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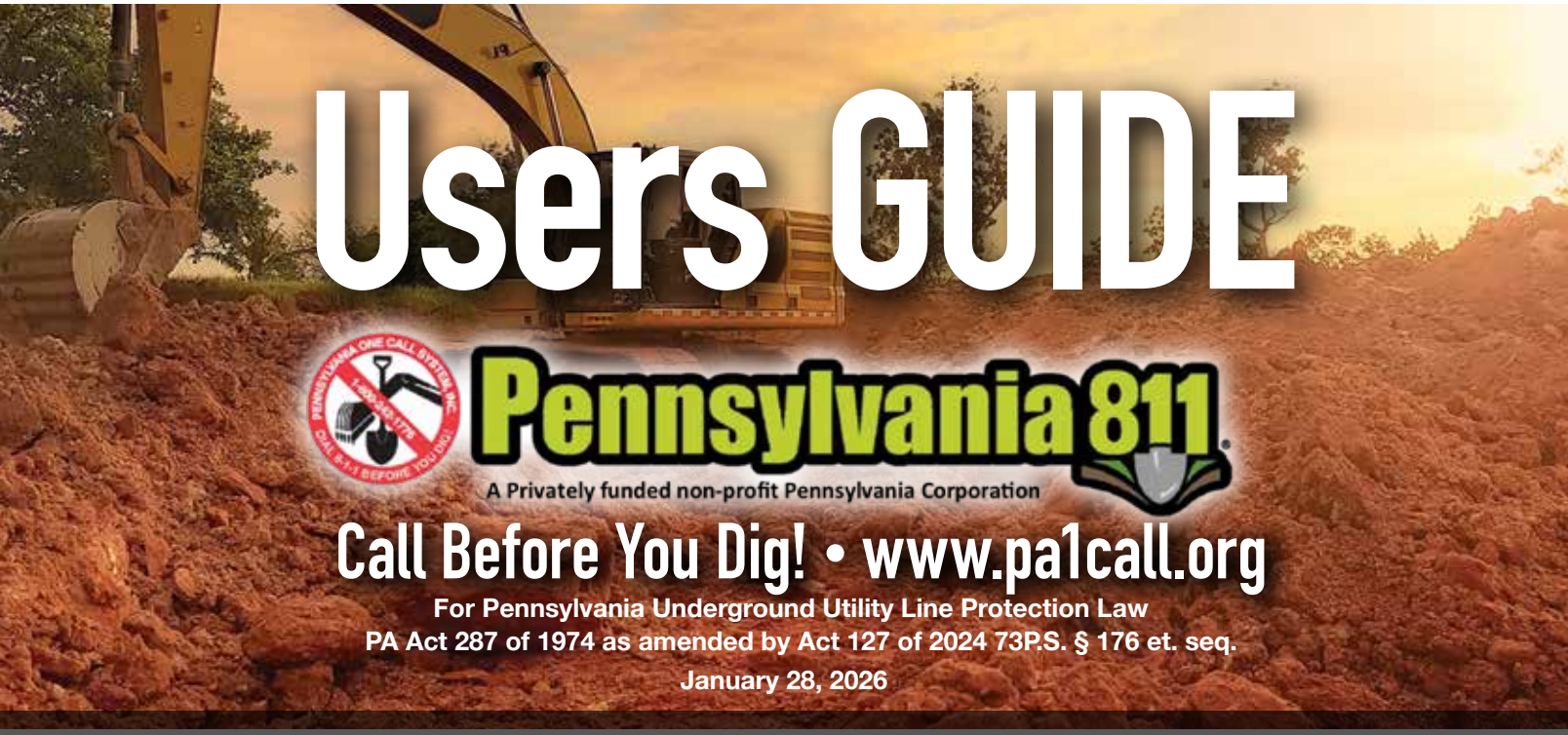

Users GUIDE

Pennsylvania 811

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For Pennsylvania Underground Utility Line Protection Law
PA Act 287 of 1974 as amended by Act 127 of 2024 73P.S. § 176 et. seq.
January 28, 2026

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www.apwa.org
www.FHWA.dot.gov
www.commongroundalliance.com
http://www.nastt.org/

DISCLAIMER OF LIABILITY

This Guide has been prepared as an educational document for excavators, designers, operators, project owners, and facility owners. It is intended as a reference tool for interacting with the Pennsylvania One Call System, ("POCS"). It is also intended to explain in a general way the requirements provided for in Pennsylvania's Underground Utility Line Protection Law, Act 287 of 1974, as amended (the "Act"). It is strongly recommended that all individuals who regularly contact POCS review the Act and this Guide. Familiarity with its contents will be valuable, but the Guide is meant to clarify and explain the law according to POCS' understanding of how it affects interaction with POCS. This Guide is not a substitute for the Act and it does not relieve anyone from discharging their responsibilities as set forth in the Act or as otherwise required by law.

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 The contents of this Guide are subject to change without notice. The web site will be updated as soon as possible after changes are made and approved by the Board of Directors. If there are any questions you may call 1-800-248-1786 or use the home page.

INTRODUCTION

The Pennsylvania One Call System Board provides this Guide for the participants of the Act to help clarify the responsibilities of each of the parties under the provisions of the law. Over 3,700 facility owners participate in the Pennsylvania One Call System currently, and a 35 member Board of Directors represents each of the industries involved in subsurface activity. All of the public utilities, public works, pipe line, telecommunications, the Commonwealth, construction and design industries were represented throughout the legislative process.

This Guide has been prepared to assist you in preparing your own operating procedures to comply with the Act, and to protect yourself and those you work with. It also provides insight into what you can expect to encounter underground. It is our hope to provide you with information to assist you in developing your own policy and procedures to guard against dangers and situations of working underground.

In addition to this Guide please reference the latest version of the Common Ground Alliance (CGA) Best Practices. Section 9 of the Act specifically requires your best efforts to comply with the CGA Best Practices.

SECTION I - ODDS ARE YOU COULD BE MOVING MORE THAN EARTH

Damage prevention is a shared responsibility. Communication between stakeholders is the key to ensuring safety and protecting vital facilities. Free-flow communication and cooperation allows all parties to focus on the common goals for safety and damage prevention.

Virtually anywhere you need to dig, there are almost certainly underground facilities somewhere in the vicinity. Growing networks of telecommunication cables, power lines, and cable TV lines are joining the gas, water, sewer and petroleum pipes. The odds of an excavator moving something besides dirt are growing every day. Even if you see overhead lines that doesn't rule out the existence of buried power, television or telephone facilities. Many utility companies have long-term programs to weatherproof their plant by putting it underground. Both aerial and underground facilities may be in use during transitions. Some areas have overhead main lines with buried services going to the homes and other buildings. Even water-filled ditches and streams may have underground utilities in or under them. A ditch may have been dry when utilities were buried. A stream may have been diverted. Even "open country" may conceal buried utilities. Large pipelines and high capacity cables are especially expensive to place, so utilities often cut across country to reduce total miles for these major installations. There are buried utilities located in most road rights of way. Buried utilities are also found along property lines and between lots and serve any building located on a lot.

Damage to buried utilities most often occurs when excavators do not call for utility locations before they dig. In many cases, utilities are damaged even after notification has been made and utility locations clearly marked. That's usually because some excavators do not know the procedures for safely excavating around the buried facilities. See section 5(4) of the Underground Utility Line Protection

Act, or "Act" (PA 73 P. S. § 176 et. seq.) for excavator requirements.

SECTION II - WHO AND WHEN TO NOTIFY THE ONE CALL SYSTEM

Notifications are referred to as Locate requests, dig notices, and tickets.

The Act; OSHA Standard 1926.651 (revised in 1990 and clarified in 2004); the Federal PIPES Act of 2020, protecting underground liquid (CFR 49 Part 195) and natural gas (CFR 49 Part 192.614) pipelines; and the National Electric Safety Code, ANSI C-2 (revised in 2016); require anyone who engages in any type of excavation or demolition work to provide advance notice. (See the Act for the definition of excavation or demolition work.)

Who should notify the One Call System?

- For excavation work, the person performing the excavation must make the notification. If the work is subcontracted, the subcontractor should make the notification. The only party protected by the notification is the person who notifies.

- A homeowner should notify the One Call System only if they are performing the excavation work themselves. A homeowner should not place a notification on behalf of their excavator because the excavator will not be protected by the notification.

- For demolition work, the person performing the demolition must make the notification. If the work is subcontracted, the subcontractor should make the notification. The only party protected by the notification is the person who notifies.

- Designers who work on project plans that include a work operation which involves the movement of earth with powered equipment as part of the project must place the notification.

- Project Owners, who or which engages the excavator for construction on any project which requires excavation or demolition work should ensure their designers and excavators notify the one call system.

When should you notify the One Call System?

- Designers are obligated to notify "not less than ten nor more than ninety business days before final design is to be completed".
  - Designers may also choose to notify more than ninety business days in advance if they state that the work is preliminary.

- Excavators (including homeowners) are obligated to notify "not less than three nor more than ten business days in advance of beginning excavation or demolition work", unless the project is complex, then additional requirements apply. Complex project notices require ten business days notice.

"Business day" means any day except a Saturday, Sunday or legal holiday prescribed by statute. A business day begins at 12:00:00 a.m. and ends at 11:59:59 p.m.

Example of calculating the three business day notice for excavation:

- The notice is made on Monday.
- The first business day is Tuesday.
- The second business day is Wednesday.
- Excavation work can commence on the third business day which is Thursday.
  - For a notification made on Thursday, the earliest lawful start date for when excavation can commence is the following Tuesday. (The first business day is Friday, Saturday is not a business day, Sunday is not a business day, Monday is the second business day and Tuesday is the third business day.)
- A legal holiday (defined below) may add one or two business days between the notification date and the date excavation can commence.

To facilitate timely and accurate mark-outs of the work site before you excavate, **the maximum Locate request size is 1000 feet, or intersection to intersection, whichever is greater, along the same road, within the same political subdivision.** Base your notifications on the resources you plan to use and the time of year (near term weather) for each date such information is provided to the system. All excavators, including subcontractors should make their own notification.

The Act states that the person doing the work shall make the notification/call. The only party protected by the notification is the caller.

PA One Call System is open 24 hours a day every day of the year. Pursuant to Sections 221 and 709 (e.1) of The Administrative Code of 1929, the Executive Board has determined that the administrative offices of State Government shall be closed on the following holidays for the purpose of transacting public business:

New Year's Day
Martin Luther King, Jr. Day
President's Day
Memorial Day
Juneteenth National Independence Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

SECTION III - TYPES OF NOTIFICATIONS HANDLED BY PA ONE CALL

There are several variations to the excavation notifications, covered in detail in Section IV of this document. Each variation can be used to solve unique situations or problems.

The following is a brief explanation of each type of notification taken by Pennsylvania One Call System, Inc. (POCS):

1. DESIGN NOTICE

Any drawing that is prepared for an excavation requires a Design Notification that must comply with the provisions in Section 4 of the Act. The Design Notice is meant to allow the designer to plan the new work around existing facilities as the Act prescribes. The information provided should cover the entire scope of the plan or development with enough detail to allow the facility owners to provide the approximate locations of their lines in the proposed work area. Digging is not permitted on a design notification.

There are two types of design notices:

- **Final Design Notice:** Those planning work that disturbs the earth are required to notify POCS not less than 10, nor more than 90 business days in advance of the final design.

- **Preliminary Design Notice:** Designers may request line and facility information more than ninety days before final design is to be completed, however, they shall state in their requirements that such work is preliminary.

The designer is **required to send plans** to the involved Facility Owners for mark up when requested. PA One Call can assist with this process through Coordinate PA, where plans and responses can be shared electronically. Once the facility owners have responded, the designer shall add their facility information to the drawing before the final design is approved.

As a designer, you are **required** to add the one call serial number and the 1-800-242-1776 or 8-1-1 number to the plan before you forward it to the involved facility owners.

The Pennsylvania One Call System Board of Directors mandated that effective on April 21, 2023, all Preliminary and Final Design Notifications must be created in POCS's Coordinate PA (CPA) application.

2. EMERGENCY NOTICES

- **Emergency Notice** - An emergency is defined by Section 1 of the Act as "a sudden or unforeseen occurrence involving a clear or immediate danger to life, property and the environment, including, but not limited to, serious breaks or defects in a facility owner's lines."

  When declaring an emergency excavation, excavators are required to confirm that the work being done falls within the definition of emergency and describe the nature of the emergency within the Locate request. Excavators must not provide a misrepresentation of an emergency excavation, subject to an administrative penalty. Once complete, the ticket will be queued for immediate transmission.

- **Damage Report Notice** - When a facility is damaged the notice is generally considered an emergency to that facility owner and other facility owners in close proximity to the damage. If a line is damaged during excavation, call the One Call System or the facility owner immediately. Report the details and particulars once the work site is safe.

  If the damage results in the escape of any flammable, toxic or corrosive gas or liquid which endangers life, health, or property, immediately notify 911 and the facility owner, as required by Section 5 clause (8). It is most often best to evacuate the immediate area. Local emergency contact information should be at the job site with the crew at all times where they have access to it, along with a map or directions to the nearest emergency care facility.

- **Odor of Gas Notice** – POCS accepts non-excavation related calls from those who smell natural gas. A notification is created and is immediately sent to the gas companies registered to receive such notices.

- **No One Call Notice** – POCS accepts notification from third parties who are not performing excavation work, but witness excavation work occurring and no physical markings are visible at or near the work site. Prior to processing a No One Call, the CSR performs a search of tickets created within the last 90 days to confirm no existing valid notification was created for the site.

- **Potential Cross Bore Notice** – When installing new utility lines in urban and suburban areas, utility providers typically dig horizontally underground, using a trenchless boring technique that avoids damage to sidewalks and landscapes. In the process, a new utility line may be unintentionally bored through a sewer pipe. Over time, a cross bore in a sewer pipe will cause a blockage. When a plumber or sewer operator plans to clear a clogged drain, he can notify the One Call System, and a ticket will be created and immediately sent to all facility owners in the area. Cross bores most often occur through sewer lines, but can be found in other types of lines and structures.

  Utility Cross Bore definition: An intersection of an existing underground utility or underground structure by a second utility resulting in direct contact between the transactions of the utilities that compromises the integrity of either utility or underground structure.

3. ROUTINE LOCATE REQUEST NOTICE

Notification for excavation work shall be made not less than 3 business days nor more than 10 business days prior to commencing excavation work starting the day the notification is received. Each Locate request must clearly identify the work site (See Section IV). When exact site information cannot be provided, use white paint, stakes and/or flags to outline the proposed excavation site. The Locate request shall be limited to the area described in the notification and the maximum Locate request size is 1000 feet, or intersection to intersection, whichever is greater, along the same road, within the same political subdivision. Facility owners should respond to routine locate request notices by the response due date.

4. DEMOLITION NOTICE

Notification for demolition work shall be not less than 3 business days nor more than 10 business days prior to commencing demolition work starting the day the notification is received. Caution: Demolition work may require more advance clearance from the facility owner if their service lines need to be disconnected. A permit may also be required for the work. The One Call notification should not be considered notice under any circumstance other than the Act. All local codes must be followed as a part of compliance with the Act. Final billing and disconnect of the lines attached to the structure must be secured directly with the involved service provider. Facility owners should respond to demolition notices by the response due date.

5. COMPLEX PROJECT NOTICE

The Act defines complex project as: ***"Complex project means an excavation that involves more work than properly can be described in a single locate request or any project designated as such by the excavator***

or facility owner as a consequence of its complexity or its potential to cause significant disruption to lines or facilities and the public, including excavations that require scheduling locates over an extended time frame."

It can be a single project, or a series of repetitive, small, short-term projects that are related in scope, that impacts facilities over a long period of time or a large area. Duration, Impact, Size, and Complexity are the determining factors.

- Duration: measured in time, will this be a long lasting project and will it have multiple phases?
- Impact: Does the project impact a lot of underground facilities? We don't always look at size for these, for example a hospital may be on 1 block but have an abundance of facilities underground.
- Size: Is it over 1000ft or intersection to intersection?
- Complexity: All of the above...does this require a meeting and a walk through to make a locate schedule to efficiently mark the site?

And in Section 5, clause (2.1), the last sentence states: ***"…In the case of a complex project, notification shall not be less than ten business days in advance of the beginning of excavation or demolition work."***

And Section 5 clause (3) states: ***"In a complex project or if an excavator intends to perform work at multiple sites or over a large area, to take reasonable steps to work with facility owners, including scheduling and conducting a preconstruction meeting, so that they may locate their facilities at a time reasonably in advance of the actual start of excavation or demolition work for each phase of the work. A preconstruction meeting may take place at any time prior to the commencement of excavation or demolition work, and the excavator, facility owners and designer, or their agents, shall attend the meeting. Notice of the meeting shall be given sufficiently in advance so as to permit attendance, either in person or electronically, by the excavator, facility owners and designer, or their agents, and shall include information sufficient to identify the scope of work. If the excavator does not believe that a preconstruction meeting is necessary under the circumstances of this clause it shall indicate such belief in its notice, but any facility owner with facilities at the work site may request a meeting with the excavator, and a meeting shall be held between the facility owner and the excavator. After commencement of excavation or demolition work, the excavator shall be responsible for protecting and preserving the staking, marking or other designation until no longer required for proper and safe excavation or demolition work at or near the underground facility or by contacting the One Call System to request that the facilities be marked again in the event that the previous markings have been compromised or eliminated."***

And Section 5 clause (3.1) states: ***"To comply with the requirements by the One Call System as determined by the board of directors regarding the maximum area that a notification may cover."***

The Pennsylvania One Call System Board of Directors mandated effective July 31, 2019, all Complex Project Notifications must be created in POCS's Coordinate PA (CPA) application.

Complex Project Process Policy

I. Terms used in this policy are as defined in the Underground Utility Protection Act (UULPA).

II. Notifications will be handled through the Pennsylvania One Call System (POCS) Coordinate PA (CPA) Web Portal.

A. Designers:

1. The designer creates a project within the CPA web portal.
   a. Includes Project Description and proposed timeline.
   b. Uploads drawings.
2. Through permissions, the designer assigns access rights (View Only or Modify) to the project owner.
3. Depending on the timeline of the project, the designer creates at least one Preliminary Design or Final Design notification ticket via the portal, from within the CPA project.
   a. If multiple excavators will be working on the same project, the designer segments the project into phases based on bid requirements.
   b. The designer creates at least one Final design ticket for each phase of the project.
4. When the project moves to construction phase, the project owner or designer assigns access rights (Modify) to the excavator for the phases of the project in which they are involved.

B. Excavators:

1. When a project <u>exists</u> in Coordinate PA:
   a. The excavator creates a complex project notification ticket via the portal, **from within the CPA project**, and indicates if a preconstruction meeting is requested. The excavator follows Option 1 or Option 2 below.
2. When a project <u>does not exist</u> in Coordinate PA:
   a. The excavator creates a project within CPA.
   b. The excavator creates a complex project notification ticket via the portal, from within the CPA project, and indicates if a preconstruction meeting is requested. The excavator follows Option 1 or Option 2 below.

Option 1: When a preconstruction meeting is requested, the excavator establishes the date, time and place of meeting in close proximity to the project work location. Electronic meetings are also acceptable. Meetings are strongly encouraged in the case of complex projects.

a. It is strongly recommended that in the case of a complex project that extends over a large geographic area, the party should consider scheduling multiple meetings throughout the site to accommodate travel needs.
b. The excavator is responsible for notifying the project owner and the designer of the meeting. Note: The designer is the one that prepared the drawing, not necessarily the one that is managing the project.

Option 2: If the excavator determines that a pre-construction meeting is not necessary, the notice shall indicate. If an individual facility owner nonetheless wishes to have a meeting, a meeting shall take place between that facility owner and the excavator. Other facility owners need not attend. [Sec 5(3) of Act.] In the notice, the excavator shall state the reason for determining that a pre-construction meeting is not necessary.

a. A facility owner requests a meeting by sending response code 092 (Requests Meeting) through POCS. This notice must be made prior to the third business day from the complex project notification.
b. The facility owner then contacts the excavator to establish the date, time, and place of meeting in close proximity to the project work location. The meeting must be held prior to the seventh business day from the complex project notification. Electronic meetings are also acceptable.

III. Meeting Protocol

1. At the meeting the parties shall agree upon their individual obligations consistent with the project. These obligations may vary from project to project based upon the specifics of the project and it is not the intent of this process to provide a specific set of standards for all complex projects. Rather it is intended that the parties shall have the flexibility to make decisions consistent with the project's parameters.
   a. Involved parties (facility owner, excavator, designer, project owners) are required to attend the meeting.
   b. The entire scope of the project must be defined at the meeting. Detail on phases should be defined as much as possible.
   c. Agreement on the scope of ticket will be left to the parties attending the preconstruction meeting.
   d. If a facility owner cannot agree to the proposed locate schedule, everyone must work to find a schedule that the one facility owner can agree to.
   e. If no agreement can be reached, the excavator must create single routine excavation notifications, from within the project, for the areas where the dissenting facility owner owns/operates lines.
   f. If an involved party fails to attend the meeting, the excavator may proceed according to the agreement reached at the meeting.
2. Meeting notes shall be taken by the excavator calling the meeting using the POCS approved template and the minutes shall set forth the agreements made by the parties. Meeting notes shall be uploaded to the POCS web portal as soon as practicable. In the absence of minutes or a meeting the parties shall be bound by the provisions contained in the POCS Users Guide for non-complex excavation notifications.
3. Within 90 days of the pre-construction meeting the excavator shall provide the routine excavation notification required by Sec. 5 of the Act. The notification shall be consistent with the agreements reached at the pre-construction meeting, if such a meeting is called.
4. A complex project requires 10 business days' notice. The excavator shall not enter a routine excavation notification prior to the pre-construction meeting.
5. If the **project start** is delayed AFTER the complex project preconstruction meeting has been conducted and the mark out schedule agreed to, the following will apply:
   a. If the **start date** that was agreed to is delayed more than 90 days:
      i. A new Complex Project ticket and meeting will be required, from within the same CPA project.
6. If the scope of the project changes, a new complex project notification and meeting will be required, from within the same CPA project.

Additional Guidance:

1. In the case where an excavator creates multiple routine excavations tickets:
   a. The facility owner may respond 092 (Requests meeting), via the KARL system and reach out to the excavator to work out a locate schedule.
   b. The one call system may reach out to the excavator to educate them on complex projects.
2. In the event an impacted facility owner fails to attend the pre-construction meeting, it is highly

encouraged the facility owner contact the excavator and schedule a one on one meeting, a minimum of at least 3 business days prior to the first lawful start date of the first routine excavation ticket.

3. If a party disagrees with the posted minutes, they communicate back to the excavator through the communication tool within the CPA portal.
4. Announcements will be sent to all parties for communication related activity in CPA.

Addendum A:

1. ROUTINE AND COMPLEX PROJECT TICKETS
2. A routine ticket is one that does not meet the definition of a complex project as established by the Pennsylvania One Call System's (POCS) Board of Directors pursuant to the UULPA.
3. A complex project is one that meets the definition established by the POCS Board of Directors.
4. An excavator shall comply with the requirements of Section 5 of the UULPA but may determine that a pre-construction meeting is unnecessary, even in the case of a complex project as defined by the POCS Board of Directors. In the event that an excavator determines that a pre-construction meeting is unnecessary, an affected facility owner may, nevertheless, request a preconstruction meeting between itself and the excavator, pursuant to Section 5(3) of the UULPA.
5. Such request by a facility owner shall not require a preconstruction meeting with all affected parties, but only with the facility owner requesting the meeting, and an affected facility owner is not entitled to a meeting with all other parties.

The Attendance and Meeting Notes form used with Complex Projects within the Coordinate PA web portal can be found in Appendix B.

"Large/Complex Project" is also included in the Common Ground Alliance (CGA) Best Practices, which are incorporated by reference in Act 287, as amended. Refer to chapter and sections: 2-2, 2-3, 2-4, 2-8, 3-14, 3-29, 4-11, 4-14, 4-17, 4-22, 5-4, 5-5, 5-6, 5-14, 5-23, 5-28, 6-18, and in the Glossary.

SECTION IV - GUIDELINES FOR PREPARING A LOCATE REQUEST

When initiating a Locate request, Section 5 clause (2.2) of the Act requires each excavator: ***"To provide the One Call System with exact information to identify the work site so that facility owners might provide indications of their lines. An excavator shall be deemed to have met the obligations of clause (2.1) if he calls the One Call System, provides the work site and other required information, and receives a serial number."***

And Section 5 clause (11): ***"To use the color white to mark a proposed excavation work site when exact work site information cannot be provided."***

We encourage excavators to visit the work site prior to placing a notification to outline their exact proposed work site in white, to assist the locator in marking only the area where the work will take place.

"If, after receiving information from the One Call System or directly from a facility owner, an excavator decides to change the location, scope or duration of a proposed excavation, the obligations imposed by this section [Section 5] shall apply to the new location."

ANNUAL FEE

Section 3 clause (f.1) states: ***"An excavator, designer or operator who proposes to commence excavation or demolition work and requests information from the One Call System shall pay to the One Call System an annual fee for the service provided by the One Call System under section 3. The fee shall be set by the One Call System board of directors and shall be used to offset a portion of the operating costs of the One Call System and a portion of the operation costs levied on the One Call System's political subdivision and municipal authority members. Failure to pay the fee shall constitute a violation of this act and shall subject the excavator, designer or operator to the enforcement authority of the commission for this nonpayment."*** The annual fee will be charged on the first notification each calendar year.

LOCATE REQUEST CREATION

When calling in notifications, POCS Customer Service Representatives (CSRs) are trained to obtain specific information concerning locate requests. All telephone calls are recorded and kept for five years. Each question asked has a purpose. This section will provide a brief explanation of the reason for each question.

Locate request processing is more efficient if the caller is prepared to answer all questions. The best way to prepare for a call is to visit the website www.paonecall.org.

Excavators, Designers, Project Owners and Facility Owners can submit Locate requests via the website with valid log in credentials. Homeowners working on their own property may submit single address Locate requests via the website without logging in. Whichever input method is chosen, questions will be asked to complete specific data fields.

Field Definitions:

Information about the company making the Locate request: (fields 1-6)

1. Telephone Number & Extension:
The telephone number, including the area code, of the excavating company, design firm, or homeowner placing the call.

2. Caller Name: (or Web Ticket Entry User name)
The caller's name is taken in order to maintain records of what person placed the Locate request.

3. Company:
The name of the company for whom the caller works. For homeowners placing their own Locate requests, this field will contain the name of the caller.

4. Address, City, State, Zip:
The mailing address of the company is recorded and stored as part of the Locate request. For homeowners placing their own Locate requests, this field will contain their mailing address.

5. Caller Email Address: (or Web Ticket Entry User Email Address)

The caller or web ticket entry user will be emailed a copy of the Locate request ticket. In addition, facility owners are required to respond back to the One Call System for all notifications, and the One Call System will collect and email the responses to the caller provided email address.

6. Caller Fax:
Needed only when an email address cannot be provided.

Description of the Work Site: (fields 7-16)

7. County:
The name of the county in which the work will be performed is required.

8. Municipality:
The name of the municipality in which the work will be performed is also required.
Ward: If the work is taking place in Allentown, Erie, Pittsburgh, or Philadelphia, the voting ward of the site is also required.

9. Street # & Street Name:
Name of the street and/or route number. Please use the exact address numbers, directional (N, S, E, W, etc.), and the street suffix (ST, RD, CT, AVE, LN, WY, etc.).

10. Nearest Intersection:
Name of the nearest intersecting street or cross street (within reasonable distance of the work site).

11. Second Intersection/Nearest Main Road:
The name of the second street if the work site is between two streets. If not working between two streets, the field can also be used to hold the nearest major intersection name, especially if the nearest intersection is a new or unnamed road. Directions and other clarifying information will be typed into location information so the facility owner knows which type of data has been entered in this field. Additional information is solicited to determine if the work is taking place in the intersection or between two intersections.

12. Site Marked in White?
Indicate by yes or no whether the proposed route or boundary of the work site had been marked in white. This field is not included for design notifications.

NOTE: If an exact location cannot be given, it is required that the proposed route or boundary of the work site be marked in white. Excavators should delineate the work site with 12 inch dashed white paint lines to avoid confusion with color codes used by facility owners (see Section V of this document). Marking the work site in white will provide locators with an accurate picture of the proposed excavation area, helps the locators complete the work and provides the excavator with the needed information, and prevents over marking. Over marking is a problem because in some areas, neighbors can get upset if the marks appear to be graffiti.

13. Location Information:
Clarifying information to specify the exact location of the dig. Include measurements and directional (N, S, E, W or variants) from known points, such as the curb line, street, structure, property line, or fence. If working on private property, note whether working in the front, rear, left, right or all sides. If known or visible, include utility pedestal or pole numbers, highway or railroad mile markers, landmark names, permanent pipeline marker identifiers, etc. You can also provide directions from the nearest town, or major intersection. Give as much descriptive information as you can to help the facility owners and the locator find the site.

14. Subdivision:
The name of the subdivision, housing development, named community, or building complex where the work will take place will be entered, if applicable.

15. Latitude and Longitude Coordinates:
Provide the GPS coordinates of the location, if available.

16. Type of Work Being Done:
Facility Owners need to know the specific reason for the excavation, demolition, or design work to help them evaluate the possible impact on their underground assets. Be as specific as possible. For example, “installing a sanitary sewer lateral” is much more helpful than “digging a sewer line”.

Formatted information based on specific notification types is also included here.

Demolition notice: the value will begin with the word DEMOLITION-.
Damage notice: the notice is qualified and will begin with the word DAMAGE- or EXPOSED-, followed by the facility type detail provided by the excavator.
Odor of Gas: the value will display ODOR OF GAS.
No One Call: the value will display NO ONE CALL
Potential Cross Bore: the value will display POTENTIAL CROSS BORE

Specific qualifiers are added to the work site information: (fields 17-21)

17. Working in:
Identify if the work will take place in the street, sidewalk, public or private property. Other designations such as right of way, treelawn, berm, river, stream, etc., can also be specified.

Street: indicate yes or no
Sidewalk: indicate yes or no
Public Property: indicate yes or no
Private Property: indicate yes or no

If on Private Property, indicate Front, Rear, Left or Right side of the property
Other: where applicable

18. Depth:
Give the approximate depth of the excavation.

19. Extent of Excavation:
Give the approximate size of the excavation. Indicate the length and width, the diameter, or some other measurement to indicate the size of the opening.

20. Method of Excavation:
Indicate how the earth will be moved, i.e. anchoring, augering, backfilling, blasting, boring, compressing, digging, directional boring, ditching, dredging, drilling, driving-in, grading, grinding, hand-digging, milling, plowing-in, powered equipment, pulling-in, ripping, scraping, tilling, trenching, trenchless excavation, tunneling, or vacuum excavation.

21. Type of Equipment:
Indicate what kind of equipment will be used to perform the work, i.e. auger, backhoe, boring, directional drilling, drilling, excavator, explosives, farm equipment, grader, hand tools, milling equipment, probing device, scraper, trackhoe, trencher, vacuum equipment, or other (specify). If you don’t know what type of equipment will be used, and have no way to determine the type, then indicate unknown.

Identification of the project owner and onsite contact information: (fields 22-26)

22. Work Being Done For (Project Owner):
Identification of whom the work is being performed for is another resource for obtaining additional information about a project. The Act refers to this as the “project owner”. The “project owner” means any person who or which engages an excavator for construction or any other project which requires excavation or demolition work.

23. Onsite Contact:
The name of the person at the work site with knowledge about the work being done, who a locator can speak with, or a facility owner can make direct contact with when clarification is needed about the Locate request.

24. Onsite Contact Phone Number and Extension:
Provide the telephone number of the onsite contact, including the area code. This number should be a mobile phone, but in the case where an office phone is auto-forwarded to a mobile device, an extension is permitted.

25. Best Time to Call:
When the onsite contact person is normally available to receive calls from facility owners.

26. Onsite Contact E-mail:
Provide the email address of the onsite contact person, as they will be sent a copy of the Locate request in addition to the caller.

Timeframes are identified: (fields 27-29)

27. Scheduled Excavation Date:
On non-design notifications, indicate the date the excavation work is scheduled to begin. Excavation work cannot begin prior to the date given. (See Lawful Start Dates below.)

Formatted information based on specific notification types is also included here.

Design notices: this field is populated with the word DESIGN.

28. Start Time:
Indicate the estimated time the excavation crew plans to be on site and digging.

29. Duration of Job:
To help the facility owner understand the complexity of notification, indicate the approximate number of hours, days, weeks, months, or years you will be actively working on the excavation or demolition. This information helps the facility owner determine the resources needed to deal with the Locate request or complex project. This field is not included on design notices.

Additional information: (fields 30-31)

30. Job Number:
This is an optional field for your use to help reference Locate requests to your internal work management systems.

31. Remarks:
Additional information you wish to include on the Locate request that was not asked in any other field, or exceeded a field size, can be entered here.

Formatted information based on specific notification types is also included here.

Demolition notices: Because disconnect of lines attached to a structure being demolished must be secured directly with the utility, the excavator is asked if they contacted utilities.

If yes, Remarks will display: CALLER HAS CONTACTED UTILITIES DIRECTLY FOR DISCONNECTS/METER REMOVAL.

If no, Remarks will display: CALLER HAS BEEN ADVISED TO TELL PROPERTY OWNER TO CONTACT UTILITIES DIRECTLY FOR DISCONNECT/METER REMOVAL.

Damage notices: The caller is asked if the damage resulted in the escape of any flammable, toxic or corrosive gas or liquid which endangers life, health, or property.

If yes, they are asked if they notified 911.

If no, they are advised to notify 911.

Based on the information they provided the Remarks will display: HAZARDOUS RELEASE <YES> or <NO> and CALLER HAS NOTIFIED 911 or CALLER HAS BEEN ADVISED TO NOTIFY 911.

Odor of Gas notices: The caller is asked if they know the gas or pipeline company name. If yes, the Remarks will display: GAS COMPANY: <name of company provided>.

Update: The update action is available for design, non-emergency demolition and excavation Locate requests. An update banner is added in the Remarks and displays the serial number being updated. The banner will include a date/time stamp, CSR initials and channel number or web ticket entry user login followed by the requestor, the reason for the update, and whether lines need to be re-marked.

Example of what Remarks will display:
******=== UPDATE 20251231234-000 == 7/26/2025Fac 1215 GRI 34===******
UPDATE REQUESTED BY: SALLY SMITH
REASON FOR UPDATE: WORK NOT STARTED or WORK STOPPED STARTING AGAIN or WORK IN PROGRESS REMARK LINES or NO MARK OUTS NEEDED

Please Note: Update tickets are NOT required every 10 days.

Cancel: indicates the work will not take place, or the address provided on the notification was incorrect and a new serial number will be created to correct the bad information. A cancel banner is added in the Remarks and displays the serial number being cancelled. The banner will include a date/time stamp, CSR initials and channel number, the requester, and the reason for the cancel.

Example of what Remarks will display:
******=== CANCEL 20251231234-001 == 7/26/2025 1652 JEC 38===******
CANCEL SERIAL NUMBER: 20251231234
CANCEL REQUESTED BY: JANE DOE
INCORRECT ADDRESS, NEW TICKET HAS BEEN PLACED

MAPPING the Locate request
During the creation of a ticket, the system attempts to locate the described proposed excavation site using the data provided for county, municipality, street, nearest intersection, and second intersection. Up to two latitude/longitude points can also be provided to assist in the search. The mapping process is slightly different based on the method of input:

Caller:

- If the map search is successful, the CSR will attempt to confirm the search results with the caller and draw a notification area polygon around the proposed excavation site.
- If the map search is unsuccessful, the CSR will work with the caller to determine if all data provided by the caller is accurate.
- In the rare situations when a site cannot be found on the map, an unmapped notification will be sent and the facility owners notified will be based on the county and municipality given by the caller.

A single point with a 150 feet radius (300 feet diameter) buffer, or a polygon delineated with up to six latitude/longitude points, with a 150 feet buffer, can

be used to draw the notification area polygon.

Web Ticket Entry User:

- If the map search is successful and the ticket is being created by a user via web ticket entry, the user must draw the notification area polygon.
- If the map search is unsuccessful, the user should ensure all data entered in the fields is accurate and try again.
- If the user is still unable to map the ticket, they must abort the entry and call the One Call System to place their notification.

A single point with a 150 feet radius (300 feet diameter) buffer, or a polygon delineated with up to six latitude/longitude points, with a 150 feet buffer, can be used to draw the notification area polygon.

Web Single Address (WSA):

- Users do not draw a notification polygon.
- If the address search is successful, the user is presented with geometry in the shape of the property parcel, and asked to verify and accept that the location found by the system is correct.
- If the address search is unsuccessful, or the user does not agree with the site parcel found, the ticket is placed in a suspend queue for manual intervention by a CSR prior to its release.
- All WSA notifications created are first reviewed by a CSR, then released and assigned a serial number. The ticket confirmation is emailed and includes the serial number, a copy of the ticket information, and the facility owners notified.

Important: The notification area polygon drawn by the CSR or the WTE user, and the geometry shape accepted by WSA users determines which member facility owners will be notified of the proposed work.

The type of notification area will be included on the Locate request:

32. Mapped Type--[P]
P = Polygon
X = Point
S = WSA Parcel
C = CPA geometry
N = Not Mapped

33. Mapped Lat/Lon--
[40.361226/-79.926977,40.361981/-79.924776,40.360903/-79.924907
40.361123/-79.927265]

If the Mapped Type = S or C, the latitude longitude coordinates will not be populated in the Mapped Lat/Lon field because the output is in OGC WKT format, which exceeds the six point limit. The OGC WKT points can be output on the ticket if the member receiving site requests the data. See field 43 Geometry. If the Mapped Type = N, coordinates do not appear in either field.

