



SAFETY HANDBOOK

Working around

natural gas pipelines



works
for your
safety

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ENSTAR Natural Gas Company provides natural gas service through more than 3,600 miles of gas mains to over 146,000 customers in Southcentral Alaska.

ENSTAR's gas pipeline system is designed, installed, and maintained with the highest regard for safety in compliance with applicable federal, state, and local government statutes and regulations. ENSTAR is regularly inspected to ensure that its operation meets industry standards.

The US Department of Transportation, Pipeline & Hazardous Materials Safety Administration (PHMSA) oversees minimum safety regulations for the transportation of natural gas by pipelines. The DOT safety regulations are currently published in Title 49, Part 190, 191, 192 & 199 of the Code of Federal Regulations (CFR).

As an operator of a natural gas system, ENSTAR is required by the DOT regulations to:

- > Deliver gas safely and reliably to customers.
- > Provide qualification training and written instruction for employees.
- > Establish written procedures to minimize hazards resulting from gas pipeline emergencies.
- > Keep records of inspection and training.
- > Test employees in safety-sensitive positions for prohibited drugs and alcohol.

How to use this safety handbook.

This handbook is divided into two major sections: **Locating** and **Ground Disturbance**. Important information on what to do should you contact a natural gas pipeline is at the back of the handbook under **Damaged and Blowing/Leaking Natural Gas Pipelines** and **Natural Gas Fires**.

This safety handbook is for anyone who performs ground disturbance work.

Ground disturbance work includes but is not limited to:

- > digging
- > augering
- > directional drilling
- > driving materials into the ground
- > professional excavation

WHY IS SAFE GROUND DISTURBANCE SO IMPORTANT?

Contact with buried natural gas pipelines can lead to serious injury or death.

Contacts also result in property damage that can cause interruptions in natural gas delivery to others and be costly to repair.

Safety should always be your first priority when working around natural gas pipelines.

The two most important steps to remember:

1) You must “Call 811 Before You Dig” prior to beginning ground disturbance work.

In Alaska, dialing 811 connects you with Alaska Digline. Alaska Digline will notify an ENSTAR Natural Gas representative, who will come to your worksite and identify all ENSTAR owned natural gas lines in your work area.

Contact: www.811ak.com or 811



2) Excavating around locate marks:

In Alaska, you must use reasonable care when digging within 24 horizontal inches of the outside dimensions of the locate marks. If you are digging to a depth of 10 feet or greater, you must use reasonable care within 30 horizontal inches. Treat all buried lines as if they were active.

Typical means of excavating around locate marks:

- Hand Dig
- Air Knife
- Vac Truck

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SECTION 1

Locating underground facilities



Dialing 811 first ensures that locates will be done by an ENSTAR Natural Gas representative who has access to system mapping information.

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CONTACTING ALASKA DIGLINE

You **must call 811 to have underground natural gas facilities located in your work area** before you begin work.

This is a **free service**.

Alaska Digline requires at least **two full working days notice** to do locates.

THE LAW

Call 811 before you dig; it's free and it's the law. Calling for locates is now as simple as dialing 811 or going online to www.akonecall.com. In Alaska, dialing 811 connects you with Alaska Digline, Inc. Alaska Digline, Inc. will take your excavation information and notify all affected utilities. Utilities have two business days to mark their utilities after receiving your call.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) is the excavation damage enforcement agency in the State of Alaska. The enforcement program protects the public from the risk of pipeline ruptures caused by excavation damage. Should an excavator violate any of the damage prevention requirements prescribed in 49 CFR part 196, Subpart B, they may face civil and or criminal penalties. Civil penalties of not more than \$200,000 for each violation, not to exceed \$2,000,000 may be levied. Criminal penalties may be enforced with imprisonment of not more than five years per violation. More information about the PHMSA ruling can be found at <http://www.phmsa.dot.gov/>.

ONE OF THE MAIN CAUSES OF PIPELINE DAMAGE IS FAILURE TO OBTAIN A LOCATE REQUEST.

Note: All proposed excavation areas should be identified in white.

