a facility that they were not notified of, it may be difficult to determine if the facility is disconnected from other ones. On the other hand, it could be determined that the facility is unclaimed by any operator included on the ticket if all operators respond to the field to verify the facility. All of these facility features must be

¹² [Cal. Gov. Code § 4216.3\(a\)\(1\)\(C\)](#)

addressed in Board standards to address the safety and obligations of all parties.

Complete data from the survey is in Attachment A.

Local Agencies and Abandoned Facilities

A regulatory definition of an abandoned facility would impact current statutory obligations. For instance, April workshop attendees discussed how current marking practices seem to differ between active and abandoned facilities based on the lack of a definition of abandoned facility.

Ownership plays the key role in determining the responsibilities over an abandoned facility. An operator of a facility in Government Code 4216(o) is an entity that owns, operates, or maintains any kind of facility.¹³ An abandoned vehicle is a comparable case here. While a car may have been “abandoned” at the side of a road, not operated or maintained, the car is still owned by someone. That person or entity is responsible for the vehicle. Current law provides a requirement for records to permit the use of the vehicle and those records must be updated when ownership changes. The question of responsibility for an abandoned vehicle relates to ownership in the same way for abandoned facilities. If ownership of an abandoned facility is transmitted to another entity, then the new owner comes the operator of the abandoned facility and is required to provide an “A” field marking to indicate the presence of the abandoned line.¹⁴

One operator in the workshop indicated that abandonment can involve transfers of ownership which may involve quitclaims to local agencies and property owners. A quitclaim is a legal instrument that can be used to relinquish some or all interest in real property and access to that property such as through an easement.¹⁵ For instance, it is common for a developer who has a facility easement running through its property to request that the operator revoke interest in some or all of the easements with a quitclaim deed so that the developer can use that property without regard for the previous easements.¹⁶

An operator may have rights to access and operate a facility through an easement on the property of another entity. Local agencies own their jurisdictional public right rights-of-way and may permit facilities to be installed and operated through their property. Local agencies often have their own standards and specifications over facilities as discussed by the Board in its July 13, 2021, meeting.¹⁷

Some of these standards can concern abandoned facilities. For instance, the Los Angeles Bureau of Engineering Operations and Control Manual states that the abandonment of franchise, or contracted, petroleum pipelines requires the approval of the Board of Public Works and, if approved, also requires the transfer of ownership to the city upon

¹³ [Cal. Gov. Code § 4216\(o\)](#)

¹⁴ [Cal. Gov. Code § 4216\(o\)](#)

¹⁵ [Caltrans Right of Way Manual, January 2022, Section 6.09.02.03](#)

¹⁶ [San Diego Gas & Electric Quitclaim Request form](#)

¹⁷ [July 13, 2021, Agenda Item No. 7, Public Works Excavation Survey and Interviews: Preliminary Results](#)

abandonment.¹⁸ Staff research shows that other cities have some requirements regarding abandoned facilities as reported in a May 2022 staff report.¹⁹

July 28 Abandoned Facilities Workshop II with Local Agencies

The Safety Standards Committee has scheduled a virtual workshop for Thursday July 28 from 3-5 p.m. to better understand abandoned facilities from the standpoint of local agencies. The Committee will seek to learn more about local processes involved with facility abandonment and to see if or how these requirements could fit a minimum statewide standard. Board staff are developing discussion questions in coordination with the Committee.

To inform the development of standards, the Committee would like to gather representatives from local agencies for the workshop. The Committee and staff invite members of the public to reach out to anyone who may be willing to share their experiences on abandoned facilities and abandonment, such as with record keeping, permitting, locating, or utility coordination at a local level.

Board staff will conduct an outreach campaign to the following local agency associations in California to drive participation in the workshop:

- League of California Cities
- California State Association of Counties
- County Engineers Association of California
- Municipal Management Association of Northern California
- Municipal Management Association of Southern California
- California Special Districts Association

The Committee encourages anyone at local agencies with experience with abandoned facilities to join in the discussion and asks for the public's assistance in getting the word out.

RECOMMENDATION

Staff recommends the Board discuss the ways in which different features of abandoned facilities such as disconnection from other facilities, inactivity, or unknown ownership impact the obligations of excavators and operators and encourages Board members and members of the public to contact their associates at local agencies and encourage them to join the Committee at the July 28 workshop.