A link to the image of the drawn notification area will be included on the Locate request:

34. Attachments: [http://www.pa811.org/attachments/20250030477]

35. LAWFUL START DATES: (3 business days) **through** (10 business days)

These dates are calculated for Locate requests, based on the business day the notification is originated. They indicate the earliest date that digging can begin and the last possible date when digging must begin. If digging does not start within these dates, a new one call notification must be placed. This information is provided to the caller by the CSR. The information is emailed to web ticket entry and web single address users.

If the scheduled excavation date given by the caller falls between the lawful start dates and is not the third business day, the lawful start dates are recalculated and the scheduled excavation date becomes the earliest lawful start date. The last possible lawful start date remains the same, i.e., ten business days from the origination of the notification.

It is very important not to begin work prior to the lawful start dates. Beginning work before the lawful start date can result in forfeiture of the excavator's rights and protection provided for under Pennsylvania Act 287 as amended. Additionally, commencing work prior to the lawful dig date is a violation of the law.

36. SERIAL NUMBER

Once the available information for the notification is gathered, the system assigns a serial number to the notification.

The serial number is eleven digits comprised of the four digit year, three digit Julian date, and four digit sequential number. A three digit version number is then appended to the serial number to track its action type. On the original ticket, the version is -000, designating a NEW or UPDATE action type. Example: 20250010001-000 is the first ticket taken in 2025. On each subsequent action taken on the original, the version number is incremented as -001 or higher to designate a RENOTIFY, CANCEL or ANNOUNCEMENT. Example: 20250010001-001 is the first RENOTIFY of the original request.

The serial number is provided to the originator of the notification based on the method of input:

Caller:

- The serial number is read to the caller, who is also offered a list of the facility owners being notified.
- Callers who provided an email address will receive a **ticket confirmation** which includes a copy of the ticket information and the facility owners notified.

Web Ticket Entry User:

- A **ticket confirmation** is emailed and includes the serial number, a copy of the ticket information, and the facility owners notified.

Web Single Address User:

- For **successful parcel** searches, a **ticket confirmation** is emailed and includes the serial number, a copy of the ticket information, and the facility owners notified.
- For **unsuccessful parcel** searches, the notification is first reviewed by a CSR, then released and assigned a serial number.
  - Once released, a **ticket confirmation** is emailed and includes the serial number, a copy of the ticket information, and the facility owners

notified.

The serial number is proof of your notification and should be saved.

Ticket confirmations should be reviewed for accuracy when received. If a discrepancy is found, the One Call System should be notified immediately and a new notification placed.

It is considered a Best practice is to have a copy of the notification at the work site.

37. RESPONSE DUE DATE

The ticket output will include the system generated response due date, which differs based on the Message Type. **Facility owners must respond to all notifications** through the One Call System by the response due date. (Refer to Section VI for additional information.)

38. LOCATE REQUEST MESSAGE TYPE

The ticket output format will include one designation from each of the three components below that define the Message Type. Example: [NEW] [EXCAVATION] [ROUTINE]

- **Action Type:** (how the request was created, which also determines the serial number and version assignment)
  - NEW – a new Locate request – receives a unique serial number and version 000.
  - UPDATE – modifies the Lawful Start Dates on an existing Locate request due to work not starting, work stopped and is starting again, or work in progress when re-marking is needed, – receives a unique serial number and version 000.
  - RENOTIFY – a re-transmit of an existing ticket, initiated by a caller, to advise one or more facility owners of locate related or response issues – the serial number does not change, however, the version number will increment with each successive re-notify.
  - CANCEL – notification by the ticket originator that work will not be done – the version number will increment.
- **Request Type:** (the kind of work being performed)
  - EXCAVATION – the movement of earth, rock, or other material.
  - DAMAGE – damaged or exposed underground facility or facilities.
  - ODOR OF GAS –third party reports of non-excavation related odor of gas.
  - DEMOLITION – partial/complete destruction of a structure served by/adjacent to underground lines.
  - NO ONE CALL –third party reports of excavation work where there is reason to believe no one call ticket exists.
  - POTENTIAL CROSS BORE – called in by plumbers or sewer operators to provide notice of intent to clear a clogged sewer drain prior to using a cutting tool.
- **Request Class:** (the timeframe of the work being performed)
  - FINAL DESIGN– a notification requiring not less than 10 nor more than 90 business days notice prior to final design.
  - PRELIMINARY DESIGN – a notification giving more than 90 business days notice.
  - ROUTINE – a notification requiring not less than 3 nor more than 10 business days notice.
  - EMERGENCY – the excavator declares work is an Emergency as defined by Act 287 as amended.
  - INSUFFICIENT NOTICE – the excavator fails to provide the required 3 business day notice and the work does not fall within the definition of emergency as defined by the Act.
  - COMPLEX PROJECT – used to schedule a complex project pre-construction meeting request.

Based on the Message Type, there may be variations in the data fields. Some variations impact the data fields described above, and have been noted where possible. Other data fields are based on conditionals or are specific to certain action or request types and the request class.

39. PennDOT Permit Number:
If the work is taking place on a PennDOT road, provide the permit number issued to you by PennDOT.
40. Project dates:
Used in lieu of Lawful Start dates on design notices. Project dates are calculated based on the designation as final design or preliminary design.
41. Project Contact, Project Contact Phone, and Project Contact Email:
Used in lieu of Onsite contact, Onsite Contact Phone, and Onsite Contact Email on design notices.
42. CPA Project ID, CPA Phase ID, and CPA Location ID:
Used when a notice originates from the Coordinate PA (CPA) project coordination, collaboration and communication tool. (See Section XII Website Tools for more information on CPA.)
43. Geometry:
Used in lieu of Mapped Type and Mapped Latitude/Longitude on notices originating from CPA or WSA online. Due to its potential size, the Geometry field is suppressed unless the receiver CDC opts in to receive the data.
44.-51.
RNO Caller, RNO Caller Phone, RNO Onsite Contact, RNO Onsite Phone, RNO Onsite Contact Email, Crew Onsite, Unmarked or Incorrectly Marked, RNO Remarks:
RNO is an abbreviation for the action type RENOTIFY. The original Lawful Start Dates, Scheduled Excavation Date, Start time and serial number do not change. Cancel and Complex Project action types are not eligible for renotify action.
52. Direct Contact with Excavator Required within two hours:
The locate request will indicate Y(es) or N(o) based on information given by the excavator.

The following is one example of the ticket output format with proper information used to identify identifying the location of a work site:

CDC ABC 00001 POCS MM/DD/YY TT:TT:TT 20251234567-000 NEW XCAV RTN

==========PENNSYLVANIA UNDERGROUND UTILITY LINE PROTECTION REQUEST=========

Serial Number--[20251234567]-[000]
Channel#--[1234] [0123] [4567-89]

Message Type--[NEW] [EXCAVATION] [ROUTINE]

County--[ALLEGHENY] Municipality--[WEST MIFFLIN BORO]

Work Site--[925 IRWIN RUN RD]

Nearest Intersection--[NOBLE DR]
Second Intersection--[LUTZ LANE]
Subdivision--[BORLAND]
Site Marked in White--[Y]
Location Information:
[WORKING FROM THE FIRE HYDRANT ON THE LEFT SIDE OF THE BUILDING, CROSSING THE DRIVEWAY INTO THE TREELAWN, CONTINUING THROUGH THE MIDDLE OF THE TREELAWN PARALLEL TO THE BUILDING, FOR 100FT, CROSSING BACK OVER THE DRIVEWAY TO THE RIGHT CORNER OF THE BUILDING.]
Caller Lat/Lon--[]
Mapped Type--[P] Mapped Lat/Lon--[40.361226/-79.926977,40.361981/-79.924776,40.360903/-79.924907
40.361123/-79.927265]

Attachments: http://www.pa811.org/attachments/20250030477]

Type of Work--[INSTALL 2IN WATER SVC LINE] Depth--[3FT]
Extent of Excavation--[2FT X 230FT]
Method of Excavation--[TRENCHING]
Equip Type—[BH]
Street--[N] Sidewalk--[Y] Pub Prop--[N] Pvt Prop--[Y] Other--[TREELAWN]
Private Front--[Y] Rear--[Y] Left--[Y] Right--[Y]

Lawful Dig Dates--[DD-MON-YY] thru [DD-MON-YY] Response Due Date--[DD-MON-YY]
Scheduled Excavation Date--[DD-MON-YY] Dig Time--[TTTT] Duration--[1 WEEK]

Caller--[ANNABELLE SMITH]
Caller Phone--[555-555-5555] Ext--[]
Excavator--[ABC CONSTRUCTION]
Address--[12345 MAIN ST]
City--[PITTSBURGH] State--[PA] Zip--[15236]
FAX--[555-444-4444] Caller Type--[B]
Email--[asmith@aol.com]
Work For--[PA ONE CALL SYSTEM INC]
Onsite Contact--[ANNABELLE SMITH]
Onsite Contact Phone--[555-555-5555] Ext--[]
Best Time to Call--[0800-1600]
Onsite Contact Email—[asmith@abc-construction.com]
Job Number--[]

Prepared--[DD-MON-YY] at [TTTT] by [CSR NAME]
Remarks--

SECTION V - WHAT HAPPENS WHEN THE NOTIFICATION IS MADE

POCS records all conversations that pertain to the Locate request, and maintains a copy. The voice and data records are maintained for five (5) years.

When the Locate request is submitted, the computer processes the ticket, assigns a serial number to the notification, determines which member facility owners to notify, where to transmit the notification, creates the ticket output format, and delivers it to each involved member, separately tracking the sequence number of the day for each unique delivery address.

The system also determines if the notification is the first one placed by a business in the calendar year. If so, an invoice is generated for the annual fee for the service provided by the One Call System. (See Section IV for more information on the annual fee).

SECTION VI - RESPONSIBILITIES OF THE FACILITY OWNER (After receiving the Locate request)

Underground facility owners have the option to receive the information from the One Call System using a variety of delivery methods, such as email, XML, or viewing Locate requests on the One Call System website. A sequence number is added to each transmission so a member can easily identify skipped transmissions.

To ensure successful delivery of Locate requests, an end of day (EOD) summary audit of notifications transmitted from the One Call System is sent to each receiving site shortly after midnight each day. The summary lists by serial number, any notifications the member should have received the day before. Members should check this audit for agreement with transmitted notifications. If any serial numbers were missed, members can initiate a resend via Online Ticket Management on the website or contact the One Call System to request a resend. Members whose primary method of receiving tickets is web view should review the EOD online as they will not receive a transmission.

- A resend is a manual re-queue of a Locate request previously logged as a successful ticket delivery, initiated by the member facility owner.
- A resend does not change any data, but appends RSND to the delivery header, populates a new delivery sequence number and includes the date/time of the resend.

- A resend may also be manually forced to a facility owner not notified on the original list when the caller has cause to believe non-notified facilities are present at the work site and are requesting a locate/response.

- A resend conditionally adds one of two text lines at the end of the Locate request:
  - When the member was listed on the original transmission:
    - [Originally sent as sequence number NNNN at MM/DD/YY HHMM].
  - When a ticket is forced to a member not in the original list:
    - [Ticket (re) sent at your request.]

DETERMINING CONFLICT WITH EXISTING ASSETS

Once the information is successfully transmitted and received by the member facility owner, their personnel review the Locate request to determine possible conflicts. The review can include automated or manual comparison with asset maps and records, contact with the excavator to clarify data information about the request, or dispatching a locator to the work site. It is the facility owner's job to decide whether or not the location of the proposed excavation work is close to existing underground facilities.

If the work to be done or work site appears to be complex, or the lines at the site are considered critical, the facility owner may request to meet the excavator. In this case, the facility owner should respond via KARL with a "092-Requests Meeting" designation, and then contact the excavator to arrange a meeting date and time.

Some facility owners are required to be on site during excavation while work is in the vicinity of their line. Generally, there is no charge for this additional level of protection. Take advantage of their expertise and make sure you understand the safety precautions that are necessary to protect the line and yourself.

After receiving and screening the non-design Locate request, if a conflict exists within the excavation work site described on the Locate request, each underground facility owner is required to mark the location of the facility owner's underground lines within eighteen inches horizontally from the outside edge of the line, known as the tolerance zone, including known connections and appurtenances. At its option, the facility owner may escalate to the trouble locate process.

Under Section 2 clause (i.1), known as the Good Samaritan clause, as a helpful guide to the excavator or property owner, the facility owner may identify the location of a known facility connected to its facilities. The identification will not impose any liability upon the facility owner for the accuracy of the non-owned facility.

RESPONDING TO LOCATE REQUEST NOTIFICATIONS

Section 2 (5) (i)-(ix) requires Facility Owners to respond to all notifications by marking, staking, locating or otherwise providing the position of the facility owner's underground lines at the work site within eighteen inches horizontally from the outside wall of such line in a manner so as to enable the excavator, where appropriate, to employ prudent techniques, which may include hand-dug test holes, to determine the precise position of underground facility owner's lines; or by notifying the excavator they have no facilities to be marked. (See below for more information on trouble locates, abandoned facilities, and responding to notifications that do not require marking in the field.)

USE OF MARKING

Facility Owners may use standard locating techniques suitable to each type of line being located based on accepted engineering and operational practices, and mark with paint, stake, and/or flags, according to APWA/Common Ground Alliance Best Practices for Temporary Marking set in ANSI standard Z535.1 Safety Color Code. (See Appendix E of this document). Markings will be done in a reasonable manner; in order to enable the excavator to easily recognize the location of buried facilities.

WHITE Proposed Excavation
PINK Temporary Survey Markings
RED Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW Gas, Oil, Steam, Petroleum or Gaseous Materials and Hazardous Materials
ORANGE Communication, Alarm or Signal Lines, Cables or Conduit, and Traffic Loops
BLUE Potable Water
PURPLE Reclaimed Water, Irrigation and Slurry Lines
GREEN Sewers and Drain Lines

SYMBOLS
(These symbols further define the color-coding used in marking buried facility locations).

CH	Chemical	SS	Storm Sewer
E	Electric	SL	Street Lighting
FO	Fiber Optic	STM	Steam
G	Gas	SP	Slurry System
LPG	Liquefied Petroleum Gas	TEL	Telephone
PP	Petroleum Products	TS	Traffic Signal
RR	Railroad Signal	TV	Television
S	Sewer	W	Water
SD	Storm Drain	W	Reclaimed Water "Purple"

Use color-coded surface marks (paint or similar coating) to indicate the location and route of buried lines. To increase visibility, color-coded vertical markers (temporary stakes or flags) should supplement surface marks. All marks and markers should include the symbols of the underground facility owner or actual company abbreviation (i.e., VZPA, DLCO, PECO, UGI, PAWC, ATT, etc.) of the company that owns or operates the line, and the width of the facility, as practicable.

Supplemental offset marking may also be added at the discretion of the facility owner, and is recommended if the surface over the buried line is to be removed or destroyed. Such markings will identify the direction and distance to the actual facility. Offset markings should be on a uniform alignment and must clearly indicate that the actual facility is a specific distance away. Please see the attached marking card for guidelines for marking of underground facilities.

Facility owners should consider documenting the completed mark out with photos. This can be done within a facility owner's internal systems or by utilizing the notes or attachment features of POCS Online Ticket Management application or Coordinate PA on the website.

TOLERANCE ZONE

The width of the tolerance zone means the horizontal space within eighteen inches of the outside wall or edge of a line or facility. (see Section VIII of this guide for additional information on excavating within the tolerance zone.)

TROUBLE LOCATES

Common Ground Alliance (CGA) Best Practice 4-23 states the operator has a trouble locate resolution protocol that emphasizes the timely and accurate completion of the trouble locate request with communication between the parties and documentation of actions taken. The practice is intended to be applied in cases where upon initial arrival at the location, the tolerance zone for an existing facility cannot be established with confidence consistent with the operator's compliant mark out criteria. In this scenario the locate entity/operator:

- Marks, stakes, locates, or otherwise providing the position of the facility owner's underground lines at the work site within eighteen inches horizontally from the outside wall of such line.
- Escalates the trouble locate internally for advanced/enhanced resolution measures, i.e., vacuum

truck, line tracer, ground penetrating radar (GPR), in-line 3D gyro mapping technology, etc.

- Attempts to make direct contact with the excavator (cell phone, text, email) and documents the method and message. If a specific interim positive response code is available or comments can be placed in the one call system, share why the locate cannot be completed, along with contact information.

- Responds to KARL using code 002 if the excavator cannot wait until the facility owner can mark the line, or use KARL code 006 if the excavator can wait until the facility owner can mark the line.
- Designates the trouble locate area consistent with their procedures and uses paint, flags or other methods that distinguish the specific trouble area from the locatable areas.

- Communication with the excavator should warn of any unique or elevated risk associated with the unlocatable facility (high pressure gas, high voltage electric, high-density fiber, etc.).

Operator makes the appropriate records/mapping corrections, and when feasible takes action to make the facility locatable moving forward (tracer wire, electronic marker system/marker balls, etc.).

ABANDONED FACILITIES

Facility owners must make reasonable efforts during the excavation phase to locate or notify excavators of the existence of any known lines and abandoned lines.

Information regarding abandoned facilities, in possession of the Facility Owner, should be provided in the following instances:

- with a correctly submitted preliminary or final Design request

- at a Pre-construction meeting on a Complex Project request

- for a Routine Locate request where the specific excavation area is identified using white paint, stakes and/or flags. (CGA 4.11/APWA guidance)

Section 9 of the Act specifically requires your best efforts to comply with the CGA Best Practices.

When the presence of an abandoned facility within an excavation site is known, an attempt is made to locate and mark the abandoned facility. When marking abandoned lines, follow the APWA/CGA Best Practices for Temporary Markings, and add the capital letter A enclosed in a circle, a method approved by APWA.

RESPONSE DUE DATE

Facility owners must respond to all notifications through the One Call System by the response due date, and must timely enter a final response to all locate requests. Responses made through the KARL system (see Appendix D) are considered to be final responses, except the system generated response 999, and the voice response 007.

Responses are due:

- Emergency notifications: Emergency Locate requests that fall within the definition of an emergency are given top priority. Underground facility owners are required to mark facilities within the emergency excavation area as soon as practicable. The response by the facility owner should be consistent with the nature of the emergency information received. The expectation is that within 2 clock hours of the notice the Facility Owner will respond to the site or make direct contact with the Excavator.
  - Damage, odor of gas, no one call, and potential cross bore notifications are classified as emergencies.
  - Note: In certain situations that fall within the definition of an emergency, but do not require immediate mark out, an emergency Locate request contains a scheduled excavation date greater than the current date. For example, a water line break during the winter months, which might freeze, causing a hazard, but can be kept safe until the next day using road salt. In such cases, the response due is 23:59:59 the calendar day prior to the scheduled excavation date.

- Routine notifications: When the scheduled excavation date is equal to three business days from the Locate request submit date then the response due is 23:59:59 the business day prior to the first Lawful Start date. When the scheduled excavation date is greater than three business days from the Locate request submit date, the response due is 23:59:59 the calendar day prior to the first Lawful Start date.
  - Insufficient Notice: the response due is 23:59:59 two business days from the Locate request submit date.

- Complex Project meeting request notices: When a meeting is requested the response due is 23:59:59 the business day prior to the proposed meeting date. When a meeting is not requested, the response due is 23:59:59 two business days from the meeting request submit.

- Design notifications: For Preliminary and Final Design, the response due is 23:59:59 ten business days from the Locate request submit date.

If necessary, the facility should propose mutually agreeable scheduling by which the excavator, facility owner or designer may locate the facilities.

Responses may be sent to the One Call System via its web service, or by using web ticket response on the website, or by calling the automated IVR service know as KARL at 800-222-6470 and following the prompts.

KARL receives the facility owner responses and emails the collected responses to the originator of the Locate request at the end of the business day on the response due date.

For a list of the Facility Owner responses used in the KARL system please see Appendix D - KARL System of this guide.

Steps for a Compliant Locate in Pennsylvania

When a facility owner receives a dig request and cannot provide a KARL 001-Clear No Facilities response, a

standard Routine notification response begins with 2(5)(i) of the Act. Some ticket management software in use by facility owners uses pre-screening tools that will complete auto conflict a notification as a KARL 002 Conflict-Direct Contact To Follow (DCTF) where facilities exist.

1. Responds timely to a valid, non-emergency locate request.
   - Timely is defined as, the day prior to the lawful dig date or an agreed upon and documented extension. 2.5 (i)
2. Uses ALL available facility records, to support determining the facility location 2.5 (i) of the Act, **and/or**
3. Utilizes standard locating technology, such as an electronic pipe locator, not including excavation 2.5 (i)
   - As noted, the initial KARL response is 002-Conflict DCTF, and if resolved, is closed as 003 Marked.
     - Note: a high percentage of notifications are completed at step 2(5)(i).
   - An appurtenance that is not owned by but attached to an FO's line can be marked applying 2(5)(i.1), the Good Samaritan rule, and is marked in good faith without liability.
     - Remember the Excavator needs to be able to rely on the accuracy of the marks.
   - In instances where the 18" Tolerance Zone around a known facility cannot be established and markings cannot be applied with confidence, leave the KARL response as 002 (or a specific Trouble Locate KARL code), and move to Step 4.
   - The excavator's responsibilities in this scenario are detailed in 5(5) of the Act, which may include actions in 5(4) & 5(15). Consistent with 5(15), the Excavator should notify the Project Owner, informing them there is insufficient information to locate an existing facility within the construction path. Any excavation work outside the tolerance zone is considered "extra work" and the Excavator is entitled to payment* under (5.15).
     - *Section 6.1(2) requires the Project Owner to respond timely to requests for payment.
4. Follow CGA Best Practice 4-23 Trouble Locate Resolution Protocol, along with any company specific policies. Sections 2(5)(i.2), 2(5)(ii) & 2(5)(iii.1) may apply.
   - 2(5)(i.2) – document a communication with the excavator that the tolerance zone for a specific facility cannot be established and the issue has been escalated internally. Delineate the area in question.
   - 2(5)(ii) - an FO may elect to timely excavate around its facility to resolve the trouble locate but is not required to do so under the Act. If a new due date is agreed to, change KARL to 006-Scheduled Date & Time to be Marked.
   - 2(5)(iii.1) states, if a mutually agreeable schedule to locate the facility cannot be reached, the excavator may proceed per section 5(4) and must utilize due care and prudent techniques to identify and protect the facility during excavation. Payment shall be provided by the Project Owner per section 5(15).
5. KARL is closed as 003-Marked, and any record corrections are completed.

RESPONDING TO EMERGENCY NOTIFICATIONS

Facility owners must respond as soon as practicable following receipt of notification from the One Call System. The response by the facility owner should be consistent with the nature of the emergency information received. The expectation is that within 2 clock hours of the notice the Facility Owner will respond to the site or make direct contact with the Excavator.

- Excavation Emergency when the scheduled excavation date is not the same day the notification is placed:
  In certain situations that fall within the definition of an emergency, but do not require immediate mark out, an emergency Locate request contains a scheduled excavation date greater than the current date. For example, a water line break during the winter months, which might freeze, causing a hazard, but can be kept safe until the next day using road salt. In such cases, the response due is 23:59:59 the calendar day prior to the scheduled excavation date.
- Damage Emergency:
  Damage notices can be the only notification received by the one call system of active excavation activity. Facility owners should respond to damage notices in the same manner as other emergency notifications.
- Repairing the damaged facility:
  If the original ticket scope covers the area where repair work will occur, facility owners may proceed with repairs without placing a new notification, otherwise, facility owners should place an emergency notification prior to repairing damage to their lines.
- Odor of Gas Emergency:
  Facility owners should respond to odor of gas notices in the same manner as other emergency notifications.
- No One Call Emergency:
  Facility owners should respond to no one call notices in the same manner as other emergency notifications.
- Potential Cross Bore Emergency:
  Facility owners should respond to potential cross bore notices in the same manner as other emergency notifications.

RESPONDING TO COMPLEX PROJECT MEETING REQUESTS

A facility owner is required to attend and participate in preconstruction meetings for a Complex Project and to work with excavators on a schedule to mark the underground lines reasonably in advance of the actual start of excava-

tion or demolition work for each phase of the work.

If the excavator does not believe a preconstruction meeting is necessary, it will be noted in the Complex Project notice sent to the facility owner, however, facility owners with facilities at the work site may request a meeting with the excavator and a meeting shall be held between the two parties.

When notification(s) exceed the scope of a routine Locate request as defined by the Board, or the work otherwise is determined to be complex in nature, the facility owner may request a meeting with the excavator to determine a mutually agreeable locate schedule. Facility owners must make direct contact with the excavator to set the meeting. Use of the Communication tool within the Coordinate PA application can assist.

RESPONDING TO DESIGN NOTIFICATIONS

Facility owners are required to initially respond to a design request for information as to the position and type of the facility owner's lines based on the information in their possession, or to mark the plans which have been provided to them by the designer, by field location or by another method agreed to with the designer.

Designers must utilize the POCS Coordinate PA application which allows for the upload of drawings at the time the design notification is made. Facility owners can access the drawings and upload pdfs of their facilities in response to the design inquiry.

RESPONDING TO RENOTIFY LOCATE REQUESTS

Facility owners are required to respond to all notifications received from the one call system.

Excavators renotify facility owners when locate request issues arise. The timing of the renotify request determines the response required of a facility owner:

- Scenario 1:
  - On a correctly submitted Locate request from an excavator, per Section 5(20) of the Act, who, upon their initial arrival at the work site determines that "clear evidence of facilities" exists which are not marked or may be mismarked, and initiates a renotify through the one call system.
  - The facility owner is required to make "direct contact" with the excavator within two hours.
  - If the facility owner fails to provide sufficient information to the excavator within three hours after the renotify call to POCS, the Act does allow the excavator to begin work as scheduled, consistent with the Section 5(5) of the Act, but not earlier than the lawful dig date, provided he exercises due care and uses prudent techniques in his work.
  - This applies to emergency and non-emergency locate requests.

- Scenario 2:
  - An excavator disagrees with a response a facility owner made through the one call system, but it is not their initial arrival at the work site. The one call system will capture the locate issue in the text of the renotify.
  - The facility owner must respond as soon as practicable.

Alleged Violations of the Law

Facility Owners are required to submit a report of an alleged violation. Please review Section X for the specifics regarding reporting of alleged violations of Act 287 of 1974 as amended.

SECTION VII - RESPONSIBILITIES OF THE DESIGNER

A Designer is any architect, engineer or other person who or which prepares a drawing for a construction or other project which requires excavation or demolition work as defined by the Act. Each designer preparing a drawing requiring excavation or demolition work within the Commonwealth shall contact Pennsylvania One Call System. The Design Notice is meant to allow the designer to plan the new work around existing facilities as the law prescribes. The notice shall be placed not less than 10, nor more than 90 business days in advance of the final design. Designers can obtain such information more than 90 days before final design is to be completed, however, they shall state in their requirements that such work is preliminary.

According to the Act, Final Design means ***"the engineering and construction drawings that are provided to a bidder or other person who is asked to initiate construction on the bid or date the project is set for construction in the absence of a bid".***

In many instances engineering and construction drawings are prepared far in advance of the bid date or the start of construction; or last minute project owner/designer adjustments may result in changes to the proposed excavation area. Preliminary design notifications should be created. The date of the most recent design One Call Notification should never be more than 90 days prior to the project bid date or date of construction in the absence of a bid. This provides the designer with the opportunity to assess the possible impact of any recently installed underground facilities within the project area and to adjust the design accordingly prior to the bid or the start of construction. It is the Project Owner's responsibility to not release any project to bid or construction until after final design is completed. Submit a design notification through the One call system when a design drawing is completed. Good communication between the designer, project owner and involved facility owners is necessary to produce the most accurate construction drawings possible.

Notifying POCS is the first step and there are several other responsibilities which need to be completed. The POCS Board of Directors mandated that effective on April 21, 2023, all Preliminary and Final Design Notifications must be created in POCS's Coordinate PA (CPA) application.

When contacting POCS to request the line and facility information, the information provided should cover the entire scope of the plan or development with enough detail to allow the facility owners to provide the location of their lines in the proposed work area. As much descriptive information as you can provide shall be given to help the facility owner identify the proposed construction area. Please be as specific as

you can with the location information. It is very important to describe the site in detail.

The designer shall make a reasonable effort to prepare the construction drawings to avoid damage to and minimize interference with a facility owner's facilities in a proposed construction area by maintaining the clearance as provided for in the applicable easement condition or an eighteen-inch clearance of the facility owner's facilities, where practical, if no easement restriction exists, or other clearance permitted or agreed upon.

A copy of the project plans shall be forwarded to each facility owner who requests a copy. If a designer is unable to provide a copy because of security of the project or proprietary concerns regarding the design of the project, the designer shall negotiate in a timely manner with the facility owner the means of obtaining the necessary data.

Designers are required to use the POCS Coordinate PA application which allows for the upload of drawings at the time the design notification is made. Facility owners can access the drawings and upload pdfs of their facilities in response to the inquiry.

The designer shall show upon the drawing the position and type of each facility owner's line derived pursuant to the request made, the name of the facility owner as shown on the list from the One Call System, the serial number of the Locate request and the toll free number of the One Call System.

The designer should consult with and advise the project owner regarding the project owner's requirement to utilize the subsurface utility engineering process. Design stage responsibilities of the designer and project owner are contained within the law and in the latest version of the Common Ground Alliance (CGA) Best Practices. The Act specifically requires your best efforts to comply with the CGA Best Practices. It is also imperative that the external funding requests include the use of the SUE process in the early and the final design phases. (PENNVEST has advised POCS that this is an item they will include but it must be spelled out in the initial funding request.) See Section IX, Responsibilities of the Project Owner, ASCE 38-22 (SUE) Process – Standard of Care Project Application chart.

For projects requiring Section 6.1(1), a competent subsurface utility engineering (SUE) provider should be used to perform ASCE 38-22 utility investigations. ASCE 38 is a process where experience, good judgement, and proper equipment, are used for each quality level of ASCE 38 to enable the designer to prepare the construction drawings to avoid damage to, and minimize interference with a facility or line. ASCE 38 Quality Level D and Quality Level C are equivalent only to the current designer notification standard under Section 4 (2) of the UULPL. ASCE 38, Quality Level B and Quality Level A should be applied for more precise horizontal and vertical data necessary for conflict identification during the design phases, when appropriate. Projects under $400,000 may utilize Levels D and C only, with the exception of a potential conflict of a facility or line. The designer should enter a complex project that has a construction drawing into the Coordinate PA portal.

As ASCE 38 data is collected, this information should be included in the construction drawings in the final design, bid, construction, and post construction purposes. Electronic as-built data collected should be entered into the post design drawings and maintained for future projects. All pre and post design data collected are required to be submitted to the One Call System. Note: For more detailed requirements, refer to Section IX, Responsibilities of the Project Owner, outlined in this Users Guide.

Designers indicate the existence of all public and private underground facilities on drawings during planning and design including if the application of the Subsurface Utility Engineering (SUE) process was applied or required for construction. See CGA Best Practice 2-3.

Electronic as built data collected should be in compliance with ASCE 75 and be entered into the post design drawing.

As with notifications of excavation work, the facility owners shall respond to design notifications through the KARL System. Note that there is a response dedicated specifically for design notifications, "082 Design Conflict. Please send plans to: <facility owner name & address>". In addition to responding through the KARL System, facility owners:

- can send plans to the designer directly, or through the Coordinate PA application (described above);
- mark the plans provided by the designer;
- or mark the facilities in the field;
- or by another method agreed to by the designer, excavator and facility owner or their agent.

The designer is required to attend and participate in preconstruction meetings on complex projects when the excavator determines that the project is a Complex Project and actually schedules a meeting. project owners are required to participate in design and preconstruction meetings either directly or through a representative. In many instances the designer may be the project owner's representative. Such meetings are encouraged to improve communications between all parties.

Annual Fee

The Act requires designers request line and facility information from facility owners and to pay the applicable fee to the One Call System. The fee is billed on the date of the first notification placed each calendar year.

During Excavation

The designer is reminded that responsibilities under the law apply to all design activities, including changes of and additions to a project on which excavation is already underway. At the end of the project all SUE data shall be forwarded to the One Call Center in a mutually agreeable format.

Alleged Violations of the Law

Designers are required to submit a report of an alleged violation. Please review Section X for the specifics regarding reporting of alleged violations of Act 287 of 1974 as amended.

SECTION VIII - RESPONSIBILITIES OF THE EXCAVATOR

Notify facility owners through the One Call System by placing a notification following the notice requirements outlined in Section II of this Users Guide.

Provide the One Call System with exact information to identify the work site.

Delineate the area of proposed excavation using white paint, stakes and/or flags.

For a complex project, follow the complex project policy documented in Section III number 5.

Many people believe that by notifying the One Call System of intended excavation they have completed all of their responsibilities with respect to the locating process. This is not the case. Notifying is only the first step, and there are several other important considerations.

Prior to the Start of Excavation

When planning excavation activities, the excavator should consider all available site information relating to the existence of underground facilities. The position of facility marks, any Subsurface Utility Engineering information contained on the project plans and the existence of visible landmarks such as meters, valve boxes, manhole covers and similar evidence should be included in the excavator's site assessment. If working on private property, check with the property owner to help identify any privately owned underground lines.

Best Practices 5-34 Designating and Depicting for the Protection of Known Underground Facilities in the Construction Path states Project Owners have a process that identifies the responsibility for preventing damages to existing facilities during the construction and design phase. In cases where projects are moved to the construction phase without adequately accounting for the precise location of known existing public and private underground facilities within the scope of the project, the excavator should follow Best Practice 5-10 (Locate Verification) or processes as required by state law. It is important that any associated contract language be specific, so all parties understand and accept their responsibilities.

The excavator must inform each powered equipment operator employed at the site of the information obtained as a result of his notification to POCS. It also is good practice to provide this information to all workers at the site. Except in the case of an emergency, the excavator at each job site should have available a complete description of the dig site, a list of the facility owner members impacted at that dig site as identified by the one call center, and the one call ticket number.

The excavator should plan the excavation or demolition work to avoid damage to or minimize interference with underground facilities in the construction area. If the work requires temporary or permanent interruption of the facility owner's service the excavator must coordinate the work with the affected facility owner(s) in all cases.

If the excavator is using trenchless technology, they must, at a minimum, utilize the best practices published by the Common Ground Alliance.

Where practicable use the National Association for Trenchless Technologies' (NASTT) published guidelines on trenchless technology including pre- and post-bore plans. Submit the plans through Coordinate PA (see Appendix C)

If requested to do so by a facility owner, the excavator must assist a facility owner in determining involvement of their lines by disclosing additional available information including dimensions and the direction of the proposed excavations.

The excavator, except in an emergency with proper notification to POCS, may not begin excavation or demolition earlier than the scheduled excavation date which can be on or after the third business day after the notification to POCS was made. In a Complex Project, the excavator may not begin excavation earlier than ten business days after notification to POCS.

The excavator must not create false emergency notifications as stated in Section 5(22), nor delegate the responsibility of placing notifications to others as stated in Section 5(23).

Consider documenting the position of marks as soon as possible after they are placed. For complex projects, documentation, communications, and mark-out schedule agreements should be stored within Coordinate PA.

Be watchful for possible removal and tampering of marks. This can occur unintentionally as a result of things such as lawn mowing, normal street maintenance, activities of children playing in the neighborhood as well as normal construction activities. Please remember that weather and wear can obliterate markings. Do not pile brush or spoilage on the marking.

The excavator is responsible for the marks once the locator has left the site. Protect and preserve the staking, marking, or other designation of underground lines until no longer required for proper and safe excavation.

- If the excavator suspects that marks may have been compromised or eliminated, the excavator stops excavating and contacts POCS to request an update ticket so the facilities be marked again. Work cannot resume until the new lawful start date on the update ticket.
- If the excavator leaves the site for two or more business days, the excavator contacts POCS to request an update ticket so the facility owners can mark the facilities again. Work cannot resume until the new lawful start date on the update ticket.
- If work does not start within the lawful start date range, the excavator contacts POCS to request an update ticket. Work cannot start until the new start date on the update ticket.

An update ticket is only needed in the scenarios stated above. Tickets do not expire every ten days. One call tickets are active as long as the work starts within the lawful start date range, marks are still protected and preserved, and the excavator has not left the site for more than two business days.

During the Excavation Process

All underground facilities encountered during the excavation work should be considered in use and potentially dangerous unless specific information from the facility owner indicates that the facility is abandoned or otherwise not in use and does not contain any dangerous elements or by-products.

If and when the excavation operation approaches the estimated location of underground facilities, the excavator **must** determine the precise location of the marked facility by safe and acceptable means. This must be accomplished by the use of hand tools or vacuum excavation techniques. The Act requires the use of prudent techniques for the area considered the "**TOLERANCE ZONE**", which means **the horizontal space within eighteen inches of the outside wall or edge of a line or facility.** After locating the precise location of underground facilities through the use of prudent techniques, excavators must continue to exercise due care within the tolerance zone to avoid interference, injury or damage to the underground lines.

If a marked facility is not found within the established Tolerance Zone during excavation, the excavator should contact POCS and renotify the facility owner. If excavation continues, prudent techniques must be used until the precise location of the facility is identified or until it has been otherwise determined that the excavation is not in conflict with the facility. The excavator may be entitled to compensation from the project owner for this extra work as set forth in clauses (4) and (15) of section 5 of the Act. The project owner under the Act ***is any person who or which engages the excavator for construction or any project which requires excavation or demolition work as herein defined.***

Work with the locator to reduce the confusion at the work site. Scheduling and cooperation can keep the job moving efficiently. Discuss the schedule and resources with the locators and set up a working relationship that can save everyone significant delays and confusion. It is always a good practice to document the work you do and record what safety instructions are given by the locator or field representative at the site.

