



Pennsylvania 811

Excavator's Handbook

**Q & A
for
Safe Digging**

Dial 8-1-1 Before You Dig!

**Pennsylvania One Call: The
Keystone of Damage Prevention**

www.paonecall.org

This document is to be used for reference only. It is not legal advice. For any legal requirements, please consult your attorney or refer to the most current amendment to Act 287 of 1974 which is available at www.pa1call.org/palaw.

When applicable, the answers to the questions will reference the section of PA Act 287 of 1974, as amended, 73P.S. § 176 et. seq. and/or the Complex Project Policy (Policy) located on the PA One Call website.

To download this guide go to www.pa1call.org/excavatorhandbook or use the QR code below.



Additional reference materials can be found:

www.paonecall.org

www.commongroundalliance.com

www.puc.pa.gov

www.apwa.net

www.FHWA.dot.gov

✦ **Question: What is considered an excavation?**

Answer: The use of powered equipment or explosives in the movement of earth, rock or other material.

- There are very specific requirements as to what activities constitute excavation which should be reviewed on the web-site www.paonecall.org.

Section 1

✦ **Question: What do I need to do before I dig?**

Answer: Place a call to 8-1-1 at least 3 business days, but not more than 10 business days, prior to starting excavation.

Section 5 (2.1) and (2.2)

✦ **Question: Should I mark in white before I call?**

Answer: Yes, the perimeter of the Work site should be marked in white. (Do not use any other color.)

Sections 1, 2 (5)(vi), and 5 (11)

✦ **Question: What hours are the one call center open?**

Answer: 24 x 7 every day of the year.

✦ **Question: Who must place the one call?**

Answer: The responsible person doing the excavation.

Sections 1 and 5 (2.1)

✦ **Question: What is a serial number?**

Answer: Proof that you placed a one call notification. The serial number is assigned by the One Call System and is on the locate request.

Section 5 (2.2)

- ✦ **Question: I'm a subcontractor, can I piggyback on my main Excavator's one call?**
Answer: No. Each responsible Excavator must make their own notification.
Section 5 (2.1) and (2.2)
- ✦ **Question: Who is responsible for finding the precise location of the underground line?**
Answer: The Excavator, using prudent techniques.
Section 5 (4)
- ✦ **Question: Upon initial arrival at the Work site, what should I do if there are no visible mark-outs?**
Answer: Do not begin excavating. Check the KARL responses through the one call center.
Section 5 (20)
- ✦ **Question: What should I do if I disagree with the responses in KARL, due to visible evidence in the field?**
Renotify the One Call System. After the renotify, wait up to three hours for the response from the Facility owner(s) before digging prudently.
Section 5 (20)
- ✦ **Question: What is the Tolerance zone?**
Answer: 18 inches horizontally from the exterior wall of the pipe or facility. (See back of handbook)
Section 1
- ✦ **Question: What is required within the Tolerance zone?**
Answer: Exercise due care and use prudent techniques.
Section 5(4)

✦ **Question: For how long are the marks good?**

Answer: When excavation begins within the Lawful start dates, you can continue work as long as equipment is on site and the marks are visible.

Section 5 (3) and (14)

✦ **Question: Must I physically protect the marked Facility owner lines I expose in preparation for excavation?**

Answer: Yes, in consultation with the Facility owner.

Section 5 (6)(ii)

✦ **Question: When may I lawfully start digging?**

Answer: Read the locate request for your Lawful start date.

Sections 1 and 1.1

✦ **Question: When do I need to call back for re-marking?**

Answer: You have an obligation to protect the marks. When the marks become obscured or when you remove equipment from the site for more than 2 business days, you must call one call for re-marks.

Section 5 (3) and (14)

✦ **Question: May I refresh anyone else's marks using their color?**

Answer: No. You must protect the marks. You may not refresh anyone else's marks.

Section 5 (3)

✦ ***Question: What should I do when I hit or damage a Line or facility?***

Answer:

- Stop digging!
- If gas is escaping or blowing, you must call 9-1-1.
- Call 8-1-1 to create a damage notification or notify the Facility owner directly.
- Submit an Alleged Violation Report (AVR) not more than thirty days after the damage occurred.

Section 5 (7), (8), and (16)

✦ ***Question: What is an Emergency one call?***

Answer: A notification involving an event that has an immediate effect on life or property.

Sections 1 and 5 (9)

✦ ***Question: What is the difference between a single excavation notification and a Complex project?***

Answer: The maximum area of a single notification is 1,000 feet or intersection to intersection, whichever is greater, along the same street, within the same political subdivision. Anything greater than this is considered a Complex project.