TYPICAL LOCATE METHODS

- 1) The locator will spray **paint markings** on the ground and/or place **locate flags/laths** in the ground to indicate where natural gas facilities are buried. Natural gas markings are required to be yellow.

The paint markings indicate the **approximate location** of the pipeline and/or other facilities. (The depth of the facility will **not be** provided.)

Locates are valid for 15 working days from the date the locate is completed.

Locate markings may be shown by paint marks, flags, or laths. The tolerance zone" (see Figure 3, p.9) extends two feet outward from the marks. Figure 1 describes typical locate marks. Figure 2 explains marking definitions and the color code for marking buried facilities.

- 2) If you are on the worksite when the locator is finished identifying underground facilities, **review the locate with the locator.**

FIG 1 - Temporary locate markings

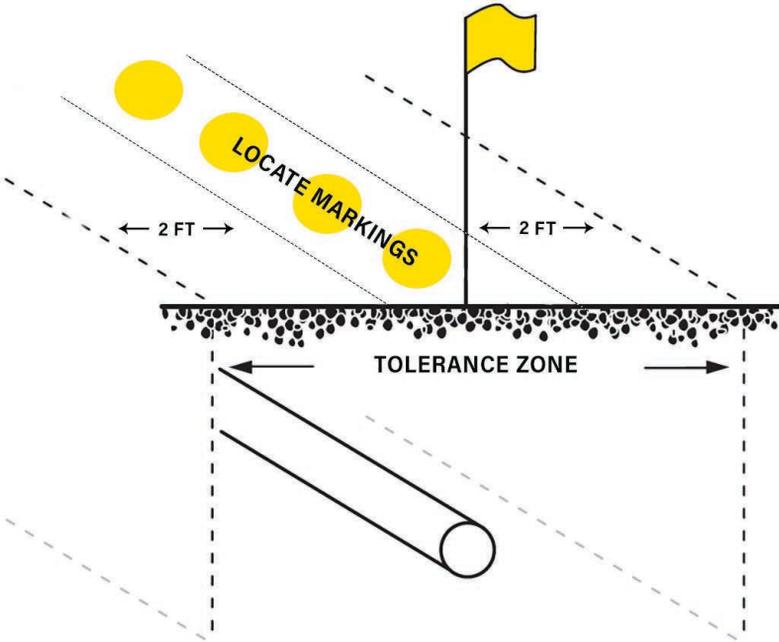


FIG 2 - Color code for marking buried utility facilities

**Color Code For Marking
Underground Utility Lines**

	White - Proposed excavation
	Pink - Temporary survey markings
	Red - Electric power lines, cables, conduit and lighting cables
	Yellow - Gas, oil, steam, petroleum or gaseous materials
	Orange - Communications, alarm, or signal lines, cables, or conduit
	Blue - Potable water
	Purple - Reclaimed water, irrigation and slurry lines
	Green - Sewers and drain lines

WHAT IF MY PROJECT GETS DELAYED OR REVISED?

What if my activity or weather disturbs the paint markings and/or flags?

The person(s) requesting the locate is responsible for preserving the paint markings and/or flags and protecting the marks from adverse weather or other ground disturbances. If the markings are no longer visible, you should call 811 to arrange for new locates.

Locates are valid for 15 working days from the date the locate is completed. Should your project be delayed or revised beyond this date, you may need reschedule your locates to match your new work start date.

Locates expire after 15 working days because:

- > paint markings eventually fade
- > flags may be tampered with
- > new utilities are constantly being installed
- > existing utilities are often upgraded

Be aware of the possibility of other underground facilities in your dig area (electricity, water, telephone, cable television, etc.).

What if I have concerns about the locate?

Please contact ENSTAR Natural Gas at 907-334-7740 to discuss your concern. ENSTAR is constantly striving to make excavation work as safe as possible.

Do not construct additions, garages, enclosed patios or decks over gas lines.

SECTION 2

Ground disturbance

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It is extremely important to expose the natural gas line.