Some facility owners have special policies because of the critical nature of their lines, (i.e., liquid pipelines, fiber optic communications, high pressure natural gas, chemical lines), and want to be on site when you are near their lines. Some facilities demand special consideration and are significant enough that your risk management policy should dictate extreme care be taken when working around these lines.

The One Call System is a mandatory organization; however, exemptions do exist. Pennsylvania One Call System (POCS) is the only One Call System in operation in Pennsylvania. Some underground facility owners have elected not to belong; in violation of the Act. Excavators are not required to make an effort to contact these nonparticipating facility owners directly before attempting an excavation, but realistically there could be a safety issue if you see indications of facilities that are not marked. It is your safety that's at risk. Entities exempt from membership under the Act are listed in the definition of "Facility Owner" and excavators should also be aware of exemptions within the definition of "Line or Facility" within the Act.

POCS is not responsible for the actual marking of facilities. It takes information from the excavator and relays it to the underground facility owners. The facility owners are responsible for ensuring that their facilities are properly marked.

Facility owners are required to respond to all notifications. POCS will collect the responses from the facility owners through the KARL system and relay it to the excavator by email. When one underground facility owner indicates that there are no facilities in conflict with specific excavation, the excavator must realize that this does not mean that POCS has cleared the site, nor does it mean that other facilities are not at that location. Excavators are encouraged to verify the current status of their one call request prior to commencing excavation or demolition work by calling the POCS KARL system at 1-800-222-6470. Please see Appendix D - KARL System of this guide for further details.

Failure to Locate Facilities Prior To the Start Date

In cases where a facility owner has not responded to a correctly submitted excavation request, or they have responded and the excavator, upon their initial arrival at the work site determines that "clear evidence of facilities" exists and are not marked or may be mismarked, the excavator must re-notify POCS. The facility owner(s) must make "direct contact" with the excavator. Excavation within the location of the unmarked or mismarked lines may not begin until receiving sufficient information from the facility owner to safely excavate. If the facility owner(s) fails to provide sufficient information to the excavator within three hours after the call to POCS, the Act does allow the excavator to begin work as scheduled, but not earlier than the lawful dig date, provided he exercises due care and uses prudent techniques in his work.

TROUBLE LOCATES

Common Ground Alliance (CGA) Best Practice 4-23 states the operator has a trouble locate resolution protocol that emphasizes the timely and accurate completion of the trouble locate request with communication between the parties and documentation of actions taken. The practice is intended to be applied in cases where upon initial arrival at the location, the tolerance zone for an existing facility cannot be established with confidence consistent with the operator's compliant mark out criteria. In this scenario the locate entity/operator:

- Marks, stakes, locates, or otherwise providing the position of the facility owner's underground lines at the work site within eighteen inches horizontally from the outside wall of such line.
- Escalates the trouble locate internally for advanced/enhanced resolution measures, i.e., vacuum truck, line tracer, ground penetrating radar (GPR), in-line 3D gyro mapping technology, etc.
- Attempts to make direct contact with the excavator (cell phone, text, email) and documents the method and message. If a specific interim positive response code is available or comments can be placed in the

one call system, share why the locate cannot be completed, along with contact information.

- Responds to KARL using code 002 if the excavator cannot wait until the facility owner can mark the line, or use KARL code 006 if the excavator can wait until the facility owner can mark the line.

- Designates the trouble locate area consistent with their procedures and uses paint, flags or other methods that distinguish the specific trouble area from the locatable areas.

- Communication with the excavator should warn of any unique or elevated risk associated with the unlocatable facility (high pressure gas, high voltage electric, high-density fiber, etc.).

Operator makes the appropriate records/mapping corrections, and when feasible takes action to make the facility locatable moving forward (tracer wire, electronic marker system/marker balls, etc.). **Excavation within the Tolerance Zone**

When excavation is to take place within the specified tolerance zone, the excavator exercises such reasonable care as may be necessary for the protection of any underground facility in or near the excavation area. Methods to consider, based on certain climate or geographical conditions include pot holing, hand digging when practical, soft digging, vacuum excavation methods, pneumatic hand tools, other mechanical methods with the approval of the facility owner/operator, or other technical methods that may be developed.

Mismarked Facilities

Common Ground Alliance (CGA) Best Practice 5-21 states an excavator notifies the facility owner/operator directly or through the 811 center if an underground facility is not found where one has been marked, or if an unmarked underground facility is found. Following this notification, the excavator may continue work if the excavation can be performed without damaging the facility, unless specified otherwise in state law. When an excavator finds an unmarked or inaccurately marked facility, excavation stops in the vicinity of the facility and notification takes place. If excavation continues, the excavator plans the excavation to avoid damage and interference with other facilities and protects facilities from damage.

When Damage Occurs

If during the course of excavation, a facility has been exposed and/or damaged, it is the excavator's responsibility to promptly notify the facility owner so that it may be inspected and repaired, if necessary, before being backfilled. Damage can also occur from improper backfilling around exposed utilities. The excavator should support these exposed facilities until such time as the facility owner inspects them. Failure to notify the facility owner can result in the excavator being held responsible for any and all damages attributable to the damaged facility.

Cathodic Protection techniques are often used to deal with the earth's stray electric current where steel and other metal lines are buried. If these are damaged, they cause problems to the pipe or cable and must be repaired by the facility owner, and the damage should also be reported.

If the damage results in the escape of any flammable, toxic or corrosive gas or liquid, the excavator must **immediately notify 911** and the facility owner. The excavator must also take reasonable measures, based on his knowledge, training, resources, experience and understanding of the situation to protect himself and those in immediate danger, the general public, property and the environment until the facility owner or emergency responders have arrived and completed their assessment of the situation. The excavator must also remain on site to convey any pertinent information to responders that may help them to safely mitigate the situation. The requirement to notify 911 is mandated by the Act and by the Federal Pipeline Safety Act.

ANNUAL FEE

The Act requires excavators to make a locate request to the One Call System prior to excavation or demolition work and to pay the applicable fee for the request. The fee is billed on the date of the first Locate request placed each calendar year.

Alleged Violations of the Law

Excavators are required to submit a report of an alleged violation. Please review Section X for the specifics regarding reporting of alleged violations of Act 287 of 1974 as amended.

SECTION IX - RESPONSIBILITIES OF THE PROJECT OWNER

It is the Project owner who is in the best position to influence damage prevention measures applied in the design and preconstruction phases, as well as once excavation begins, as they control the finances, scope of project, and terms in the contract. The Project Owner is responsible for ensuring compliance by all entities they engage in the project. Section 6.1 (2) of the UULPL states: ***"Provisions in any contract, public or private, which attempt to limit the rights of excavators under section 5 shall not be valid for any reason, and any attempted waiver of section 5 shall be void and unenforceable as against public policy and any such attempted waiver shall be reported to the commission prosecutor staff for appropriate action, including the imposition of an administrative penalty under section 7.10".***

This section of the Users Guide recognizes the value of communication between all parties to the Act. To that end POCS created Coordinate PA, a planning tool intended to promote collaboration, cooperation, coordination and communication among all stakeholders. It is a tool that requires participation by Project owners or their designees to populate future projects to be successful at improving project quality, eliminating potential conflicts in advance of construction, and reducing damages to existing infrastructure.

Note: The Pennsylvania One Call System Board of Directors mandated that effective on April 21, 2023, all Preliminary and Final Design Notifications must be created in POCS's Coordinate PA (CPA) application.

It is the duty of Project owners to utilize and pay for the Subsurface Utility Engineering (SUE) process in accordance with the Act. It is the Project owner who initiates design projects that will require excavation or demolition and they are its principal beneficiary. The use of SUE or other similar techniques is required on large or complex projects costing $400,000 or more. The SUE process provides a way to accurately identify the quality of subsurface utility information. (see ASCE 38-22 (SUE) PROCESS - Standard of Care section, et. seq. below).

Project owners must furnish the pertinent data obtained through subsurface utility engineering to the One Call System in a mutually agreeable format. PA One Call's Coordinate PA application is the repository for upload of SUE data.

Project owners must not release to bid or construction any project until after final design is completed.

For new construction and where practicable in the opinion of the Project owner, color-coded permanent markers must be installed to indicate the type and location of all laterals installed by the Project owner. These markers will assist in locating efforts in the future.

Project owners are obligated to timely respond to notifications received from the excavator when facility owners cannot accurately locate or identify all lines. When not resolved in the design phase, and an excavator must ascertain the location of lines, including unclaimed or abandoned lines, the excavator is entitled to compensation from the Project owner as outlined in Section 5, (15) of the Act. By utilizing the SUE process, or other similar techniques, in the Design Phase, this potential is minimized. (Refer to Section III of this User Guide, Type of Calls, #1 for information on Preliminary and Final Design notifications.)

Project owners are required to participate in design and complex project preconstruction meetings and shall encourage such meetings, as necessary, for work they put forth that is larger than the maximum area that a routine Locate request may cover to provide for a mark out plan with existing facility owners that can be maintained and help keep the project on track.

ASCE 38-22 (SUE) PROCESS - Standard Of Care

The American Society of Civil Engineers (ASCE) has developed an important standard of care guideline, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, CI/ASCE 38-02. As of August 26th, 2022 ASCE 38-02 has been updated to 38-22 and 75-22 added to clarify the recording of that Data.

This standard guideline describes four quality levels of utility depiction:

Quality Level D - Information derived from existing records or oral recollections.

Quality Level C - Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to Quality Level D.

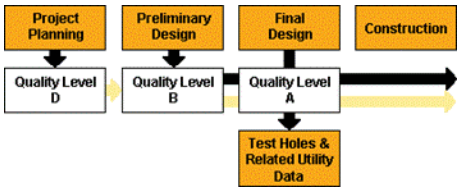
Quality Level B - Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities.

Quality Level A - Precise horizontal and vertical location of utilities obtained by the actual exposure and subsequent measurement of subsurface utilities, usually at a specific point.
To order a copy of ASCE Standard 38-22 and 75-22, please go to the ASCE Bookstore: http://www.pubs.asce.org/ or call 1-800-548-2723.

This Chart is taken from ASCE and FHWA brochure. Click the link below to see the Federal Highway Administration Color Brochure and note that Final Design Level is "A"

Project Application

SUE Definition. The ASCE standard makes it very clear that SUE is a process, not a technology. It defines SUE as a branch of engineering practice that involves managing certain risks associated with utility coordination; utility mapping at appropriate quality levels;



Updated: 06/27/2017 SUE Brochure - Subsurface Utility Engineering - Utility Program - Design - Federal Highway Administration (dot.gov)

utility conflict analysis; utility relocation, design, and coordination; utility condition assessment; and communication of utility data to concerned parties.

How can all these items be SUE? Keep in mind that SUE today is a **process**. It is no longer just paint marks on the ground or vacuum excavation. These technologies are not even mentioned in the ASCE definition. They may be part of SUE, but then again, they may not be.

ASCE 38 (SUE) Process. The SUE process doesn't follow any set pattern. Rather it is tailored to individual projects. It essentially involves systematically identifying the quality of utility information needed to design a project and acquiring and managing that level of information.

The following tasks are typically performed in the SUE process:

- Identify utility owners that have facilities on or may be affected by the project. Contact these utility owners (face to face meetings are preferable) and provide them with information about the proposed project. Schedule periodic follow-up meetings.
- When the project plans are about 30% completed, or possibly even sooner in the planning phase, provide the plans to utility owners along with a request that they review the plans and provide pertinent "as built" or other existing utility information. Obtain existing utility information from other sources. Review all information that can be obtained and plot it on a utility composite drawing or something equivalent. This is Quality Level D (QL-D) information.
- Make field observations to identify visible above-ground utility features. Survey and plot resulting information. This is Quality Level C (QL-C) information. It is correlated

with the records information (QL-D). When records and features information do not agree, resolve discrepancies.

- Use appropriate surface geophysical methods (i.e., pipe and cable locators, terrain conductivity methods, resistivity measurements, metal detectors, ground-penetrating radar, etc.) to designate existing subsurface utilities or to trace a particular utility system. This provides two-dimensional horizontal information. Place paint marks on the ground. Place identification flags or stakes on the paint marks or coding on the pavement at 50-foot intervals and survey to project control. Depict resulting information in the client's computer-aided design and drafting (CADD) system, Geographic Information System (GIS), and/or manually plotted plan sheets. This is Quality Level B (QL-B) information. If requested by the project owner, also survey and depict information about aerial utilities.
- Resolve differences between QL-B, QL-C, and QL-D information. This may involve additional surface geophysical searches and/or actual exposure of some subsurface utilities. This may require re-depicting utilities that have previously been depicted in order to present the more accurate information.
- Develop a conflict matrix showing all possible conflicts. This involves comparing depicted utilities information with proposed plans (highway, bridge, drainage, maintenance of traffic, and other). The resulting matrix contains columns to record the physical location of each conflict, the name of the utility involved, the nature of the conflict, and action needed. Upon analyzing the information recorded on the matrix, it will be obvious that some conflicts can be readily resolved, some conflicts are questionable and additional information is needed, and some conflicts cannot be resolved.
- Convene and facilitate a meeting with utility companies to discuss potential conflicts and other aspects of the project. Discuss possible strategies to avoid conflicts and identify locations where additional three-dimensional information is needed.
- Expose selected subsurface utilities to obtain three-dimensional information. Use minimally intrusive excavation methods, such as vacuum excavation. Depict resulting information using computer-aided design and drafting or manual plotting methods onto plan sheets. This is Quality Level A (QL-A) information.
- Resolve differences between QL-A information and the previously obtained QL-B, QL-C, and QL-D information. Depict new and corrected information. Go back to the conflict matrix with the new QL-A information to determine the status of conflicts requiring additional information. Meet with utility companies to discuss these conflicts and possible strategies to avoid utility relocations.
- Deliver depicted information to the project owner. The basic deliverables for utility information are a CADD file, a GIS file, or a plan sheet that has utility information in plan view for Quality Levels A, B, C, and D and utility information in plan and profile view for Quality Level A.
- Work with the project owner's designers to be sure they understand the information provided and to suggest possible ways to avoid conflicts.
- Where conflicts cannot be avoided, and utilities will have to be relocated:
  - Determine prior rights.
  - Obtain relocation cost estimates and plans from utility companies.
  - Prepare utility relocation agreements.
  - Provide utility relocation design.
  - Acquire necessary right-of-way.
- Store pipe location and condition information in a database for asset management.
- Work with utility companies, one-call centers, and contractors during construction as needed.
- Continue to represent the project owner in all utility-related activities as the project progresses.

In regard to the above tasks, several important things need to be kept in mind:

- These tasks may be provided by the project owner but are more commonly performed by a SUE provider working closely with the project owner. They are most effectively utilized when coordinated by a capable utility coordinator employed by the provider. The utility coordinator is responsible for working with the owner and the affected utilities to determine the need for each task and to assure selected tasks are performed properly and expeditiously.
- These tasks may be used in a different order than that prescribed above (i.e., it may sometimes be more practical to perform (a) QL-C tasks before and/or in conjunction with QL-D tasks, and/or (b) QL-B tasks before and/or in conjunction with QL-C or QL-D tasks).
- Some of these tasks should be used on every project, but it may not be necessary to use all of them (e.g., QL-D and QL-C information may be all the information deemed necessary for projects under $400,000). If not willing to accept potential risks involved in using only QL-D and QL-C, project owners may opt to obtain additional information using QL-B and QL-A or other methods. Determinations may be made every step of the way until acceptable risk levels are achieved.

No matter how many tasks are employed or in what order they are applied, it is all the SUE process.

For more information on the SUE process:

Updated 11/21/2022 Subsurface Utility Engineering - Subsurface Utility Engineering - Utility Program - Design - Federal Highway Administration

Alleged Violations of the Law

Project owners are required to submit a report of an alleged violation. Please review Section X for the specifics regarding reporting of alleged violations of Act 287 of 1974 as amended.

SECTION X - ENFORCEMENT AND REPORTING ALLEGED VIOLATIONS

The UULPL assigns enforcement authority to the Pennsylvania Public Utility Commission (PUC) and established a Damage Prevention Committee (DPC). The DPC has the authority to review reports of alleged violations, determine the basis or root cause of the alleged violation reported, issue warning letters, issue informal determinations that impose administrative penalties, and require persons to attend a damage prevention educational program. The committee must complete its review of alleged violation reports and issue informal determinations within two hundred seventy (270) days of the occurrence of the alleged violation. Affected parties have various rights regarding informal determinations, including the right to be heard, and the right to appeal administrative penalties in writing within thirty (30) days; however, most cases are likely to be resolved at this level.

A person or entity may be assessed additional administrative penalties if they fail to:

- Pay a daily administrative penalty to the commission within sixty (60) days of issuance of the informal determination;
- Complete PUC compliance training within sixty (60) days, if training has been ordered by the DPC.

The DPC appointed by the PUC, consists of members of various stakeholder groups, as well as the PUC, the Department of Transportation, and Pennsylvania One Call System, with the PUC representative serving as the chairman. (See Section 7.8 of the UULPL.)

The PUC also has the right, in appropriate cases, to file criminal and civil complaints against violators. Such action is more likely to occur where there is death, personal injury, or significant property damage, or in the case of repeat offenders.

The PUC has established a full-time enforcement staff specifically for the UULPL. In addition, the PUC will issue regulations that describe how both enforcement and the DPC will operate, consistent with the UULPL. Initially, these will be temporary or interim regulations, but, eventually, they will become permanent regulations. The PUC has the power to amend the regulations, as well.

Alleged Violations

All Alleged Violation Reports are to be submitted via the POCS website under the Enforcement section.

Excavators, designers, project owners, and facility owners shall submit an alleged violation report to the commission through the One Call System for instances when a person by action or inaction fails to fulfill the obligation of the Act. The report of alleged violation shall be in a form and manner as required by the commission. **An Alleged Violation Report (AVR) is submitted from the POCS website under the Enforcement section.**

- **Facility Owner** - Submit a report of alleged violation not more than thirty business days after receipt of notice that the facility owner's lines have been damaged by excavation or demolition work or if the facility owner believes a violation of this act has been committed in association with excavation or demolition work.

- **Designer** - Submit a report of alleged violation not more than thirty business days from the time the designer becomes aware that a violation of this act may have been committed in association with excavation or demolition work.

- **Excavator** - Submit a report of an alleged violation not more than thirty days after striking or damaging a facility owner's line during excavation or demolition or if the excavator believes a violation of this act has been committed in association with excavation or demolition work.

- **Project Owner** - Submit a report of alleged violation not more than thirty days after striking or damaging a facility owner's line during excavation or demolition work activities, after a project owner's contracted excavator strikes or damages a facility owner's line during excavation or demolition activities or if the project owner believes a violation of this act has been committed in association with excavation or demolition.

When notified of an alleged violation, the stakeholder should fully investigate circumstances involved with the alleged violation.

Designate one person from your organization as a "contact person" to administer these alleged violation reports.

Pennsylvania One Call System is not responsible for the issuance of citations or enforcement under this statute.

Alternate Dispute Resolution

Pennsylvania One Call System has the authority under the statute to create and administer a voluntary payment dispute resolution process for all parties involved with the statute. This process may not be used to settle or resolve alleged violations of the law.

SECTION XI - TAMPERING WITH MARKS

Under the law owners of underground facilities such as pipe lines, electric, communication and other types of lines are required to place physical marks on the surface of the ground within 18" of the actual underground position of the lines, identifying the size, type and number of lines when an excavator makes a request to locate through Pennsylvania One Call System, Inc. These marks help the excavator determine, in advance of excavation, where the safety (tolerance) zone of the buried lines is so the excavator can use prudent techniques to safely excavate without causing damage to the underground facility within the tolerance zone. This process greatly reduces the chance that an existing line will be damaged during excavation activities.

It is important that these marks remain visible and unaltered until all excavation in the area is completed. Accurate marks for underground lines result in safer excavations with fewer damaged lines. Removing, moving or otherwise tampering with marks for underground facilities increases the chance of damage to the line. This can result in injury and even death to those in the

immediate vicinity. It also can cause interruption of service and may result in costly repairs that could increase monthly utility bills.

Marks that have been removed, moved or otherwise tampered with are **never** accurate and could prove to be deadly! The color, style, method and location of marks communicate critical information to the excavator. If you witness or otherwise have reason to believe that someone has tampered with underground utility marks, please immediately notify the excavation company and Pennsylvania One Call System, Inc. POCS may be contacted by dialing 8-1-1 or 1-800-242-1776.

Tampering with underground facility marks, even if those marks are placed on private property, violates Section (10) of PA Act 287, as amended.

Accurate marks result in safer excavations for everyone!

SECTION XII - WEBSITE TOOLS

POCS provides a variety of online tools to stakeholders: Project Owners, Designers, Excavators, Facility owners (members), and homeowners. All are available at www.paonecall.org to authenticated users.

User Accounts and Login Creation

- A user account is needed to gain access to any and all of POCS's online tools. Each person is required to have their own user account/log in credentials. Users are required to provide their First and Last names, Company Name, Phone number and email address.

- To create a user account, navigate to www.paonecall.org and select "Create Account" at the bottom of the Account Access box and enter information into all of the fields, then select Submit. The system will search for your contact information and if found request that you verify the information. Otherwise, you can select "try again" or "create a new account". The following information is required to create a user account: First and Last Name; Company; Email address; Street Address; City, State, Zip Code; Desired user name and Password. Other information (such as title, company name, telephone number) is helpful to POCS but not required to create an account. Once you start the process to create an account, you must finish the process including adding your address on the next screen. Please do not use the Back button or abandon the process until it is completed. When the form is completed, click the <Finish> button at the bottom of the form. You will receive an email within the next five minutes to complete your account setup. If you do not receive the email, please log in to www.paonecall.org to activate your account. You can navigate to "My Account" from the top menu and request access to our web tools for placing and viewing locate requests. Please email contact@pa1call.org with any questions.

- To gain access to online tools, navigate to www.paonecall.org and Enter your username and password in the Account Access box or select Login in the upper right hand corner to open the Account Access box. Once logged in, choose My Account in the top menu, then select the Applications tab to request applications in the bottom section.

- The request will be pending until the request is reviewed by POCS and access granted. Not all applications are available to all users – for example, the "Member Database Verification" application is only available to users who work at a member company and are responsible for maintaining their information on file with PA One Call. When access is granted, the user is notified via email or a telephone call.

What online applications are available to authenticated users?

Coordinate PA (CPA). This web service application developed to support Public Works (governmental) and Utility advance planning to aid in design and project planning collaboration and cooperation.

- POCS maps are used to display participating project scopes and phases to make it easy for contributors to identify collaborative project opportunities far enough in advance to recognize cost savings and minimize disruption to the public through sharing and coordination of their effort.

- CPA integrates with POCS's Web Ticket Entry process to create Design and Excavation notifications from the project coordination tool to increase project safety and reduce project costs as required by Pennsylvania's Underground Utility Line Protection Law.

- Pennsylvania coordinating committees meet to share their projects and project plans in an effort to find overlap in construction work. A list of coordinating communities is available in the Resource Center of the POCS website.

- CPA also facilitates the exchange of electronic design files between a facility owner and a designer for design tickets. Instead of sending paper copies of design files to facility owners that request them, the designer can upload an electronic file for the facility owner to view, determine their involvement, and upload pdfs of existing facilities which then appear as layers within the application so the designer can view them to plan their work.

Facility Owner Billing. This application for underground facility members to view and pay PA One Call invoices electronically.

Member Database Verification. This application facilitates online verification without the need for a paper form. POCS verifies facility owner information on file every year. The member is asked to verify all information on file, including business address, contact information, municipalities where the member owns or operates underground facilities, and maps of their notification area(s).

Member Mapping. This application is a geospatial mapping tool used by facility owners to describe notification areas within the municipalities where the

member owns or operates underground lines. The member draws points, lines or polygons on a map to indicate where they want to be notified of excavation activities. POCS accepts shapefiles. These notification areas are compared to the proposed excavation area on a ticket. No overlap between the proposed excavation area and the member notification area indicates that excavation will not occur near the member's underground facilities, and ticket receipt to the member is suppressed.

Online Ticket Management. This application facilitates viewing the ticket database for facility owners, excavators, and designers. The facility owner can query the database for their tickets within a specified date range and filter on a variety of ticket attributes such as CDC, ticket action type, ticket county or ticket municipality, and response status. The excavator or designer can query the database for their tickets within a specified date range and filter on a variety of ticket attributes such as ticket action type, ticket county or ticket municipality, and facility owner responses and notes. A map is provided to both Facility Owners and Excavators to utilize a spatial search of the tickets received or placed, respectively. The center point of the notification area is represented by a blue or red dot. The red dots indicate the emergency tickets.

Web Single Address. This application is for Professional Excavators and Property Owners to submit an individual or "residential" address to request an underground facility line location prior to digging.

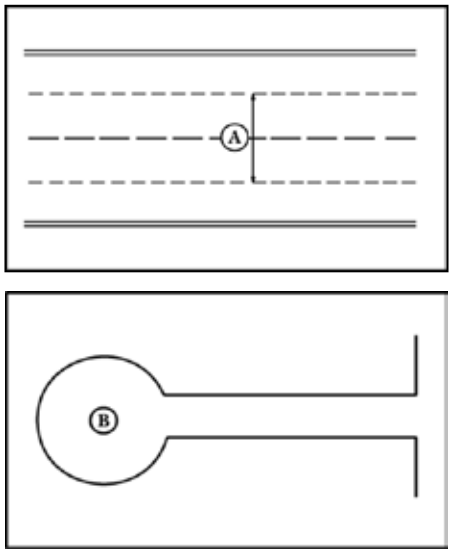
Web Ticket Entry. This application is an online or mobile application for excavators to enter construction or emergency location requests without contacting POCS by telephone.

Appendix A

Terminology often used when creating a notification

A. Center Lane(s) – In a four-lane street, the two lanes at the center of the pavement.

B. Cul-de-sac – A local street open at one end with a special provision for turning around.

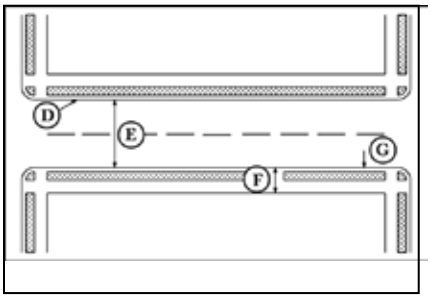


C. Culvert (not pictured) – Any pipe or structure under a roadway or driveway to facilitate drainage of surface water.

D. Curb Lane(s) – Traffic or parking lane immediately adjacent to the curb.

E. Curb to Curb – The paved area of a road right of way between the two curb lines.

F. Curb to Property Line – The area between the curb and the front property line.



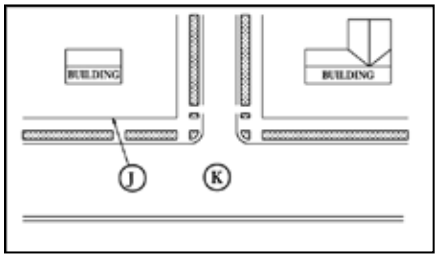
G. Curb Line – The point where the curb meets the edge of the street pavement.

H. Easement (not pictured) – A right to use or control the property of another for designated purposes.

I. Frontage Road (access road - not pictured) – A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control access.

J. Front Lot Line – (Same as street right of way line) the property line adjacent to the street right of way.

K. Intersection – The general area where two or more highways join or cross, within which are included the roadway and roadside facilities for traffic movements in that area.



L. Interchange (not pictured) – A system of inter-connecting roadways in conjunction with one or more grade separations providing for the movement of traffic between two or more roadways on different levels.

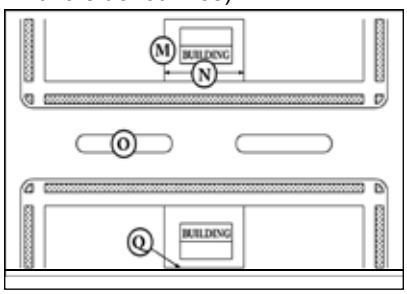
M. Lot Line – A line marking the legal limits of an individual's property.

N. Lot Line to Lot Line – The area between the two side lot lines on private property and the entire road right of way (See R.)

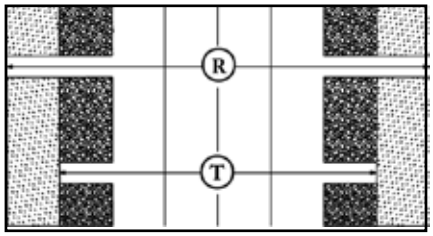
O. Median – The portion of a divided highway separating the traveled ways for traffic in opposite directions.

P. Property Line – See Lot Line (M).

Q. Rear Lot Line(s) – Property lot line at the rear of the lot (area opposite street that connects the two side lot lines).



R. Right of Way – Dedicated street areas bounded by two generally parallel lines called right-of-way lines. Another name for these lines is front property lines.

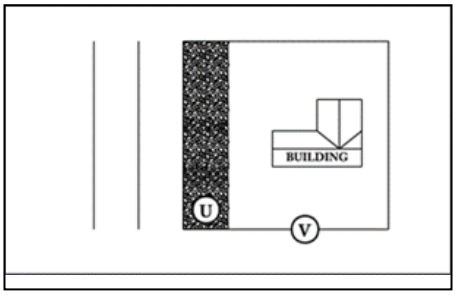


S. Road (not pictured) – Highway in rural area.

T. Roadway – The portion of a highway, including shoulders, for vehicular use.

U. Shoulder – The edge of a road (generally gravel) between normal traffic lanes and grass areas. The term normally used in areas where there is no curb.

V. Side Lot Line(s) – The two property lines, which normally extend away from the street right-of-way.



W. Street (not pictured) – Highway in an urban area.

X. Tolerance Zone (not pictured) – The horizontal space within eighteen inches of the outside wall or edge of a line or facility.

Appendix B

Complex Project Meeting Agreement Template

Pennsylvania 811

A Privately funded non-profit Pennsylvania Corporation

Act 287 as amended Complex Project Meeting Agreement

Project Name		Project Id	
Project Creator Name		Project Creator Company	
Project Owner Company		Designer Company	
Excavating Contractor		Complex Project Ticket	
Date of Meeting		Minutes Prepared By	

Location of Meeting

1. Project Overview

2. Meeting Attendees - *After the meeting, please have attendees initial to sign off on the meeting agreements*

Name	*Organization/Company Representing*	*Email/Phone number*

3. Project Phases

4. Meeting Notes, Issues, Discussions

5. Meeting Agreements (Locate Schedule)

Appendix C
Board of Directors Resolution

Pennsylvania One Call System, Inc.

Resolution for Addition to Users Guide Language

WHEREAS, on April 24, 2023, the Board approved the Users Guide language: "If the excavator is using horizontal directional drilling (HDD), he must, at a minimum, utilize the best practices published by the HDD Consortium."

WHEREAS, the current legislation references trenchless technology Best Practices of the Common Ground Alliance,

WHEREAS, a Common Ground Alliance trenchless technology Best Practice does not exist,

NOW THEREFORE, the POCS Board determines that Section 8 of the Users Guide shall be amended to reflect the following language: "Where practicable use the National Association for Trenchless Technologies' (NASTT) published guidelines on trenchless technology including pre- and post-bore plans. Submit the plans through Coordinate PA."

Dated: July 30, 2025

Appendix D
The KARL System

(Kathy Automated Response to Location requests)

Overview

Pennsylvania One Call System, Inc. (POCS) has created a voice relay and response solution that automates the call out process to facility owner members requesting supplemental voice relay of information on emergency notifications; allows facility owner members to respond to all notifications; emails excavators/designers with the collected responses; and allows excavators/designers to retrieve information about their responses.

When an excavator/designer calls into the system, information is collected and entered into the POCS computer system as a Work Locate request (WLR) ticket. Excavators who have registered with POCS may also create their own WLRs utilizing Web Ticket Entry. Designers are required to use Coordinate PA. Each WLR is assigned a unique serial number. Based on information within the ticket the computer system assigns a message type and determines if voice notification has been requested by a facility owner member. This information is passed to the KARL System.

KARL determines the priority of the voice message and queues a voice call out request for each pertinent facility owner. When a facility owner answers a voice call out KARL speaks the WLR information. Upon completion of the callout, KARL records the outcall status as successful or failed.

Anytime during voice relay of an emergency, KARL will accept responses to the spoken WLR information. When a facility owner responds, KARL will record their response in the database. On all other WLR's, KARL will accept responses through telephone input, data transfer, or Online Ticket Management.

On the response due date, KARL will email the results to the excavator/designer who initiated the WLR, to inform them of the status. If a response is not received for a facility owner by the response due date, KARL will send a "No response" indication for that facility owner. At any time, the excavator/designer may call into KARL to inquire the current status of the WLR.

With the exception of 007 and 999, each response code has a "note" section, which Facility Owners may use to relay additional information to the excavator, designer, or homeowner.

For responses where direct contact occurs, facility owners are encouraged to update their responses after each interaction with an excavator or designer.

KARL RESPONSE CODES BY NUMBER		
001	CLEAR. NO FACILITIES OR FACILITIES NOT INVOLVED BASED ON TICKET INFORMATION.	
002	CONFLICT. LINES NEARBY. DIRECT CONTACT TO FOLLOW BY FACILITY OWNER.	
003	FIELD MARKED.	
004	INSUFFICIENT INFORMATION. DO NOT DIG.	
005	NOT MARKED DUE TO NO ACCESS.	
006	SCHEDULED DATE & TIME LINES WILL BE MARKED BY: <Facility Owner enters date and time>	
007	VOICE MESSAGE (temporary communication valid for 30 days)	
082	DESIGN CONFLICT. PLEASE EMAIL OR SEND PLANS TO: <system completes Facility Owner name & address from file>	
083	ENGINEERING COMPLETED. A PDF FILE OR MARKED UP PLANS WERE SENT TO THE REQUESTOR.	
090	WILL ATTEND MEETING.	
091	CLEAR. WILL NOT ATTEND MEETING.	
092	REQUESTS MEETING. DIRECT CONTACT TO FOLLOW BY FACILITY OWNER.	
095	DID NOT ATTEND MEETING. DIRECT CONTACT TO FOLLOW BY FACILITY OWNER.	
096	AGREES NO MEETING REQUIRED.	
099	ATTENDED MEETING. REACHED AGREEMENT.	
999	DID NOT RESPOND THROUGH PA ONE CALL.	

KARL Responses - Uses and Constraints

001 CLEAR. NO FACILITIES OR FACILITIES NOT INVOLVED BASED ON TICKET INFORMATION.
Facility Owner has no underground lines at the site as described in the Locate request.

002 CONFLICT. LINES NEARBY. DIRECT CONTACT TO FOLLOW BY FACILITY OWNER.
Facility Owner may have underground lines at the site and will contact excavator directly at the contact information provided on the Locate request.
When the facility owner makes contact with the excavator, It is recommended the facility owner document the name of the person they spoke with along with any agreement reached.
This should be updated with a Clear (001) or Field Marked (003) response after contact is established with the excavator.

003 FIELD MARKED.
A locator was dispatched and physically marked lines at the work site.

004 INSUFFICIENT INFORMATION. DO NOT DIG.
Facility Owner cannot make a determination of their involvement based on the information provided by the excavator on the Locate request.
The facility owner should attempt to contact the excavator to obtain additional information, or instruct the excavator to call in a new Locate request.
When the facility owner makes contact with the excavator, It is recommended the facility owner document the name of the person they spoke with along with any agreement reached.

005 NOT MARKED DUE TO NO ACCESS.
Facility Owner has a conflict but could not mark their lines at the site because the locator could not gain access to the location caused by things such as a bad dog, locked gate or other security measures.
The facility owners should attempt to contact the excavator to arrange for access.
When the facility owner makes contact with the excavator, It is recommended the facility owner document the name of the person they spoke with along with any agreement reached.
This should be updated with a Clear (001) or Field Marked (003) response after contact is established with the excavator.

006 SCHEDULED A DATE AND TIME LINES WILL BE MARKED BY:
<Facility Owner enters date and time>
Facility Owner will mark the lines at the site by the mutually agreed upon date and time.
When the facility owner makes contact with the excavator, It is recommended the facility owner document the name of the person they spoke with along with any agreement reached.
This should be updated with a Field Marked (003) response once marking is complete.

007 VOICE MESSAGE (TEMPORARY)
Facility Owner recorded a message to convey information to the excavator that is different from the standard KARL responses. It is important to note that this is a temporary message that is only saved for 30 days and is not considered a final response under the law.
This should be updated with a Clear (001) or Field Marked (003) response once contact is established with the excavator.

082 DESIGN CONFLICT. SEND PLANS TO: <system completes Facility Owner name & address from file>
Facility Owner has lines at the site and the design drawings should be sent to them for markup.
This should be updated with an Engineering Completed (083) response once plans are marked up and returned to the designer, or updated with a Clear (001) response if after review of the plans, the Facility Owner determines no conflict exists.

083 ENGINEERING COMPLETED. A PDF FILE OR MARKED UP PLANS WERE SENT TO THE REQUESTOR.
The Facility Owner has answered the designer's request for plans by uploading a PDF of their lines, or marked up the PDF provided by the designer. Alternately, the Facility Owner may email or mail hard-copy, marked up drawings to the requestor.

090 WILL ATTEND MEETING.
Facility Owner may have underground lines in the area of the complex project and will attend the meeting.
The law requires Facility Owners to attend complex project meetings when requested by the excavator.
This should be updated with a Clear (001), Field Marked (003), or Attended Meeting-Reached Agreement (099) response.

