

EXCAVATOR COMPLIANCE TRAINING

Reference Guide, 07-02-2021

PA Act 287 of 1974, as amended by Act 50 of 2017

Pennsylvania Underground Utility Line Protection Law aka the One Call Law

This guide has been prepared as an educational document for excavators taking the compliance test. The guide's intention is as a reference tool to explain in a general way the requirements provided by the law.



EXCAVATOR COMPLIANCE TRAINING

PENNSYLVANIA PA PUBLIC UTILITY COMMISSION (PUC) (COMMISSION)

Act 50 of 2017 authorizes PUC to enforce provisions of the state's Underground Utility Line Protection Law, Act 287, also known as the "One Call Law." The PUC'S Bureau of Investigation and Enforcement has created a section called "PA1Call Enforcement". This section will consist of a supervisor and investigators. As a requirement of Act 50, all underground facility damages are to be documented and submitted to the PA1Call System via a facility damage investigation form found on the PUC website and the PA1Call System website.

The PUC representative on the Board of Directors of Pennsylvania One Call is the supervisor of the Gas Safety Section. Enforcement Staff Contact Information: www.puc.pa.gov/pipeline/pa-one-call

PENNSYLVANIA ONE CALL SYSTEM, INC.

Pennsylvania One Call System, Inc. *dba* Pennsylvania 811, POCS, PA1Call System, One Call

- Our purpose is to prevent damage to underground facilities. To promote safety, we provide an efficient and effective communications network among project owners, designers, excavators, and facility owners.
- Open every day of the year, 24 hours a day.
- Submit locate requests online at www.paonecall.org or by calling 811.

DAMAGE PREVENTION

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

ONLINE RESOURCES

PA Act 287 of 1974,
as amended
pa1call.org/palaw

User Guide
pa1call.org/userguide

Excavator
Information
pa1call.org/excavators

Enforcement
pa1call.org/enforcement



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EXCAVATION WORK

Excavation work, as described in PA Act 287 of 1974, as amended, 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, 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 of a depth of less than eighteen inches
- Performing minor routine maintenance up to a depth of eighteen inches measured from the top edge of the cartway or the top outer edge of an improved shoulder
- Removal of sediment buildup, within the right-of-way of public roads and work up to a depth of twenty-four inches beneath the existing surface within the right-of-way of a state highway

PLANNING

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.

Every project has a project owner. Your job, as an excavator, is to avoid damage, to minimize interference with a facility owner's facilities and to gather information to identify existing facilities. When performing a site assessment discuss with the project owner the possibility of compensating you when additional prudent techniques, costs and time are required to ascertain the precise location of a marked line.

THREE BUSINESS DAYS

- Excavators 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.
- Complex project notices require a ten-business day notice.
- A business day is any day except Saturday, Sunday, or legal holiday prescribed by statute.
- A business day begins at 12:00:00 am and ends at 11:59:59 pm.

**An excavator notifies during the week
WITHOUT a legal holiday in the week**

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	NOTIFY	MARK	MARK	LAWFUL START DATE		

TICKET TYPES

- Design: any drawing that is prepared for an excavation requires a design notification that must comply with the provisions in Section 4 of the Act. Digging is not permitted on a design notification. Those planning work that disturbs the earth are required to notify Pennsylvania 811. There are two types of design notices: Final Design Notice and Preliminary Design Notice. Facility owners are required to provide information as to the position and type of lines at the work site based on the information currently in the facility owner's possession; or, to mark the plans, which have been provided by the



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designer by field location or by another method agreed to by the designer, excavator and facility owner, or its agent.