You must carefully expose the natural gas line if you are disturbing the ground within two feet of the outside edges of locate markings.

ONE OF THE MAIN CAUSES OF PIPELINE DAMAGE IS FAILURE TO PROPERLY EXPOSE THE NATURAL GAS LINE.

SAFETY FIRST

It is always a good practice to assess what personal protective equipment you should wear prior to beginning a work project.

Consider:

- > safety glasses
- > gloves
- > flame retardant coveralls
- > steel-toed footwear

For ground disturbance work around natural gas pipelines, you should conduct a hazard assessment to avoid injury and potential natural gas ignition.

To ensure maximum safety, it is preferred that ground disturbance activities should be completed in **frost-free conditions**.

GROUND DISTURBANCE NEAR THE TOLERANCE ZONE

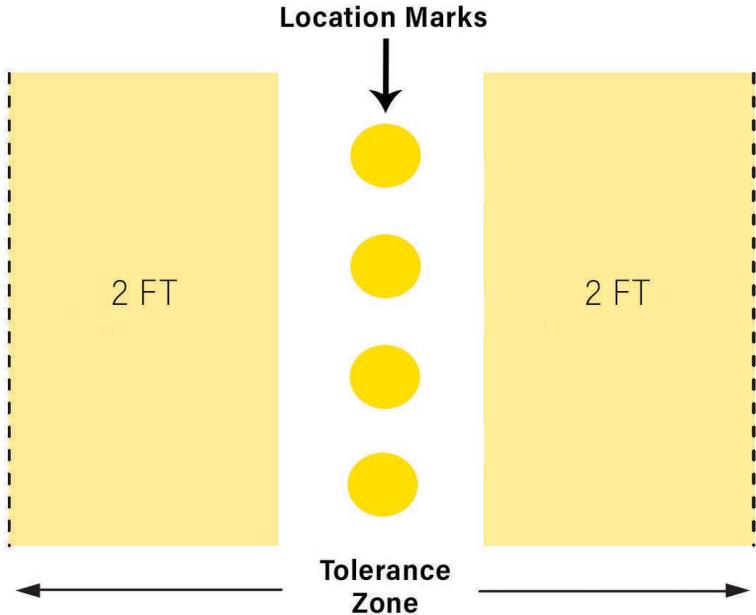
Hand dig or use a vac truck **first**; then use mechanical excavation.

All ENSTAR Natural Gas lines must be exposed before beginning any mechanical excavation activity within the tolerance zone located two feet on either side of any locate marks.

Standby/Inspection Requirements

Extreme caution must be exercised whenever pipelines are encountered. All excavations in the immediate vicinity of ENSTAR Natural Gas facilities (including backfill, compaction, temporary support, and shoring), are subject to prior approval and inspection by ENSTAR personnel. Pipeline inspections are provided whenever an excavator is working within 10 feet of a transmission pipeline, or within five feet of a distribution line. If excavation occurs without either locates or standby (qualified ENSTAR personnel), ENSTAR reserves the right to excavate to determine if there has been any damage to ENSTAR facilities. If damage has occurred ENSTAR has the right to charge the excavator for repairs.

FIG 3 - Tolerance zone



EXCAVATING AROUND LOCATE MARKS

In Alaska, you must use reasonable care when digging within 24 horizontal inches of the outside dimensions of the locate marks. If you are digging to a depth of 10 feet or greater, you must use reasonable care within 30 horizontal inches. Treat all buried lines as if they were active.

Typical means of excavating around locate marks:

- Hand Dig
- Air Knife
- Vac Truck

Remember that improper use of a shovel, air knife, or vac truck can damage natural gas lines.

Hand digging in the tolerance zone reduces the possibility of damaging the gas line. Use small hand tools, such as a shovel or garden trowel.

Vac Truck/Air Knife Requirements

- > Use a wand tip and suction hose covered with material that will not damage the pipe – Teflon® or rubber.
- > Keep wand in motion at all times, with the wand tip at least one foot from the line. Reduce pressure to finish the exposure.
- > The wand tip should have a three-jet tip or an agitating spinner assembly.
- > Do not exceed pressures of 1,500 PSI or temperatures of 140°F.
- > Damage to the pipe or coating must be reported to ENSTAR Natural Gas.