091 CLEAR. WILL NOT ATTEND MEETING.
Facility Owner has no underground lines in the area of the complex project and will not attend the meeting.

092 REQUESTS MEETING. DIRECT CONTACT TO FOLLOW BY FACILITY OWNER
The Facility Owner is designating the work as complex for their company.
The Facility Owner will contact the excavator. DO NOT DIG until the facility owner and excavator agree on a mark out schedule.
Excavators are required by law to conduct a meeting with any Facility Owner that requests it.
When the facility owner makes contact with the excavator, It is recommended the facility owner document the name of the person they spoke with along with any agreement reached.
This should be updated with a Clear (001) or Field Marked (003) response.

095 DID NOT ATTEND MEETING. DIRECT CONTACT TO FOLLOW BY FACILITY OWNER.
Facility Owner may have a conflict at the site, but was unable to attend the preconstruction meeting.
The Facility Owner should attempt to contact the excavator to set a one-on-one meeting.
When the facility owner makes contact with the excavator, It is recommended the facility owner document the name of the person they spoke with along with any agreement reached.
This should be updated with a Clear (001), Field Marked (003), or Attended Meeting-Reached Agreement (099) response.

096 AGREES NO MEETING REQUIRED.
Facility Owner agrees that a meeting is not required for this complex project.
This should be updated with a Clear (001) or Field Marked (003) response.

099 ATTENDED MEETING. REACHED AGREEMENT.
The Facility Owner attended the meeting, has determined there is a conflict, and reached an agreement on a locate schedule. When the facility owner makes contact with the excavator, It is recommended the facility owner document the name of the person they spoke with along with any agreement reached.

999 DID NOT RESPOND THROUGH PA ONE CALL.
System generated response when no response is received from Facility Owner prior to the response due date.

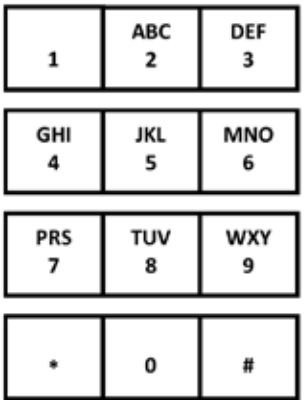
All responses to KARL are considered to be final responses, with the exception of 007 and 999.
USING THE INTERACTIVE VOICE RESPONSE SYSTEM (KARL):

Users of the KARL response system will be required to enter numeric and alphabetic answers to interact with the voice response unit. These responses may be entered verbally or by using the telephone keypad. At different times in the script, KARL may ask facility owners for the member call directing code (CDC), for the initials of the person entering responses or accepting supplemental voice out-dials, and to confirm the company telephone numbers. KARL will ask excavators and designers for their company telephone number, for serial numbers, and the initials of the person performing the inquiry. It is best to speak the answers.

If you choose to enter your alphabetic response by using the telephone keypad you must translate the letters into numbers. To translate letters into numbers for entry into KARL, look at the letter on the telephone keypad and the letter's position on the key. For the letter Q enter 11 and for the letter Z enter 12.

For example, if your initials are SAM, you would enter the number 7 matching the key where the S is found, followed by the position of the letter S which is

K	A	R	L
52	21	72	53



3. The numeric representation for the letter S would be 73. The A would be 21 and the M would be 61.

Facility Owner Response and Excavator/Designer Inquiry

Responses are initiated by facility owners after they have researched the serial number information delivered to them during the notification phase. Facility owners are required to respond to design stage serial numbers within ten business days of the creation date of the serial number, and by the response due date on construction serial numbers. Responses will be accepted from the facility owner after entering the member CDC and the initials of the person initiating the response. Serial number responses may be updated by a facility owner multiple times. The last response made will be included on the Response to Caller email transmission. Inquiries can be initiated by excavators and designers, who can listen to the current status of the serial number they entered. The date/time of the inquiry will be recorded in the database.

Facility Owner Response

Action required: Call KARL at 1-800-222-6470
KARL will say: "Thank you for calling the Pennsylvania One Call serial number response system. " Please indicate the type of caller you are. Press or say 1 for excavator, press or say 2 for facility owner, press or say 3 for homeowner. To speak with a customer service representative, press or say 0."
Action required: PRESS or SAY 2
KARL will say: "Please enter or say your CDC code. Press or say 7 for help on how to enter your CDC code numerically."
Action required: Enter your two or three digit CDC.
KARL will say: "CDC <cdc> is for <facility owner name>. If this is correct, press or say 1. If this is not correct, press or say 2. To speak to a customer service representative, press or say 0."
Action required: PRESS or SAY 1
KARL will say: "Please enter or say your initials. Press or say 7 for help on how to enter your initials numerically."
Action required: Enter or say at least two initials (4 numbers). KARL will accept three initials (6 numbers).
KARL will say: "The initials you have entered are <initials>. If this is correct, press or say 1. If this is not correct, press or say 2. To speak to a customer service representative press or say 0".
Action required: PRESS or SAY 1
KARL will say: "Please enter or say the one call serial number."
Action required: Enter your 11 digit serial number.
KARL will say: "The work location for serial number ########## is for <work site address>. If this is correct, press or say 1. If this is not correct, press or say 2. To speak to a customer service representative, press or say 0."
Action required: PRESS or SAY 1.
KARL will say: "What is the status of this ticket?"
"If this location is clear, no facilities or facilities are not involved based on the ticket information, press or say 1.
If this location has Conflict, lines nearby direct contact to follow by facility owner, press or say 2.
If this location is field marked, press or say 3.
If this location has insufficient information, do not dig, press or say 4.
If this location is not marked due to no access, press or say 5.
If you will schedule a date and time for the mark, press or say 6.
If you would like to leave a voice message, press or say 7.
If there is a design conflict, press or say 82.
If a PDF file is marked up plans were sent to the requestor, press or say 83.
If you will attend the meeting, press or say 90.
If you are clear and will not attend the meeting, press or say 91.
If you have a possible conflict, require a meeting, and will make direct contact with the excavator, press or say 92.
If you did not attend the meeting due to an unforeseen circumstance, and will make direct contact with the excavator, press or say 95.
If you agree that no meeting is required, press or say 96.
If you attended the meeting, reached agreement, and plan to follow the locate schedule, press or say 99."
Action required: PRESS or SAY 1, 2, 3, 4, 5, 6, 7, 82, 83, 90, 91, 92, 95, 96, or 99.
KARL will say:
If 1: "You selected, clear, no facilities or facilities are not involved based on the ticket information."
If 2: "You selected, conflict, lines nearby direct contact to follow

by facility owner."

If 3: "You selected, field marked."

If 4: "You selected, insufficient information, do not dig."

If 5: "You selected, is not marked due to no access."

If 6: "You selected, to mark by <date> at 2359. "If this is correct, press or say 1; otherwise press or say 2

If 1: jump to the end.

If 2: **KARL will say:** "You will now be given the opportunity to leave the date and time you will mark the site for the excavator. To continue press or say 1. To return to the previous menu, press or say 2."

If 7: "You will now be given the opportunity to record a message to be left with this serial number, to continue press or say 1, to return to the previous menu, press or say 2."

If 82: "You selected, design conflict."

If 83: "You selected, a PDF file or marked up plans were sent to the requestor."

If 90: "You selected, will attend meeting."

If 91: "You selected, clear - will not attend meeting."

If 92: "You selected, requests meeting, direct contact to follow by facility owner."

If 95: "You selected, did not attend meeting, direct contact to follow by facility owner."

If 96: "You selected, agrees no meeting required."

If 99: "You selected, attended meeting, reached agreement."

After each response is entered, KARL will say: "If this is correct, press or say 1. Otherwise press or say 2."

If 1: **KARL ends with:** "Your response to serial number ########## has been accepted. If you would like to enter a response for another ticket, press or say 1. If you would like to enter ticket response for a different CDC press or say 2. If you have no more ticket responses, please hang up."

If 2: **KARL will start over.**

Excavator/Designer Inquiry

Action required: Call KARL at 1-800-222-6470

KARL will say: "Thank you for calling the Pennsylvania One Call serial number response system." Please indicate the type of caller you are. Press or say 1 for excavator, press or say 2 for facility owner, press or say 3 for homeowner. To speak with a customer service representative, press or say 0."

Action required: PRESS or SAY 1.

KARL will say: "Please enter or say the One Call serial number."

Action required: Enter or say your 11 digit serial number.

KARL will say: "Please enter or say your company's 10-digit phone number."

Action required: Enter or say the phone number used when the dig notice was created.

KARL will compare the phone number entered against the phone number associated with the serial number. If they match, KARL will speak the phone number and company name.

KARL will say: "Excavator phone number <phone number> is for <company name>. "If this is correct, press or say 1, If this is not correct, press or say 2. To speak to a customer service representative press or say 0."

Action required: PRESS or SAY 1.

KARL will say: Please enter or say your initials. Press or say 7 for help on how to enter your initials numerically.

Action required: Enter or say at least two initials (4 numbers). KARL will accept three initials (6 numbers).

KARL will say: "The initials you entered are <initials>. If this is correct, press or say 1. If this is not correct, press or say 2. To speak to a customer service representative press or say 0."

Action required: PRESS or say 1

KARL will say: "The work location for serial number ########## is for < work site address>. If this is correct, press or say 1. If this is not correct, press or say 2. To speak to a customer service representative press or say 0."

Action required: PRESS or say 1.

KARL will retrieve the status of each utility that has responded to the current ticket and speak the response to the excavator/designer. If an excavator/designer presses 2, they will be given another opportunity to enter a different serial number.

KARL will say: "The following facility owners have responded through the One Call System, <CDC code>, <response>."

KARL will read a list of CDCs and their responses.

KARL will say: "<#> other facility owners have not yet responded through the one call system, if you would like to hear this list, press or say 1, otherwise press or say 2"

Action required: PRESS or SAY 1 or 2

If 1: KARL will read the list of facility owners who have not yet responded CDC code <code> <company name> has not respondedIf 2: "To hear this serial number's information again, press or say 1. To enter a new serial number, press or say 2. To transfer to a customer service representative, press or say 0. To end this call, hang up."

Action Required: PRESS or SAY 1, 2, OR Hang Up.

Facility Owner Notification

As directed by the facility owner, on serial numbers requiring supplemental outcall notification, such as emergency notifications out of normal business hours, KARL will attempt to deliver information for all serial numbers that apply to the contacted facility owner within the same call. The outcall will be considered a success and removed from the outcall queue after the field "location information" has been spoken to the facility owner member. Outcalls will be limited to one attempt per member CDC. After each outcall attempt the resulting successful or failed status of the outcall will be entered into the database.

To ensure successful facility owner out-dials please follow these instructions when KARL calls you:

Action required: Answer the telephone

KARL will say: "Hello, this is the Pennsylvania One Call. I have an emergency location request for you. Press or say one to continue."

Action required: PRESS or say 1

If no response is received from the person who answered the phone:

KARL will say: "CDC code <code>, the serial number is <serial number>. For information regarding your serial number please call 1-800-242-1776 and reference CDC code <code> and serial number <serial number>."

If 1:

KARL will say: "Please enter or say your company's ten-digit phone number."

Action required: Enter the telephone number designated for emergency notifications, which is the telephone number KARL dialed.
KARL will say: "Please enter or say your initials. Press or say 7 for help on how to enter your initials numerically.
Action required: Enter or say at least two initials (4 numbers). KARL will accept three initials (6 numbers).
KARL will say: "The initials you entered are <initials>. If this is correct, press or say 1. If this is not correct, press or say 2. To speak to a customer service representative, press or say 0."
Action required: PRESS or SAY 1.

KARL will speak the CDC code, serial number, the scheduled excavation date and time; the work-site county, municipality, address, nearest intersection and location information of the WLR.
KARL will say: "To repeat this information, press or say 1. To respond to this serial number now, press or say 2. To continue, press or say 3. To speak with a service representative, press or say 0.

Action required: PRESS or SAY 1, 2, or 3.
If 1: KARL will repeat the information.
If 2: KARL will ask: "Would you like to respond for CDC <code>, <company name>? Press or say 1 for yes, press or say 2 for no, To speak with a customer service representative, press or say 0."
KARL will accept your response to the serial number (see Response Section),
If 3: KARL will continue and speak the excavator name.
KARL will say: "The excavator is <excavator name>. For detailed information on this excavator, press or say 1. To continue, press or say 2."
Action required: PRESS or SAY 1 or 2.
If 1: KARL will speak the excavator address, caller name, caller phone number, person to contact and contact phone number.
If 2: KARL will speak the type of work, the extent of excavation, if the excavation is on the street, sidewalk, public property, private property, who the work is being done for, and remarks.
KARL will say: "To hear this information again, press or say 1. To respond to this serial number now, press or say2. To continue press or say 3. To speak with a customer service representative, press or say 0. To end this call, please hang up.
Action required: PRESS or SAY 1, 2, or 3, OR Hang up.

Appendix E
APWA/CGA Best Practices for Temporary Markings

Refer to CGA Best Practices Appendix B

This marking guide provides for universal use and understanding of the temporary marking of subsurface facilities to prevent accidents and damage or service interruption by contractors, excavators, utility companies, municipalities or any others working on or near underground facilities.

Know what's below. Dial 811 before you dig.
PA Act 287, as amended, Section 5, Clause 11

An excavator shall use the color white to mark a proposed excavation site when exact site information cannot be provided. THIS SHOULD BE DONE PRIOR TO THE NOTIFYING 811 or 1-800-242-1776 (from outside PA). Pennsylvania law requires notice no less than 3 nor more than 10 business days before you dig ANYWHERE IN THE COMMONWEALTH. Any excavation within the tolerance zone shall be performed by using prudent techniques. The excavator observes a tolerance zone which is comprised of the width of the facility plus 18" on either side of the outside edge of the underground facility on horizontal plane (see graphic on page 50). Use pink temporary survey markings for all surveying and grade marks. Continue using Prudent Techniques until you find the Line. Notify Project Owner and charge PennDOT 408 Spec for the extra work necessary beyond the 18" Tolerance Zone.

Temporary Facility Markings by Facility Owners

To mark, stake, locate or otherwise provide the position of the facility owner's underground lines at the site within 18 inches horizontally from the outside wall of such line in a manner so as to enable the excavator, where appropriate within the tolerance zone, to employ prudent techniques, which may include hand-dug test holes, to determine the precise position of the underground facility owner's lines. This shall be done to the extent such information is available in the facility owner's records or by use of standard locating techniques other than excavation. The marking can be done in one of two ways: either placing the marks over the approximate center of the facility, or by placing the marks over the actual outside edges of the facility with a line connecting the two horizontal lines to indicate there is only one facility. ***PA One Call does not locate or mark lines.***

Tolerance Zone

Any excavation within the tolerance zone is performed with non-powered hand tools or non-invasive method until the marked facility is exposed. The width of the tolerance zone is specified in PA Law. The tolerance zone including the width of the facility plus 18" (450 mm) measured horizontally from each side of the facility.

Best Practices for Locating & Marking Practices/Responsibilities

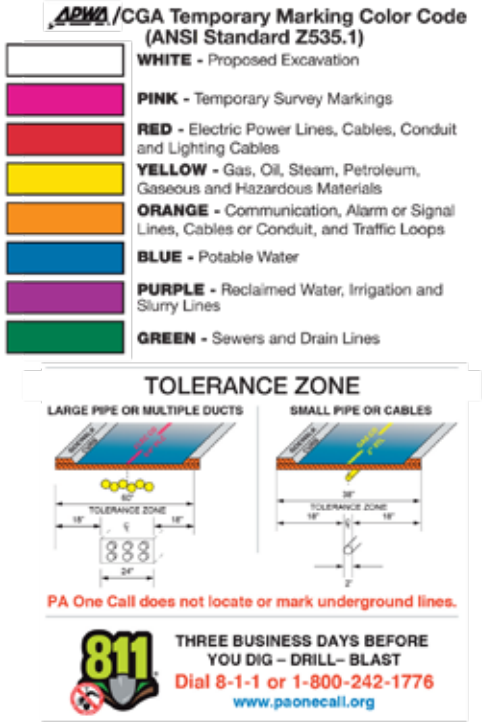
The APWA/CGA Temporary Marking Color Code and Chapter 4 marking practices are specified in PA Act 287, as amended. The Facility Owner or Representative is responsible to markings of facilities and appurtenances including the appropriate color of their facility type, their company identifier (name, initials or abbreviation), the number and width of their facilities and a description of the facility (HP, FO, STL). Use paint, flags, stakes or whiskers or a combination to identify the Facility Owner's line/facility(s) at or near the excavation Work site. It is against the Law to tamper with these markings. *CGA Best Practices Appendix B contains the Uniform Color Code and Marking Guidelines and Chapter 4 contains the practices.*

Uniform Color Code

The American Public Works Association/CGA's Uniform Color Code is PA law.

The code uses ANSI Standard Z535.1. Safety colors, as shown for temporary marking of excavation sites and underground facility identification (examples are provided on front). *Release 5/23*

Appendix F



Underground Utility Line Protection Law

AKA PA One Call Law

SB1237 **ACT 127**
Signed: 10/29/2024

PN1950
2024 Effective: 10/29/2024

73 P. S. § 176 et. seq.

Reprinted by Pennsylvania One Call System, Inc. The purpose of this reprinting is to provide those affected with a complete copy of the ACT.

http://commongroundalliance.com/programs/best-practices

Note: Changes are shown in bold. Notes in red text are POCS clarifications.

AN ACT

Amending the act of December 10, 1974 (P.L.852, No.287), entitled, "An act to protect the public health and safety by preventing excavation or demolition work from damaging underground lines used in providing electricity, communication, gas, propane, oil delivery, oil product delivery, sewage, water or other service; imposing duties upon the providers of such service, recorders of deeds, and persons and other entities preparing drawings or performing excavation or demolition work; and prescribing penalties," further providing for title and for definitions; providing for lawful start date; further providing for duties of facility owners, for duties of the One Call System, for duties of other parties, for duties of excavators, for duties of designers, for duties of project owners, for audits and for penalties; providing for enforcement, for damage prevention committee and for compliance; and further providing for One Call System authority and for expiration.
The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:
AN ACT

To protect the public health and safety by preventing excavation or demolition work from damaging underground lines used in providing electricity, communication, gas, propane, oil delivery, oil product delivery, sewage, water or other service; imposing duties upon the providers of such service and persons and other entities preparing drawings or performing excavation or demolition work; and prescribing penalties.

TERMS TO BE USED IN THIS ACT - DEFINITIONS

SECTION 1. The following words and phrases when used in this act shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Abandoned" means no longer in service and physically disconnected from a line.

"Alleged violation" means an instance when a person by action or inaction is alleged to have failed to fulfill the obligations of this act.

"Business day" means any day except a Saturday, Sunday or legal holiday prescribed by statute. A business day begins at 12:00:00 a.m. and ends at 11:59:59 p.m.

"Chairman" means the Chairman of the Pennsylvania Public Utility Commission.

"Commission" means the Pennsylvania Public Utility Commission.

"Committee" means the damage prevention committee established under section 7.8.

"Common Ground Alliance best practices" means the damage prevention industry recommended standards issued by the Common Ground Alliance; a not-for-profit corporation created pursuant to the issuance of the United States Department of Transportation's Common Ground Task Force report in 1999.

"Complex project" means an excavation that involves more work than properly can be described in a single locate request or any project designated as such by the excavator or facility owner as a consequence of its complexity or its potential to cause significant disruption to lines or facilities and the public, including excavations that require scheduling locates over an extended time frame.

"Consumer Price Index" means the index of consumer prices developed and updated by the Bureau of Labor Statistics of the
United States Department of Labor.

"Conventional oil and gas well" means a conventional oil and gas well as defined in section 2 of the act of June 23, 2016 (P.L.375, No.52), known as the Pennsylvania Grade Crude Development Act.

"Damage prevention investigator" means an employee of the commission tasked with reviewing and investigating an alleged violation reported to the commission under sections 2(10), 4(8), 5(16) AND 6.1(7) and offering recommendations to the committee to address the alleged violation in the form of a warning letter, administrative penalty or par-

ticipation in an educational program established by the commission.

"Demolition work" means the partial or complete destruction of a structure, by any means, served by or adjacent to a line or lines.

"Designer" means any architect, engineer or other person who or which prepares a drawing for a construction or other project which requires excavation or demolition work as herein defined.

"Drawing" means a type of technical plan that shows information about existing and proposed underground facilities, grading, landscaping or other site details for the purpose of providing a clear picture of construction to the excavator. The term does not include sketches made for the purpose of obtaining excavation related to permits.

"Emergency" means a sudden or unforeseen occurrence involving a clear and immediate danger to life, property or the environment, including, but not limited to, serious breaks or defects in a facility owner's lines.

"Excavation work" means the use of powered equipment or explosives in the movement of earth, rock or other material, and includes, but is not limited to, anchoring, augering, backfilling, blasting, boring, digging, ditching, dredging, drilling, driving-in, grading, plowing-in, pulling-in, ripping, scraping, trenching and tunneling. The term does not include soft excavation technology such as vacuum, high pressure air or water, tilling of soil for agricultural purposes to a depth of less than eighteen inches, performing minor routine maintenance up to a depth of less than eighteen inches measured from the top of the edge of the cartway or the top of the outer edge of an improved shoulder, in addition to the performance of incidental de minimis excavation associated with the routine maintenance and the removal of sediment buildup, within the right-of-way of public roads or work up to a depth of twenty-four inches beneath the existing surface within the right-of-way of a State highway, work performed by persons whose activities must comply with the requirements of and regulations promulgated under the act of May 31, 1945 (P.L.1198, No.418), known as the Surface Mining Conservation and Reclamation Act, the act of April 27, 1966 (1st Sp.Sess., P.L.31, No.1), known as The Bituminous Mine Subsidence and Land Conservation Act, or the act of September 24, 1968 (P.L.1040, No.318), known as the Coal Refuse Disposal Control Act, that relate to the protection of utility facilities or the direct operations on a well pad following construction of the well pad and that are necessary or operations incidental to the extraction of oil or natural gas.

"Excavator" means any person who or which performs excavation or demolition work for himself or for another person.
"Facility owner" means the public utility or agency, political subdivision, municipality, authority, rural electric cooperative or other person or entity who or which owns or operates a line. The term does not include the Department of Transportation within a State highway right-of-way. The term does not include any of the following:

(1) A person serving the person's own property through the person's own line, if the person does not provide service to any other customer.

(2) A person using a line which the person does not own or operate, if the use of the line does not serve more than a single property.

"Federal pipeline safety laws" means the provisions of 49 U.S.C. Ch. 601 (relating to safety), including the regulations promulgated under 49 U.S.C. Ch. 601.

"Final design" means the engineering and construction drawings that are provided to a bidder or other person who is asked to initiate construction on the bid date or the date the project is set for construction in the absence of a bid.

"Fiscal year" means the fiscal year utilized by the commission.

"Injury" means a bodily harm to a person, who, as a result of the bodily harm, immediately receives medical attention at a health care facility away from the scene of the incident.

"Lawful start date" means the scheduled start date as provided under section 1.1.

"Line" or "facility" means an underground conductor or underground pipe or structure used in providing electric or communication service, or an underground pipe used in carrying, gathering, transporting or providing natural or artificial gas, petroleum, propane, oil or petroleum and production product, sewage, water or other service to one or more transportation carriers, consumers or customers of such service and the appurtenances thereto, regardless of whether such line or structure is located on land owned by a person or public agency or whether it is located within an easement or right-of-way. The term shall include unexposed storm drainage and traffic loops that are not clearly visible. The term shall include unconventional oil and gas well production and gathering lines or facilities. The term shall not include stripper well lines unless the line or facility is a regulated onshore gathering line as defined in regulations promulgated after January 1, 2006, by the United States Department of Transportation pursuant to the Pipeline Safety Act of 1992 (Public Law 102-508, 49 U.S.C. § 60101 et seq.), if the regulated gathering line is subject to the damage prevention program requirements of 49 CFR § 192.614.

"Locate request" means a communication or notification between an excavator or designer and the One Call System in which a request for locating facilities is processed. Locate requests submitted by an excavator performing work within the right-of-way of any State highway, either under contract to the Department of Transportation or under authority of a permit issued by the Department of Transportation, shall include the number of the Department of Transportation contract or permit.

"Minor routine maintenance" means shaping of or adding dust palliative to unpaved roads, removal and application of patches to the surface or base of flexible base, rigid base or rigid surface roads by either manual or mechanized method to the extent of the existing exposed base material, crack and joint sealing, adding dust palliative to road shoulders, patching and cutting of shoulders and shoulder bases by either manual or mechanized methods to the extent of the existing exposed base, and cleaning of inlets and drainage pipes and ditches.

"One Call System" means the communication system established within this Commonwealth to provide a single nationwide toll-free telephone number or 811 number for excavators or designers or any other person covered by this act to call facility owners and notify them of their intent to perform excavation, demolition or similar work as defined by this act. The One Call System shall be incorporated and operated as a nonprofit corporation pursuant to 15 Pa.C.S. Pt. II Subpt. C (relating to nonprofit corporations).

"Operator" means any individual in physical control of powered equipment or explosives when being used to perform excavation or demolition work.

"Person" means an individual, partnership, corporation, political subdivision, a municipal authority, the Commonwealth and its agencies and instrumentalities, or any other entity.

"Powered equipment" means any equipment energized by an engine or motor and used in excavation or demolition work.

"Preconstruction meeting" means a scheduled event held by the excavator, designer, project owner and facility owner, or an agent of the excavator, designer, project owner and facility owner, prior to the commencement of excavation or demolition work in a complex project.

"Project owner" means any person who or which engages an excavator for construction or any other project which requires excavation or demolition work.

"Report of alleged violation" means a recorded account of an alleged violation.

"Sketch" means a physical depiction of a work site generally for permitting purposes and not solely or specifically applicable to design requirements.

"Stripper well" means a conventional oil and gas well with a maximum daily average production which does not exceed fifteen barrels of oil and ninety thousand cubic feet of natural gas during any twelve-month consecutive time period.

"Stripper well lines" means a production or gathering line or facility that has a nominal inside diameter of eight inches or less, only carries oil or natural gas produced exclusively from one or more stripper wells and is not regulated under the Federal pipeline safety laws and subject to the pipeline damage prevention requirements in 49 C.F.R. § 192.614 (relating to damage prevention program) or 49 C.F.R. § 195.442 (relating to damage prevention program).

"Subsurface utility engineering" or "SUE" means those techniques set forth in the American Society of Civil Engineers (ASCE) most recently published standard CI/ASCE 38, or its successor document as determined by the One Call System.

"Tolerance zone" means the horizontal space within eighteen inches of the outside wall or edge of a line or facility.

"Trenchless technology" means a family of construction techniques for installing or rehabilitating underground infrastructure with minimal disruption to surface traffic, business and residents.

"Traffic loop" means a device that detects metal objects such as cars and bicycles based on the change in inductance that they induce in the device.

"Unconventional formation" means a geological shale formation existing below the base of the Elk Sandstone or its geologic equivalent stratigraphic interval where oil or natural gas generally cannot be produced at economic flow rates or in economic volumes except by vertical or horizontal well bores stimulated by hydraulic fracture treatments or by using multilateral well bores or other techniques to expose more of the formation to the well bore.

"Unconventional oil and gas well" means a bore hole drilled or being drilled for the purpose of or to be used for the production of oil or natural gas from an unconventional formation.

"Violation" means an instance when it has been determined by the commission that a person by action or inaction has failed to fulfill the obligation of this act.

"Well pad" means area, under the control of an oil or natural gas company, occupied by equipment or facilities necessary or required for the drilling, production or plugging of an oil or natural gas well.

"Work site" means the specific place denoted on the locate request where excavation or demolition work is being or is planned to be performed. A work site should be denoted as a clearly defined, bounded area, including relevant identifiable points of reference such as the specific address with a specific description as to the portion of the property, including descriptions such as front, back, left side, right side and direction such as N, S, E, W or variants. Where possible, the points should also reference, without limitation, the size and radius or circumference of the excavation, utility pad or pedestal numbers, utility pole numbers, landmarks, including trees, fountains, fences, railroads, highway and pipeline markers, and latitude and longitude.

SECTION 1.1. The lawful start date shall be three business days through ten business days following notification to the One Call System.

RESPONSIBILITIES OF THE FACILITY OWNER

SECTION 2. It shall be the duty of each facility owner:

(1) To be a member of and give written notice to the One Call System. Such notice shall be in a form acceptable to the One Call System and include:

(i) the legal name of the facility owner and their official mailing address;

(ii) as follows:
(A) The names of the counties and municipalities, down to and including wards in Philadelphia, Pittsburgh, Allentown and Erie, in which its lines are located and other related information as may be required by the One Call System regarding the location of a member's facilities.

(C) A facility owner may not be required to locate lines or facilities installed before April 30, 2018, unless the facility owner has existing

maps of the lines or facilities and the facility owner's existing maps meet the specifications of the One Call System's Member Mapping Solutions. Nothing under this clause shall prohibit a facility owner as a member of the One Call System from voluntarily submitting to the One Call System maps of lines or facilities installed before April 30, 2018.

(iii) the facility owner's address (by street, number and political subdivision) and the telephone number and fax number, if available, to which inquiries may be directed as to the location of such lines;

(iv) the street identifications or like information within each of the municipalities in which its lines are located. This information shall be in a form acceptable to the One Call System. Upon acceptance of the information from a facility owner, the One Call System shall provide the facility owner with notification within the boundaries described. All facility owners shall agree to indemnify and hold harmless the One Call System for any errors and omissions on the part of the facility owner or the excavator or designer providing the information as the agent of the facility owner **or member mapping information as required by the One Call System;** and

(v) any other information required by the One Call System.

(2) To provide the One Call System, within five business days, with any revised information required under this section.

(4) Not more than ten business days after receipt of a request from a designer who identifies the work site of excavation or demolition work for which he is preparing a drawing, to initially respond to his request for information as to the position and type of the facility owner's lines at such work site based on the information currently in the facility owner's possession or to mark the plans which have been provided to it by the designer by field location or by another method agreed to by the designer, excavator and facility owner, or their agent. The facility owner shall so advise the person making the request of the facility owner's status at the work site through the One Call System.

(5) After receipt of a timely request from an excavator or operator who identifies the work site of excavation or demolition work he intends to perform and not later than the business day prior to the lawful start date of excavation:

(i) To mark, stake, locate or otherwise provide the position of the facility owner's underground lines at the work site within eighteen inches horizontally from the outside wall of such line in a manner so as to enable the excavator, where appropriate, to employ prudent techniques, which may include hand-dug test holes, to determine the precise position of the underground facility owner's lines. This shall be done to the extent such information is available in the facility owner's records or by use of standard locating techniques other than excavation. Standard locating techniques shall include, at the utility owner's discretion, the option to choose available technologies suitable to each type of line or facility being located at the work site, topography or soil conditions or to assist the facility owner in locating its lines or facilities, based on accepted engineering and operational practices. **Facility owners shall make reasonable efforts during the excavation phase to locate or notify excavators of the existence of any known lines and abandoned lines.**

(i.1) To identify the location of an actually known facility's point of connection to its facilities, where the point of connection is not owned or operated by the facility owner. A facility owner may identify the location of a known facility connected to its facilities, but not owned or operated by the facility owner, as a helpful guide to the excavator or owner. The identification shall not be deemed to impose any liability upon the facility owner for the accuracy of the other facility's identification.

(i.2) To document communications between a facility owner and the excavator to ensure that the excavator is aware of a facility owner's inability to locate its facilities.

(ii) To timely elect to excavate around its facilities in fulfillment of this subparagraph, at its option.

(iii.1) To propose mutually agreeable scheduling by which the excavator, facility owner or designer may locate the facilities.

(v) To respond to all notices through the One Call System, provided the request is made in the time frame set forth under this act. The response shall be made not later than the end of the second business day following receipt of the notification by the One Call System, excluding the business day upon which the notification is received, or not later than the day prior to the lawful start date of excavation if the excavator specifies a later date or, in the case of an emergency, to respond through the One Call System as soon as practicable following receipt of notification of the emergency by the One Call System.

(v.1) To, if a facility owner failed to respond to an original, proper, nonemergency locate request from the One Call System or to a renotification under section 5(20), communicate directly to the excavator within two hours after renotification of the information about its facility location and, if necessary and possible, go to the proposed work site to mark, stake or locate its underground lines or to verify to the excavator that the facility owner's underground lines are not within the area of the proposed work site.

(v.2) To timely enter a final response to all locate requests.

(vi) In marking the approximate position of underground lines or facilities, to follow the Common Ground Alliance Best Practices for Temporary Marking set forth in ANSI standard Z535.1. Should the Common Ground Alliance Best Practices be amended, the amended guidelines shall be applied and followed. If the Common Ground Alliance Best Practices no longer publishes guidelines for temporary markings or if the responsibility for publishing the guidelines is transferred to or assumed by another entity, the facility owner shall follow the guidelines approved by the One Call System's board of directors.

(vii) To respond to emergency notifications as soon as practicable following receipt of notification of such emergency. The response by the facility owner shall be consistent with the nature of the emergency information received by the facility owner.

(viii) To participate in preconstruction

meetings for a complex project or as described in section 5(3).

(ix) If notification is received pursuant to section 5(8), to give priority to responding to notification as an emergency.

(9) If a facility owner fails to become a member of the One Call System in violation of this act and a line or lines of such nonmember facility owner are damaged by an excavator by reason of the excavator's failure to notify the facility owner because the facility owner was not a member of the One Call System serving the location where the damage occurred, such facility owner shall have no right of recovery from the excavator of any costs associated with the damage to its lines. The right herein granted shall not be in limitation of any other rights of the excavator.

(10) To submit a report of alleged violation to the commission through the One Call System not more than thirty business days after receipt of notice that the facility owner's lines have been damaged by excavation or demolition work or if the facility owner believes a violation of this act has been committed in association with excavation or demolition work. The report of alleged violation shall be in a form and manner as required by the commission.

(11) To comply with all requests for information by the commission relating to the commission's enforcement authority under this act within thirty days of the receipt of the request.

(12) To participate in the One Call System's Member Mapping Solutions as determined by the One Call System's board of directors.

(13) To maintain existing records of main lines abandoned on or after the effective date of this paragraph and to mark, locate and identify the main lines, if possible, based upon the existing records. The records shall include written or electronic documents or drawings in the possession of the facility owner that show the location of an existing line or facility.

(14) To comply with all requests for information by the commission relating to the commission's enforcement authority under this act within thirty days of receipt of the request.

RESPONSIBILITIES OF THE ONE CALL SYSTEM

SECTION 3. It shall be the duty of the One Call System:

(1.1) To assign one or more serial numbers and the date that the work site may legally be excavated and to log the entire voice transaction on logging recorders in appropriate digital form and maintain these logs for five years. All records shall be indexed and available to the parties involved at a reasonable cost and at reasonable times set by the One Call System.

(1.2) To perform the obligations, as set forth under this section, on behalf of the facility owner, excavator or designer as established by the board of directors of the One Call System.

(1.3) To provide access to municipal lists provided to the One Call System for those interested parties. This list shall contain facility owners having lines in the municipality, including wards as indicated in section 2(1)(ii), and to maintain, for each municipality, a list containing the information as required to be submitted by the facility owner. Such list shall be updated as revised information is received from the facility owner within five business days.

(3) To, per memoranda of understanding between the commission and the One Call System, provide reports of alleged violations and other information, such as photographs, photocopies and drawings, that are submitted with the report of alleged violation. The One Call System shall provide access to or photocopies of One Call System response records, tickets or other similar information related to matters covered by this act under investigation by the commission, pursuant to its enforcement authority under this act. The One Call System may provide reports of alleged violations to the Pennsylvania Emergency Management Agency, per memoranda of understanding.

(4) To determine the maximum geographic area that shall constitute a valid single notification and to determine when multiple notifications shall be required of any person, including the method, the type and the number of notifications in a complex project.

(5) If approved by the board of directors of the One Call System, to offer a service for the application and obtaining of State or municipal permits for excavation work. Issuance of the required permits shall be the responsibility of the appropriate State or municipal agency which has jurisdiction over the type of excavation work being performed.

(6) Pursuant to policies adopted by the One Call System's board of directors, to provide a secure repository for and access to subsurface utility engineering data received from project owners to affected facility owner members.

(7) To inquire, when an excavator has notified the One Call System of the existence of a release of natural gas or other hazardous substance or of potential danger to life, health or property, whether the excavator has notified the 911 system. If the 911 system has not been notified, the One Call System shall notify the excavator of the excavator's responsibility to notify the 911 system and shall make a record of the conversation.

(8) To notify the facility owner as soon as possible that an excavator has identified an unmarked or incorrectly marked facility and of the facility owner's responsibilities under section 2(5)(v.1).

SECTION 3.1. (a) The duties of the One Call System are those duties as set forth in section 3. Duties assigned to other parties in other sections of this act shall be the duties of those parties and shall not be imputed to the One Call System, including the duty to provide accurate information to the One Call System concerning proposed excavation and the duty to locate facilities at a work site.

(b) The One Call System shall not be liable for damages to the person or the person's property arising out of its nonnegligent actions in furtherance of the duties imposed under this act and shall be liable only if the failure to comply was the proximate cause of any damages claimed.

(c) (Reserved).

(d) The One Call System shall be governed by a board of directors to be

chosen by the facility owners. No less than twenty percent of the seats on the board shall be held by municipalities or municipal authorities. The board shall include all of the following:

(1) The chairman or his designee.

(2) The Director of the Pennsylvania Emergency Management Agency or his designee.

(4) The Secretary of Transportation or his designee.

