

Utility Clearance

FSOP 1.2 (April 14, 2010)

Ohio EPA Division of Environmental Response and Revitalization

1.0 Scope and Applicability

Underground utilities must be cleared by the Division of Environmental Response and Revitalization (DERR) District Office Site Coordinator or Site Investigation Field Unit (SIFU) Sampling Team Leader prior to conducting hand or mechanical excavation of soil or sediment greater than a depth of 12 inches. Sampling or digging deeper than 12 inches constitutes "excavation" per Ohio Revised Code (ORC) 3781.25(H) and requires utility clearance. Overhead utilities also require a safe working distance and need to be cleared prior to work in their vicinity.

2.0 Definitions

Not applicable

3.0 Health and Safety Considerations

- 3.1 Contact with underground or overhead utilities may result in injury or death to personnel or the public, damage to or destruction of equipment or facilities, or damage to the environment.
- 3.2 If the site does not appear to have been cleared (e.g., no evidence of flags or paint markings or notification of clearance), contact the appropriate underground protection service, utility or facility as listed in Section 4.1 before proceeding with work.
- 3.3 If a utility line is hit or damaged, walk away immediately and clear the area of personnel and the public. Contact the appropriate utility and/or underground protection service (see Section 4.1). Call 9-1-1 if there is any injury or potential threat for injury or if a substance is being released to air, such as natural gas, or if there is a fire, explosion, or a threat of fire or explosion.

4.0 Procedure Cautions

- 4.1 Ohio currently has **two** underground protection services that must be contacted; the **Ohio Utilities Protection Service (OUPS)** and the **Oil and Gas Producers Underground Protection Service (OGPUPS)**.
- 4.2 Many manufacturing plants and other facilities have their own internal underground utilities and infrastructure that are not covered by OUPS or OGPUPS. Knowledgeable facility staff, such as a plant engineer, maintenance supervisor, or health and safety personnel, must be contacted to locate any facility-owned underground utilities or infrastructure.
- 4.3 OUPS member utilities may not locate or mark lateral or service connections from main utility lines to residences and commercial or industrial buildings (see Section 7.1.3).

- 4.4 Overhead utilities, such as power lines, also need to be cleared if overhead clearance is needed for equipment. OUPS and OGPUPS do not locate or provide safe clearance for overhead utilities. The utility company or facility must be contacted separately for information regarding safe working distance.
- 4.5 Do not excavate within the tolerance zone, or "approximate location" of the underground utility without the supervision of the owning utility. The "approximate location" as defined in ORC 3781.25(D), is *"the site of the underground utility facility including the width of the underground utility facility plus eighteen inches on each side of the facility."* Any excavation within the tolerance zone should be performed with hand tools in a careful and prudent manner until the marked utility is exposed.
- 4.6 Additional utility investigation procedures, such as those described in Section 7.2, may be appropriate as supplemental procedures but may never be used in place of contacting OUPS and OGPUPS. In case of a dispute in utility locations between a supplemental procedure and OUPS, OGPUPS or member utilities, contact OUPS, OGPUPS or appropriate member utility for verification of utility locations.

5.0 Personnel Qualifications

Ohio EPA personnel entering the site must meet DERR's qualifications for performing work at uncontrolled hazardous waste sites.

6.0 Equipment and Supplies

Not applicable

7.0 Procedures

- 7.1 Contact the following underground protection services to clear utilities prior to excavation:
 - 7.1.1 Contact OUPS at **8-1-1** or **(800) 362-2764** at least 48 hours (two working days) but no more than ten working days prior to digging. Working days do not include weekends or legal holidays. (As an alternative, OUPS may be contacted on line using i-dig Newtin RTE. For more information on i-dig, see www.oups.org.)
 - 7.1.1.1 Provide the necessary information as detailed on the attached OUPS Locate Work Order Form to OUPS to accurately locate site and/or work area.
 - 7.1.1.2 OUPS will provide notification to full membership utilities to mark or clear utilities.