Vac Truck Contractors

- > Contractors are responsible for damage that occurs to a company pipeline during vac truck exposing operations.
- > **Cover or barricade all open holes and excavations** until backfilling operations are completed.
- > Minor damage to the coating of a pipeline or locate wire will be repaired at **no charge** to the contractor. Contractors are required to provide adequate access to pipe for repairs and recoating applications.
- > Contractors are responsible for public safety at excavation sites until inspection and backfilling is complete.
- > If damage occurs, contractors must contact the necessary authorities and ENSTAR Natural Gas immediately. In an emergency, the operator may be asked to render assistance.

Pipe Wall Protection

Dents, scrapes, gouges and scratches reduce pipeline wall thickness and affect the safety of the facility in two ways. First, the reduced wall thickness decreases the pressure at which the pipeline can safely operate. Second, the damage serves as a stress concentration that can cause a future brittle failure of the pipeline. An ENSTAR representative must inspect each dent, scrape, gouge or scratch, no matter how small, before it is reburied.

Corrosion Protection

ENSTAR's steel pipelines are protected from corrosion by a dielectric coating and an impressed current or galvanic anode cathodic protection system. Direct contact with metallic objects (a short) or removal of the protective coating can compromise this system. Contact the ENSTAR Engineering Department (907) 334-7740, whenever coating damage or a short is encountered. An ENSTAR representative must inspect each short or section of damaged coating before it is reburied.

Locate Wire Protection

ENSTAR's polyethylene pipelines are installed with a parallel copper wire, which is used to locate the pipeline. If the locate wire or wire coating is damaged, ENSTAR's ability to properly locate the pipeline may be severely compromised. Electrical continuity must be maintained. An ENSTAR representative must inspect and/repair each possible locate wire damage before it is reburied, accidental locate wire damage repair is free of charge.

EXCAVATION METHODS

Use of mechanical excavation is permitted only after the facility is exposed.

Mechanical excavation involves machinery that is powered by a pneumatic, electrical, or chemical energy source of operation.

When Excavating with Machinery (other than a vac truck)

- > two workers should always be present – the machine operator and a spotter
- > remove small layers of soil in sequence
- > dig parallel to the buried line whenever possible
- > observe the excavation at all times for movement (e.g. cable contact), soil consistency (trench line), or foreign objects identifying underground facilities.
- > keep all mechanical excavation a minimum of two feet away from all gas lines to prevent accidental contact with the gas line. Manually remove soil from the gas line area.

Excavation Parallel to Pipeline

Whenever an excavation (horizontal or vertical) is performed within five feet of a distribution pressure pipeline and 10 feet of a transmission pressure pipeline, the gas pipeline must be exposed to visually determine the exact location.

When parallel excavations are expected to expose or undermine sections of pipeline, the excavator must notify ENSTAR Engineering in advance. Care must be taken not to damage the pipeline, or to induce stresses due to differential settlement following construction. Long parallel excavations exposing pipelines can be very dangerous if not properly performed and shall not be attempted without prior approval by ENSTAR. Unless otherwise approved by ENSTAR Engineering, all excavations parallel to a gas pipeline require that the pipeline be exposed at intervals no greater than every 25 feet to visually determine the pipelines exact location. Contact ENSTAR Engineering at (907) 334-7740 for additional information.

An ENSTAR Representative must be present when working within 10 feet of a transmission pressure line or five feet of a distribution pressure pipeline 4" or greater in size.

Directional Drilling (horizontal boring)

Directional drilling involves the use of mechanical equipment to excavate by drilling horizontally beneath the surface.