(5) An excavator or excavation industry representative.

(6) A designer or designer industry representative.

(7) An owner or operator or a representative of an owner or operator of pipelines associated with conventional oil and gas wells. The owner or operator may be a facility owner or a pipeline owner or operator who voluntarily submits maps of its lines or facilities to the One Call System.

(8) A facility owner or facility owner representative of pipelines associated with unconventional oil and gas wells.

(e) Operation costs for the One Call System shall be shared, in an equitable manner for services received, by facility owner members as determined by the One Call System's board of directors. Political subdivisions with a population of less than two thousand people or municipal authorities having an aggregate population in the area served by the municipal authority of less than five thousand people shall be exempt from the payment of any service fee. The One Call System may be reimbursed for its costs in providing this service from the contractor fees.

(f) All fees shall be set by the board of directors and shall be based on the latest annual audited cost factors of the One Call System. Fees shall be set and adjusted to a rate not more than five percent above the audited cost factor plus the current average published Consumer Price Index for Pennsylvania. Costs of capital improvements may be added, if the improvement receives a majority vote of the board of directors.

(f.1) An excavator, designer or operator who proposes to commence excavation or demolition work and requests information from the One Call System shall pay to the One Call System an annual fee for the service provided by the One Call System under section 3. The fee shall be set by the One Call System board of directors and shall be used to offset a portion of the operation costs of the One Call System and a portion of the operation costs levied on the One Call System's political subdivision and municipal authority members. Failure to pay the fee shall constitute a violation of this act and shall subject the excavator, designer or operator to the enforcement authority of the commission for the nonpayment.

(h) Any request for information shall be reviewed and provided as determined in accordance with the procedure established by the One Call System's board of directors.

RESPONSIBILITIES OF A DESIGNER

SECTION 4. It shall be the duty of each designer preparing a drawing which requires excavation or demolition work within this Commonwealth:

(2) To request the line and facility information prescribed by section 2(4) from the One Call System not less than ten nor more than ninety business days before final design is to be completed. This clause is not intended to prohibit designers from obtaining such information more than ninety days before final design is to be completed; however, they shall state in their requirements that such work is preliminary.

(2.1) To forward a copy of the project plans to each facility owner who requests a copy. If a designer is unable to provide a copy because of security of the project or proprietary concerns regarding the design or the project, the designer shall negotiate in a timely manner with the facility owner the means of obtaining the necessary data.

(2.2) To submit a design notification through the One Call System when a design drawing is completed.

(2.3) To timely respond to notifications received from excavators in accordance with section 5(15).

(2.4) To inform the project owner of the project owner's duties under

(2.5) To comply with all requests for information by the commission relating to the commission's enforcement authority under this act within thirty days of written receipt of the request.

(3) To show upon the drawing the position and type of each facility owner's line, derived pursuant to the request made as required by clause (2), and the name of the facility owner as shown on the list referred to in section 3.

(4) To make a reasonable effort to prepare the construction drawings to avoid damage to and minimize interference with a facility owner's facilities in the construction area by maintaining the clearance as provided for in the applicable easement condition or an eighteen-inch clearance of the facility owner's facilities if no easement restriction exists.

(4.1) To depict lines or facilities with the appropriate quality levels based on the complexity of the design and construction activities obtained through the SUE process in the planning and design phases in accordance with the American Society of Civil Engineers (ASCE) most recently published standard CI/ASCE 38.

(4.2) In the event that as-builts are required during the construction phase, to prepare the as-builts in accordance with the most recently published standard of CI/ASCE 75.

(5) A designer shall be deemed to have met the obligations of clause (2) if he notifies the One Call System and shows, as proof, the serial number of one call notice on drawings. The designer shall also show the toll-free number of the One Call System on the drawing near his serial number.

(6) If, after receiving information from the facility owners, the designer decides to change the work site of a proposed excavation, the obligations imposed by this section shall apply to the new work site.

(7) The designer who has complied with the terms of this act and who was not otherwise negligent shall not be subject to liability or incur any obligation to facility owners, operators, owners or other persons who sustain injury to person

or property as a result of the excavation or demolition planning work of the designer.

(8) To submit a report of alleged violation to the commission through the One Call System not more than thirty business days from the time the designer becomes aware that a violation of this act may have been committed in association with excavation or demolition work. The report of alleged violation shall be in a form and manner as required by the commission.

(9) To request line and facility information required under section 2(4) from the One Call System and to pay the applicable fee for the request.

RESPONSIBILITIES OF THE EXCAVATOR

SECTION 5. It shall be the duty of each excavator who intends to perform excavation or demolition work within this Commonwealth:

(2.1) To **submit a locate request to identify** the location and type of facility owner lines at each work site by notifying the facility owner through the One Call System. Notification shall be not less than three nor more than ten business days in advance of beginning excavation or demolition work. No work shall begin earlier than the lawful start date which shall be on or after the third business day after notification. The lawful start date shall exclude the date upon which notification was received by the One Call System and notification received on a Saturday, Sunday or holiday, which shall be processed on the following business day. In the case of a complex project, notification shall not be less than ten business days in advance of the beginning of excavation or demolition work.

(2.2) To provide the One Call System with exact information to identify the work site so that facility owners might provide indications of their lines. An excavator shall be deemed to have met the obligations of clause (2.1) if he calls the One Call System, provides the work site and other required information and receives a serial number.

(3) In a complex project or if an excavator intends to perform work at multiple work sites or over a large area, to take reasonable steps to work with facility owners, including scheduling and conducting a preconstruction meeting, so that they may locate their facilities at a time reasonably in advance of the actual start of excavation or demolition work for each phase of the work. A preconstruction meeting may take place at any time prior to the commencement of excavation or demolition work, and the excavator, facility owners and designer, or their agents, shall attend the meeting. Notice of the meeting shall be given sufficiently in advance so as to permit attendance, either in person or electronically, by the excavator, facility owners and designer, or their agents, and shall include information sufficient to identify the scope of work. If the excavator does not believe that a preconstruction meeting is necessary under the circumstances of this clause it shall indicate such belief in its notice, but any facility owner with facilities at the work site may request a meeting with the excavator, and a meeting shall be held between the facility owner and the excavator. After commencement of excavation or demolition work, the excavator shall be responsible for protecting and preserving the staking, marking or other designation until no longer required for proper and safe excavation or demolition work at or near the underground facility or by contacting the One Call System to request that the facilities be marked again in the event that the previous markings have been compromised or eliminated.

(3.1) To comply with the requirements established by the One Call System as determined by the board of directors regarding the maximum area that a notification may cover.

Which has been set at: **"1000' or Intersection to Intersection, whichever is greater, along the same street, within the same political subdivision"** by the Board.

(4) To exercise due care and to take all reasonable steps necessary to avoid injury to or otherwise interfere with all lines where positions have been provided to the excavator by the facility owners pursuant to section 2 (5). Within the tolerance zone the excavator shall employ prudent techniques, which may include hand-dug test holes, vacuum excavation or similar devices to ascertain the precise position of such facilities. If insufficient information to safely excavate is available pursuant to section 2(5), the excavator shall employ like prudent techniques which shall be paid for by the project owner pursuant to clause (15).

(5) If the facility owner fails to respond to the excavator's timely request as provided under section 2(5) or the facility owner notifies the excavator that the line cannot be marked within the time frame and a mutually agreeable date for marking cannot be arrived at, the excavator may proceed with excavation as scheduled, but not earlier than the lawful dig date, provided he exercises due care in his endeavors, subject to the limitations contained in this clause and clauses (2.1) through (4) and (20).

(6) To inform each operator employed by the excavator at the work site of such work of the information obtained by the excavator pursuant to clauses (2.1) through (5), and the excavator and operator shall:

(i) Plan the excavation or demolition work to avoid damage to or minimize interference with a facility owner's facilities in the construction area. Excavation or demolition work which requires temporary or permanent interruption of a facility owner's service shall be coordinated with the affected facility owner in all cases.

(ii) After consulting with a facility owner, provide such support and mechanical protection for known facility owner's lines at the construction work site during the excavation or demolition work, including during backfilling operations, as may be reasonably necessary for the protection of such lines.
(7) To report immediately to the facility owner any break or leak on its lines, or any dent, gouge, groove or other damage to such lines or to their coating or cathodic protection, made or discovered in the course of the excavation or demolition work. The One Call System board of directors may adopt procedures to permit reporting under this clause through the One Call System.

(8) To immediately notify 911 and the facility owner if the damage results in the escape of any flammable, toxic or corrosive gas or liquid. The excavator shall take reasonable measures, based on its knowledge, training, resources, experience and understanding of the situation, to protect themselves and those in immediate danger, the general public, the property and the environment until the facility owner or emergency responders have arrived and completed their assessment and shall remain on the work site to convey any pertinent information to responders that may help them to safely mitigate the situation.

(9) The time requirements of clause (2.1) shall not apply to a facility owner or excavator performing excavation or

demolition work in an emergency, as defined in section 1; nonetheless, all facility owners shall be notified as soon as possible before, during or after excavation or demolition work, depending upon the circumstances.

(11) To use the color white to mark a proposed excavation work site when exact work site information cannot be provided.

(11.1) To assist a facility owner in determining involvement of a facility owner's lines by disclosing additional available information requested by the facility owner, including dimensions and the direction of proposed excavations.

(11.2) If using trenchless technology, at a minimum, to utilize the best practices published by the Common Ground Alliance.

(12) The following standards shall be applied in determining whether an excavator shall incur any obligation or be subject to liability as a result of an excavator's demolition work or excavation work damaging a facility owner's facilities:

(i) The excavator who has complied with the terms of this act and who was not otherwise negligent shall not be subject to liability or incur any obligation to facility owners, operators, project owners or other persons who sustain injury to person or property as a result of the excavator's excavation or demolition work damaging a facility owner's lines.

(ii) Where an excavator has failed to comply with the terms of this act or was otherwise negligent, and the facility owner or designer has misidentified, mislocated or failed to identify its facilities pursuant to this act, then in computing the amount of reimbursement to which the facility owner is entitled, the cost of repairing or replacing its facilities shall be diminished in the same proportion that the facility owner's or designer's misidentification, mis-location or failure to identify the facilities contributed to the damage. Should the facility owner or designer not have misidentified, mislocated or failed to identify its facilities pursuant to this act, there shall be no diminution of the facility owner's right of recovery.

(13) If, after receiving information from the One Call System or directly from a facility owner, the excavator decides to change the location, scope or duration of a proposed excavation, the obligations imposed by this section shall apply to the new location.

(14) If an excavator removes its equipment and vacates a work site for more than two business days, to renotify the One Call System unless other arrangements have been made directly with the facility owners involved in his work site.

(15) When the information required from the facility owner under section 2(5)(i) cannot be provided or, due to the nature of the information received from the facility owner, it is reasonably necessary for the excavator to ascertain the precise location of any line or abandoned or unclaimed lines by prudent techniques, which may include hand-dug test holes, vacuum excavation or other similar devices, the excavator shall promptly notify the project owner or the project owner's representative, either orally or in writing. If oral notification is given, the notice shall be reduced to writing within a reasonable time by the project owner or excavator. After giving such notice, the excavator shall be entitled to compensation from the project owner for this additional work as provided in the latest edition of the Pennsylvania Department of Transportation Form 408 specifications for extra work performed on a force account basis. The provisions of this subsection shall not be deemed to limit any other rights which the excavator has under its contract with the project owner or otherwise. Provisions in any contract, public or private, which attempt to limit the rights of excavators under this section shall not be valid for any reason, and any attempted waiver of this section shall be void and unenforceable as against public policy and any such attempted waiver shall be reported to the commission **prosecutor staff for appropriate action, including the imposition of an administrative penalty under section 7.10.**

(16) To submit a report of an alleged violation to the commission through the One Call System not more than thirty days after striking or damaging a facility owner's line during excavation or demolition or if the excavator believes a violation of this act has been committed in association with excavation or demolition work. The report of an alleged violation shall be in a form and manner as required by the commission.

(17) To comply with all requests for information by the commission relating to the commission's enforcement authority under this act within thirty days of the receipt of the request.

(18) To, if it chooses to do so and if working for a facility owner, a municipality or a municipal authority, delegate the power to discharge the duties set forth in clauses (2.1) and (2.2) to its project owner, with the project owner's consent. If the power is delegated pursuant to this clause, both the excavator and the project owner shall be responsible for providing the required notices.

(19) To ensure the accuracy of any information provided to the One Call System pursuant to this section.

(20) To renotify the One Call System of an unmarked or incorrectly marked facility, if an original, proper locate request has been made to the One Call System and, upon initial arrival at the proposed work site, it is apparent to the excavator that there is an unmarked or incorrectly marked facility. An excavator may not begin excavating in the affected area of the work site until after receiving sufficient information from the facility owner to safely excavate. If the facility owner fails to provide sufficient information to the excavator within three hours after the excavator has notified the One Call System of the unmarked or incorrectly marked facility, the excavator may proceed with excavation subject to the limitations under clause (5). **This clause shall apply to an emergency or nonemergency locate request.**

(21) To make a locate request to the One Call System prior to excavation or demolition work and to pay the applicable fee for the request.

See www.paonecall.org for additional detail.

(22) To not provide a misrepresentation of an emergency excavation, subject to an administrative penalty imposed under section 7.10.

(23) To not delegate the excavator's duty to submit a locate request to the One Call System to another person. The excavator shall have the sole responsibility to submit each locate request to the One Call System.

LEGISLATIVE INTENT

SECTION 6. Except as otherwise provided in this act, this act shall not be deemed to amend or repeal any other law, Commonwealth regulation or any local ordinance enacted pursuant to law concerning the same subject matter, it being the legislative intent that any such other law or local ordinance shall have full force and effect where not inconsistent with this act.

EXCAVATION EMERGENCIES

PROVIDED BY PIPELINE ASSOCIATION FOR PUBLIC AWARENESS

KNOW THE HAZARDS

- Natural gas and other petroleum products will ignite and burn. If exposed to the skin, serious irritations may occur. Escaping gases can displace oxygen.
- Electricity will arc or short to ground producing heat that is up to four times greater than the heat of the sun. At a minimum, it will burn skin and damage internal organs. High voltage electricity can arc significant distances through the air. Be aware of all aboveground high voltage lines and keep any part of the equipment at least 10 feet away from overhead lines.
- Water under high pressure can cause serious injury. Wastewater contains bacteria that can be a significant health risk. Sewer gas will ignite and burn.

RECOGNIZE UNSAFE CONDITIONS

- Pools of liquid, blowing dirt, hissing sounds, vapor clouds, gaseous odors, bubbles in standing water, dead vegetation, and frozen soil or ice next to pipelines are all signs of a natural gas or petroleum pipeline leak and should be treated as an emergency.
- Treat contact with any electric line as an emergency regardless of whether it appears undamaged, damaged or severed. This includes contact with aboveground high voltage lines.
- Utilities often jointly use trenches placing you at greater risk in trenches that also have electricity.
- Wet or discolored soil is an indication of a water/sewer leak and should be treated as a potential emergency condition.

EMERGENCY CONDITIONS INVOLVING UNDERGROUND FACILITIES INCLUDE:

Leaks, ruptures, explosions, fires, severe settling or soil movement, weakened or damaged facilities and similar instances where immediate action is necessary to prevent loss of life, injury to persons, or damage to property and the environment. Every situation is different and must be evaluated on the individual circumstances. Below are general emergency response guidelines for various emergency/damage situations involving underground facilities.

RESPOND IMMEDIATELY

NATURAL GAS & PETROLEUM LIQUIDS

1. Turn off equipment, if it can be done safely.
2. Abandon all equipment and get a safe distance away.
3. Avoid open flames or anything that might start a fire. Do not start motor vehicles or electrical equipment. Remove all ignition sources (cigarettes, cell phones, or anything that could create a spark or static electricity).
4. Evacuate the area and keep people out.
5. Do not make contact with escaping liquids.
6. Do not operate any pipeline valves.
7. Call 911 or your local fire, police, or sheriff's office.
8. Do not try to put out a fire. If it's burning, let it burn; ask local firefighters to observe and protect adjacent property.
9. Contact the facility operator immediately to report the condition.

ELECTRICITY

1. Only move equipment in contact with overhead or underground electric lines if you can move it away safely.
2. If excavator equipment remains in contact with electric equipment, it's safest to stay on equipment (unless on fire) until rescue workers arrive; keep others away. If you must abandon equipment, jump clear of it, landing with both feet on the ground at the same time, and then only shuffle or hop away.
3. If a buried electrical line is struck in wet soil/conditions, the ground may become energized for a large area around the strike. *(Hopping or shuffling away will help reduce your risk to step potential.)*
4. Contact the facility operator immediately to report the condition.
5. If appropriate, call 911 for local emergency response.

WATER/SEWER

1. Evacuate the area immediately and keep people out. Leaking water can fill a trench quickly making escape extremely difficult.
2. Do not close valves in order to stop flooding. Closing the wrong valve may affect fire flows and/or possible containment of potable systems.
3. Be careful of damaged high-pressure water lines because even the slightest scratch or vibration can cause pipelines to break.
4. Move carefully around trenches with wet walls. Wet soil can easily cause suffocation.
5. Avoid contact with wastewater. Do not wade in or work around wastewater.
6. Sewer gas is flammable; avoid open flames or anything that might start a fire.
7. Contact the facility operator immediately to report the condition.

FIBER/COMMUNICATION

1. If a fiber optic cable is cut, do not look into the end of it. Serious eye damage may occur.
2. Contact the facility operator and report the condition.

NEVER BURY A DAMAGED FACILITY!

Even a minor scrape, nick, cut, tear, break, or dent should be reported to the facility owner immediately. If not promptly repaired, it could result in a future leak, service outage, explosion, accident, injury, or death.

DIRECTRICES PARA REACCIONAR EN EMERGENCIAS

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Click Before You Dig

PÓSTER DE SEGURIDAD PROVEIDO POR PIPELINE ASSOCIATION FOR PUBLIC AWARENESS

CONOZCA LOS PELIGROS

- El gas natural y otros productos de petróleo son inflamables y queman. Si la piel está expuesta, serias irritaciones pueden ocurrir. Los gases escapados pueden desplazar el oxígeno.
- La electricidad hará descargas o cortocircuito a tierra produciendo temperaturas que son cuatro veces más intensas que la temperatura del sol. Como mínimo quemaría la piel y dañaría los organos internos. Los altos voltajes de electricidad pueden hacer arco a distancias considerables a través del aire. Usted debe estar consiente de cables aéros de alto voltaje y aleje cualquier parte del equipo por lo menos a 10 pies de distancia de los cables aéreos.
- El agua a alta presión pueden causar heridas graves. Las aguas residuales contienen bacterias que puede ser de alto riesgo para la salud. Los gases del alcantarillado son inflamables y queman.

RECONOZCA LAS CONDICIONES PELIGROSAS

- Los charcos de liquido, la tierra soplando, los sonidos siseantes, las nubes de vapor, los olores a gas, las burbujas en agua estancada, la vegetación completamente seca, y la tierra congelada o hielo alrededor de gasoductos/ oleoductos son todas señales de escapes de gas natural o petróleo y deben de ser tratadas como una emergencia.
- Trate el contacto con cualquier cable eléctrico como una emergencia sin tener en cuenta si aparece dañado o no o si está cortado. Ésto incluye el contacto con cables aéreos de alto voltaje.
- Con frecuencia los servicios usan zanjas conjuntamente poniéndolo a usted en un mayor riesgo en las zanjas que támbien tienen electricidad.
- La tierra mojada o descolorida es un indicio de un escape de agua/alcantarillado y debe ser tratada como una condición de emergencia potencial.

CONDICIONES DE EMERGENCIA que afectan las instalaciones subterráneas incluyen: escapes, rupturas, explosiones, incendios, hundimiento severo o movimiento de tierra, debilitamiento y daño de gasoductos/oleoductos/acueductos, y casos similares donde es necesaria la acción inmediata para impedir pérdida de vidas, heridas a personas, o daños a propiedad y el medio ambiente. Cada situación es diferente y debe ser evaluada individualmente según las circunstancias. A continuación se dan directrices generales de emergencia para reaccionar ante varias emergencias/situaciones donde hay daños que afectan las instalaciones subterráneas.

REACCIONE INMEDIATAMENTE

GAS NATURAL Y LÍQUIDOS DERIVADOS DEL PETROLEO

1. Apague el equipo, si lo puede hacer con seguridad.
2. Abandone todo el equipo y aléjese a una distancia segura.
3. Evite llamas abiertas o cualquier cosa que pueda prender fuego. No arranque vehículos de motor o equipo eléctrico. Retire todas las fuentes de ignición (cigarrillos, teléfonos celulares, o cualquier cosa que pueda crear una chispa o electricidad estática).
4. Evacúe el área y no deje pasar a la gente.
5. No haga contacto con escapes de líquidos.
6. No maneje las válvulas de gasoductos/oleoductos.
7. Llame al número de emergencia 911 o llame a las oficinas locales del cuerpo de bomberos, policía, o sheriff.
8. No trate de apagar el fuego. Si está ardiendo déjelo quemar; pídale a los bomberos que observen y protejan la propiedad adyacente.
9. Inmediatamente póngase en contacto con a la compañía que opera los gasoductos/oleoductos para reportar las condiciones.

ELECTRICIDAD

1. Sólo mueva equipo que esté en contacto con cables eléctricos aéreos o subterráneos si usted lo puede mover con seguridad.
2. Si el equipo excavador continúa en contacto con equipo eléctrico, es más seguro quedarse en el equipo (a no ser que esté en llamas) hasta que lleguen los trabajadores de rescate: no deje que otros se acerquen. Si tiene que abandonar el equipo, salte lejos del equipo, cayendo con ambos pies a la misma vez, y luego sólo aléjese arrastrando los pies o saltando
3. Si hay impacto con un cable enterrado y la tierra está mojada, la tierra en el área alrededor del impacto puede estar energizada. (Reduzca el riesgo de electrocutarse alejándose saltando o arrastrando los pies.)
4. Inmediatamente póngase en contacto con la compañía que opera las instalaciones para reportar la emergencia
5. Si es apropiado llame al número de emegencia 911 para ayuda local.

ACUEDUCTO/ALCANTARILLADO

1. Evacúe el área de inmediato y no deje que la gente se acerque. Un escape de agua puede llenar una zanja rápidamente haciendo su escape sumamente dificil.
2. No cierre las válvulas para impedir inundaciones. Cerrar la válvula equivocada puede impedir que el agua pase por los ductos de agua que usan los bomberos para apagar fuegos y/o posiblemente contaminar el sistema de agua potable.
3. Tenga cuidado con los ductos de agua de alta presión debido a que cualquier leve rasguño o vibración puede causar una ruptura.
4. Muévase con cuidado alrededor de zanjas que tienen las paredes mojadas. Tierra mojada puede derrumbarse fácilmente y causar asfixia.
5. Evite contacto con aguas residuales. No camine o trabaje alrededor de aguas residuales.
6. Los gases del alcantarillado son inflamables; evite llamas abiertas o cualquier cosa que pueda iniciar un incendio.
7. Inmediatamente póngase en contacto con la compañía que opera los acueductos y alcantarillados para reportar la emergencia.

FIBRA ÓPTICA/COMUNICACIÓN

1. Si el cable de fibra óptica está cortado, no mire adentro de la punta del cable. Graves daños a los ojos pueden ocurrir.
2. Inmediatamente póngase en contacto con la compañía que opera la fibra óptica para reportar la situación.

NUNCA ENTIERRE EQUIPO DAÑADO

Nunca entierre equipo dañado como cables eléctricos, gasoductos, oleoductos, o ductos de cualquier tipo. Informe de inmediato a la compañía afectada cualquier leve rasguño, corte, rotura, o abolladura. Si la reparación no es hecha rápidamente en el futuro pueden resultar escapes, interrupción de servicios, explosiones, accidentes, heridas, o muerte.

RESPONSIBILITIES OF THE PROJECT OWNER

SECTION 6.1. It shall be the duty of each project owner who engages in excavation or demolition work to be done within this Commonwealth:

(1) To utilize subsurface utility engineering or other similar techniques whenever practicable to properly determine the existence and positions of underground facilities when designing known complex projects having an estimated cost of four hundred thousand dollars ($400,000) or more.

(2) To timely respond to notifications received from excavators pursuant to section 5(15). **Provisions in any contract, public or private, which attempt to limit the rights of excavators under section 5 shall not be valid for any reason, and any attempted waiver of section 5 shall be void and unenforceable as against public policy and any such attempted waiver shall be reported to the commission prosecutor staff for appropriate action, including the imposition of an administrative penalty under section 7.10.**

(3) To not release to bid or construction any project until after final design is completed.

(4) To participate in design and preconstruction meetings either directly or through a representative.

(5) To furnish the pertinent data obtained through subsurface utility engineering to the One Call System in a mutually agreeable format.

(6) For new construction and where practicable in the opinion of the project owner, to install color-coded permanent markers to indicate the type and location of all laterals installed by the project owner.

(7) To submit a report of alleged violation to the commission through the One Call System not more than thirty days after striking or damaging a facility owner's line during excavation or demolition work activities, after a project owner's contracted excavator strikes or damages a facility owner's line during excavation or demolition activities or if the project owner believes a violation of this act has been committed in association with excavation or demolition. The report of alleged violation shall be in a form and manner as required by the commission.

(8) To comply with all requests for information by the commission relating to the commission's enforcement authority under this act within thirty days of receipt of the written request.

PERFORMANCE CRITERIA

SECTION 7. (a) The Auditor General may review management and financial audits of the One Call System, which audits shall be performed by a qualified auditing firm within this Commonwealth. A copy of the audit shall be submitted to the Auditor General upon its completion and to the General Assembly by October 31 of the year following the end of the audit period. The cost of reasonable expenses incurred by the Auditor General in performing the obligations under this section shall be reimbursed by the One Call System. The fees shall not be inconsistent with those of commercial auditing firms for similar work.

(b) The Auditor General, for the purposes set forth in subsection (a), and any contractor, excavator, facility owner or member of the One Call System shall have the right during regular business hours to inspect and copy any record, book, account, document or any other information relating to the provision of one call services by the One Call System, at the cost determined by the board of directors.

(c) The One Call System shall submit an annual report to its members, and a copy of the report shall be submitted to the Auditor General.

(d) The One Call System shall cause a financial audit to be performed annually by a qualified auditing firm within this Commonwealth.

ENFORCEMENT

SECTION 7.8. (a) A damage prevention committee shall be established as follows:

(1) The committee shall consist of the following members, appointed by the commission:

(i) The chairman or his designee from the commission's professional staff.

(ii) The Secretary of Transportation or the secretary's designee.

(iii) The president of the One Call System or his designee from the One Call System professional staff.

(iv) One representative from each of the following non-municipally owned or affiliated facility owner industries: electric, natural gas or petroleum pipelines, telephone, water or wastewater and cable television, nominated by facility owners or affiliated organizations.

(v) Three representatives of excavators, nominated by excavators or affiliated organizations.

(vi) One representative of municipal governments, nominated by municipal governments or affiliated organizations.

(vii) One representative of municipal authorities, nominated by municipal authorities or affiliated organizations.

(2) A person appointed to the committee must have expertise within the operation of this act **related to the industry represented.**

(3) A nomination under clause (1)(iv), (v), (vi) and (vii) shall be forwarded to the secretary of the commission. The executive director of the commission shall provide recommended candidates to the commission for approval.

(4) Except for an unexpired term or for committee members under clause (1)(i) and (iii), the following shall apply:

(i) An appointment to the committee shall begin January 1.

(ii) Except for initial terms under clause (5), a committee member's term shall be for a term of three years.

(5) The initial term of committee members shall be as follows:

(i) Two representatives of facility owners **under clause (1)** (iv)shall serve three years, one representative shall serve two years and two representatives shall serve one year.

(ii) One representative of excavators shall serve three years, one representative shall serve two years and one representative shall serve one year.

(iii) The representative of municipal governments shall serve two years.

(iv) The representative of municipal authorities shall serve three years.

(6) The commission member shall serve as the chairman of the committee and shall be a nonvoting member, except if the chairman's vote is necessary to break a tie. The chairman's attendance shall not be counted to establish a quorum.

(7) At least seven members of the committee who are present shall constitute a quo-

rum for the transaction of business. A simple majority vote of the committee members present at a meeting shall be deemed to be the position of the committee.

(b) The committee shall meet regularly to carry out the following purposes:

(1) Review a report of an alleged violation of this act and damage prevention investigator findings **concerning the basis or root cause of the alleged violation reported and recommendations proposed to address the alleged violation.**

(2) Issue a warning letter to a person as deemed appropriate by the committee or as recommended by the damage prevention investigator.

(3) Issue an informal determination that imposes an administrative penalty.

(4) Require a person to attend a damage prevention educational program.

(5) Issue an informal determination that modifies or dismisses a recommendation of the damage prevention investigator.

(c) The following shall apply to alleged violations:

(1) A person determined, in a report issued by a damage prevention investigator, to have committed an alleged violation shall do one of the following:

(i) Provide a written acknowledgment of the findings and administrative penalty contained in the report issued by the damage prevention investigator to the committee.

(ii) Appear before the **committee** to present its position.

(2) A person who is subject to an informal determination of the committee may accept or reject the result. If **a person who is subject to an informal determination opts to reject the informal determination, the person shall reject the informal determination in writing within thirty days of the date when the informal determination is made by the committee and the matter shall be referred to the commission prosecutor staff for an action resulting in a formal complaint before the commission. An action resulting in a formal complaint before the commission must be brought by commission prosecutor staff within the time limits specified under 66 Pa.C.S. § 3314(a) (relating to limitation of actions and cumulation of remedies).**

(3) When a written rejection of an informal determination under clause (2) results in a formal complaint before the commission, the commission shall conduct a de novo review of the alleged violation. The informal determination of the committee shall not be binding upon the commission.

(d) Except for alleged violations involving injury or death, the provisions of subsection (c) shall be applied in advance or instead of filing a formal complaint against a person determined, in a report issued by a damage prevention investigator, to have committed an alleged violation. An informal determination of the committee shall be binding on the commission unless the person rejects the informal determination.

(d.1) Notwithstanding any other provision of this act, the committee shall only have the powers and duties enumerated in subsections (b) and (c) if the committee completes its review of an alleged violation and issues an informal determination within two hundred seventy days of the occurrence of the alleged violation.

(e) The committee shall have the following additional duties:

(1) Upon the request of the commission, the committee shall hold a special meeting to advise the commission on a matter related to damage prevention for underground facilities under this act.

(2) As soon as practicable after establishment, the committee, with input from the One Call System, shall develop and implement bylaws. The bylaws shall:

(i) Establish a schedule for the frequency of regular meetings.

(ii) Delineate the committee's practice and procedure concerning the performance of duties assigned under this act and commission orders and regulations.

(iii) Be approved by the commission.

(3) Submit an annual report containing relevant damage prevention data to the commission, the Committee on Consumer Protection and Professional Licensure of the Senate and the Committee on Consumer **Protection, Technology and Utilities** of the House of Representatives. **The report shall include relevant metrics to demonstrate how the damage prevention committee's actions advance the goal of minimizing the occurrence of line hits and enhance public safety.**

(f) Except for willful misconduct, members of the committee shall be immune, individually and jointly, from civil liability for an act or omission done or made in performance of the members' duties while serving as members of the committee.

(g) The commission shall have the following powers to carry out the purposes of this act:
(1) To employ individuals.

(2) To issue orders.

(3) To promulgate regulations. If the commission promulgates regulations that limit reporting to a specific type of incident, including contact with a line, damage to a line or line coating, personal injury, third-party damage and failure to comply with this act, the commission may consider the resources available for enforcement and other factors.

(4) For one year following the effective date of this section, to promulgate temporary regulations. Regulations under this clause shall:
(i) Expire no later than two years following the effective date of this section.
(ii) Be exempt from all of the following:
(A) Sections 201, 202 and 203 of the act of July 31, 1968 (P.L.769, No.240), referred to as the Commonwealth Documents Law.
(B) The act of June 25, 1982 (P.L.633, No.181), known as the Regulatory Review Act.

SECTION 7.9. (a) Program costs for commission enforcement of this act shall be included in the commission's proposed budget and shall be subject to the review and approval of the Governor and the General Assembly as described under 66 Pa.C.S. § 510(a) (relating to assessment for regulatory expenses upon public utilities). The assessment of the commission's program costs for commission enforcement of this act shall not include Federal and State funds provided for the enforcement of this act and shall be allocated in the following manner:

(1) Eighty percent of the program costs shall be included within the amount assessed to public utilities under 66 Pa.C.S. § 510.

(2) Twenty percent of the program costs shall be assessed as a fee upon the One Call System, with the fee to be paid to the commission. The One Call System's board of directors shall determine the manner in which the fee may be recovered from facility owners, excavators, designers and other involved persons, provided that the One Call System's

board of directors' manner of recovery may not include facility owners that are public utilities.
(b) (Reserved).

SECTION 7.10. (a) The commission may issue a warning and order requiring compliance with this act and may levy an administrative penalty for a violation of this act. A warning, order or penalty shall be served on the person or entity violating this act at the person's last known address. A party aggrieved by the imposition of an order or administrative penalty imposed by the commission may appeal the order or penalty as provided under 2 Pa.C.S. Chs. 5 Subch. A (relating to practice and procedure of Commonwealth agencies) and 7 Subch. A (relating to judicial review of Commonwealth agency action).

(b) The following shall apply:

(1) A person or entity violating this act may be subject to:
(i) an administrative penalty of not more than two thousand five hundred dollars ($2,500) per violation; or
(ii) if the violation results in injury, death or property damage of twenty-five thousand dollars ($25,000) or more, an administrative penalty of not more than fifty thousand dollars ($50,000).

(2) The commission and committee shall consider the following factors in determining the administrative penalty to be assessed:
(i) The history of the party's compliance with the act prior to the date of the violation.
(ii) The amount of injury or property damage caused by the party's noncompliance.
(iii) The degree of threat to the public safety and inconvenience caused by the party's noncompliance.

(iv) The party's proposed modification to internal practices and procedures to ensure future compliance with statutes and regulations.

(v) The degree of the party's culpability.

(vi) Other factors as may be appropriate considering the facts and circumstances of the incident.

(c) The following shall apply:

(1) An administrative penalty recovered under this section shall be payable to the commission and collected in the manner provided for by law.

(2) A person or entity violating this act must pay an administrative penalty to the commission within sixty days of issuance of the informal determination, unless the person or entity subject to the informal determination rejects the informal determination within thirty days in accordance with section 7.8(c)(2).

(3) The commission shall assess an additional administrative penalty of one hundred dollars ($100) per day, not to exceed a total of five thousand dollars ($5,000), for an administrative penalty not paid within the period specified under paragraph (2).

(4) A person or entity subject to an informal determination of the committee requiring a damage prevention educational program under section 7.8(b)(4) shall successfully complete the program within sixty days of issuance of the informal determination. The commission shall assess an additional administrative penalty of one hundred dollars ($100) per day, not to exceed a total of five thousand dollars ($5,000), on a person or entity that fails to comply with this clause.

(d) This act shall not affect a civil remedy for personal injury or property damage, except as provided for under this act.

(e) The commission may issue a subpoena, on application of an attorney responsible for representing the Commonwealth in actions before the commission, for the purpose of investigating an alleged violation of this act. The commission shall have the power to subpoena witnesses and compel the production of books, records, papers and documents.

(f) No provision of this act shall be construed or interpreted to do any of the following:

(1) Affect the ability of a district attorney or the Attorney General to investigate or file a claim for the same conduct.

(2) Deprive a governmental agency, including a law enforcement agency, the Auditor General and a district attorney, of any jurisdictional power or duty.

(g) A facility owner may petition a court of competent jurisdiction to enjoin excavation or demolition work conducted in violation of this act. Local law enforcement or emergency management personnel may, in the interest of public safety, order an excavator on a work site to stop further excavation if the excavation is being conducted in violation of this act.

Note: This may also be enforced under Section 3302 of PA Title 18 Section b - Risking catastrophe.

SECTION 7.11. Except as otherwise provided in this act, an action for the recovery of any penalty or forfeiture incurred under the provisions of this act or a prosecution on account of any matter or thing mentioned in this act may not be maintained unless brought within three years from the date at which the liability arose.

DISPUTE RESOLUTION

SECTION 8. The One Call System shall have the authority to design, establish and administer a voluntary payment dispute resolution process which may be used by excavators, facility owners, designers, project owners and other involved persons. The process shall provide for dispute resolution panels selected from among a list of representatives of stakeholder groups, including facility owners, excavators, designers and regulators. The process established under this section may not be used to settle or resolve alleged violations of this act nor may involve any issues related to the commission's enforcement activities.

COMMON GROUND ALLIANCE BEST PRACTICES

SECTION 9. Except as otherwise provided for by this act, persons shall use their best efforts to comply with the Common Ground Alliance best practices.

SECTION 10. No person shall intentionally remove or tamper with a marking provided for under this act.

SECTION 11. Nothing in this act shall impair the rights or immunities provided to political subdivisions under 42 Pa.C.S. Ch. 85 Subch. C (relating to actions against local parties) or any other State law.

Section 39. This act shall expire on December 31, **2031.**

Section 8. This act shall take effect immediately.

APPROVED – The 29th day of October, A.D. 2024.

