



Excavation safety around natural gas



Table of contents

You could damage much more than a gas line.....	4
Your responsibilities	4
Guidelines for locating and hand digging.....	5
Safety laws and regulations	7
Line location assistance	7
Obtaining a FortisBC gas line permit	8-9
Emergency repairs	9
Emergency checklist	11

BC 1 Call

Online requests: bc1c.ca

Toll free: **1-800-474-6886**

Steps for safe digging

- 1** Click on bc1c.ca or call BC 1 Call at **1-800-474-6886** to request all gas line location records. This is a requirement of FortisBC and provincial gas safety regulations. You should receive this information in about two business days.
- 2** Have gas line information on site during the excavation. If you need help understanding this information, call our Public Underground Location Services at **1-888-822-6555**.
- 3** Use the gas line information to locate and mark lines with paint or stakes and maintain them until digging is underway.
- 4** Hand dig first to expose gas lines before using mechanical equipment.

You could damage much more than a gas line

Excavating is serious business. That's why it's critical to take due care.

Knowing where natural gas lines are located before you start excavating is the first step to ensure safety on the job. Do this by calling or clicking BC 1 Call to request free underground gas line information.

Once you've received maps, you must ensure a safe work site by hand digging to expose the gas line before using mechanical equipment.

Hitting a line not only threatens the safety of the public and your workers, but can also impact the environment and cost you money. So take the necessary precautions, play it safe and call or click before you dig.

Your responsibilities

Whether you're digging up a major intersection or installing fence posts, B.C. regulations require you to take three steps before you start digging:

- 1** Click or call BC 1 Call and request line location information. The call is free.
- 2** Use the information provided to mark the location of buried gas lines.
- 3** Hand dig to expose the gas line.

Guidelines for locating and hand digging

Before beginning any excavation or boring, you must locate the buried gas line and hand dig to expose the line. Technical Safety BC has approved these guidelines for locating and hand digging.

You must:

- have gas line information on site
- identify the location of the gas line and mark the line with paint or stakes until digging is underway
- hand dig to expose the gas line if your excavation is within 1 m on either side of the indicated location of the gas line

You may:

- use an electronic pipe locator to confirm the approximate location of the gas line
- use mechanical equipment only to remove surface cover. You must hand expose the gas line within the no mechanical dig zone in a sufficient number of locations to determine the exact positions and depths of the installation before further use of mechanical excavation equipment. (see FIG. 1)
- use hydrovac excavation equipment within the boundary limit

Do not use mechanical equipment within the no mechanized dig zone until the gas line has been hand exposed.

When exposing buried gas lines, the “no mechanized dig zone” refers to the area equal to the diameter of the gas pipe, plus one metre on either side of the gas line’s indicated location extending upwards to the surface.

Hand dig within “the zone” to expose the pipe using manual equipment and tools. Mechanized equipment should only be used to break the surface.

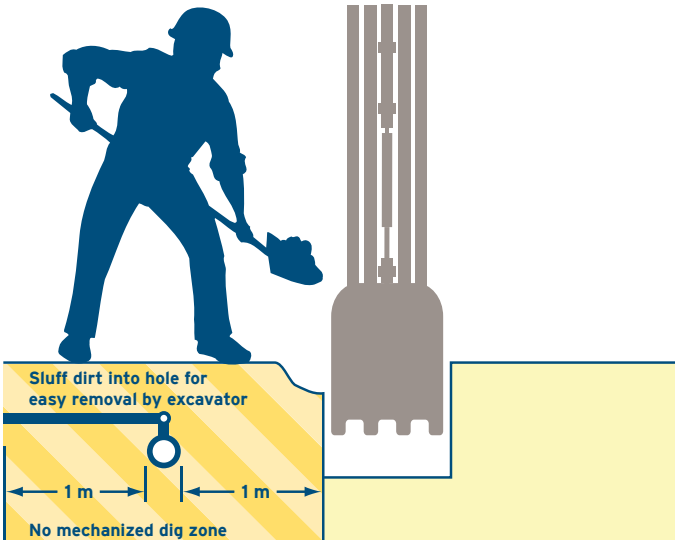


FIG. 1 - Hand digging for a gas line

Safety laws and regulations

WorkSafeBC and Technical Safety BC *require* you to obtain buried gas line location information and hand dig to expose the lines.