Perpendicular Drilling

The excavator **must expose the gas line by hand or vac truck to create a 'daylighted' area extending a minimum of one foot on all sides around and below the pipe. A daylighted area of three feet is preferred all the way around the pipe.** Close visual inspection of the area below the pipe is required to **ensure that the drill-head/reamer does not hit the gas line** during the initial push or the pull-back. The drill path must cross under the pipe at the exact point of exposure. **Never assume that the gas line will be at the same depth on either side of the exposure point.**

Parallel Drilling

The excavator **must expose a number of points along the gas line** when drilling within five feet (for distribution lines) or 10 feet (for transmission lines) of the **outside edges** of the gas line locate markings. This must be done to ensure that the gas line does not deviate from the associated locate marks. The number of exposure points is determined by the drill path and facility depth. At a minimum, exposure points should occur every 25 feet along the gas line.

Trenchless Excavation (Vertical or Horizontal)

Whenever a trenchless excavation (horizontal or vertical) is performed within five feet of a distribution pressure pipeline and 10 feet of a transmission pressure pipeline, the gas pipeline must be exposed to visually determine the exact location. If the trenchless excavation is expected to cross the pipeline within the aforementioned distances, the pipeline in question shall be fully exposed to a minimum of one foot beneath the pipeline prior to the expected crossing to ensure that the pipeline is not unduly damaged due to ground movement in the immediate vicinity of that pipeline. **When performing a trenchless excavation parallel to a gas pipeline, the gas pipeline must be exposed at intervals of 25 feet or less to visually determine the pipeline's exact location.** Trenchless excavation is defined as drilling, directional drilling, boring, pile installation, etc.