Governor Josh Shapiro

www.paonecall.org
DIAL 8-1-1 or
1-800-242-1776

WORK LOCATION REQUEST FORM

TELEPHONE NUMBER: (_____) _____ EXT.:_____ CALLER:_____

COMPANY NAME:_____

ADDRESS:_____ CITY: _____ STATE: _____ ZIP _____

EMAIL ADDRESS:_____ FAX #: (_____) _____

NOTIFICATION TYPE:

☐ **FINAL DESIGN** (Not less than 10 nor more than 90 Business Days) ☐ **PRELIMINARY DESIGN** (Greater than 90 Business Days)

☐ **CONSTRUCTION** (Not less than 3 nor more than 10 Business Days) ☐ **DEMOLITION** (Not less than 3 nor more than 10 Business Days)

WORKSITE INFORMATION:

COUNTY: _____ MUNICIPALITY:_____ WARD: _____

STREET ADDRESS:_____ STREET NAME:_____

NEAREST INTERSECTION:_____

WORKING BETWEEN 2 INTERSECTIONS ☐ YES ☐ NO

SECOND INTERSECTION/NEAREST MAIN ROAD:_____

SUBDIVISION:_____ LATITUDE/LONGITUDE COORD.:_____

WORKING IN: ☐ STREET ☐ SIDEWALK ☐ PUBLIC PROPERTY ☐ PRIVATE PROPERTY (☐ Front ☐ Rear ☐ Left ☐ Right)

☐ OTHER (SPECIFY)_____ SITE MARKED IN WHITE: ☐ Yes ☐ No

LOCATION INFORMATION:_____

TYPE OF WORK:_____ DEPTH:_____

EXTENT OF EXCAVATION:_____ METHOD OF EXCAVATION:_____

PROJECT OWNER:_____ ONSITE CONTACT:_____

ONSITE CONTACT PHONE:(_____) _____ EXT:_____ BEST TIME TO CALL:_____

ONSITE CONTACT EMAIL:_____

SCHEDULED EXCAVATION DATE:_____ TIME: _____ DURATION OF JOB:_____

JOB #: _____ PENNDOT CONTRACT/PERMIT #:_____

REMARKS:_____

COMPLEX PROJECT REQUEST NUMBER (if applicable)_____

TO BE COMPLETED AFTER PLACING ONE CALL

LAWFUL START DATES:_____ THROUGH_____

OTHER SERIAL NUMBERS REFERENCED:_____

FACILITY OWNER MEMBERS NOTIFIED:_____

SERIAL NUMBER ASSIGNED:_____ DATE/TIME:_____

THERE IS AN ANNUAL FEE PLEASE DO NOT FAX THIS FORM TO POCS

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acts Members

The Importance of Bilingual Education

When safety information is offered in more than one language:

- Crews ask questions more comfortably
- Instructions are followed more accurately
- Work moves forward with fewer mistakes or rework
- Trust is built across the team

Bilingual education is not only inclusive. It's practical. The more someone understands, the better they work.

Simple Takeaways for the Field

- Make sure every person knows what the markings mean before digging
- Use bilingual materials during orientation, tailgate meetings, and toolbox talks
- Give people space to ask questions in the language they are comfortable speaking
- Understanding leads to safer crews and safer work

Why Excavation Safety Around Pipelines Matters and What Every Crew Needs to Know

Introducing Powerful New Training

BY KESLEY TWEED, EXECUTIVE DIRECTOR, PIPELINE ASSOCIATION FOR PUBLIC AWARENESS

Introducing Powerful New Training Videos Filmed on Active Job Sites

Every time you dig you're making decisions that affect lives, communities, and critical infrastructure. Across the U.S., underground pipelines transport vital energy resources—natural gas, oil, ammonia, CO_2, and more. And every year, damage during excavation is still one of the top causes of pipeline accidents.

That's why a new national excavation safety video series produced by the Pipeline Association for Public Awareness (PAPA) is being released in 2026. It was filmed on location in Colorado Springs, Colorado, and other job sites across the country.

Real Operators. Real Excavators. Real Examples.

This isn't just another training clip—it's a powerful look at what's at stake, what to watch for, and how to protect your crew and your job site.

Why You Should Watch the New Excavation Safety Videos

Here's what you'll gain in just a few minutes:

Quick Refreshers on Critical Safety Practices

- When and why to call 811—especially for ongoing jobs
- How to identify and protect the tolerance zone
- Proper use of vacuum excavation and potholing
- What to do if your locate is late

Real-World Insight from Crews Like Yours

- Operators and excavators share lessons from the field
- Near-miss stories and how work can be impacted
- What damage really looks like—and why it's never "just a scratch"

Life-Saving Awareness

- Learn the signs of a leak—beyond just smell
- Understand different products—and how to stay safe in the event of a hit pipeline
- Know the immediate steps to take in case of emergency

Practical Takeaways You Can Use on the Job

- The most common digging mistakes—and how to avoid them
- Why visual pipeline markers aren't enough
- How operators and excavators can partner for safety—not just compliance

The Goal: Everyone Goes Home Safe
The videos are more than a requirement—they are a reminder that safety isn't a box to check. It's a culture.

PAPA is sending this important reminder through the videos:
Every operator, every contractor, every laborer—**everyone has a role in preventing damage** and ensuring we all return home safely at the end of the day.

Whether you're a seasoned pro or new to the field, these training videos are powerful tools you can carry into the work zone. ESG

Pre-Excavation Checklist

Before EVERY Excavation

Click Before You Dig 811

In the Office

- ○ Review all drawings, plans, engineering blueprints for existing buried facilities
- ○ Proposed excavation area has been marked in white paint and/or flags
- ○ Call 811 at least 2-3 business days before excavation (check your state One Call laws)
- ○ Locate ticket number is posted at the work location
- ○ Onsite meeting scheduled with all high profile facilities in locate area (gas/oil pipelines, high-voltage cables, fiber optic)

Onsite

Complete a pre-excavation walkthrough of the entire jobsite and adjacent areas

Visually Inspect the Jobsite

- ○ Signs or marking posts
  - Pavement markers (stamped nails, pavement decals, A-tags)
  - Surface markers
- ○ Other surface signage for landscaped areas
- ○ Locate marks
- ○ Consult any maps or field sketches of the location
- ○ Identify all services to buildings such as:
  - Gas meters
  - Farm taps
  - Pipeline valves
  - Cable pedestals
  - Electric cables
  - Water valves
  - Telephone closures
- ○ Look for the evidence of trench lines from the previous exavation
- ○ Look for the cleared pipeline ROWs
- ○ Talk with the property owner or general contractor to identify potential private facilities that may not be marked:
  - Lighting
  - Outbuildings
  - Pools/Spas
  - Irrigation
  - Sewer laterals
  - Propane tanks
  - Communications lines

Document the Jobsite

- ○ Compare actual jobsite to One Call ticket
  - One Call ticket covers the scope of the work
  - One Call ticket "Work to Begin" date is valid
  - All utilities have responded
  - All facilities are marked within the excavation area
- ○ Photograph the jobsite
  - Locate marks and flags from 360°
  - Permanent signage and location relative to the dig area:
    - Note location, height, and operator of overhead lines
    - Note all required safety signage
  - Video and/or sketches where pertinent

Before You Dig

- ○ Review safety information with anyone working the job
- ○ Confirm with facility owner vacuum or hydro excavation is scheduled for all pipelines impacted
- ○ Locations for hand digging within the tolerance zone are noted
- ○ Emergency equipment available when hazardous atmospheres are potentially present
- ○ List of all emergency contact numbers for assets in and adjacent to the dig zone is readily available
- ○ The location and route to the nearest hospital is known by onsite supervisors
- ○ When possible before any excavation, do a sweep with a locator to identify any foreign lines that are not marked
- ○ Representatives for all critical facilities are present

Lista de Verificación Para la Excavación

Antes de CADA Excavación

En la Oficina

- Revisar todos los dibujos, planos y especificaciones de ingeniería de las instalaciones subterráneas actuales
- El área de excavación propuesta ha sido marcado con pintura blanca y/o banderitas
- Marque al 811 por lo menos 2 o 3 días hábiles antes de la excavación (consulte las leyes de One Call de su estado)
- l número de solicitud está colocado en el sitio de trabajo
- Reunión programada con todas las instalaciones prominentes en el área de la localización (tuberias de gas y aciete, cables de alto voltaje, y fibra óptica)

Sitio de Trabajo

Realice una inspección exhaustiva antes de la excavación en S todo el sitio de trabajo y las zonas vecinas

Inspección visual del Sitio de Trabajo

- Letreros o postes de señalización
  - Marcadores de pavimento (clavos estampados, calcomanías de pavimento, etiquetas A)
  - Marcadores superficiales
- Señalizaciones de superficie para áreas ajardinadas
- Marcas de localización
- Consultar mapas o dibujos del sitio
- Identificar todos los servicios a edificios como:
  - Medidores de gas
  - Válvulas agrícolas
  - Válvulas de tubería
  - Soportes para cables
  - Cables eléctricos
  - Válvulas de agua
  - Conexiones telefònicas
- Busque rastros de las líneas de trinchera de la excavación previa
- Revise que las filas de paso de la tubería están despejadas
- Hable con el propietario o el contratista general para identificar posibles instalaciones privadas que no estan marcadas
  - Luces
  - Otros Edificios
  - Piscinas/Spas
  - Sistemas de riego
  - Laterales de alcantarillado
  - Tanques de propano
  - Líneas de comunicación

Documentación del Sitio de Trabajo

- Comparar el sitio de trabajo con el ticket de One Call
  - El alcance del trabajo se refleja en el ticket de One Call
  - La fecha de inicio anotada es válida
  - Todas las compañías de servicios públicos han contestado
  - Todas las instalaciones se encuentran señalizadas dentro del área de excavación
- Fotografía del sitio de trabajo
  - Localización de marcas y banderas en 360°
  - Señalización permanente y su ubicación relativa a la excavación:
    - Anotar la ubicación, altura y operador de las líneas aéreas
    - Anotar toda la señalización de seguridad necesaria
  - Videos y/o bocetos cuando sea pertinente

Obtenga más capacitación y recursos de seguridad *GRATIS*

Scan Me

Antes de Excavar

- Revise la información de seguridad con todos los empleados
- Confirmar con el propietario que excavación hidráulica o al vacío para todas las tuberías afectadas ha sido programado
- Anotar ubicaciones para la excavación manual dentro de la zona de tolerancia
- Equipo de emergencia esta disponible cuando hay posibilidad de atmósferas peligrosas
- La lista de todos los números de contacto de emergencia para los bienes dentro de la zona de excavación y sus zonas vecinas está disponible
- Los supervisores locales conocen la ubicación del hospital más cercano y como llegar
- Cuando sea posible, haga una inspección con equipo de localización para identificar líneas que no están
- Representantes de las instalaciones esenciales están presentes

Pipeline Location Information

PIPELINE MARKERS

Include the word WARNING, DANGER OR CAUTION

Identify the material being transported

Provide a number to reach the company in event of an emergency

Provide the name of the pipeline company

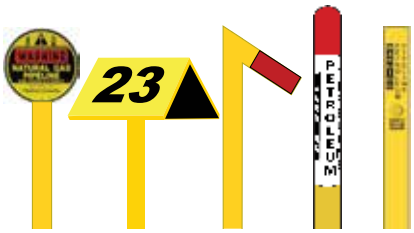
Pipelines are buried in areas called rights-of-way. Pipeline markers are used to designate the general route of the pipeline. Markers can also be found where a pipeline crosses a street or railroad, emerges from the ground, or in waterways.

BE AWARE: Pipeline markers will not designate the exact location, depth or number of pipelines in the area. Markers come in different shapes and sizes, but will always:

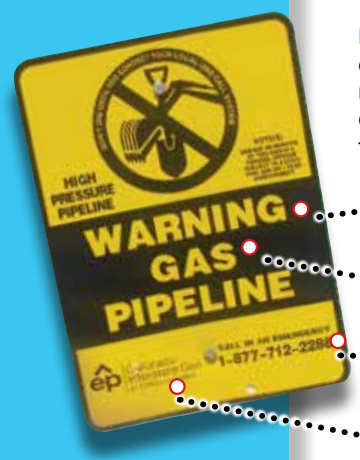
Gathering pipelines are normally located in rural areas and transport crude oil or natural gas from wellheads and production facilities to processing facilities where the oil, gas and water are separated and processed.

Transmission pipelines move refined liquid products and natural gas from refineries to marketing and distribution terminals typically using larger diameter, high-pressure lines. The general location of all transmission pipelines can be viewed in the National Pipeline Mapping System at www.npms.phmsa.dot.gov

Distribution pipelines are normally located in populated areas and carry natural gas or propane from a transmission pipeline or storage facility directly to residential and industrial customers. Some companies have included the location of their pipelines in a mobile friendly web application called Pipelines Nearby, which can be accessed at www.pipelinesnearby.org



MARCADORES DE TUBERÍA



Incluye la palabra WARNING, DANGER OR CAUTION (aviso, peligro o precaución)

Identifica el material siendo transportado

Da el número de la compañía en case de emergencia

Da el nombre de la compañía de tubería

Las tuberías son enterradas en áreas llamadas derecho de paso (ROW por sus siglas en ingles). Los marcadores de tubería se usan para designar la ruta general de la tubería. Los marcadores también pueden ser encontrados donde una tubería cruza una calle o riel de tren, donde sale del suelo, o en vías navegables.

ESTÉ CONSCIENTE: Los marcadores no dan la ubicación exacta, profundidad ni número de tuberías en el área. Los marcadores vienen en diferentes formas y tamaños, pero siempre incluyen:

Tuberías **Recolectoras** están situadas en zonas rurales y transportan normalmente petróleo crudo o el gas natural de manantiales y de instalaciones de producción a centros de procesamiento donde se separan y se procesan aceite, gas y agua.

Las tuberías de **Transmisión** mueven productos y gas natural líquidos refinados desde refinerías a terminales comerciales y de distribución típicamente usando líneas de alta presión con diámetro más grande. La ubicación general de todas las tuberías de transmisión se puede ver en el sistema de trazado nacional de tubería en www.npms.phmsa.dot.gov

Las tuberías de **Distribución** están situadas en áreas pobladas y llevan normalmente el gas natural o propano de una tubería de transmisión o instalación de almacenamiento directamente a clientes residenciales e industriales. Algunas compañías han incluido la ubicación de sus tuberías en una aplicación web móvil llamada Pipelines Nearby, que puede ser accedida en www.pipelinesnearby.org

COLOR CODE IDENTIFIERS

WHITE	Proposed Excavation
PINK	Temporary Survey Markings
RED	Electric Power Lines, Cables, Conduit, and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum, or Gaseous
ORANGE	Communication, Alarm or Signal Lines, Cables, or Conduit
BLUE	Potable Water
PURPLE	Reclaimed Water, Irrigation, and Slurry Lines
GREEN	Sewers and Drain Lines

FACILITY IDENTIFIER			
CH	Chemical	E	Electric
FO	Fiber Optic	G	Gas
LPG	Liquefied Petroleum Gas	PP	Petroleum Products
RR	Railroad Signal	S	Sewer
SD	Storm Drain	SL	Street Lightning
STM	Steam	SP	Slurry System
SS	Storm Sewer	TEL	Telephone
TS	Traffic Signal	TV	Television
W	Reclaimed Water "Purple"	W	Water
UNDERGROUND CONSTRUCTION DESCRIPTIONS			
C	Conduit	CDR	Corridor
D	Distribution Facility	DB	Direct Buried
DE	Dead End	JT	Joint Trench
HP	High Pressure	HH	Hand Hole
MH	Manhole	PB	Pull Box
R	Radius	STR	Structure (vaults, junction boxes, inlets, lift stations)
T	Transmission Facility		
INFRASTRUCTURE MATERIAL			
ABS	Acrylonitrile - Butadiene - Styrene	ACP	Asbestos Cement Pipe
CI	Cast Iron	CMC	Cement Mortar Coated
CML	Cement Mortar Lined	CPP	Corrugated Plastic Pipe
CMP	Corrugated Metal Pipe	CU	Copper
	Cresote Wood Duct		High Density Polyethylene
MTD	Multiple Tile Duct	PLA	Plastic (conduit or pipe)
RCB	Reinforced Concrete Box	RCP	Reinforced Concrete Pipe
RF	Reinforced Fiberglass		Steel Cylinder Concrete Pipe
STL	Steel	VCP	Vertrified Clay Pipe

Understanding the Marks: Locating and Marking Practices

Scan Me

Chapters from CGA Best Practices.
For the complete Understanding the Marks: Locating and Marking Best Practices, See CGA Best Practices at
BestPractices.CommonGroundAlliance.com

4. Locating and Marking
4.01 Available Records
4.02 Corrections and Updates
4.03 Color Code
4.04 Vacant
4.05 Locator Training
4.06 Safety
4.07 Visual Inspection
4.08 Facility Marking
4.09 Positive Response to Locate Request
4.10 Marking Multiple Facilities in the Same Trench
4.11 Abandoned Facilities
4.12 Locating Electromagnetically
4.13 Facility Owner/Operator Identification
4.14 Communication Between Parties
4.15 Documentation of Work Performed
4.16 Damage Investigation
4.17 Forecasting/Planning for Predictable Workload Fluctuations
4.18 Quality Assurance
4.19 Trenchless Excavation
4.20A Locating and Marking in Navigable Waterways
4.20B Locating and Marking in Navigable Waterways
4.21 Service Lines
4.22 Marking Newly Installed Facilities
4.23 Trouble Locate (Unlocatable) Resolution Protocol

Introducing New Project Best Practices for Underwater Utility and Pipeline Safety

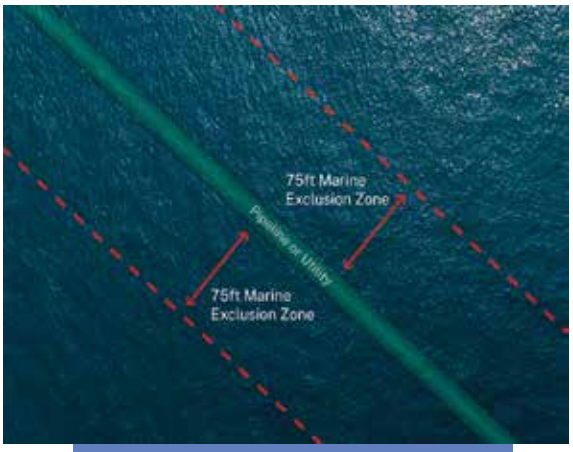
ED LANDGRAF, DIRECTOR, MARINESAFE811

The National Transportation Safety Board issued recommendations to the industry for CAMO/MarineSafe811, pipeline regulators and contractors to update and enhance new project and construction best practices after the 2020 Corpus Christi five fatality pipeline accident.

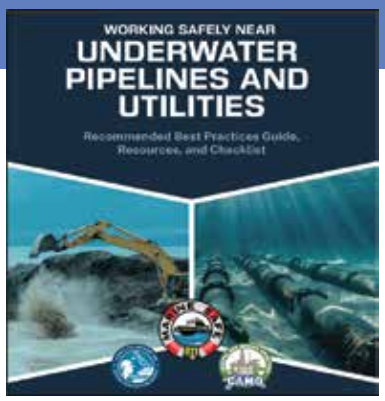
The recommendations are also being incorporated in the National Common Ground Alliance Best Practices Manual. This provided an additional opportunity to update all the practices and be more inclusive of utility protections, not just pipelines. It's important to note that many of these practices can be applied to on land infrastructure as well.

A few specific focus areas include a seven-day advance waterway excavation notice to the 811 Center notification process (all 811 waterway and marine notifications need to be made to the state 811 center where the work will be occurring). The seven-day advance notice allows the utility or pipeline company a greater amount of time to respond and mark the lines which can typically take much longer in marine environments. It should be noted that many marine contractors would rather have "electronic" marks such as GPS, KML, KMZ files verse markers in the field. Buoys, cane poles, etc. can easily be moved or removed and obviously paint does not work on water.

Another key component is the accuracy of the marks in marine areas. Underwater marking and surveying of lines is much less accurate than on-land. Therefore, the best practice recommendation is that the lines be marked within 15 feet of their actual location on either side of the line. The "Marine Exclusion Zone" which is commonly referred to as a "Tolerance Zone" on land is also enhanced in the best practices. That distance is a minimum of 75 feet on either side of the line.



The cost of a waterway accident is at least 10 times greater than an on-land incident. Downtime and emergency response are 10 times longer in a marine environment than on land. These are factors that need to be calculated in your risk assessments and project planning.



There are many other key practices that have been updated throughout the entire manual. It encouraged utility owners, pipeline operators, 811 personnel, contractors and associated stakeholders to take the online training in English or Spanish. The training is aligned with the best practices and has received very good reviews. All resources, support materials and training are FREE and can be accessed at **www.MarineSafe811.org**. Other notable additions and tools include the field excavation checklist which covers project planning, excavation guidelines and emergency response. Additionally, for those who want to learn more about the different types of waterway excavation equipment, methods, projects and terminology, there is a "Marine Construction and Dredging 101" document with pictures on the **MarineSafe811.org** site.

MarineSafe811 is a national non-profit program funded by Pipeline, Utility and 811 industry members. The initiative is gaining ground across much of the United States and even Canada. Recently, our first ever safety engagements hosted with a variety of marine stakeholders, contractors, emergency responders and regulators in multiple east coast states, had excellent reviews. In 2026 more engagements will be planned across the United States. All stakeholders need to understand, although waterway accidents don't occur often, when they do, even the smallest event has significant impacts.

There are three primary goals of the MarineSafe811 program:

1. **Protect Lives**
2. **Protect the Environment**
3. **Protect Infrastructure** ESG

To learn more, go to www.MarineSafe811.org and join the MarineSafe811 program.

"I Called 811" is Not Enough

BY ROGER COX, PRESIDENT, ACTS NOW, INC.

You know that as an excavator you must follow the laws of the state where you're digging, and never have the differences been so great. Not only are the dig laws different in each state but they may have changed since the last time you worked in that state. Additionally, within each state, municipalities or utility districts may have enacted stricter rules and penalties within their jurisdiction.

Because of the differences in "locate-by times", tolerance zones, white lining requirements, HDD restrictions, and enforcement rules, going into any state without first familiarizing yourself with the local 811 website and available free training is risking failure.

Locate-By Times

A deadline by which utility companies must have their facilities marked. The only way to know the answer in the state you're working in is to contact your local 811 center. It varies by state and it matters.

Tolerance Zones

The required distance from the marked utility where no mechanical equipment can dig (typically 18 – 24 inches on either side of the mark), but it varies by state.

Ticket Lifespans

The life of an 811 ticket easily ranges from 10 to 30 days. You need to know this one.

White Lining Requirements

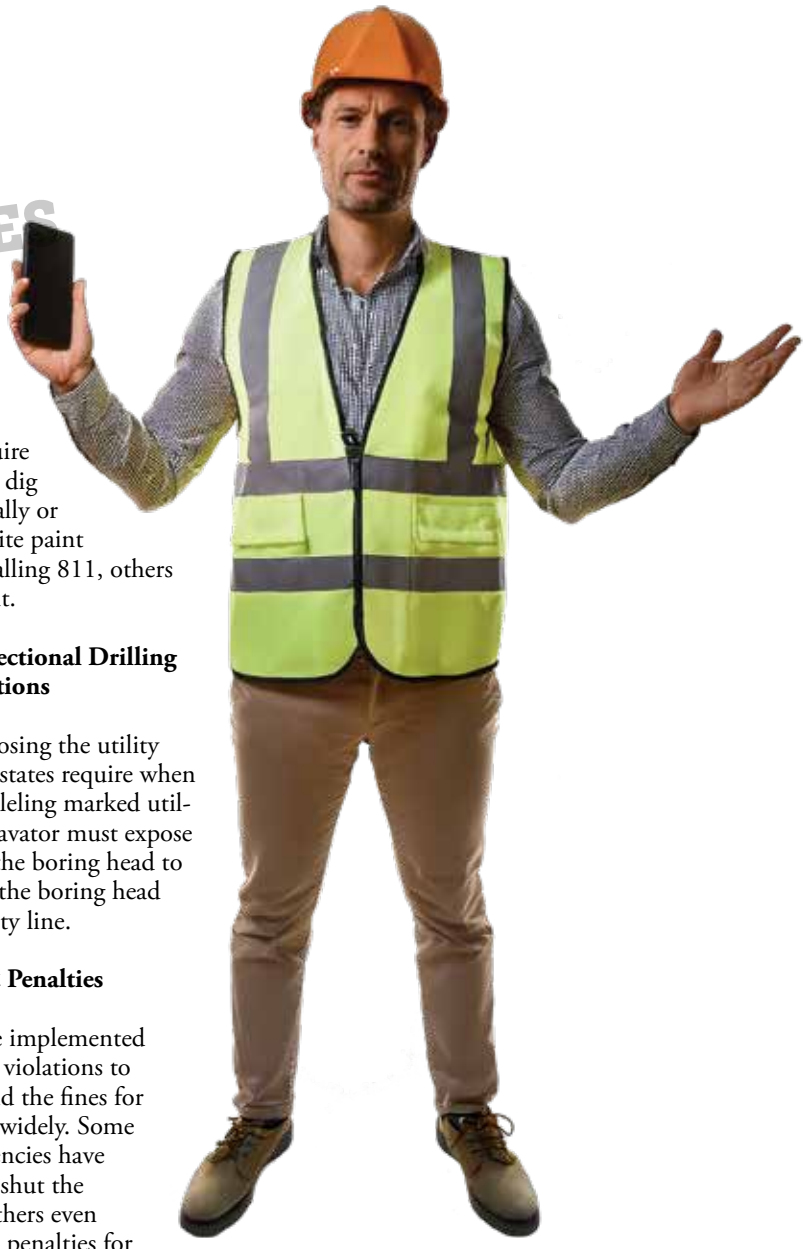
Some states require pre-marking the dig area either virtually or physically in white paint or flags before calling 811, others only encourage it.

Horizontal Directional Drilling (HDD) Restrictions

Rather than exposing the utility you cross, some states require when crossing or paralleling marked utility lines, the excavator must expose to the depth of the boring head to visually observe the boring head clearing the utility line.

Enforcement & Penalties

More states have implemented enforcement for violations to their dig laws and the fines for violations differ widely. Some enforcement agencies have the authority to shut the job down and others even include criminal penalties for willful damage.



Calling 811 is a great first step in avoiding damage to underground utilities, but before you put a bucket or drill head in the ground, it's not enough to know what's below; you must know the law!

Your safety and your company's bottom line will depend on it. ESG

Electric Current on Pipelines - Good or Bad

BY ROD WEBER, AMPP CP4, CATHODIC PROTECTION SPECIALIST, CHS PIPLINES & TERMINALS

Direct current (DC) is used to cathodically protect pipelines in order to control corrosion for two important reasons.

1. Cathodic protection is a best practice that extends the useful life of the pipeline by significantly reducing corrosion on the external surface of buried or submerged steel pipe and steel tank bottoms in contact with soil. Cathodic protection DC is the good current when it comes to pipelines.
2. Cathodic protection is required by code of federal regulations, CFR 195, Subpart H for regulated hazardous liquids pipelines and CFR 192, Subpart I for natural gas pipelines.

Alternating current (AC) is the all-important energy that powers practically everything and makes our modern lifestyles possible. For all the good things it does for society, AC serves no useful purpose when flowing on a pipeline and in fact, can cause corrosion of the pipe as well as pose a safety hazard to pipeline personnel. Where pipelines are concerned, AC is the bad electric current.

The purpose of this article is to give a brief introduction to cathodic protection and discuss how AC can find its way onto pipelines and how pipeline operators mitigate AC.

Cathodic Protection (CP)

Pipelines, or any steel, buried in soil or submerged in water corrode due to current flow from electrochemically active areas (anodic areas) to less active (cathodic) areas. Galvanic CP uses galvanic anodes made of materials such as magnesium or zinc which are more electrochemically active than steel. The galvanic anodes are buried in proximity to the pipeline and connected to the pipeline by wire. Direct current flows through the anode wire to the pipeline providing the steel atoms of the pipe wall with a surplus of electrons which make the entire pipe surface in the area a cathode thereby stopping the corrosion process. The pipeline is protected and the galvanic anode is sacrificed over time.

Impressed current CP differs from galvanic CP in that a DC power source, typically a rectifier, is used to power or impress the current onto a string of conventional or deep anodes. Impressed current anodes are made of materials such as graphite, high silicon iron and other alloys that have the ability to discharge current for long periods of time before being fully consumed. Impressed current systems are most often used for pipelines with a higher CP current demand than what galvanic anodes can provide.

Rectifiers are square shaped, painted or galvanized, boxes or cabinets often mounted on poles underneath or near powerlines. We often drive past rectifiers on highways and county roads without noticing them or what they do. When you see one you can bet that there is a pipeline or other underground steel structure being protected in the area. What rectifiers do is take AC from commercial power and being true to their name, rectify the AC turning it into DC (the good pipeline current) which powers the anodes and provides cathodic protection to the pipe.

Graphite anodes ready for installation

AC On Pipelines

There are three ways that AC finds its way on to pipelines:

- Inductive coupling occurs when an underground pipeline is parallel to an overhead high voltage AC power transmission line. The magnetic field that radiates outward from the transmission line cuts across the buried pipeline and induces an AC voltage onto it. The most common way for AC to get on pipelines is inductive coupling.
- Capacitive coupling occurs when pipe is welded and strung above ground on skids in AC transmission corridors. In this case, the coated pipe acts like a capacitor storing the voltage from the transmission line magnetic field.
- Resistive coupling is a rare event caused by fault currents on the AC transmission line traveling to ground and directly affecting the pipeline. High AC voltages can stress and damage the pipeline coating and cause severe damage to the pipe wall.

The first concern with AC on pipelines is the safety of operating personnel. Industry has established a maximum safe touch potential of 15 volts. This level of voltage has been rare on our pipeline system. 15 volts and more can be induced when several factors are met or exceeded. Powerline phase to ground maximum fault current, phase to phase voltage and load current, shorter distance between pipe and overhead conductors, coating quality of the pipeline, resistivity of the soil between the pipeline and the powerline towers.

AC pipeline corrosion can occur at voltages less than 15 volts. Many factors are computer modeled to establish where and how much mitigation will be required to bring down the AC voltage levels on the

pipeline. The goal is to achieve both a safe AC voltage and minimize the potential for AC current to cause pipe wall loss or coating damage.

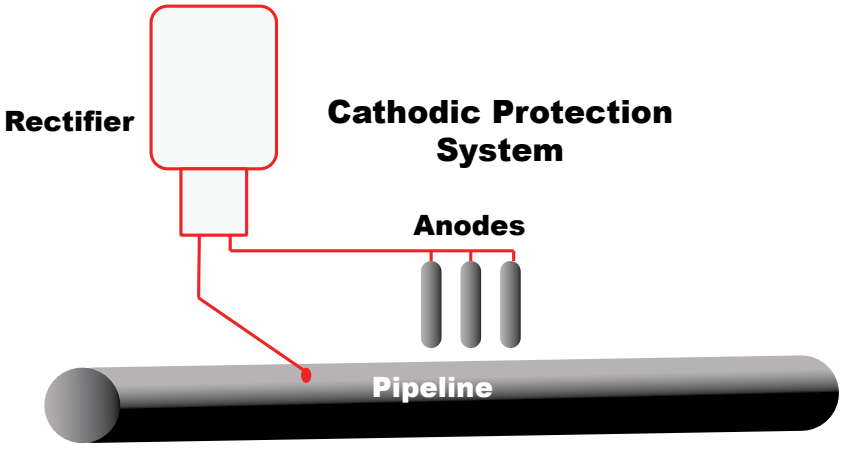
Mitigation Of Pipeline AC

The challenge is to give the induced AC a path to ground or a return path back to the transmission powerline it originated from without losing the protective DC cathodic protection that the pipeline must have. This is done by trenching or plowing in a copper or zinc mitigation cable parallel to the pipeline and normally between the pipeline and overhead AC powerline.

A solid state device known as a decoupler or PCR is connected between the pipeline and the mitigation cable. The PCR provides a low impedance path for the AC current to flow off the pipeline and out through the mitigation cable while simultaneously blocking DC cathodic protection current from leaving the pipeline. Remote monitoring units (RMUs) can be setup to ensure pipeline AC current densities are minimized and will not lead to corrosion and that safe pipeline touch potentials are present.

Pipelines will continue to add AC mitigation systems due to increasing demand on the electrical grid with new transmission systems being built or capacity expanded. Shared utility corridors with pipelines and overhead power transmission lines will continue to be a challenge for operators. ESG

Pipeline rectifier



Above grade enclosures of AC mitigation PCR and RMU

When Hand Digging Is Required

Keeping in Mind State Laws Vary

BY BLAIRE PROUGH, DAMAGE PREVENTION LIAISON, PENNSYLVANIA 811

Excavation is an essential part of construction, utility maintenance and public infrastructure projects. From installing underground lines to simple landscaping, digging safely is critical to protecting workers, property, and the public. One of the most important safety practices, sometimes required by law, is knowing when and how to hand dig.

Striking a buried utility can cause serious injuries, service outages, property damage, and costly fines. A single incident can shut down a jobsite, disrupt essential services such as 911 centers, and put workers at risk. Understanding when hand digging is required and how to do it correctly, is a fundamental part of excavation safety.

Hand digging allows for precise exposure of underground utilities. Unlike mechanical equipment, which can apply tremendous force in seconds, hand tools enable workers to remove soil gradually and with control. That careful approach minimizes the risk of striking or damaging buried facilities.

Think of hand digging as the final few inches of safety before you reach a utility line. It's the precision step; the one that trades speed for certainty. When your excavator bucket is too big and the risk is too high, switching to hand tools is the right move.

Although the rules differ slightly from state to state, the principle is the same everywhere: if you're near a buried line, slow down, switch tools, and expose it safely.

Before any digging project begins, every state requires contacting 811, the national "Call Before You Dig" number. Once a ticket is submitted, local utility companies visit the site and mark their lines with color-coded paint or flags.

These markings are essential, but they don't provide exact locations or depths. They indicate only an approximate path for each buried line. That's why states establish what's called a tolerance zone, a buffer area on either side of the markings where extra caution must be used. The tolerance zone typically extends 18" to

24” on either side of the utility, though some states go as wide as 36”. Within this area, mechanical excavation is restricted, and hand digging or approved soft-digging methods are required.

You can think of the tolerance zone as your area to proceed with extreme caution. Once your machine bucket touches that space, the law and common sense says it’s time to stop and start hand digging. Hand digging means using manual tools such as shovels, spades, picks, or trenching tools, instead of powered equipment. The goal is to carefully expose utilities without causing damage.

There’s also a related method known as soft digging, which uses low-pressure water or air to loosen the soil. The loosened soil is then vacuumed away, allowing workers to see and uncover buried facilities without direct contact. Both techniques aim to protect what’s underground while allowing excavation to continue safely.

Regulations do vary, but there are consistent situations where hand digging is required or strongly recommended across all states.

- **Inside the Tolerance Zone:**
  Once you’re within the tolerance zone buffer area, use of mechanical equipment must stop. The rest of the excavation must be done by hand or with a soft-digging method. Markings only show the approximate location, so it’s critical to expose the utility visually before proceeding.

- **When Utility Marks Are Conflicting:**
  If the markings on-site are unclear or contradictory, proceed as if a utility could be anywhere in your excavation area. Use hand tools or vacuum excavation until the buried line is found and confirmed.

- **When Crossing Over or Under Known Utilities:**
  If your work requires crossing an existing line, hand dig to locate it first. Expose the line completely to verify its depth and position before digging above or below it.

- **In Congested Utility Areas:**
  Urban areas and older neighborhoods often have multiple utilities stacked in the right-of-way. Mechanized equipment is risky in these conditions. Hand digging allows the precision needed to separate and identify each facility safely.

- **In Unstable or Wet Soil:**
  When the ground is soft, saturated, or unstable, mechanical digging can cause cave-ins or sudden shifts that damage utilities. Hand digging allows you to control how the soil is removed and keeps the excavation stable.

- **When Required by the Facility Owner:**
  Some utility companies have their own stricter rules requiring hand exposure within specific distances from their lines. Always follow each company’s instructions, even if they exceed the state’s minimum requirements.

Hand digging might sound simple, but it requires proper training and awareness. Workers must know how to read utility markings, interpret jobsite maps, and recognize warning signs of potential hazards. They must also understand when to stop work and call for help if something doesn’t look right. In excavation, hesitation can be a good thing. Taking the time to verify conditions could prevent a major accident.

While hand digging is a manual process, modern technology is helping make it safer and more efficient. Ground-penetrating radar, electromagnetic locators, and GPS mapping tools can identify and record underground utilities before any excavation occurs. Some companies now document precise coordinates and depths of exposed lines for future mapping.

But even with advanced technology, physical verification through hand digging remains crucial. Soil conditions, interference, or outdated records can make electronic data unreliable. The only way to confirm a utility’s exact position is to uncover it by hand.

Hand digging is more than just a regulatory requirement, it’s a protection from the unknown underground. Every year in the U.S., thousands of utility strikes occur, leading to injuries, outages, and millions of dollars in damage. Many of these incidents could be prevented simply by following hand digging protocols near marked lines.

When excavation work involves buried utilities, safety depends on precision and patience. Following the law, understanding tolerance zones, and using the right techniques help protect not only the crew on-site but the communities those utilities serve. Hand digging takes more time, but it saves lives, prevents costly damage and keeps projects moving safely. By respecting state regulations, training crews properly, and never assuming a mark is correct, contractors can dig smarter and safer.

So, when is hand digging required?

Whenever you’re close enough to a buried utility that mechanical equipment could cause damage. In excavation, success is measured not by what you hit—but by what you don’t. ESG

Why Strong Communication Between Utility Locators and Excavators Saves Time, Money, and Lives

BY ADAM ZECIRI, FOUNDER, SUB-T AND LOCATING DYNAMICS

There was a time not long ago when the world of utility locating and excavation seemed to be nothing but a blame game for who was at fault for a utility damage. There was no culpability, no teamwork, just a lot of finger pointing. While that may still be the case today in some instances, from what I've seen in the past 25 plus years of my career, there has been a positive shift towards more cooperation and collaboration between utility owners, locators and excavators. A key difference between "back then" and today is more communication. Modern technologies, including ticket management software, certainly play a role in greasing the cogs of the ever grinding damage prevention machine. But what makes communication effective?

