



bge<sup>SM</sup>

AN EXELON COMPANY

worker  
beware<sup>®</sup>

Work safely around  
natural gas and electric lines

# Respect the power of electricity

- **When you arrive at a job site, always identify power lines and high-voltage equipment**, and point them out to your coworkers.
- **Assume all overhead power lines are energized and potentially dangerous**, including service drops running between poles and buildings.
- **Check the site daily**, because conditions may change.
- **Review your emergency plan** before work begins so that everyone knows what to do in case of power line contact.



# For tools & equipment other than cranes & derricks used in construction: Always observe the 10-foot rule

- OSHA requires that you keep yourself and your equipment (other than cranes or derricks used in construction) *at least 10 feet away* from overhead power lines carrying up to 50 kV.
- Higher-voltage lines require greater clearances. Contact BGE for clearance information.
- If your job requires you to work closer than 10 feet from power lines, call BGE well in advance to make safety arrangements.
- Electrical safety distances given here are minimums.
- Always use the maximum possible distance, and clearly mark boundaries to keep workers and equipment the required distance away.

# Cranes & derricks in construction

- **When cranes and derricks are used in construction:** Keep the crane boom and load *at least* **20 feet away** from lines up to 350 kV and **50 feet away** from lines greater than 350 kV but at or less than 1,000 kV. Always assume the line is energized, and allow nothing closer unless you have confirmed with BGE that the line has been de-energized.
  - If voltage is unknown, contact BGE before work begins.
- **As voltage increases, clearance distances also increase.** Contact BGE and consult the OSHA regulations at [osha.gov](https://www.osha.gov) for specific clearance requirements and encroachment prevention precautions.
  - Once you have established the required clearance, clearly mark a boundary with tape, signs or barricades.
- **Whenever cranes or derricks are used in construction on your job site,** contact BGE well in advance so any necessary facility protection arrangements can be made.



# Use a dedicated spotter

- **Always use a dedicated spotter on the ground** to safely judge distances between hoisting equipment and power lines.
- **Crane and derrick operators** must maintain continuous contact with a dedicated spotter to comply with electric line clearance requirements.
- **The spotter's only responsibility should be power line safety.** Don't divide the spotter's attention with other tasks.



# If heavy equipment contacts a power line

- **Remain on the equipment.**
- **Tell others to stay away.**
- **Have someone call 911 and BGE immediately.**
- **If fire or other imminent danger forces you off:**
  - Do not touch the equipment and the ground at the same time.
  - Jump clear, and land with your feet together.
  - Take very short hops, keeping feet together and making contact with the ground at the same time.



# Call before you dig. It's the law!

- **The law requires you to call Miss Utility at 811 at least two full business days but not more than 10 days prior to digging.** This free service will arrange to have underground utility lines marked so you can dig a safe distance away.
- **Before you call, PRE-MARK your excavation route** so locators can easily identify and mark affected utilities.
- **If you don't call 811, you risk hitting an underground utility line, resulting in possible outages, fire or explosion.** You or your coworkers could be hurt or killed, and you may be held liable for any resulting damages, as well as outage and repair costs.

*Always contact your state 811 center before digging and for the most current requirements.*



**Know what's below.  
Call before you dig.**

# Wait the required time

- In Maryland, wait two full business days, excluding the date of your request, weekends and legal holidays.
- If you wait the required time and the locate is not completed, do **not dig**. Notify the 811 service that your locate request has not been fulfilled.





# Conduct a visual site survey

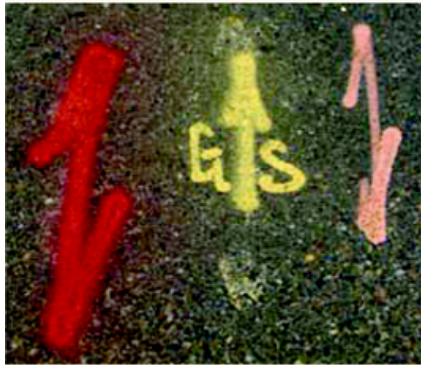
- **Do not rely exclusively on the locate marks.** Look for visual indicators of underground facilities that have not been marked, such as meters, valves and pad-mounted transformers.
- **Check with property owners about any private underground lines** that would not have been marked by the locator.
- **Also check for signs of something buried after the locate was completed,** such as a fresh trench.
  - If you find a newly installed or unmarked facility, call 811.