Section 3 (4)

✦ ***Question: What determines if my Excavation work is a Complex project?***

Answer:

- Duration
- Impact on the Facility owner's lines or the public
- Size
- Complexity

Section 1

✦ **Question: A Facility owner feels my Excavation work is complex and requests a meeting through the KARL System; what happens next?**

Answer: The Facility owner will contact you directly to schedule a meeting.

Section 1

✦ **Question: My Excavation work falls under the definition of complex; what do I need to do?**

Answer:

- If a project does not exist in the Coordinate PA (CPA) portal on the PA One Call website, then create one.
- Create a Complex project meeting notification from within the project.
- Hold a Preconstruction meeting, as applicable.
- Create locate request(s) from within the project based on agreements made at the meeting.

Sections 1 and 5 (3) and Policy

✦ **Question: Where should the Preconstruction meeting be held?**

Answer: In close proximity to the project work location or electronically.

Sections 1 and 5 (3) and Policy

✦ **Question: What should occur at the Preconstruction meeting?**

Answer: Attendance should be recorded on the POCS approved Complex Project Meeting Sign In Sheet template and notes taken, including the scope of locate request(s) and the agreed upon mark-out

schedule.

Note: Sign in sheet and meeting notes template are available on the POCS website.

Policy

✦ ***Question: What should happen after the meeting?***

Answer: The meeting notes/agreement and sign in sheet should be uploaded to the CPA portal. Locate request(s), as modified, should be created via the CPA portal based on the agreement reached at the meeting.

Policy

✦ ***Question: Is a Preconstruction meeting required?***

Answer: No, if the Excavator chose not to hold a meeting, a Facility owner can request a one on one meeting with the Excavator.

Section 5 (3)

✦ ***Question: May an Excavator dig on a Complex project notification?***

Answer: No, this is the notification that begins the preconstruction planning process.

Policy

APWA/CGA Temporary Marking Color Code (ANSI Standard Z535.1)



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 - Communication, Alarm or Signal Lines, Cables or Conduit, and Traffic Loops



BLUE - Potable Water



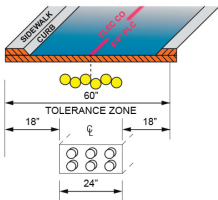
PURPLE - Reclaimed Water, Irrigation and Slurry Lines



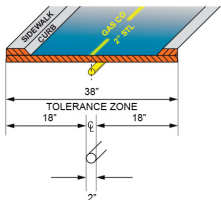
GREEN - Sewers and Drain Lines

TOLERANCE ZONE

LARGE PIPE OR MULTIPLE DUCTS



SMALL PIPE OR CABLES



PA One Call does not locate or mark underground lines.



**THREE BUSINESS DAYS BEFORE
YOU DIG – DRILL– BLAST**

Dial 8-1-1 or 1-800-242-1776

www.paonecall.org

APWA/CGA Best Practices For Temporary Markings

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 7). 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 BP 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 previous page). *Release 5/23*



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:

NOTIFICATION TYPE:

☐ CONSTRUCTION (Not less than 3 nor more than 10 Business Days) ☐ DEMOLITION (Not less than 3 nor more than 10 Business Days)
☐ FINAL DESIGN (Not less than 10 nor more than 90 Business Days) ☐ PRELIMINARY DESIGN (More than 90 Business Days)

WORKSITE INFORMATION:

COUNTY: MUNICIPALITY: WARD:

STREET ADDRESS:

NEAREST INTERSECTION:

WORKING BETWEEN TWO INTERSECTIONS: ☐ Yes ☐ No

SECOND INTERSECTION/NEAREST MAIN ROAD:

SUBDIVISION: LAT/LONG COORD:

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

SITE MARKED IN WHITE: ☐ Yes ☐ No When specific site information is not provided the site must be marked in white.

LOCATION INFORMATION:

TYPE OF WORK: DEPTH: EXTENT OF EXCAVATION:

METHOD OF EXCAVATION: TYPE OF EQUIPMENT USED:

WORK BEING DONE FOR: ON SITE CONTACT:

PHONE:() EXT: BEST TIME TO CALL:

EMAIL ADDRESS: FAX #: ()

SCHEDULED EXCAV. DATE: TIME: DURATION OF JOB:

JOB #: PENNDOT CONTRACT/PERMIT #:

REMARKS:

TO BE COMPLETED AFTER PLACING ONE CALL

LAWFUL START DATES: THROUGH

FACILITY OWNER MEMBERS NOTIFIED:

SERIAL NUMBER(S) ASSIGNED: DATE:

THERE IS AN ANNUAL FEE