In the world of underground utilities, the space between what we assume, and what is actually in the ground can be perilously thin. Every day, preventable utility strikes disrupt operations, damage infrastructure and most critically, put workers at risk. While technology, training and regulatory frameworks all play essential roles, one factor consistently rises to the top: communication. Effective, clear and well-documented communication between utility locators and excavators can be considered the true linchpin of damage prevention.

Despite the technical nature of utility locating, the most impactful improvements often come from simple, human-centered practices: talking, confirming, documenting and ensuring everyone involved shares the same understanding. This is the essence of what safety professionals often call three-way communication.

In its simplest form, three-way communication is a structured loop where:

- One person states information clearly
- The second person repeats it back in their own words and
- The first person confirms the accuracy of what was repeated

This method, widely used in the military, aviation, medicine and industrial safety, eliminates assumptions and prevents "I thought you meant…" mishaps. When a locator tells an excavator, "The gas line runs east-west three feet off the curb" and the excavator repeats back, "Copy, gas line east-west, three feet off the curb," both parties ensure that the information is heard, understood and verified. While this is a hypothetical situation involving a set of walkie-talkies, the benefits of three-way communication can be carried beyond to a simple phone call. Roger?

Why Multi-Channel Communication Matters

Relying on a single form of communication—such as leaving paint on the ground—can create blind spots. Rain washes markings away. Vehicle and pedestrian traffic disturbs flags. Messages get lost in busy jobsite noise. To counteract these realities, the most effective professionals use multiple communication channels, each reinforcing the others.

1. Notes on the 811 Ticket

Adding short, simple and concise comments to the ticket is one of the most underused methods of strengthening communication. Notes provide a permanent, time-stamped record of issues such as limited access, critical facilities, high-risk anomalies, non-locatable facilities, or requests for field meets. You don't have to write a novel, just try and capture the key points of the conversation. Because the 811 ticket is often the central document for all stakeholders, anything written there becomes part of the official record and is useful for both safety and liability clarity (CYA).

2. Text Messages, Email, and Messenger Apps

Digital communication adds depth. A quick text such as, "Markings completed on south section—unable to access west lot due to locked gate" ensures the excavator receives information promptly and directly. Email or messenger apps allow for photos, sketches, GPS screenshots and additional detail that paint alone cannot convey. These methods also create a verifiable communication trail if questions arise later.

3. On-Site Dialogue

Nothing replaces face-to-face conversation. Locators and excavators should actively seek brief, purposeful interactions whenever possible. These exchanges support three-way communication and allow for immediate clarification of complex or unusual site conditions.

4. Physical Markings and Flags

Paint and flags remain the visual foundation of utility communication. They show the excavator where utilities lie in relation to the dig site. However, they should be viewed as only one part of a layered communication system and not the entire system.

5. Properly Closing the Ticket

Closing a ticket is more than just completing the task; it is a declaration that communication has occurred. Clear, descriptive notes in the ticket reduce disputes and improve transparency.

The Payoff: Safer Jobsites and Stronger Collaboration

When locators and excavators embrace multi-channel communication and commit to three-way confirmation, the result is a safer, more predictable excavation environment. Misunderstandings shrink. Re-marks decline. Downtime decreases. And most importantly, crews go home safely at the end of the day.

In the damage-prevention world, communication is not an optional courtesy, it is a professional responsibility. By embracing layered communication practices, locators and excavators strengthen the integrity of their work and contribute to more reliable, resilient underground infrastructure. After all, there is a very strong chance they will see each other again soon, on another job site. Wouldn't you prefer to greet a friend and colleague working towards a common goal, rather than an enemy? ESC

Digging Safely, Understanding the Risks

BY AMANDA EADES, MANAGER, DAMAGE PREVENTION AND PUBLIC AWARENESS, DELTA UTILITIES

Natural gas is a vital energy source powering homes and businesses across the United States. Natural gas is lighter than air, odorless in its natural state, and displaces oxygen. To aid in leak detection, an odorant is added, often described as smelling like rotten eggs. Excavators must be vigilant for signs of a leak, including bubbling in standing water, dead vegetation, hissing or roaring sounds, and the distinct sulfur-like odor.

If a leak is suspected, evacuate the area immediately on foot. Avoid using electronics or anything that could spark ignition. From a safe space, call 911 and your local utility.

Safe Digging Practices
Damage prevention is a shared responsibility. Here are five essential steps to ensure safe digging:

1. **Plan Your Project:** Use white paint or flags to mark the dig area. Provide accurate site details and avoid unnecessary locate requests.
2. **Call 811:** This free, national service ensures underground utilities are marked before digging. This step is required by law.
3. **Wait the Required Time:** Allow at least two full working days for utilities to respond. Confirm all marks and perform a site walk.
4. **Protect the Marks:** Avoid disturbing paint or flags. If marks fade, circle them in white and request a remark.
5. **Excavate with Care:** Always pothole to verify depth and location. Use hand tools within the tolerance zone and maintain an 18-inch buffer around marked utilities. Keep in mind state laws vary. Tolerance zones specifications can differ by state. Make sure to verify your state tolerance zone specifications before digging.

Responding to Emergencies
In the event of a gas leak or fire, DO NOT attempt to repair or operate pipeline valves. Let ignited gas burn. It's safer than risking reignition. Federal regulations require that only trained and qualified personnel handle gas line repairs. Even minor damage like scrapes or dents must be reported to the utility and 811 within one hour. If product is released, 911 must also be contacted.

Building a Safety Partnership
Excavators should start with utilizing local resources to help learn the laws in the state they are excavating in. The state One Call centers and utilities are more than happy to provide free presentations, information on their state dig laws, and many also provide free online training.

The State of Louisiana recently enacted a law requiring that at least one excavator on any dig site must have successfully completed the free online training provided by Louisiana 811. An electronic certificate is issued after the completion of the course and is used as proof of adhering to this requirement.

Positive Response
A positive response to a One Call (811) ticket is a communication from utility operators to the excavator, indicating the status of their locate request. The response confirms whether underground utilities have been:

- Marked
- Cleared (no conflict)
- Require further coordination
- Not marked due to specific reasons

Positive response systems close the communication loop between excavators and utility operators. Instead of relying solely on visual confirmation at the job site, excavators can check the status online or through apps to know:

- If it's safe to dig
- If markings are complete
- If additional steps are needed before excavation

Common types of positive responses, depending on the state or utility system, may include codes or messages such as:

- **Marked –** All utilities have been located and marked
- **No Conflict –** No utilities are in the excavation area
- **Ongoing Coordination –** Further communication is needed before digging
- **Unable to Access –** Locator couldn't access the site and will follow up

In summary, before digging always plan your project, call 811 before you dig, verify utility locates via positive response, pothole and hand dig within the tolerance zone, and protect the locate marks while digging. ESG

Rethinking Trench Safety: Clarifying OSHA Misinterpretations and Prioritizing Protection

BY BRUCE MAGEE, REGION PRODUCT DEVELOPMENT MANAGER, UNITED RENTALS

Excavation work can be complex and is made even more confusing, not by a lack of rules, but by "false knowledge" and commonly repeated misinterpretations. When training your workforce, it is crucial to share facts, not misinformation. A comprehensive review of OSHA standards, technical manuals, and manufacturer guidelines reveals several critical areas where shared misrepresentations put workers at risk. These distortions range from when a registered professional engineer is needed, to the appropriate use of trench shields, to when it is necessary to test for atmospheric hazards.

Debunking the 20-Foot Engineering "Rule"

Perhaps the most persistent misconception in trench safety revolves around when an engineer must be involved. The perceived "20 Foot 'Rule'" often leads excavators to believe that if an excavation is less than 20 feet deep, an RPE design is automatically unnecessary. That is not true.

While it is true that every trench deeper than 20 feet must use a protective system designed by an RPE (Registered Professional Engineer), the converse—that engineer involvement is unnecessary when working less than 20 feet deep—is false.

The requirement for an RPE input is driven not just by depth, but also when deviating from limits of use established for any given system, and every system does have limitations. OSHA 1926 Subpart P, which covers sloping/benching, timber shoring, and aluminum hydraulic shoring, provides charts and tables that are valid only up to 20 feet. However, written RPE approval is required, regardless of depth, when utilizing OSHA options but exceeding their limits of use. Another common protective system is a trench box, where the limits of use are found in the manufacturer's tabulated data. Any deviation from the OSHA charts or tabulated data requires written RPE approval, irrespective of the depth of the excavation.

MAPS with fall protection, ladder and guard rail

Specific instances requiring RPE involvement—even in shallow trenches (less than 20 feet)—include:

- Using a manufactured protective system for which there is no manufacturer's tabulated data, such as cantilevered or beam-braced steel sheeting, or beam and plate
- Deviating from any notes, charts, warnings, or limitations found in OSHA Appendices B, C, or D, or Manufacturer's Tabulated Data, such as:
    - Placing materials (like plates or steel sheeting) behind a shield to extend its height or depth, which adds uncalculated loads
    - Using unapproved methods of closing off the end of a shield
    - Using a system in a soil type for which it was not rated

Bottom line - know that RPE help is required whenever the selected protective system is used beyond its limitations.

Understanding the Effects of Surcharge Loads

Protective systems, such as trench shields, are designed to support vertical soil walls by accounting for the lateral earth pressures from the soil only, ranging from 25 PSF per foot of depth to 80 PSF per foot of depth. Trench shield users often incorrectly assume that the shield will support the soil wall *and* any adjacent surcharge. These surcharges can come from equipment, spoil piles, buildings, roadways, and similar sources, and may not be included in the depth rating calculations. Manufacturers that do include surcharges never

Steel shield

factor in more than 72 PSF. Some do not factor in any surcharge loads into their calculations. Any allowable surcharge values will be listed in the system's tabulated data. No manufactured system, nor any OSHA depth-rating chart, includes surcharges from vehicular traffic. Whenever surcharges are present in the adjacent area, a qualified engineer must be consulted.

Avoiding Critical Trench Shield Usage Mistakes

Trench shields are often misused, which places workers at greater risk. OSHA mandates that protective systems must have the capacity, and to be maintained in a way, to resist all reasonably expected loads.

Common mistakes related to trench shield handling and usage include:

1. **Improper Lifting/Handling:** Shields have designated lifting points. Tabulated data specifies that the user is not to lift a shield by the spreader bars, spreader sockets, or stacking pockets, and to never pull a shield by its spreaders.
2. **Mismanagement of Soil at the End of the Shield:** Conventional trench shields were designed to be open-ended, meaning the soil at the end should be sloped away. Any capping of the end of a box in a way not approved in the tabulated data requires RPE approval.
3. **Interchangeability of Spreaders:** Trench shield walls are held in place by pipe, often 8" schedule 80. Some manufacturers allow pipe spreaders up to 20' in length, but not all. Maximum pipe spreader length will be specified by the tabulated data. Using longer spreaders without written RPE approval can result in immediate failure and is a dangerous practice.

When Manufacturer Data Conflicts with OSHA

Manufacturers produce protective systems, such as trench shields, which may offer advantages over the options available in OSHA's charts. However, when using manufactured systems, the key rule is this: **if OSHA's regulations conflict with the manufacturer's tabulated data, the tabulated data takes precedence.** OSHA makes it clear that employers must follow the manufacturer's instructions for safe use, and those instructions govern how the system can be used in the field.

Manufacturers may choose to be more restrictive than OSHA. Examples of situations where manufacturer data may conflict with OSHA include:

- Tabulated data requiring employees to exit a box when it is being moved.
- Tabulated data limiting the use of a trench shield with a vertically sided lower portion combined with a sloped upper portion.

Are Excavations Confined Spaces?

The short answer is no. The Confined Spaces in Construction standard OSHA 1926 Subpart AA tells us that work regulated by subpart P is exempt from the confined space rules. This should not be construed to mean that an excavation cannot have a hazardous atmosphere. Mandatory atmospheric testing is required in excavations 4 feet or more in depth if it is reasonable to expect a hazardous atmosphere to exist or develop. It is entirely reasonable to think that a hazardous atmosphere exists, or will develop, in performing sewer work or in areas where petroleum distillates are handled. In those instances, testing must be performed prior to entry. With the pump-equipped gas monitor in hand, lower the attached wand into the trench to draw atmosphere, testing in four-foot increments in the direction of travel, and allowing sufficient time for the atmosphere to travel through the tubing. If controls like ventilation are used, testing must continue. In excavations, hazardous atmospheres are defined by conditions such as oxygen levels below 19.5% or flammable gas exceeding 20% of the lower flammable limit.

If ventilation is required, adequate positive-forced fresh air flow from a known source must be provided. The space must be purged prior to entry, and the air changes per hour must be a minimum of 20. Follow the ventilation manufacturer's instructions for proper use. Emergency rescue equipment, such as retrieval systems, must also be available when a hazard is reasonably expected to exist or develop.

In summary, effective trench safety demands specific, fact-based training for all workers, to ensure they are aware of all existing and predictable hazards, and to know what corrective measures should be in place. Adherence to these requirements and limitations is the path to protecting workers. ESG

SR with fall protection

Lessons from the R.M. Palmer Tragedy: Recognizing the Signs and Responding Fast

BY STAFF WRITER, ACTS NOW, INC.

A catastrophic explosion at the R.M. Palmer Co. chocolate factory in 2023, which tragically killed seven people, serves as a powerful reminder for excavators that underground safety isn't just about hitting a line—it's about the environment around those lines. An NTSB investigation revealed that the disaster was caused by a "cascading failure" where a corroded steam pipe cracked, heating up and eventually failing a nearby natural gas fitting.

For the excavation community, the most critical takeaway from this tragedy is that **underground utilities are interconnected.** A problem with one system can quickly become a life-threatening failure in another.

Knowing the Signs: It's More Than Just a Hit

In the years leading up to the explosion, a crew replacing gas lines was alerted to the presence of the corroded steam pipe but did not notify safety managers to assess how that heat might impact the gas infrastructure.

For the Excavator:

- **Identify Anomalies:** If you uncover a utility that looks heavily corroded, damaged, or out of place, report it—even if it isn't the line you are currently working on.
- **Watch for "Shared Risks":** Be aware that steam lines, high-voltage cables, or other "hot" utilities can degrade nearby plastic gas fittings.
- **Trust Your Senses:** Before the explosion, employees reported smelling gas. On a job site, a "rotten egg" odor, a hissing sound, or bubbling in wet soil are non-negotiable warning signs that the site is no longer safe.

How to Respond: "Get Out" vs. "Investigate"

The NTSB found that the factory's greatest failure was its emergency response. Rather than evacuating immediately when the smell of gas was detected, the company's policy was to "investigate and determine if evacuation is necessary." This delay proved fatal.

Overhead image of the accident. (Source: Western Berks Fie Department.)

The Excavator's Emergency Protocol:

1. **Stop and Evacuate Immediately:** If you smell gas or suspect a leak, do not attempt to "find" the source or determine the severity. Your only job is to get yourself and your crew to a safe, upwind location.
2. **Abandon Equipment:** Do not take the time to shut down engines or move trucks if a leak is suspected; the equipment itself can act as an ignition source.
3. **Call 911 and the Operator:** Once you are in a safe location, notify emergency services and the utility company.
4. **Never "Close" a Valve:** Never attempt to operate utility valves yourself to stop a leak. This can cause pressure changes that lead to further failures.

The Foundation of Safety Culture

The R.M. Palmer tragedy proves that no technology can replace human awareness. As an excavator, you are the eyes and ears on the ground. By reporting suspicious infrastructure and treating the smell of gas as an immediate signal to evacuate, you ensure that a "cascading failure" stops with you. Remember: **When you smell gas, the investigation is over—it's time to get out.** ESG

[Michael Rubinkam]. "**[Deadly Berks Co. chocolate factory explosion caused by faulty gas fitting, safety board finds].**" NBC Philadelphia. [Updated December 11, 2024]. *https://www.nbcphiladelphia.com/news/local/r-m-palmer-chocoloate-factory-explosion-cause-gas-leakntsb-report/4050991/.*



Recognizing a Pipeline Leak

In the unlikely event of a pipeline leak, one or any combination of the items listed below can typically help you recognize a leak.

You might see:

- Colored liquid on the ground
- Flames, if a leak has ignited
- Oily rainbow-like sheen on water surfaces
- Continuous bubbling in a wet area
- Discolored snow or vegetation in an otherwise green area
- A steam-like cloud or fog
- Unexpected frost buildup on the ground
- Dirt being blown or appearing to be thrown into the air

You might hear:

- An unusual roaring, blowing or hissing sound

You might smell:

- An unusual odor similar to diesel fuel, gasoline, sulfur or rotten egg

Responding to a Pipeline Leak

DO

- ✓ **First, leave the immediate area on foot!** Move in a crosswind direction away from the leak or vapor cloud and maintain a safe distance. Abandon any equipment being used in or near the area.
- ✓ **Then, go directly to a safe location and then call 911** and the pipeline operator's emergency number that is located on the nearest pipeline marker or on page 8 of this brochure.
- ✓ **Warn others to stay away from the leak.**

DO NOT

- ✗ **Cause any open flame or other potential source of ignition** such as an electrical switch, vehicle ignition, lighting a match, ringing a doorbell, etc.
- ✗ **Come into direct contact** with any escaping liquids or gas.
- ✗ **Drive into a leak or vapor cloud** while leaving the area.
- ✗ **Attempt to operate any pipeline valves** yourself. You may inadvertently route more product to the leak or cause a secondary incident.
- ✗ **Attempt to extinguish a natural gas fire.**
- ✗ **Use telephones (including cell phones)** or anything that could cause a spark.
- ✗ **Use email, text or the internet to contact the company** about a leak, and never assume someone has reported the leak.

Liaison with Excavators

Pipeline operators strive to educate excavators and share resources to prevent digging accidents. Our resources for excavators are available on our website, ***pipelineawareness.org.***

The Lexington Incident: Cross-Bore Risk, Excavation Responsibility, and Industry Lessons

STAFF REPORT

On April 9, 2025, a natural gas explosion occurred in Lexington, Missouri following an underground utility strike during a fiber-optic installation project. The blast destroyed multiple homes, claimed the life of a five-year-old child, and left his father and ten-year-old sister with life-altering injuries.

This impact is a sobering reminder that underground incidents do not stop at the job site. When failures occur below ground, the consequences can extend directly into homes and families. Respect for those affected requires that the excavation and utility industry extract clear lessons—and apply them consistently.

What Happened (Preliminary)
Available information indicates that a natural gas distribution line was compromised during horizontal directional drilling (HDD) activities. Following the strike, gas migrated through surrounding soil and along a path of least resistance, entering a nearby residence through existing utility pathways. Gas accumulated until ignition triggered a catastrophic explosion.

Investigators are reviewing locating practices, verification methods, and post-strike response, including whether subsurface conflicts such as cross-bores contributed to the outcome.

Cross-Bores: A Known, High-Consequence Risk
Cross-bores—where one utility is unintentionally drilled through another, often a gas line intersecting a sewer or service lateral—are a documented hazard associated with trenchless installation methods. Many remain undetected for years, becoming catastrophic only when disturbed or when gas migrates into confined spaces.

This incident reflects several established cross-bore risk factors:

- Trenchless installation in residential or developed areas
- Incomplete records or undocumented laterals
- Reliance on surface locates without depth verification
- Gas migration into structures through utility or sewer pathways

Cross-bores are especially dangerous because they may present no immediate warning signs and can bypass traditional assumptions about gas behavior.

Key Lessons for Excavators

1. Trenchless Does Not Mean Low Risk
HDD reduces surface disruption but increases subsurface uncertainty. When bore paths intersect undocumented or inaccurately mapped utilities, cross-bore risk rises significantly.

Field takeaway: Treat trenchless work near gas infrastructure as high-risk. Adjust bore plans when uncertainty exists—not after.

2. Locates Are Indicators, Not Protection
Standard locating practices often miss private laterals, depth variance, and

historical installations—common contributors to cross-bores.

Field takeaway: Use potholing, camera inspections, or additional verification where cross-bore risk exists. Paint marks show position, not clearance.

3. Blind Boring Magnifies Consequences
Blind boring beneath foundations, driveways, or service corridors increases the likelihood of undetected cross-bores that may remain hazardous long after installation.

Field takeaway: Avoid blind boring in shared or uncertain corridors. Require additional checks when records are incomplete.

4. A Strike Is Not the End of the Event
In gas incidents, the most severe outcomes often occur after the strike. Migration through soil, conduits, or sewer systems may be delayed and invisible.

Field takeaway: Stop work immediately after any strike or suspected contact. Treat every gas release as mobile and escalate to emergency response without delay.

5. Cross-Bore Awareness Must Be Field-Level Knowledge
Cross-bores are not an abstract engineering issue—they are a practical field hazard.

Field takeaway: Incorporate cross-bore education into regular training and toolbox talks, including formation, warning signs, and response expectations.

Lessons for the Industry
Cross-Bore Risk Is a Shared Responsibility
Cross-bores often result from layered decisions across years, involving multiple contractors and utilities.

Industry takeaway: Coordinate cross-bore prevention and inspection programs. Clearly define responsibility for verification and post-installation review.

Speed Increases Risk
Aggressive fiber deployment and competitive build-outs increase the likelihood that verification steps are minimized—conditions under which cross-bores are most likely to occur.

Industry takeaway: Align schedules with verification requirements. Safety controls must scale with deployment pace.

Invisible Hazards Require Stronger Culture
Cross-bores represent one of the most dangerous hidden risks in underground work.

Industry takeaway: Measure success by risk reduction, not just incident counts. Reinforce that unseen hazards demand greater caution.

Moving Forward
The Lexington incident reinforces a fundamental truth of underground work: what we cannot see often poses the greatest danger. Cross-bores, gas migration, and subsurface conflicts demand disciplined verification, conservative decision-making, and immediate escalation when conditions change.

For excavators, the responsibility is clear: verify before boring, stop when uncertain, and respond without hesitation.

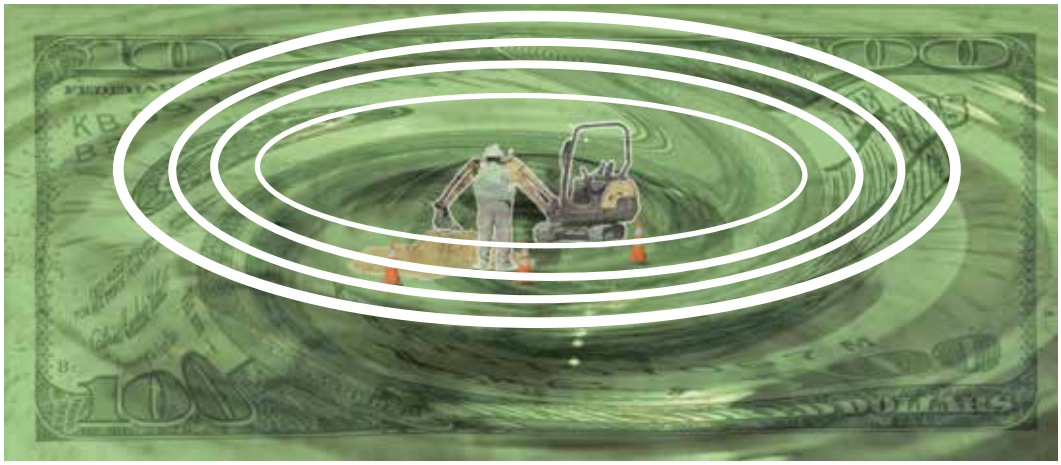
For the industry, the obligation is broader: design systems, contracts, and cultures that treat cross-bore risk as a critical, ongoing safety priority.

Learning from this incident is not about assigning blame—it is about preventing the next. ESG

Case Study: The Economic Ripple Effect of a Single Fiber Cut

Dallas, September 2025

By Staff Writer, ACTS Now, Inc.



The Silent Strike

A single, preventable act—the swing of an excavator bucket, the push of a drill head—can have catastrophic consequences. In the damage prevention industry, we are trained to fear the visible, dramatic failures: the blast of a ruptured natural gas line or the flash of a severed power cable. Yet, in September 2025, the Dallas/Fort Worth region experienced a silent, modern kind of disaster that underscores a critical shift in risk assessment: **the crippling nature of a major fiber optic cut**.

The incident, which occurred near a major infrastructure corridor, involved the severance of a core fiber bundle. While there were no flames or emergency evacuations, the ensuing communications failure triggered a massive, cascading economic and public safety crisis. This single strike demonstrated unequivocally that protecting fiber optic cable is no longer a secondary concern; it is fundamental to maintaining the security, functionality, and economic viability of all modern critical infrastructure.

The Incident: Scope and Immediate Impact

The strike, later confirmed to be a lapse in proper pre-excavation procedures during a commercial project, occurred on a high-capacity trunk line. This particular fiber route didn't just carry everyday internet traffic; it served as a primary communications backbone for multiple critical sectors across the region. The primary victim was not the cable, but the essential services relying on its instantaneous data flow. The immediate failures were staggering:

- **Aviation Operations:** Dallas/Fort Worth International Airport (DFW), one of the world's busiest hubs, experienced severe communication degradation. Check-in systems stalled, baggage handling software failed, and—most critically—air traffic control was forced to resort to manual, backup procedures, dramatically slowing air traffic into and out of the region.
- **911/Emergency Services:** Redundancy failures meant that emergency call routing was delayed or rerouted through less efficient paths, slowing critical response times during the initial outage window.
- **Utility Monitoring:** Regional pipeline and power grid operators lost high-speed telemetry necessary for real-time monitoring, pressure regulation, and remote shut-off capabilities, forcing them to dispatch personnel for manual, on-site checks—a significant security and operational risk.

This immediate failure highlighted a dangerous reality: in 2025, damage to a telecom line can blind and cripple other essential utilities.

The Economic Ripple Effect

The costs associated with the Dallas fiber cut quickly grew exponentially beyond the price of splicing a few damaged cables. The economic ripple effect was felt across global supply chains.

The chaos at **DFW Airport** was the most visible point of failure. According to follow-up reports, the communication outages led to the cancellation or significant delay of hundreds of flights. This translated into an estimated **$15–20 million** in lost revenue for airlines and logistics companies, not including the direct costs of rebooking and accommodating thousands of stranded passengers. The disruption sent shockwaves through the national air freight network, causing backlogs that took days to clear.

Beyond aviation, the **business interruption** was profound. The cut temporarily disabled crucial financial transaction processors and cloud services relying on the affected fiber routes. Businesses lost commerce as point-of-sale systems stalled and remote workforces lost connectivity. Furthermore, the incident forced regional data centers to initiate expensive and power-intensive failover protocols, taxing local power grids.

The Cost of Restoration was another massive expense. Emergency response teams, including specialized fiber splicing crews, were mobilized from across state lines. The necessary rapid deployment, overtime labor, and expedited permitting added millions to the repair bill. The incident confirmed that when a fiber backbone fails, the economic and operational demands necessitate a restoration effort equivalent to that of any other high-consequence utility failure.

Lessons Learned for Damage Prevention

The Dallas fiber cut served as an expensive, high-profile training session for the entire damage prevention industry, driving home four critical lessons that may influence future policy and educational initiatives.

1. Fiber Protection is Pipeline Protection
The most urgent lesson is the dependency of older, high-pressure infrastructure on newer telecom lines. A pipeline's safety mechanisms—pressure monitoring, flow control, and remote emergency shut-off—are all executed via fiber telemetry. When an excavator strikes a fiber line, they are not just taking down the internet; **they could be blinding the pipeline operator's control center.** This interdependence mandates that fiber be treated with the same extreme caution reserved for high-pressure gas or high-voltage power.

2. The Problem of Density and Accuracy
The Dallas region has seen explosive growth in new fiber installations, many installed via **Horizontal Directional Drilling (HDD)**. This creates a critical challenge: HDD bores, particularly those executed quickly, often deviate slightly from original permit paths, making their "as-built" data less reliable than traditional open-trench installs. If a locator relies on outdated or inaccurate data, the margin for error is non-existent when working near highly dense underground infrastructure.

What if the industry pushed for **mandatory Subsurface Utility Engineering (SUE)** or high-accuracy Global Positioning System (GPS) mapping to be standard for all new telecom and broadband installations? This improved data would then be integrated into the One Call ticket system, ensuring the marks on the ground reflect reality.

3. New Training Focus: Educating the Excavator
Education must evolve beyond "Call 811." Training programs need to specifically address the unique risks of modern telecom lines:

- **No Warning:** Fiber optic cables offer no audible or olfactory warning before they are struck, unlike natural gas.
- **Ubiquity:** Telecom lines are everywhere—running parallel to power, crossing pipelines, and crisscrossing residential areas.
- **The "Last Mile" Vulnerability:** A cut near a neighborhood junction box can cripple hundreds of homes and several businesses. Excavators must understand that even a small service line is critical.

4. Post-Incident Communication Gaps
The incident highlighted gaps in regional emergency protocols. While utilities train for a gas leak or power outage, the coordinated response to a massive telecom failure was fragmented. Facilitating inter-utility communication drills, ensuring that when an excavation strike takes down communication, the affected utility owners, local emergency management, and the telecom company know exactly how to communicate using redundant backup systems.

Raising the Protection Priority

The September 2025 Dallas fiber cut was a definitive warning shot: damage prevention is now synonymous with communications infrastructure protection. One small cut led to multi-million-dollar economic disruption, jeopardized public safety systems, and compromised the operational security of legacy utilities. The challenge now lies in translating the chaos of the Dallas event into lasting, industry-wide change. By investing in higher-accuracy mapping standards, enforcing strict adherence to 811 procedures for all excavation types, and elevating the status of fiber safety in all educational materials, the damage prevention community can fortify the digital backbone upon which all modern life depends. Protecting fiber is protecting the security and functionality of the entire system. ESC

The Hidden Hazard: Data Hygiene and Risk-Based Solutions for Abandoned Underground Utilities

BY VARUN ADIBHATLA, INFRASTRUCTURE PRACTICE LEAD, GROUNDWORK DATA

Abandoned underground utilities represent a critical but underrecognized threat to public safety and infrastructure integrity. While abandoned facilities account for only 3% of reported damage root causes according to Common Ground Alliance (CGA) DIRT data, they disproportionately contribute to high-consequence incidents. This paper argues that addressing abandoned utility infrastructure requires a dual strategy: rigorous data hygiene practices to ensure accurate asset records and risk-based prioritization targeting older urban areas where abandoned infrastructure concentrates.

Three root causes dominate the damage landscape, accounting for 76% of all incidents:

1. No notification to 811 before excavation (25-32% of damages)
2. Failure to maintain clearance or pothole verification (15-17%)
3. Facilities not marked or marked inaccurately due to locator error, including abandoned facilities (combined 10-15%)

Abandoned and Deadly: The Youngstown Case Study

The National Transportation Safety Board's investigation into the May 28, 2024 Realty Tower explosion in Youngstown, Ohio provides a sobering case study of the consequences of poor abandoned utility documentation. A scrap-removal crew cut into a 1-inch steel service line they believed to be abandoned. The line was indeed marked as "cut and abandoned" in company records dating to September 11, 2015. However, the record was inaccurate—the line remained pressurized and connected to the natural gas system.

Natural gas filled the building's basement and ignited around 2:44 PM, killing 27-year-old Akil Drake and injuring seven others. Investigators found the scrap-removal crew cut an Enbridge service line that records had wrongly shown as abandoned by Dominion years earlier.

Realty building after the explosion, with approximate locations of underground assets depicted in yellow. (Source: Mahoning County Sheriff's Office)

Systemic record failures emerged. In 2017, when the same line was struck, Dominion staff still believed it was abandoned, though it remained live. Utility locators failed to mark it in January and May 2024 because the line wasn't in system maps. A state review found groups of services incorrectly shifted to "abandoned" status during an IT cleanup.

Enbridge's broader audit of 5,951 questionable records found 79 active, pressurized lines mislabeled as abandoned—a 1.33% error rate with dozens of near-miss disasters embedded in the system.

The Correlation with Urban Age and Housing Stock

While comprehensive national data linking abandoned utility prevalence to neighborhood age remains limited, the structural relationship is evident through multiple pathways.

Infrastructure in older neighborhoods accumulates abandoned utilities through repeated upgrades, obsolete materials, and inconsistent record-keeping. Older housing stock sees multiple infrastructure cycles where outdated lines are left in place to avoid removal costs, creating dense subsurface layers.

Field studies, such as work in downtown Toledo, show frequent discoveries of unrecorded railroad ties, utility lines, and foundations.

Pre-1970 neighborhoods contain aging cast iron gas mains, asbestos-cement water pipes, and legacy telecom lines. As modern systems replace them, the older assets are abandoned, compounded by incomplete or lost records from mid-century installations.

Ownership changes further degrade documentation. The Youngstown case involved infrastructure that moved between operators, illustrating how mergers and territorial shifts lead to gaps in institutional knowledge.

Economic decline intensifies the problem. Post-industrial areas with shrinking populations lack funding to remove old utilities, leaving the oldest infrastructure concentrated in disinvested neighborhoods. Studies comparing old and new development show predictable patterns: modern subdivisions have well-documented underground utilities, while older areas retain a patchwork of active and abandoned systems installed across many eras.

Data Hygiene as a Foundation for Safety

Data quality is a life-safety issue. The Youngstown incident shows us that misclassified pipelines can kill, and Enbridge's discovery of 79 live lines mislabeled as abandoned underscores the stakes.

Four practices matter most.

Physical verification must replace paperwork-only abandonment. Enbridge's 2015 work order claimed a service line was closed; investigators later found the valve open and still connected. Field checks and pressure tests should be mandatory before marking any asset abandoned.

Integrated asset systems reduce errors created by siloed databases. Enbridge's customer system shifted services to "abandoned" during an automated cleanup with no field validation. A single, unified asset platform prevents contradictory records.

GPS tagging ensures abandoned lines aren't lost to history. Many never enter modern GIS and persist only in paper archives or memory. Tagging newly installed and newly discovered abandoned facilities preserves spatial visibility for future crews.

Regular audits catch systemic errors. Enbridge's review of 5,951 questionable records found multiple live lines marked abandoned. Sampling based on patterns—similar dates, geography, or data entry methods—quickly exposes high-risk record groups.

Risk-Based Prioritization Strategies

Risk mitigation should focus where abandoned utilities create the highest impact.

Three priority tiers capture the pattern.

Priority 1 targets high-consequence assets in dense areas. Gas lines make up roughly 40% of damages and pose the most severe outcomes. When One Call isn't used, electric and gas lines represent 76% of resulting events.

Any abandoned gas line near occupied buildings or critical infrastructure should undergo rapid record verification and, if uncertain, physical exposure.

Priority 2 focuses on pre-1970 neighborhoods. Older housing areas layer multiple generations of utilities and contain the densest clusters of abandoned lines. Rising damages per construction dollar point to the difficulty of excavating in these complex subsurface environments.

Any abandoned gas line near occupied buildings or critical infrastructure should undergo rapid record verification and, if uncertain, physical exposure.

Priority 3 covers ownership transition zones. The Dominion-to-Enbridge handoff shows how transfers create record gaps. All facilities marked abandoned within roughly two years before or after ownership or system migrations should be flagged for review.

Recommended Solutions

1. For asset owners, physical verification must replace assumptions. Pressure tests and photos should confirm every abandonment. Audit records—especially older, pre-1970 assets and those tied to ownership changes. Direct capital toward verifying high-consequence gas lines rather than treating all abandonments uniformly. Centralize GIS with GPS-tagged active and abandoned facilities for locator and 811 access.

2. For regulators, require reporting of abandoned-facility discoveries to build statewide location databases. Mandate audits during ownership transitions with statistically valid sampling. Set strict accuracy standards for active/abandoned status and enforce penalties. Support removal of abandoned lines during street projects through grants or rate mechanisms.

3. For excavators and developers, treat abandoned markings in older areas as suspect. Request proof of abandonment date and method. Add contingency budgets for work in pre-1970 zones. Use vacuum or hand-dig verification in dense older infrastructure areas regardless of locator confidence.

Conclusion

Abandoned, poorly documented underground utilities pose a persistent safety and infrastructure threat. The May 2024 Youngstown explosion, caused by a misclassified active gas line, demonstrates the deadly human cost of poor data hygiene. Enbridge's discovery of 1.33% active facilities mislabeled as abandoned confirms this is a systemic data crisis.

Older urban areas, with concentrated aging infrastructure and data degradation during ownership changes, face compounded risk. Solutions require rigorous data hygiene to match records to reality and risk-based prioritization focusing resources on high-consequence areas.

Annual societal costs from utility damages exceed $30 billion, with abandoned lines contributing disproportionately to severe incidents. The case for systematic verification and investment in data quality is compelling. Technology (GPS, asset platforms, field protocols) and data (housing/infrastructure age, ownership) exist. What is needed is the institutional will to treat data hygiene as a life-safety imperative.