# Respect the marks, and dig with care

- **Not all utilities are 811 members and may not be notified.** You are responsible for notifying non-member utilities. Check with 811 for more information.
- **Exercise extreme caution when digging near buried utilities and the tolerance zone,** and have a spotter present to observe the excavation whenever heavy equipment is used.

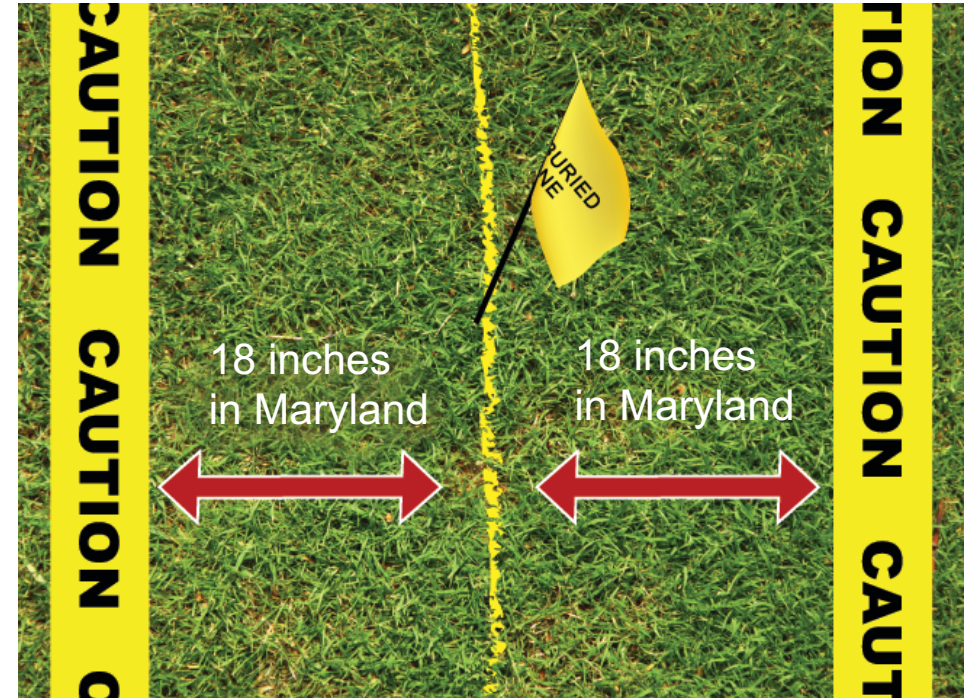
## AMERICAN PUBLIC WORKS ASSOCIATION COLOR CODE FOR LOCATOR MARKS



	Electric power lines
	Gas, oil or steam
	Communications lines, cables or conduit
	Potable water
	Reclaimed water, irrigation and slurry lines
	Sewers and drain lines
	Temporary survey markings
	Your proposed excavation

# Respect the tolerance zone

- **Adhere to state laws for digging within the “tolerance zone.”**  
This safety area spans the width of a marked utility line plus a state-mandated distance from each indicated outside edge of the line: 18 inches in Maryland.
- **Hand dig or use vacuum excavation equipment prudently in this zone.**
- **Once visual identification has been achieved,** do not use mechanized digging equipment within 18 inches of the outermost surface of buried utility lines. Use a spotter to observe the excavation and help prevent damage when heavy equipment is used near utility lines.
- **The tolerance zone is a *minimum* safety clearance.** Protect yourself by using the maximum possible distance.