- 7.1.1.3 OUPS will provide a ticket number for the location request. Make sure to record the ticket number in the site-specific work plan or other appropriate document accessible to personnel in the field.
- 7.1.1.4 OUPS will provide the names of limited membership utilities and their contact numbers if requested. These members must be contacted individually by Ohio EPA personnel. OUPS will not contact limited membership utilities to locate underground utilities. Make sure to record contact information such as phone numbers or ticket numbers from limited members in the site-specific work plan or other appropriate documentation accessible to field personnel.
- 7.1.1.5 If work does not proceed within ten working days of the request, another request must be made.
- 7.1.1.6 Underground utility lines may be marked with flags or paint or both. Color codes for marking utilities are shown on the attached OUPS Utility Color Code Guide.
- 7.1.1.7 Work may continue until markings are no longer visible.
- 7.1.1.8 If the site is vacant, a sign with the street address may need to be posted so that OUPS can locate the site.
- 7.1.2 Contact OGPUPS at **(800) 925-0988** 48 hours (two working days) prior to digging. Working days do not include weekends or legal holidays. Locations may also be faxed to (740) 587-0446 using the location form located at www.ogpups.com.
 - 7.1.2.1 Provide the necessary information as detailed on the attached Underground Protection Service Ohio's Request Line Locate Form to OGPUPS to accurately locate site and/or work area.
 - 7.1.2.2 OGPUPS will inform you within 48 hours if they have a member with facilities in the area. These members must be contacted individually by Ohio EPA personnel.
 - 7.1.2.3 OGPUPS will provide a ticket number for the location request. Make sure to record the ticket number in the site-specific work plan or other appropriate document accessible to field personnel.
 - 7.1.2.4 Members have 48 hours to return your call to locate or provide notification if underground facilities are present.
- 7.1.3 If at a manufacturing plant or other facility, contact knowledgeable facility staff such as a plant engineer, maintenance supervisor, or health and

safety personnel to locate any facility-owned underground utilities or infrastructure for utility clearance.

- 7.2 Additional methods of utility investigation, such as the use of field geophysical or other detection instruments by DERR or SIFU personnel or subcontracting of utility locating services, may be appropriate on certain sites. This work should be considered supplemental, however, and must never be used in place of contacting OUPS and OGPUPS for utility clearance and, if available, contacting knowledgeable site personnel.
- 7.3 Contact the utility company or facility directly for clearance if any work will be conducted within 50 feet of an overhead power line. Clearance distances from power lines are dependent on the power line voltage and other factors such as weather. See the attached American Electric Power (AEP) Ohio Public Safety Fact Sheet for more information. Supervision by utility staff may be required when work within 50 feet of overhead power lines is required. The minimum clearance distance from a power line for operation of the Geoprobe® direct-push rig, however shall never be less than 25 feet.

8.0 Data and Records Management

Not applicable

9.0 Quality Control and Quality Assurance

Not applicable

10.0 Attachments

Ohio Utility Protection Service Locate Work Order Form

Ohio Utility Protection Service Utility Color Code Guide

Oil and Gas Producers Underground Protection Service Request Line Locate Form

American Electric Power Ohio Public Safety Fact Sheet

11.0 References

Ohio Revised Code 3781.25(D) and 3781.25(H)

O.U.P.S. LOCATE WORK ORDER

CALL 48 HOURS BEFORE YOU DIG -- 800-362-2764

COLOR CODES: Red = Electric Orange = Phone/Cable TV Yellow = Gas Blue = Water Green = sewer
White = Proposed Excavation

COMPLETING ENTIRE FORM HELPS TO ENSURE A MORE ACCURATE AND TIMELY LOCATE

Contact Phone # _____ Caller Name _____

Company Name _____

Fax _____ Email _____

County _____ City/Township _____

Address/Location of Work _____

Extent of Work: Front/Sides/Rear _____ Farthest Distance/Direction back off Road _____

Lot # _____ Subdivision _____ Builder Name _____

Cross / Between Streets _____

Distance & Direction from Cross Street _____

Date of Excavation _____ Start Time of Excavation _____

Type of Work _____

Working for Company _____ Work Done By Company _____

_____ Means of Excavation _____ Blasting _____ Pre Markings _____ Meet

_____ RR Right of Way _____ Highway _____ Mile Marker At/From _____

Comments _____

OUPS TICKET NUMBER _____

Dig Safely.

COLOR CODES FOR LOCATING UTILITY LINES

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

Tolerance Zone: Width of Underground Facility Plus 18" on Each Side.



OHIO
Utilities Protection
SERVICE
Call Before You Dig

1-800-362-2764
www.oups.org

Ohio's Request Line Locate

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Underground Protection Service



**OHIO'S REQUEST
LINELOCATE**



CALL BEFORE YOU DIG!

Need to locate an underground pipeline facility????