The Youngstown tragedy, and the thousands of active lines misclassified across American cities, represent future disasters preventable through improved data hygiene and risk-based action. PSG

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	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	
ALABAMA / Alabama 811 / 800-292-8525 **Website:** al811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 full working days (not including day of notification) **Marks Valid:** 20 working days **Law Link:** al811.com/law	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	12" *	Y	Y	Y	N	N	18"
*Agricultural purposes only																							
ALASKA / Alaska Dig Line, Inc. / 800-478-3121 or 907-278-3121 **Website:** 811ak.com **Hours:** 8:00 AM - 5:00 PM, M-F/Emergency 24/7 **Advance Notice:** 2-10 business days based on location **Marks Valid:** 15-20 business days based on location **Law Link:** 811ak.com/faq	N	Y	Y	Y	Y	Y	N	N	N	N	Y	N	N	N	N	Y	N	Y	Y	Y	N	Y	24"*
*24-30" based on proposed depth of dig																							
ARIZONA / Arizona 811 / 800-782-5348 **Website:** arizona811.com **Hours:** 6:00 AM - 5:00 PM, M-F **Advance Notice:** 2 full working days(excludes weekends and holidays) **Marks Valid:** 15 working days **Law Link:** arizona811.com/resources/	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	N	N	Y	Y	N	N	24"
ARKANSAS / Arkansas 811 / 800-482-8998 **Website:** arkansas811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 to 10 working days **Marks Valid:** 20 working days **Law Link:** arkonecall.com/statelaw/statelaw.aspx	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	N	N	N	Y	Y	N	Y	18"
CALIFORNIA **Underground Service Alert of Northern CA & NV** **USA North 811 / 800-642-2444** **Website:** usanorth811.org **Hours:** 24 x 7 **Advance Notice:** 2 working days, not including the day of notification **Marks Valid:** 28 days **Law Link:** usanorth811.org (Quick Links / Law & Excavation Manual)	N	Y	Y	N	Y	Y	Y*	Y	Y	Y	Y	Y	N	Y	N	N	N	Y	N	Y	N	Y	24"
Underground Service Alert of Southern California / 800-422-4133 **Website:** digalert.org **Hours:** 6:00 AM - 7:00 PM, M-F **Advance Notice:** 2 working days to 14 calendar days not including date of notice **Marks Valid:** 28 days **Law Link:** https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=5.&title=1.&part=&chapter=3.1.&article=2	N	Y	Y	N	Y	Y	Y*	Y	Y	Y	Y	Y	N	Y	N	N	N	Y	N	Y	N	Y	24"
*DOT and non-pressurized sewer lines, storm drains and drain lines exempt																							
COLORADO / Colorado 811 / 800-922-1987 **Website:** co811.org **Hours:** 24 hours **Advance Notice:** 2 days, not to include the day of notice **Marks Valid:** 30 days **Law Link:** https://ops.colorado.gov/sites/ops/files/2021-10/ud-safetycommissionstatutes101821.pdf	N	Y	Y	Y	Y	Y	Y	N	N	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	N	Y	18"
CONNECTICUT / Call Before You Dig / 800-922-4455 **Website:** www.cbyd.com **Hours:** 7:00 AM - 5:00 PM, M-F; Emergencies 24 Hours **Advance Notice:** 2 full working days up to 30 calendar days (excludes weekends, holidays and the day of notification) **Marks Valid:** 30 days **Law Link:** www.cbyd.com/resources/ct-cbyd-state-law-regulations#	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	N	Y	Y	Y	N	Y	18"
DELAWARE / Delmarva811 / 800-282-8555 **Website:** https://delmarva811.com/ **Hours:** 24 hours, 7 days **Advance Notice:** 2 full business days **Marks Valid:** must start within 10 calendar days, no expiration as long as marks still visible and scope does not change. **Law Link:** delcode.delaware.gov/title26/c008/index.shtml	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y*	N	N	N	N	Y	Y	N	N	24"
FLORIDA / Sunshine 811 / 800-432-4770 **Website:** sunshine811.com **Hours:** 7:00 AM - 6:00 PM **Advance Notice:** 2 full business days (10 if dig site is underwater) **Marks Valid:** 30 days **Law Link:** sunshine811.com/law	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	24"

Notification Center and State Law Directory

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	TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					Tolerance Zone (either side of the utility plus the width of the utility)
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	
GEORGIA / Georgia 811 / 800-282-7411																							
Website: Georgia811.com **Hours:** 7:00 AM - 6:00 PM, M-F • (24/7 emergency) **Advance Notice:** 2 business days (excluding day of call) **Marks Valid:** 30 calendar days **Law Link:** georgia811.com/index.php/laws-policies/	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N*	N	N	N**	N	Y	Y	Y	Y	Y	18”
	* Routine road maintenance ** Farming activities																						
HAWAII / Hawaii One Call Center / 866-423-7287 / Tickets Fax: 877-695-2466																							
Website: callbeforeyoudig.org **Hours:** 24 hours, 7 days **Advance Notice:** 5 workings days, not to exceed 28 calendar days **Marks Valid:** 28 calendar days **Law Link:** callbeforeyoudig.org/law.htm	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N	N	Y	N	N	N	Y	Y	Y	N	N	30”
IDAHO																							
DIG LINE / 800-342-1585 **Website:** digline.com **Hours:** 27 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 28 Days **Law Link:** https://legislature.idaho.gov/statutesrules/idstat/title55/T55CH22/	N	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	N	N	N	Y	15”	Y	Y	Y	Y	Y	24”
BONNER/BOUNDRY / 800-428-4950 **Website:** digsafenorthidaho811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 28 days **Law Link:** https://legislature.idaho.gov/statutesrules/idstat/Title55/T55CH22/	N	Y		N	Y	Y	Y	N	Y	N	Y	Y	N	N	N	Y	15”	Y	Y	Y	Y	N	24”
SHOSHONE/BENEWAH / 866-242-5844 **Website:** nid811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 28 days **Law Link:** https://legislature.idaho.gov/statutesrules/idstat/Title55/T55CH22/	N	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	N	N	N	Y	15”	Y	Y	Y	Y	N	24”
KOOTENAI COUNTY / 800-428-4950 **Website:** kootenaicounty811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 28 days **Law Link:** https://legislature.idaho.gov/statutesrules/idstat/Title55/T55CH22/	N	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	N	N	N	Y	15”	Y	Y	Y	N	Y	24”
ILLINOIS																							
JULIE, INC. / 800-892-0123 **Website:** illinois1call.com • **Hours:** 24 hours, 7 days **Advance Notice:** 48 hours notice (two business days), but no more than a 14 calendar day advance notice prior to the start of excavation. **Marks Valid:** 28 calendar days **Law Link:** illinois1call.com/lawandenforcement/	N	Y	N	N	Y	Y	Y	N	Y*	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y	N	N	18”
811 CHICAGO / 312-744-7000 **Website:** ipi.cityofchicago.org/Digger **Hours:** 24 hours a day, 7 days a week **Advance Notice:** 48 hours • **Marks Valid:** 28 days **Law Link:** https://codelibrary.amlegal.com/codes/chicago/latest/chicago_il/0-0-0-2651040	N	Y	N	N	Y	Y	Y	Y	Y*	Y	Y	Y	N	N	Y	Y	N	Y	N	Y	N	N	18”
	*When possible																						
INDIANA / Indiana 811 / 800-382-5544																							
Website: indiana811.org • **Hours:** 24 hours, 365 days **Advance Notice:** 48 hours notice (two working days), but no more than a 20-calendar day advance notice prior to the start of excavation. **Marks Valid:** 20 calendar days **Law Link:** indiana811.org/wp-content/uploads/2019/06/IC-8-1-26-1.pdf	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y	N	N	24”
IOWA / Iowa One Call / 800-292-8989																							
Website: iowaonecall.com • **Hours:** 24 hours, 7 days **Advance Notice:** 48 hours, excluding the day of notice, Saturdays, Sundays, and legal holidays **Marks Valid:** 25 calendar days **Law Link:** iowaonecall.com/Default.aspx?tabid=404#iowa	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18”
	*Normal farm operations less than fifteen inches																						

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KANSAS / Kansas 811 / 800-344-7233																								
Website: kansas811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 full working days(not including day of notice) **Marks Valid:** 20 calendar days **Law Link:** kansas811.com (Resources/Other Helpful Links)	N	Y	Y	Y	Y	Y	Y	N	N*	Y	N	Y	N	Y*	Y	Y	N	Y	N	Y	N	N	24"
*Homeowner retains responsibility for any damages due to digging																								
KENTUCKY / Kentucky 811 / 800-752-6007																								
Website: kentucky811.org **Hours:** 24 hours/7 days **Advance Notice:** 2 working days **Marks Valid:** 21 calendar days **Law Link:** kentucky811.org/the-dig-law	N	Y	Y	Y	Y	Y	N	N	N*	Y*	Y	Y**	Y***	N	Y	Y	N****	Y	Y	Y	N	Y	24"
*Unless requested by a facility operator KRS367.4911(11) **Only gas or PHMSA-regulated facilities have mandatory damage reporting to the state regulator. Damage reporting to the affected facility is required. Damage reporting to the call center is not required. ***Exempt from calling for routine road maintenance (defined in KRS 367.4903(10)) as preservation, including road repairs and resurfacing, and replacement of signs, posts, and guardrails at the exact same location when no additional penetration of existing grade is necessary, but does not include road construction, installation of signs, posts, and guardrails, or any activity that requires penetration of existing grade. ****Specific exemption exists for connection or disconnection of communications lines when non-intrusive excavation is used to a depth less that 12 inches KRS 367.4915(12)																							
LOUISIANA / Louisiana 811 / 800-272-3020																								
Website: louisiana811.com **Hours:** 7:00 AM - 6:00 PM, Emergency Locates 24/7 **Advance Notice:** 2 Business Days **Marks Valid:** 20 Days/30 Days for Agriculture, Forestry, Marine **Law Link:** https://www.louisiana811.com/dig-law/	N	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	N	Y	N	Y	N	Y	Y	Y	N	Y	18"
MAINE / Dig Safe System, Inc. / 888-344-7233																								
Website: digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours(excluding weekends and holidays) **Marks Valid:** 60 days; must start within 30 days **Law Link:** http://www.digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18"
MARYLAND / Miss Utility (Western Shore) / 800-257-7777																								
Website: www.missutility.net **Hours:** 24 hours, 7 days **Advance Notice:** 2 full business days **Marks Valid:** 12 business days **Law Link:** www.missutility.net/maryland/	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	Y*	N	N	N	N	Y	Y	N	N	18"
*Hand dig only up to a depth of 6". Mechanized equipment must call.																								
Delmarva811 (Eastern Shore) / 800-441-8355 **Website:** missutilitydelmarva.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 full business days **Marks Valid:** 12 business days **Law Link:** https://delmarva811.com/	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	Y*	Y	N	N	N	Y	Y	N	N	18"
*Hand dig only up to a depth of 6". Mechanized equipment must call.																								
MASSACHUSETTS / Dig Safe System, Inc. / 888-344-7233																								
Website: digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours(excluding weekends and holidays) **Marks Valid:** 30 days **Law Link:** digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18"
MICHIGAN / Miss Dig System, Inc. / 800-482-7171																								
Website: missdig811.org **Hours:** 24 hours **Advance Notice:** 3 business days(excluding weekends and holidays) **Marks Valid:** 3 weeks to 6 months **Law Link:** missdig811.org/education/public-act-174.html	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	N	N	N	N	Y	Y	N	Y	18"
MINNESOTA / Gopher State One Call / 800-252-1166 or 651-454-0002																								
Website: gopherstateonecall.org **Hours:** 24 hours **Advance Notice:** 48 hours(excluding weekends and holidays) **Marks Valid:** 14 days **Law Link:** revisor.leg.state.mn.us/statutes/?id=216D	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	N	Y	24"
MISSISSIPPI / Mississippi 811, Inc. / 800-227-6477 / Tickets Fax: 601-362-7533																								
Website: ms811.org **Hours:** 24 hours, 7 days **Advance Notice:** 3 working days **Marks Valid:** 14 working days **Law Link:** ms1call.org/One Call-law	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y	24"	12"	Y	Y	Y	N	Y	18"
*Less than 16"																								
MISSOURI / Missouri 811/ 811																								
Website: www.missouri-811.org **Hours:** 24 hours, 7 days **Advance Notice:** 2 working days, not counting day of request **Marks Valid:** 21 calendar days **Law Link:** www.missouri-811.org/law	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y	Y*	N	Y	Y	Y	N	N	24"

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MONTANA/MONTANA 811/800-424-5555 **Website:** montana811.org **Hours:** 24 hours, 365 days **Advance Notice:** 2 business days **Marks Valid:** 30 days **Law Link:** montana811.org/montana-dig-law.html	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y*	N	Y	Y	Y	Y	Y	N	N	18”
	*Only under certain circumstances																						
NEBRASKA / Nebraska811 / 800-331-5666 **Website:** ne1call.com **Hours:** 24 hours, 365 days **Advance Notice:** 2 to 10 business days excluding holidays and weekends **Marks Valid:** 17 Days **Law Link:** ne1call.com/ne-law-enforcement/nebraska-statutes/	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y	N	N	18”
NEVADA / USA North 811 / 800-642-2444 **Underground Service Alert of Northern CA & NV** **Website:** www.usanorth811.org **Hours:** 24/7 **Advance Notice:** 2 working days, not including the date of notification **Marks Valid:** 28 days **Law Link:** usanorth811.org (Quick Links/Law & Excavation Manual)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	N	Y	N	N	24”
NEW HAMPSHIRE / Dig Safe System, Inc. / 888-344-7233 **Website:** digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours(exluding weekends and holidays) **Marks Valid:** 30 days **Law Link:** digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18”
NEW JERSEY / New Jersey One Call / 800-272-1000 / Tickets Fax: 800-705-4559 **Website:** nj1-call.org **Hours:** 24 hours **Advance Notice:** 3 full business days **Marks Valid:** 45 business days **Law Link:** nj1-call.org/nj-law/	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	N	Y	Y	Y	N	Y	N	N	24”
NEW MEXICO / New Mexico One Call, Inc. dba NM811 / 800-321-2537 / Tickets Fax: 800-727-8809 **Website:** nm811.org **Hours:** 7:00 AM - 5:00 PM, M-F / Emergencies & Damages: 24 hours **Advance Notice:** 2 working days, not including the day of the notification **Marks Valid:** 15 Days **Law Link:** nm811.org/new-mexico-811-law/	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	Y	18”
NEW YORK **UDig NY/811 or 800-962-7962** **Website:** UDigNY.org **Hours:** 24/7/365 **Advance Notice:** 2 to 10 working days (excluding day of call) **Marks Valid:** Valid as long as excavator maintains marks **Law Link:** UDigNY.org/law	N	Y	N	N	Y	Y	Y	N	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	N	N	24”
NEW YORK 811 / 800-272-4480 **Website:** newyork-811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 to 10 business days **Marks Valid:** 10 working days **Law Link:** newyork-811.com/excavators/code-753-at-a-glance	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	N	N	24”
NORTH CAROLINA / North Carolina One Call Center, Inc. / 800-632-4949 **Website:** nc811.org **Hours:** 24 hours, 365 days **Advance Notice:** 3 full working days **Marks Valid:** 15 working days **Law Link:** nc811.org/north-carolina-law.html	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	N	24”

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NORTH DAKOTA / North Dakota One Call / 800-795-0555																							
Website: ndonecall.com **Hours:** 24 hours **Advance Notice:** 2 Full Business Days **Marks Valid:** 21 calendar days **Law Link:** legis.nd.gov/cencode/t49c23.pdf?20130530105605	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	Y	N	N	Y	Y	N	N	24"
OHIO / OHIO811 / 800-362-2764																							
Website: OHIO811.org **Hours:** 24 hours, 7 days **Advance Notice** 48 hours but not more than 10 working days **Marks Valid:** As long as visible and work begins within 10 days of original ticket **Law Link:** oups.org/law	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	Y	N	Y	Y	Y	N	Y	18"
OKLAHOMA / OKIE811 / 800-522-6543																							
Website: okie811.org **Hours:** 24 hours, 7 days **Advance Notice:** 48 hours excluding date of notification, weekends and legal holidays **Marks Valid:** 14 calendar days **Law Link:** okie811.org/thelaw	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	Y	N	N	Y	N*	Y	Y	Y	N	Y	24"
	*Excluding the burying of communications lines of a communications provider up to 12" deep within 12" surrounding their pedestals.																						
OREGON / Oregon Utility Notification Center / 800-332-2344 / Tickets Fax: 503-293-0826																							
Website: digsafelyoregon.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 Full Business Days **Marks Valid:** 30 days **Law Link:** https://digsafelyoregon.com/resources/forms/	Y	Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	12"	N	Y	N	N	Y	Y	N	N	24"
	*Excluding the burying of communications lines of a communications provider up to 12" deep within 12" surrounding their pedestals.																						
PENNSYLVANIA / Pennsylvania One Call System, Inc. / 800-242-1776																							
Website: pa1call.org **Hours:** 24 hours, 7 days **Advance Notice:** 3 to 10 business days (construction), 10-90 days (design), at least 10 days (large projects) **Marks Valid:** as long as equipment is on site **Law Link:** pa1call.org/palaw	N	Y	Y	Y	Y	Y	Y**	N	Y	Y	Y	Y	N*	N	N	Y	N	Y	Y	Y	N	Y***	18"
	* PennDot minor routine maintenance exempt if without 24" depth from highest spot in ROW * Municipal Roads - minor routine maintenance if within 18" depth from highest point in ROW ** Exemptions include PennDOT within state road DOT, Stripper Well Lines in Class 1 areas *** Large projects accepted online only																						
RHODE ISLAND / Dig Safe System, Inc. / 888-344-7233																							
Website: digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours(exluding weekends and holidays) **Marks Valid:** Must start within 30 days, as long as marks maintained **Law Link:** digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	18"
SOUTH CAROLINA / South Carolina 811 / 888-721-7877																							
Website: sc811.com **Hours:** 7:30 AM - 5:30 PM, M-F **Advance Notice:** 3 to 12 full working days notice(10-20 full working days notice subaqueous) **Marks Valid:** 15 working days **Law Link:** sc811.com/state-law/	N	Y	Y	Y	Y	Y	Y	N	Y*	Y	Y	Y	N**	N**	N**	Y	Y	Y	Y	Y	N	Y	24"
	*When unable to be adequately identified **Only specified work activities and depth Updated version of the law effective May 22, 2026																						
SOUTH DAKOTA / South Dakota 811 Center / 800-781-7474																							
Website: sdonecall.com/state-law/ **Hours:** 24 hours **Advance Notice:** 48 hours(excluding weekends and holidays) **Marks Valid:** 21 working days from start date and time on ticket **Law Link:** sdonecall.com/law.asp	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y*	N	N	N	N	N**	Y	Y	Y	N	Y	18"
	* Damage reporting required. All damage must be reported to the facility operator, or if the operator is unknown, to South Dakota 811 Center. ** For agricultural tilling and road and ditch maintenance to a depth of 18" only; homeowners have a 12" depth exception for tilling of soil and gardening																						
TENNESSEE / Tennessee 811 / 800-351-1111																							
Website: tn811.com • **Hours:** 24 hours **Advance Notice:** Not less than 3 working days, not more than 10 working days **Marks Valid:** 15 calendar days **Law Link:** https://www.tenn811.com/law	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	24"

Notification Center and State Law Directory

Click Before You Dig.com

HELP US STAY UP TO DATE.
Directory information is also available online at *actsnowinc.com*.

Note: Voice tickets may also be another acceptable form of ticket submission. Report any updates to this directory by calling 501-548-6363.

You can reach your local Notification Center in the U.S. by dialing 811.

	TICKETS			STATE LAWS & PROVISIONS										NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone (either side of the utility plus the width of the utility)
TEXAS / Texas811 / 800-344-8377																								
Website: texas811.org **Hours:** 24 hours **Advance Notice:** 48 hours (excluding weekends and holidays) **Marks Valid:** 14 working days **Law Links:** statutes.capitol.texas.gov/Docs/UT/htm/UT.251.htm	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	16"	Y	Y	Y	N	N	18"
UTAH / Blue Stakes of Utah 811 / 800-662-4111																								
Website: bluestakes.org **Hours:** 8:00 AM - 4:00 PM, M-F **Advance Notice:** 3 business days, 72 hours notice **Marks Valid:** 21 calendar days **Law Link:** le.utah.gov/xcode/Title54/Chapter8A/54-8a.html	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	24"
VERMONT / Dig Safe System, Inc. / 888-344-7233																								
Website: digsafe.com **Hours:** 24 hours, 7 days **Advance Notice:** 72 hours (excluding weekends and holidays) **Marks Valid:** 30 days **Law Link:** digsafe.com/laws_rules.php	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	N	Y	N	Y	N	Y	N	N	Y	18"
VIRGINIA / Virginia 811 / 800-552-7001																								
Website: va811.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 working days(excluding day of call) **Marks Valid:** 15 working days **Law Link:** va811.com/resources/laws-and-regulation/	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N*	Y	Y	Y	Y	N	N	Y	Y	N	N	24"
* No damage tickets in VA and anyone damaging a utility does not have to report the damage to Virginia 811, but they must report the damage to the operator, and for a gas damage, the SCC.																								
WASHINGTON / Washington 811 / 811 / 800-424-5500																								
Washington 811 **Website:** digsafewa.com **Northwest Utility Notification Center (NUNC)** **Website:** digsafewa.com **Inland Empire Utility Coordinating Council (IEUCC)** **Website:** digsafewa.com **Hours:** 24 hours, 7 days **Advance Notice:** 2 business days **Marks Valid:** 45 days **Law Link:** washington811.com/wa-dig-law-rcw-19-122/	N	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	24"
WASHINGTON D.C. / District One Call / 800-257-7777																								
Website: missutility.net **Hours:** 24 hours, 7 days **Advance Notice:** 96-business hours **Marks Valid:** 15 business days **Law Link:** https://code.dccouncil.gov/us/dc/council/code/titles/34/chapters/27/	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	N	N	N	N	N	N	Y	N	N	18"
WEST VIRGINIA / West Virginia 811 / 800-245-4848																								
Website: wv811.com **Hours:** 24 hours **Advance Notice:** 2 days but not more than 10 **Marks Valid:** 10 days **Law Link:** wv811.com/one-call-law	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	N	Y	Y	Y	N	N	24"
WISCONSIN / Diggers Hotline / 800-242-8511																								
Website: diggershotline.com **Hours:** 24 hours, 7 days **Advance Notice:** 3 working days **Marks Valid:** For duration of work if marks remain visible and work is continuous **Law Link:** docs.legis.wisconsin.gov/statutes/statutes/182/0175	N	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	N	N	N	N	N	Y	Y	Y	N	Y	18"

Know what's below. Call before you dig.

Expand public awareness by visiting call811.com. You will find a variety of downloadable elements available for use free in your company/organization's existing campaigns.

Note: Voice tickets may also be another acceptable form of ticket submission.

811 Know what's below. Call before you dig.

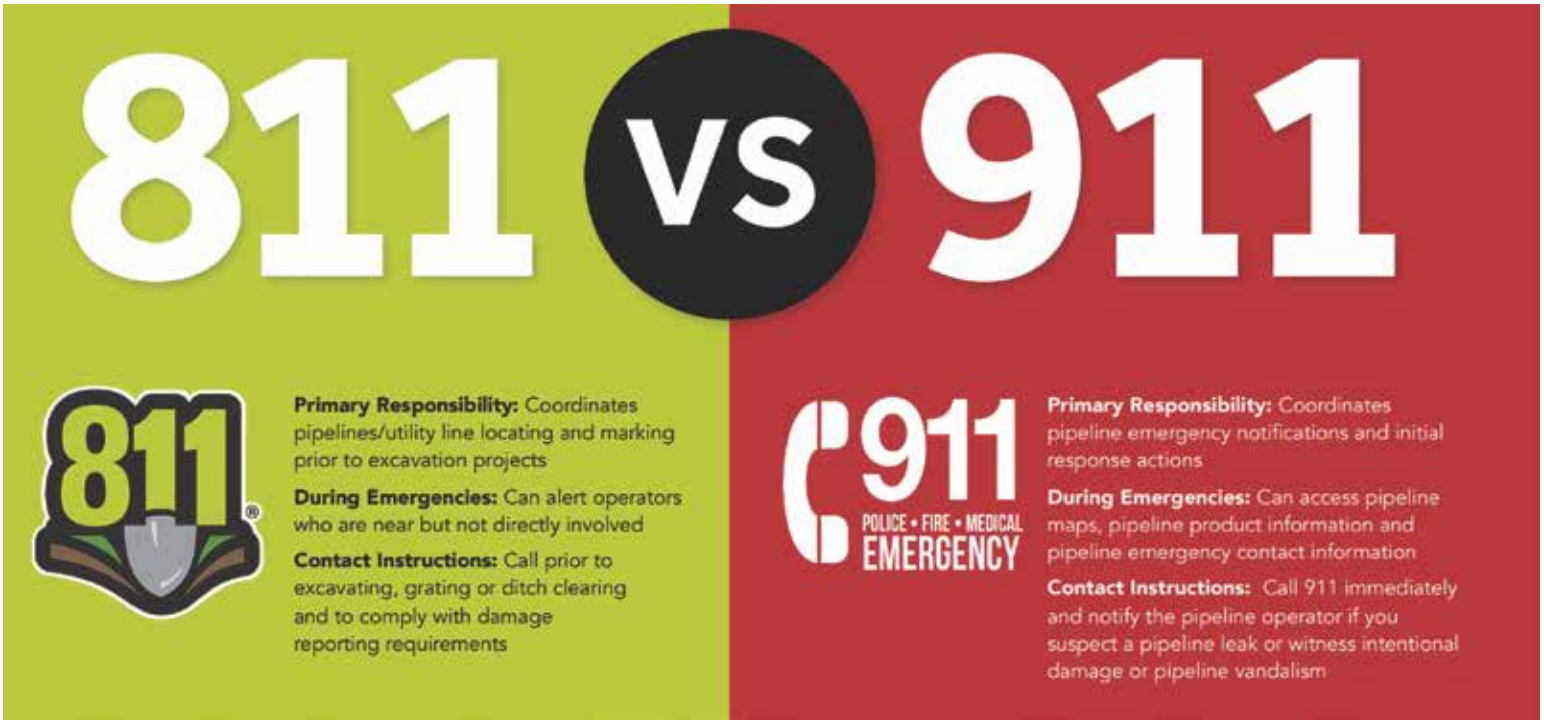
	TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone (either side of the utility plus the width of the utility)
WYOMING / One-Call of Wyoming, Inc. / 811 or 1-800-849-2476 (if out of state)																							
Website: onecallofwyoming.com **Hours:** 24 hours **Advance Notice:** 2 full business days **Marks Valid:** 14 business days **Law Link:** https://www.onecallofwyoming.com/wp-content/uploads/2022/10/WY-State-Statute.pdf	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	N	Y	Y	Y	N	N	24"

Canadian One Call and Provincial Law Directory

Click Before You Dig / Cliquez Avant de Creuser

Canadian One Call Centres Committee

	TICKETS			PROVINCIAL LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED					
	FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone (either side of the utility plus the width of the utility)
ALBERTA / Utility Safety Partners / 800-242-3447																							
Website: utilitysafety.ca **Hours:** 8:00 AM - 4:30 PM, M-F (Emergency or Online: 24/7) **Advance Notice:** 3-5 full working days **Marks Valid:** Determined by member	N	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	N	N	N	*	Y	Y	Y	N	Y	VARIES
	* 300 mm (12") hand tools only																						
BRITISH COLUMBIA / BC 1 Call / 800-474-6886																							
Website: bc1c.ca **Hours:** 24 hours / 7 days **Advance Notice:** Regular & Project - 3 working days excluding weekends and holidays Large Project – 5 working days excluding weekends and holidays Planning & Design – 10 working days excluding weekends and holidays **Marks Valid:** 60 calendar days	N	Y	Y	Y	N	Y	N	N	N	Y	N	Y	N	N	N	N	N	Y	Y	Y	N	Y	VARIES
MANITOBA / Click Before You Dig Manitoba / 800-940-3447																							
Website: ClickBeforeYouDigMB.com **Hours:** 8:00 AM - 5:00 PM **Advance Notice:** 3-5 full working days **Marks Valid:** Determined by member	N	Y	Y	Y	N	N	N	N	N	Y	Y	N	N	N	N	N	N	Y	N	Y	N	Y	VARIES
ONTARIO / Ontario One Call / 800-400-2255																							
Website: OntarioOneCall.ca **Hours:** 24 hours, 365 days **Advance Notice:** 5 working days **Marks Valid:** Minimum 60 days **Law Link:** www.ontario.ca/laws/statute/12o04	N	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	Y	VARIES
QUEBEC AND ATLANTIC PROVINCES / Info-Excavation / 800-663-9228																							
Website: info-ex.com **Hours:** 24 hours/7 days **Advance Notice:** 72 hours (3 working days) **Marks Valid:** Maximum 180 days	N	Y	Y	Y	N	Y	N	N	N	Y	N	Y	N	N	N	N	N	Y	Y	Y	Y	Y	1m
SASKATCHEWAN / Sask 1st Call / 866-828-4888																							
Website: sask1stcall.com **Hours:** 8:00 AM - 4:30 PM, M-F (Emergency 24/7) **Advance Notice:** 3-5 full working days **Marks Valid:** 30 days	N	Y	Y	Y	N	N	N	N	N	Y	N	N	N	N	N	N	N	Y	Y	Y	N	Y	VARIES



Community Liaison Services

Mission:
To advance PHMSA's pipeline safety mission by proactively engaging with pipeline stakeholders, providing technical expertise, and leveraging technology, data, and information to reduce pipeline risks and influence change through program and policy development.

Vision:
To serve as "trusted" and "credible" stewards of public safety and environmental protection by raising awareness and influencing change to continuously improve pipeline safety.

If you need assistance with any of the following pipeline safety related matters, please contact a PHMSA Community Liaison today:
- Pipeline safety policy/programs (damage prevention, public awareness, emergency response, PIPA, etc.)
- Pipeline stakeholder engagement and outreach
- Pipeline technical services and support (public inquiries, whistleblowers, post incident/accident communications, siting and permit initiatives)
- Questions about pipeline safety in your community

Community Liaisons are located within each PHMSA region.

Community Liaison Services Program Manager
Marta Riendeau: Marta.Riendeau@dot.gov • Phone: (609) 354-8010

Central Region:
Illinois; Indiana; Iowa; Kansas; Michigan; Minnesota; Missouri; Nebraska; North Dakota; South Dakota; Wisconsin.
Dave Mulligan: david.mulligan@dot.gov • Phone: (720) 963-3193

Southern Region:
Alabama; Florida; Georgia; Kentucky; Mississippi; North Carolina; Puerto Rico; South Carolina; Tennessee.
Marta Riendeau: Marta.Riendeau@dot.gov • Phone: (609) 354-8010

Eastern Region:
Connecticut; Delaware; Maine; Maryland; Massachusetts; New Hampshire; New Jersey; New York; Ohio, Pennsylvania; Rhode Island; Vermont; Virginia; Washington, D.C.; West Virginia.
Hung Nguyen: hungnguyen@dot.gov • Phone: (202) 713-7913

Southwest Region:
Arkansas; Louisiana; New Mexico; Oklahoma; Texas.
Marta Riendeau: Marta.Riendeau@dot.gov • Phone: (609) 354-8010

Western Region:
Alaska; Arizona; California; Colorado; Hawaii; Idaho; Montana; Nevada; Oregon; Utah; Washington; Wyoming.
Dave Mulligan: david.mulligan@dot.gov • Phone: (720) 963-3193 ESG

LEAK, HAZARD & EMERGENCY RESPONSE INFORMATION

	NATURAL GAS	PETROLEUM GAS	PETROLEUM LIQUIDS	ANHYDROUS AMMONIA	CARBON DIOXIDE	ETHANOL	HYDROGEN GAS	SOUR CRUDE OIL (H_2S)	SOUR GAS (H_2S)
INDICATIONS OF A LEAK									
SEE – liquid pooling on the ground		●			●		●		
SEE – a white vapor cloud that may look like smoke		●		●					
SEE – fire coming out of or on top of the ground	●	●					●		●
SEE – dirt blowing from a hole in the ground	●	●		●	●		●		●
SEE – a sheen on the surface of water		●	●					●	
SEE – an area of frozen ground in the summer	●	●			●		●		●
SEE – an unusual area of melted snow in the winter	●	●			●		●		●
SEE – an area of dead vegetation	●	●	●			●	●	●	●
SEE – bubbling in pools of water	●	●			●		●		●
HEAR – a loud roaring sound like a jet engine	●	●							●
HEAR – a hissing or whistling noise	●	●		●	●		●		●
SMELL – an odor like rotten eggs or a burnt match	1	1						●	●
SMELL – an odor like petroleum liquids or gasoline		●	●			●		●	
SMELL – an irritating and pungent odor				●				●	●
HAZARDS OF A RELEASE									
Highly flammable and easily ignited by heat or sparks	●	●	●			●	●	●	●
Will displace oxygen and can cause asphyxiation	●	●		●	●		●		●
Vapors are heavier than air and will collect in low areas		●	●	●	●	●		●	●
Contact with skin may cause burns, injury or frostbite		●	●	●	●	●	●		●
Initial odor may be irritating and deaden the sense of smell								●	●
Toxic and may be fatal if inhaled or absorbed through skin				●				●	●
Vapors are extremely irritating and corrosive				●				●	●
Fire may produce irritating and/or toxic gases	●	●	●	●		●	●	●	●
Runoff may cause pollution			●	●		●		●	
Vapors may form an explosive mixture with air	●	●	●			●	●	●	●
Vapors may cause dizziness or asphyxiation without warning	1	1			●		●		
Is lighter than air and can migrate into enclosed spaces	●						●		
EMERGENCY RESPONSE									
Avoid any action that may create a spark	●	●	●			●	●	●	●
Do NOT start vehicles, switch lights or hang up phones	●	●	●			●	●	●	●
Evacuate the area on foot in an upwind and/or uphill direction	●	●	●	◆2	◆2	●	●	◆2	◆2
Alert others to evacuate the area and keep people away	●	●	●	◆2	◆2	●	●	◆2	◆2
From a safe location, call 911 to report the emergency	●	●	●	●	●	●	●	●	●
Call the pipeline operator and report the event	●	●	●	●	●	●	●	●	●
Wait for emergency responders to arrive	●	●	●	●	●	●	●	●	●
Do NOT attempt to close any pipeline valves	●	●	●	●	●	●	●	●	●
Take shelter inside a building and close all windows				◆2	◆2			◆2	◆2

1 The majority of these products are naturally odorless and only certain pipeline systems may be odorized. Odorant can also fade or be scrubbed out when leaking products migrate through soil.

◆2 Sheltering in place is an alternative to evacuation when the products are toxic or the risk of fire is very low. Refer to "Shelter-In-Place or Evacuate Guidance Document" provided online at: **qrco.de/Evacuation**

Potential Hazards Associated with Pipeline and Pipeline Facility Leaks

Natural Gas

- A gas that is colorless, odorless, lighter than air
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation or dizziness
- May produce irritating and/or toxic gasses

Petroleum Gas

- A gas that is colorless, odorless, tasteless, heavier than air
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation or dizziness
- May cause burns, injury, frostbite
- May produce irritating and/or toxic gas

Petroleum Liquids

- Liquids and vapors are heavier than air
- Flammable and easily ignited
- May cause burns, injury, frostbite
- May produce irritating and/or toxic gas
- Runoff may cause pollution

Anhydrous Ammonia

- Colorless gas or liquids with pungent odor and heavier than air
- Will displace oxygen and can cause asphyxiation
- May cause burns, injury, frostbite
- Toxic and may be fatal
- Runoff may cause pollution

Carbon Dioxide

- A heavy gas that is colorless, odorless, tasteless, and heavier than air
- Will displace oxygen and can cause asphyxiation and dizziness
- May cause burns, injury, frostbite

Ethanol

- A colorless liquid that is heavier than air
- Flammable and easily ignited
- May cause burns, injury, frostbite
- May produce irritating and/or toxic gas
- Runoff may cause pollution

Hydrogen Gas

- A gas that is colorless, odorless and lighter than air
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation and dizziness
- May cause burns, injury, frostbite
- May produce irritating and/or toxic gasses

Sour Crude Oil

- Corrosive contaminant found in crude oil that has an odor like the smell of rotten eggs or a burnt match and is heavier than air.
- Flammable and easily ignited
- Toxic and may be fatal
- Extremely irritating, toxic and corrosive
- Runoff may cause pollution

Sour Gas

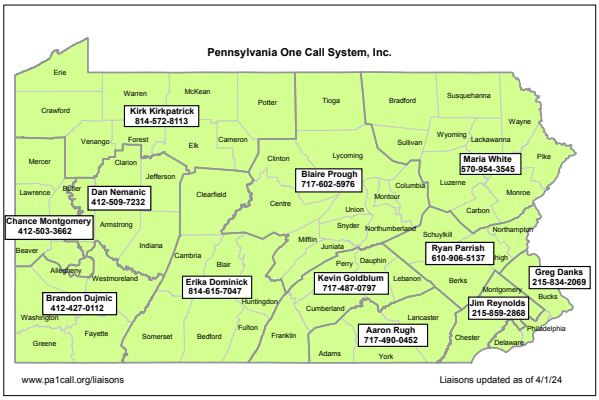
- Corrosive contaminant found in natural gas that has an odor like the smell of rotten eggs or a burnt match and is heavier than air.
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation
- May cause burns, injury, frostbite
- Toxic and may be fatal
- Extremely irritating, toxic and corrosive
- Runoff may cause pollution

ACTS Now, Inc.
PO Box 644
Conway, AR 72033

Pennsylvania 811
A Privately funded non-profit Pennsylvania Corporation

contact@pa1call.org

CONTACT US



Call Before You Dig
811 or 800-242-1776
412-464-7100

KARL System
800-222-6470

POCS Administrative Offices
800-248-1786

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Visit **www.paonecall.org/Events** to view our scheduled trainings and register!