- **Emergency:** An emergency is defined by Section 1 of the Act. A sudden or unforeseen occurrence involving a clear and immediate danger to life, property and the environment, including, but not limited to serious breaks or defects in a facility owner's lines. Facility owners should respond as soon practicable following receipt of the notification from Pennsylvania 811.
- **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 remarking is needed. The update ticket is a new ticket. In the remarks section on the ticket, it will reference the previous serial number.
- **Complex Project:** used to schedule a complex project preconstruction meeting request.
- **Routine (single) Locate Request:** 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.
- **Demolition:** 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. Demolition work may require more advance clearance from a facility owner if their service lines need to be disconnected. This work may also need a permit for the work. The one call notification should not be considered notice under any circumstance other than the Act.

SINGLE LOCATE REQUEST VS COMPLEX PROJECT

- The maximum locate request size is 1,000 feet, or intersection to intersection, whichever is greater, along the same road, within the same political subdivision.
- 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, Complexity (DISC)
- A project owner or an excavator can request a preconstruction meeting.
- A facility owner is required to attend and participate in preconstruction meetings and to work with excavators on a schedule to mark the underground lines reasonably in advance of the actual start of excavation or demolition work for each phase of the work.
- A facility owner can respond back through the KARL system to request a meeting with the excavator if they would like to talk about the complexity of a single locate request.

PRECONSTRUCTION MEETINGS AND COORDINATE PA

A project owner or an excavator can schedule the preconstruction meeting prior to the commencement of excavation or demolition work in a complex project. All stakeholders, including project owners, designers, excavators and facility owners, or their agents, are required to attend and participate in the complex project meetings, if involved. The involved stakeholders work with the project owner and/or excavator on a schedule to mark the underground lines reasonably in advance of the actual start of the excavation or demolition work for each phase of the work.









Coordinate PA (CPA) enables users to add and/or import existing projects, find opportunities with others who want to coordinate, share project documents and communications with designated contacts, and notify facility owners and other contacts at any stage of the project.

MARK IN WHITE

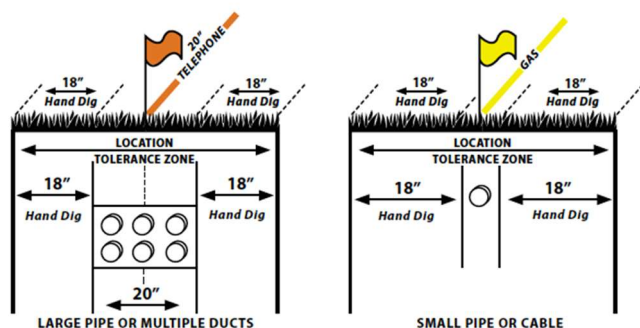
- Increase visibility with color-coded flags and/or stakes.
- Long locates should be indicated at intervals at no more than 50 feet.
- Changes in direction and lateral connections to the facility should be clearly marked.
- A facility owner may identify the location of a known facility connected to its facilities, but not owned or operated by the facility owner, as a helpful guide to the excavator or owner.
- To identify the location of a 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 property owner. The identification shall not be deemed to impose any liability upon the facility owner for the accuracy of the other facility's identification. This is referred to as the Good Samaritan clause.
- It is good practice to mark and protect all facilities in addition to the standard main or service lines; which may include the main valves, curb valve boxes on services, drip installation boxes, cathodic protection test station boxes.

FOUR COMPONENTS OF A CORRECT MARK

- A facility owner responsibility is 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 or edge of a line or facility.
- The four components are 1) use the appropriate color when marking underground lines; 2) identify the facility owners name or initials or use a flag with the company logo; 3) Mark the type of material the facility is made of; and, 4) Indicate the size of the line.
- Why are the components important to an excavator? 1) when using the appropriate color it identifies the type of facility the excavator will deal with underground; 2) knowing who the facility owner is beneficial when the excavator has a question or if something happens on site they can immediately contact; 3) if an excavator gets to the underground line, they can identify it is the facility owners line based on the material; 4) the size of the line is extremely important because that determines the tolerance zone for the excavator.
- A tolerance zone means the horizontal space within eighteen inches of the outside wall or edge of a line or facility.