FIG 4a and 4b - Directional drilling inset on next page

FIG 4a - Directional drilling

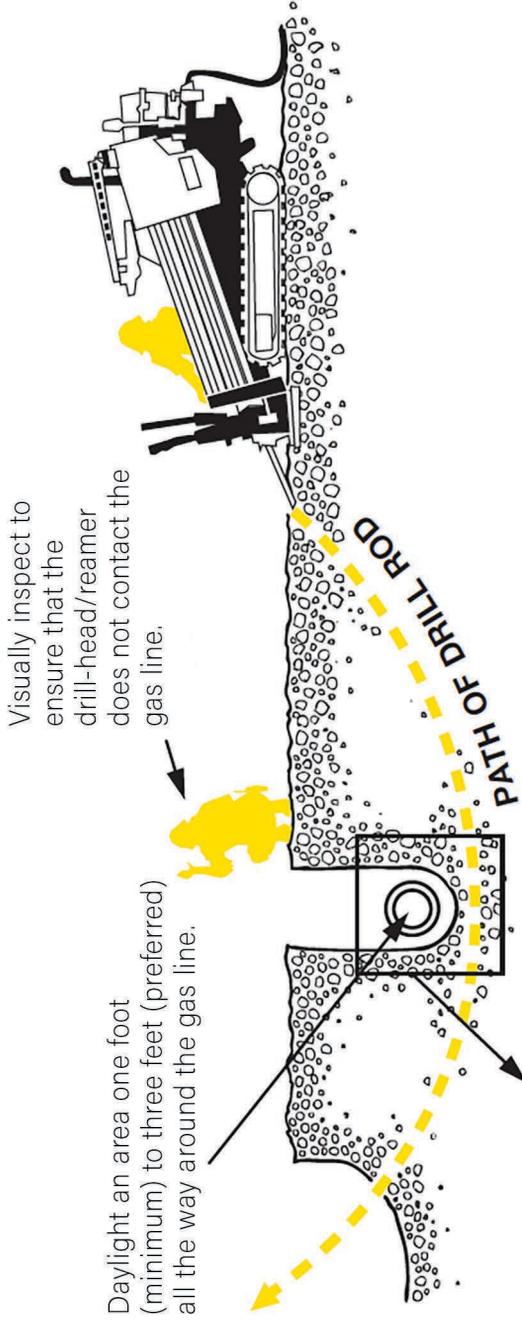
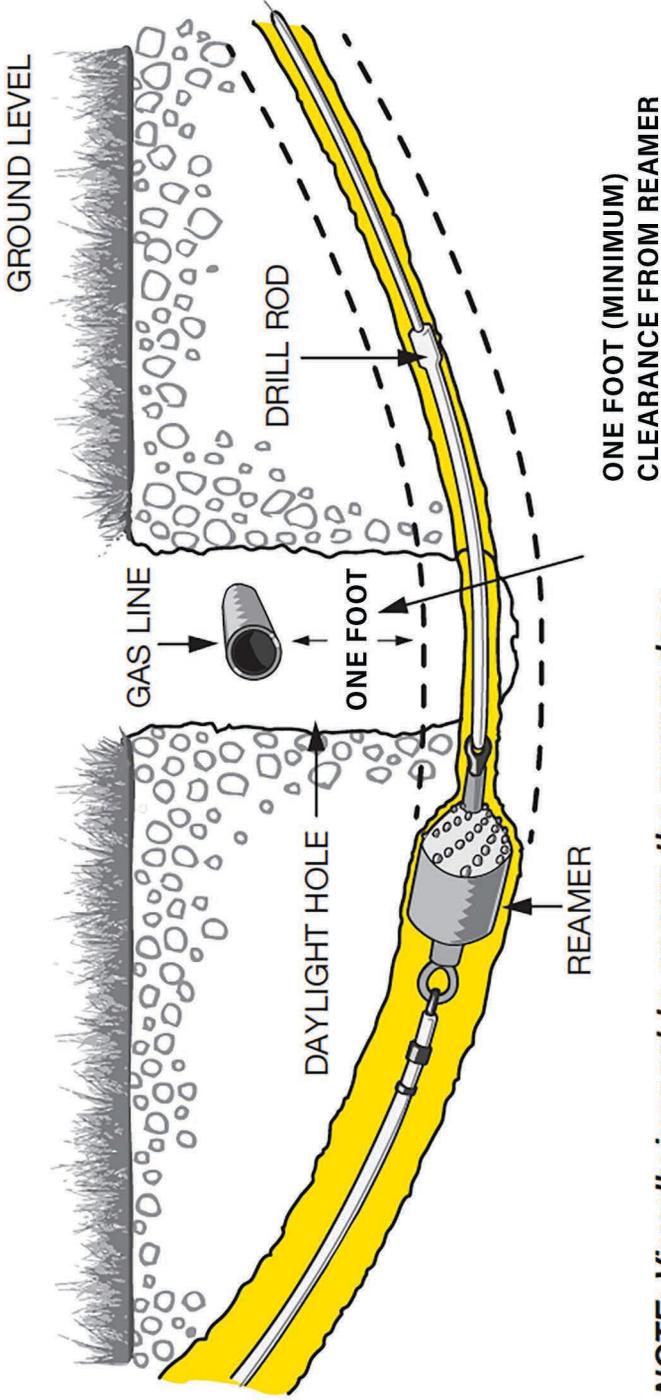


FIG 4b - Directional drilling



NOTE: Visually inspect to ensure the reamer does not contact the gas line during pull back process.

Blasting

All plans for blasting that will occur within 500' of any ENSTAR Natural Gas facility, shall be reviewed by an ENSTAR engineer. The person performing the blasting shall take all appropriate measures as recommended by ENSTAR Engineering, (i.e. require minimum distance from facilities, minimize blasting charge intensity, etc.) to protect the integrity of ENSTAR's facilities. A leak survey shall be performed before and after any blasting activity, within 500' of any ENSTAR facility.

PIPELINE MARKERS

Do not assume there is not a pipeline if there is no marker.

ENSTAR transmission pipelines are generally marked above ground with pipeline markers similar to the one shown. Transmission pipelines are located in the vicinity of the pipeline markers. Transmission pipelines are steel and range in size from 2" to 20" in diameter. They are typically coated with a protective coating. Pipeline coatings are predominantly yellow and black, but may also be green or brown.



Distribution pipelines are steel, or high density polyethylene with locate wire. These pipelines range in size from 1" to 12" in diameter. Gas "mains" are typically found in street right-of-ways or utility easements and supply the natural gas to an entire street or subdivision.