To locate oil & natural gas facilities in Ohio call the Oil and Gas Producers
Underground Protection Service at (800) 925-0988 or fax (740) 587-0446

Bold field names can not be left blank

Contact Name
Company
Address 1
Address 2
City **State** **Zip**

Please denote below how you want to receive this response:

Telephone **Fax**

Please fill out the information below to receive a line locate:

TYPE OF FACILITY	COUNTY	TOWNSHIP	MUNICIPAL CORP.	SECTION OR LOT NUMBER
<input type="text"/>				
<input type="text"/>				
<input type="text"/>				
<input type="text"/>				

Ohio's Request Line Locate

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Once you've completed this form, simply print, then fax or call in your line locate to:

Oil and Gas Producers Underground Protection Service (OGPUPS)

800-925-0988 Toll Free or

(740) 587-0446 Fax

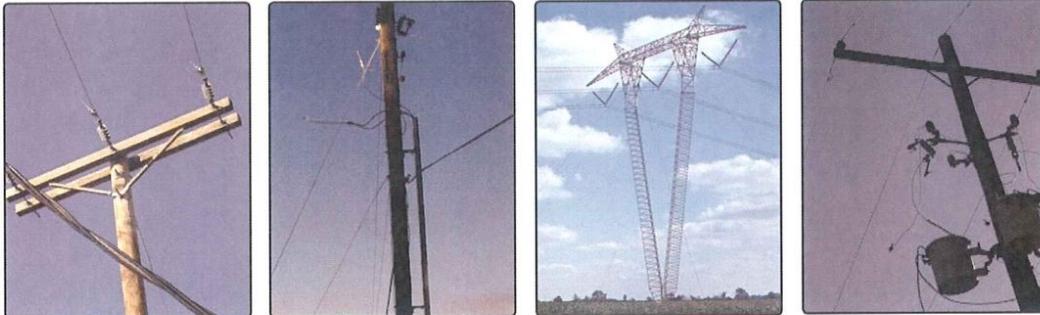
IMPORTANT:

For complete safety, you should also call the Ohio Utility Protection Service at 1-800-362-2764.

Public Safety

Look Up for Lines

Keep a Safe Distance from All Overhead Power Lines



Most contact with overhead power lines is accidental, but can result in severe injuries and even death. Fortunately, most, if not all, electrical accidents can be prevented. Before you begin any job, whether it's installing a TV antenna on your roof or constructing a new building, it's important to be aware of power line locations and the necessary safety precautions.

Working Around Electricity

Electricity always attempts to travel to the ground and will follow all paths to get there. If a conductor of electricity becomes available, the electricity will follow that path to ground. Tools and equipment you use, and even your own body, are excellent conductors.

What does this mean? Let's say you're using a ladder to do some work around your house. If that ladder accidentally touches an overhead power line, the ladder (and you) could become the path for the electricity, sending electricity through the ladder and your body, which can cause severe injuries or even death.

Minimum Clearances

Always look up first for overhead power lines. If you see some in the area, there is a MINIMUM clearance of 10 feet which should be maintained. The minimum clearance increases as the voltage increases. Minimum clearances also can be affected by weather conditions, the type of work being performed, the equipment being used and other factors. Additional minimum clearances for various voltages are shown in this chart.

Line Voltage	Minimum Clearances
Up to 50,000 volts	10 feet
50,000 to 200,000 volts	15 feet
200,000 to 350,000 volts	20 feet
350,000 to 500,000 volts	25 feet
500,000 to 750,000 volts	35 feet
750,000 to 1,000,000 volts	45 feet

Equipment and Overhead Lines

- Use a clean, dry wood or fiberglass ladder if electric lines are anywhere in the area. They are less likely to conduct electricity than a metal ladder.
- When installing an antenna, position it at least 1.5 times its total length away from power lines. If it starts to fall, let it go and stay clear.
- Be certain to maintain a safe clearance when the bed of a dump truck is raised.
- Know the minimum distance a crane can operate safely near a power line. Keep all parts of the crane and its load outside this area. If your crane does come in contact with an overhead line, don't leave the cab, call 9-1-1 and the power company immediately.
- Designate a worker responsible for signaling the crane operator when any part of the crane or its load approaches the minimum clearance limit. The worker should never touch the crane.
- Some jobs may require the line be de-energized to complete the task safely. The power company will work with you to determine if this is needed.
- Do not rely on proximity warning devices such as hook insulators or boom guards, because each has its limitations.
- Take time to plan any job and contact your local power company if you have any questions.



For more public safety information, visit: <http://www.AEPOhio.com>