# Know when to stop digging

- **If there are no locate marks after you have waited the required time, do NOT dig.**
- **If you do not understand the locate marks, do NOT dig.**
- **If you cannot visually verify the location of marked utility lines, STOP digging.**
- **If you find unmarked, mismarked or seemingly abandoned facilities, STOP digging.**
- **If you see signs of something buried after the locate was complete, such as a fresh trench, STOP digging.**
- **If the marks fade or are destroyed, STOP digging and contact 811 to request a new ticket.**



# Natural gas basics

- **Natural gas travels through pressurized underground pipelines of varying diameters.** The size of a gas line is NOT a reliable indicator of the internal pressure.
- **BGE adds a distinctive, sulfur-like odor to natural gas to assist in the detection of leaks.** However, in certain conditions, you may not be able to smell this odorant.
- **Leaking natural gas can be ignited by a tiny flame or spark—**even from a lit cigarette or a phone.



# Watch out around pipeline markers

- **High-visibility pipeline markers indicate the need for extra care around** our natural gas transmission pipelines.
- **These markers are general indicators only.** For security purposes, they do not show the exact location, path or depth of gas pipelines.
- **The markers should never be used as a substitute for calling 811.**
- **Call the number on the marker if you notice any type of suspicious activity** or construction occurring nearby without gas utility personnel present.





# Recognizing a natural gas pipeline leak: Look, listen and smell

- BGE puts the safety additive mercaptan in natural gas, giving it a rotten-egg odor and making it easier to detect. **Some gas leaks are also detectable by sight or sound.** Signs of a gas leak include:
  - **Dirt** being blown into the air
  - **Dead vegetation** in an otherwise green area
  - **A dry spot** in an otherwise moist area
  - **Fire** coming from the ground or appearing to burn above the ground
  - **Water** bubbling or being blown into the air
  - **Roaring**, blowing or hissing sounds
  - **Exposed pipeline** after an earthquake, fire, flood or other disaster
  - **A damaged connection** to a gas appliance



# Responding to a natural gas pipeline leak

- **If you suspect a gas leak or if you contact a gas pipeline, take these steps:**
  - **Warn others and leave the area immediately.** Go to a safe place, then call BGE at 877.778.7798.
  - **Extinguish open flames.** Do not use matches or lighters. Do not attempt to light an appliance.
  - **Do not use any phones, electric switches, thermostats or appliance controls.** All of these devices, including battery-operated equipment, can cause sparks and ignite natural gas.
  - **Do not start or turn off vehicles or motorized equipment.** Abandon any motorized equipment.
  - **Do not attempt to find the source of the leak** or to repair a leak.
  - **Call 911 if you are concerned about your safety.** If gas is escaping, federal code requires you to call 911.
  - **Emergency gas service calls are answered 24/7.** BGE will respond promptly to survey the area, perform safety measures and repair BGE's equipment. There is no charge to investigate a gas leak.
- **Review your emergency plan** before work begins so that everyone knows what to do in case of natural gas pipeline contact.



# Utility safety review

- Identify all power lines and electrical equipment upon arrival at a job site. Recheck the site daily, and review your emergency plan.
- Keep yourself and all tools and equipment *at least 10 feet away* from all overhead power lines carrying up to 50 kV. Higher voltages require greater clearances.
- Cranes and derricks used in construction may require clearances greater than 10 feet and encroachment prevention precautions.
- Always use a dedicated spotter.
- If a power line contact occurs, follow proper safety procedures and immediately call **911** and BGE.
- Call Miss Utility at **811** and wait the required time before you dig.
- Know the warning signs of a natural gas leak.
- If you suspect a gas leak or if you contact a gas pipeline, warn others, leave the area immediately, go to a safe place and call BGE. If gas is escaping, you must call **911**.

# Underground utility locator contact information

- Call Miss Utility at **811** or these local numbers:
  - Delaware: 800.282.8555
  - Washington, DC: 202.265.7177
  - MD (Western Shore): 800.257.7777
  - MD (Eastern Shore): 800.441.8355
- Visit **missutility.net**.



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Call before you dig.**



# Contact information

- In case of a natural gas or electrical emergency, call 911 and BGE at **800.685.0123**.
- For additional information, visit our website at **[BGE.COM/ContractorSafety](https://www.bge.com/ContractorSafety)**.



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Thank you