APWA/CGA Temporary Marking Color	
	WHITE - Proposed Excavation
	PINK - Temporary Survey Markings
	RED - Electric Power Lines, Cables, Conduit and Lighting Cables
	YELLOW - Gas, Oil, Steam, Petroleum, Gaseous and Hazardous Materials
	ORANGE - Communications, Alarm or Signal Lines, Cables or Conduit, and Traffic Loops
	BLUE - Potable Water
	PURPLE - Reclaimed Water, Irrigation and Slurry Lines
	GREEN - Sanitary and Storm Sewer Lines

TOLERANCE ZONE





APPURTENANCES

As a helpful guide to the property owner or excavator, a facility owner identify the location of the 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.

KARL RESPONSE CODES

- A facility owner is required to respond to all notifications through the One Call System.
- The KARL system is set up to use by phone or online.
- Facility owners can use interim responses to communicate with the excavator and designers; facility owners are required to give final responses to close the communication with the excavator and designers.
- When a facility owner does not give a final response, it will register in the ticket record, as “999 did not respond through PA One Call”; which is a violation of the law.
- For excavation tickets, there are two final responses: 001 Clear, no facilities OR facilities are not involved based on ticket information, and 003 Field marked.
- For design tickets, there is one final response: 083 engineering completed.
- For complex project tickets, there are two responses: 091 Clear will not attend meeting and 099 Attended meeting. Reached agreement.

FINAL RESPONSES UNDER THE LAW		
Excavation	Design	Preconstruction Meeting
001 Clear No Facilities OR facilities not involved based on ticket information	083 Engineering Completed	091 Clear Will Not Attend Meeting
003 Field Marked		099 Attended Meeting Reached Agreement

THE DIRECT CONTACT RULE

- A renotify is a retransmit of an existing ticket to advise one or more facility owners of locate-related issues.
- When the excavator initially arrives at the work site, the excavator discovers an unmarked or incorrectly marked facility they will a) Call 811; b) Request to renotify the facility owner or facility owners.
- This is NOT a new ticket. The serial number does not change.
- The ticket will contain this statement: Direct contact with excavator required within two hours: YES
- The facility owner has two hours to make direct contact with the on-site person on the ticket by a) meet at the work site, b) communicate by telephone, or c) contact by using FaceTime or Skype



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RENOTIFY TICKET

- A renotify ticket, without the Direct Contact Rule, will contain this statement: Direct contact with excavator required within two hours: NO
- The facility owner should respond to the ticket based on their company policy.

TICKET UPDATES

It is *not* required to update your ticket every 10-business days on an active work site when the markings are preserved, and the equipment has *not* been moved off the work site for more than two business days.

You can request a facility owner to mark their facilities again, when:

- Active work site: if the previous markings have been compromised or eliminated. A three business day notice is required
- Inactive work site: work did not begin within the original lawful start date

PRUDENT TECHNIQUES

When working within the tolerance zone, prudent techniques are required. Methods to consider based on climate or geographical conditions are soft digging techniques, i.e. hand digging (when practicable), pot-holing and vacuum excavation.

DAMAGES AND EMERGENCIES

You are responsible 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. If you do not know the facility owner's contact information, you can contact 811.

You are to immediately notify 911 and the facility owner if the damage results in the escape of any flammable, toxic or corrosive gas or liquid, which endangers life, health or property.

ALLEGED VIOLATION REPORT

- The Pennsylvania Public Utility Commission (PUC) enforces PA Act 287 of 1974, as amended (the One Call law).
- A person by action or inaction fails to fulfill their obligation of the Act.
- Excavators, designers, project owners and facility owners are required by law to submit an alleged violation report to the Commission through the One Call System.
- An excavator and project owner has not more than 10 business days to file an alleged violation report.
- A designer and facility owner has not more than 30 business days to file an alleged violation report.

Alleged Violation Reporting (AVR)				
	Excavator	Project Owner	Designer	Facility Owner
Not more than 10 business days	X	X		
Not more than 30 business days			X	X