ATTACHMENTS

- A. Attachment A: Abandoned Facilities Definition Survey Questions and Data

¹⁸ [City of Los Angeles Excavation Permit Technical Procedure 01a – Oil Abandonment](#); Los Angeles Bureau of Engineering Operations And Control Manual, C 342.72 Pipeline Abandonment And Removal (Franchise Provisions)

¹⁹ [May 9-10, 2022, Agenda Item No. 14 , Abandoned Lines Standards Development Update.](#)

California Underground Facilities Safe Excavation Board

July 10-11, 2022

Agenda Item No. 14 Information Item – Staff Report

Abandoned Lines Standards Development Update

Attachment A: Abandoned Facilities Definition Survey Questions and Data

QUESTIONS

1. Which of the following best describes your primary industry role?
 - a. Excavator
 - b. Locator
 - c. Facility Operator
 - d. Engineer
 - e. One Call Centers
 - f. Member of the Public
 - g. Other (Text)

2. Which of the following best describes what you consider to be an abandoned facility?
 - a. A facility no longer in use
 - b. A facility no longer in use and disconnected from other facilities
 - c. A facility no longer in use and no longer owned by a facility operator
 - d. All of the above
 - e. Other (Text)

RESPONSE DATA

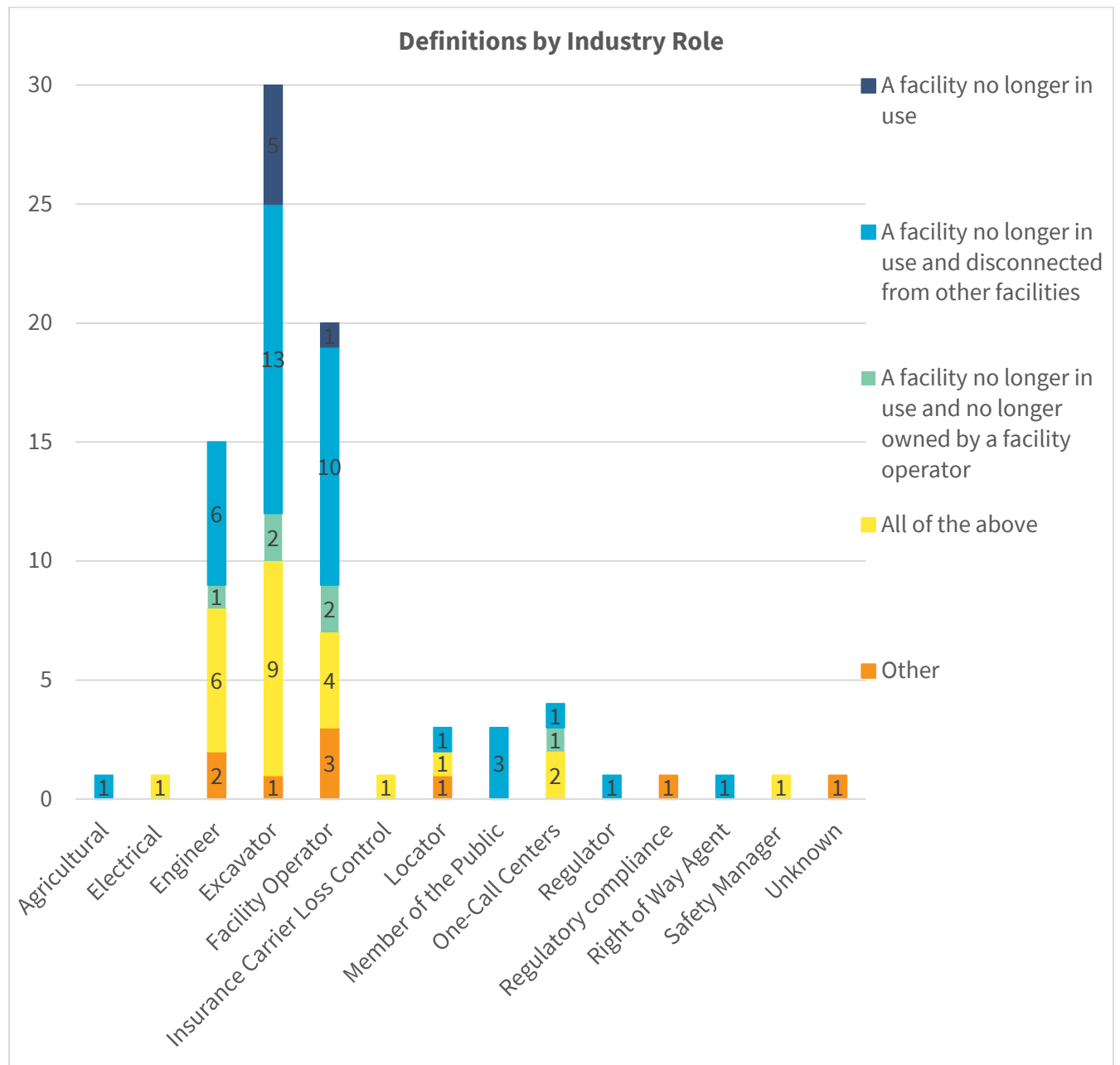


Figure 3: The survey received 83 responses with definitions grouped by industry role here.