For specific information about regulations that govern excavating or working near pipelines in B.C., contact:

Technical Safety BC

Safety Standards Act and Gas Safety Regulation
technicalsaftybc.ca

WorkSafeBC

Occupational Health and Safety Regulation
worksafebc.com

BC Oil and Gas Commission

Oil and Gas Activities Act and Regulations
bcogc.ca

Line location assistance

You are responsible for contacting BC 1 Call and requesting line location information. However, FortisBC will provide on-site locates on gas lines and temporary surface marking or staking when:

- detailed records are not available
- the information on the plans or listing of facility locations is unclear or the gas installation is not where FortisBC records indicate

- there is an emergency repair of another utility in progress (e.g. damaged water main or sewer)
- the excavator has been unsuccessful in locating our gas line or service by hand
- the planned excavation is within 10 m of an intermediate pressure pipeline or is within 30 m of the edge of a transmission pressure pipeline operating above 100 psi (700 kPa). (See the section on obtaining a FortisBC permit on the next page.)

All requests for location information must be submitted through BC 1 Call online at bc1c.ca or at **1-800-474-6866**, at least two business days before the scheduled start of an excavation.

If your project is delayed and your excavation work has not started within 10 days of receiving gas line information from FortisBC, you must verify the location information through BC 1 Call before beginning work.

Remember:

Contractors are responsible for notifying FortisBC and WorkSafeBC of damage to gas lines. FortisBC may seek to recover all associated costs from any person or organization who damages a FortisBC underground utility.

Obtaining a FortisBC gas line permit

You must have:

- written permission from FortisBC when working within 30 m of a pipeline operating above 100 psi (700 kPa)
- a permit from FortisBC when working:
 - within 10 m of a transmission pressure pipeline
 - within 2 m of an intermediate pressure pipeline
 - within a FortisBC statutory right of way

If you're working within 10 m of BC Oil and Gas Commission regulated lines, FortisBC must perform the locate.

For permit applications and more information

Local calls	604-576-7021 (in the Lower Mainland)
Toll free	1-877-599-0996
Email	property.services@fortisbc.com
Web	fortisbc.com/rightofway



Emergency repairs

If you're conducting an emergency repair to another utility—for example, a damaged water main or sewer line—and require gas line location information from FortisBC, contact BC 1 Call at **1-800-474-6886** and FortisBC will be notified immediately.

Emergency checklist

If gas is escaping from a ruptured line:

- Shut off machinery and all sources of ignition.
- Evacuate—move people upwind if possible—keep cars and bystanders away from area.
- Call the FortisBC natural gas emergency line immediately at **1-800-663-9911**.
- Don't attempt repairs or operate underground gas valves.
- Call **911** or the fire department.
- Warn people in nearby buildings where gas might enter through drains, etc.
- Evacuate the building, as well as neighbouring buildings if gas is thought to be entering.

If a pipe has been struck, jarred or pulled, or the tracer-wire, protective wrapping or the pipe surface has been damaged:

- Stop all work and call FortisBC.
- Check for the smell or sound of escaping gas in the area.
- Do not backfill. FortisBC must physically check the integrity of the piping system and repair any damage.



BC 1 Call online:	bc1c.ca
BC 1 Call toll free:	1-800-474-6886
Natural gas emergencies (24 hrs):	1-800-663-9911
Permit Desk:	1-877-599-0996
Public Underground Location Services:	1-888-822-6555

*FortisBC acknowledges the assistance
and co-operation of Technical Safety BC.*



*FortisBC Energy Inc. does business as FortisBC. The company is an indirect,
wholly owned subsidiary of Fortis Inc. FortisBC uses the FortisBC name and logo
under license from Fortis Inc.*