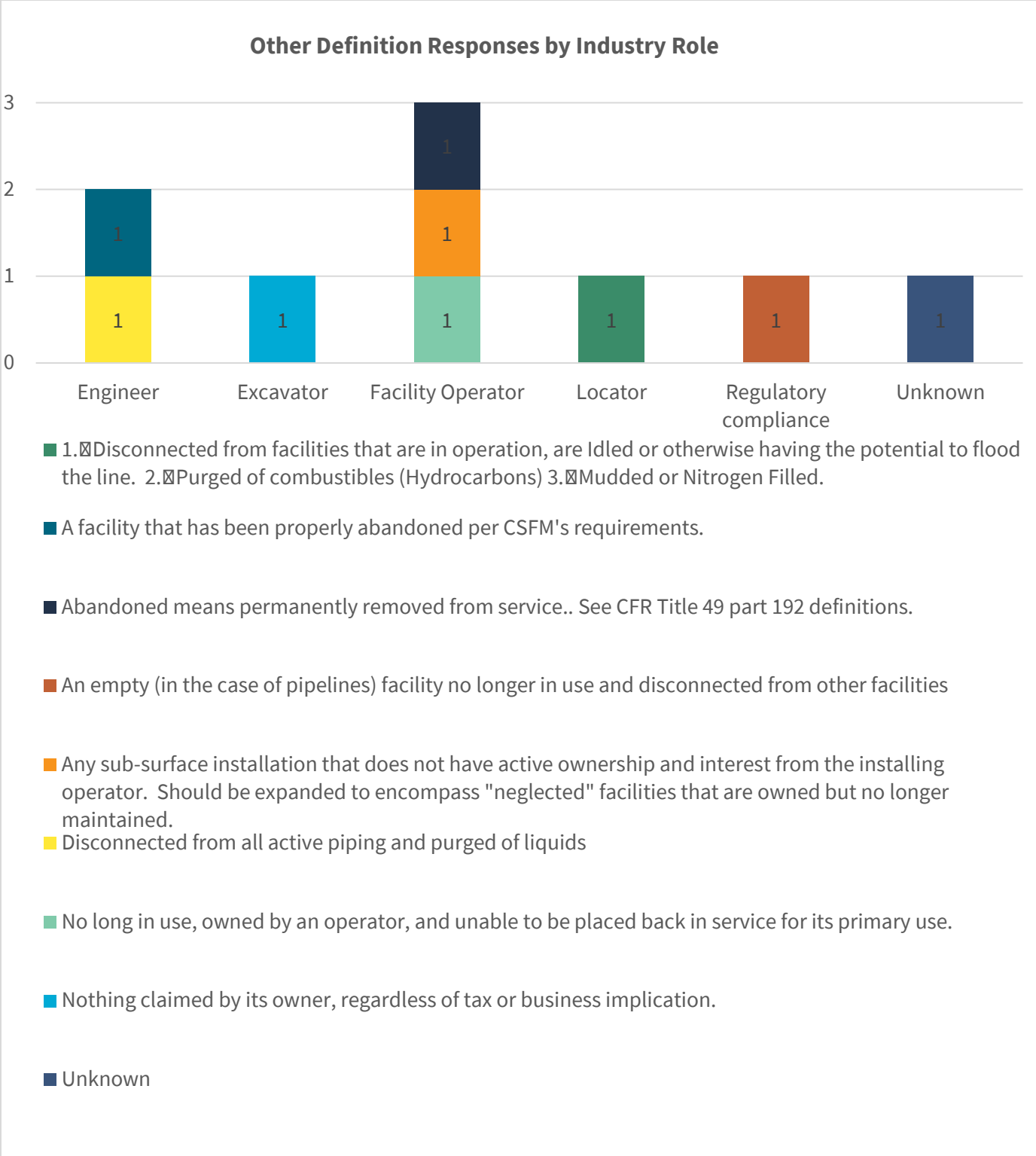


Figure 4: Nine respondents provided their own definition of an abandoned facility that are grouped by industry role in this chart.