Natural gas service lines are connected to the gas main. Service lines generally service a single building or small group of buildings on a private property. Service lines are typically 1/2" to 2" in diameter. Service lines can be rigid steel, steel tubing, copper or polyethylene with locate wire. Gas mains and service lines are generally black or yellow in color.

EXCESS FLOW VALVES

An Excess Flow Valve (EFV) is a safety device installed in a natural gas service line near the gas main that is designed to automatically shut off the flow of natural gas in the event that the service line is broken. Effective February 12, 2010, all gas companies nationwide are required to install an EFV in any newly installed service line that serves one single family dwelling.

What does this mean to you as an Excavator?

Should you damage a natural gas service line that has an EFV, the gas will blow for a short duration and shut off automatically if the flow of gas is sufficient to close the EFV. Damages that do not sever the service line completely may not cause the EFV to close and the gas will continue to blow. Regardless, **you must report all damages to ENSTAR immediately.** EFVs are designed to allow a small amount of "bleed-by" so they can be reset without excavating the gas main. Backfilling a damaged service line with gas bleeding underground is extremely dangerous and could fuel an explosion if it is not repaired timely. **Do not assume a damaged service is dead or abandoned if it is not blowing gas.** The EFV may have shut down the flow of gas. Report all damages immediately by calling (907) 277-5551.

Please remember that the vast majority of ENSTAR service lines WILL NOT have an EFV. Should you damage a service line without an EFV, gas will blow at full line pressure until ENSTAR can arrive to shut it off. Your best protection against damaging underground utilities is to call 811 for locates and hand dig within two feet of the locate marks.

Other Facilities

Mechanical Couplings

- > you may see a mechanical coupling on any part of the pipeline system
- > a mechanical coupling is a fitting holding two ends of the pipeline together
- > mechanical couplings can pose a safety issue
- > **if you expose a mechanical coupling, ensure the coupling is supported to restrict movement. Call ENSTAR Natural Gas as the mechanical coupling may require additional support or removal.**

WHAT IS A TEMPORARY SUPPORT SYSTEM AND IS IT REQUIRED?

A **temporary support system** is a structure used to prevent sag, bending, or deflection in pipelines during excavation and backfill. It is usually a structure made of steel or wood.

The **length of the natural gas pipeline** to be undermined is the determining factor on whether a temporary support system is required.

Figure 5 lists the maximum span of pipeline that can be undermined **without supports**.

Support for Steel Pipeline Crossings

If an excavation below a **steel gas** pipeline leaves the pipeline unsupported, the excavator must provide additional support for the pipeline. See Fig. 5 for maximum length of unsupported pipe. Support must be provided in a way as to not damage the pipe or its coating during construction, backfill placement, and compaction. Generally, a support spacing of five feet or less will provide the required support. ENSTAR Engineering must approve all excavations crossing steel pipelines above 4-inch in diameter. If support is required, ENSTAR Engineering written approval is required prior to beginning construction.

Call ENSTAR Engineering at (907) 334-7740 for further information. Extra care must be taken when geotextile fabric and/or rigid insulation are used. Geotextile fabric and/or rigid insulation shall be sufficiently separated from steel pipeline and in addition to continuous support under the pipeline, compacted fill material shall be placed between the geotextile fabric/rigid insulation and the pipeline (see item 10 clearance). Care shall be taken to ensure stability for the ENSTAR facility. Failure to properly protect ENSTAR's facilities could result in future damage if differential settlement occurs.

Support for Polyethylene Line Crossings

If an excavation is below a **polyethylene gas pipeline** the excavator must continuously support such pipeline during construction, backfill placement, and compaction. Geotextile fabric and/or rigid insulation shall be sufficiently separated from the polyethylene gas pipeline to prevent undue stress during the compaction/settlement process.

FIG 5 - Maximum length of unsupported pipe

Pipe Size (inches)	Steel Span (feet)	Polyethylene (feet)
(1/2)	(5)	(5)
(3/4)	(6.5)	(5)
(1 1/4)	(8)	(6.5)
(2)	(10)	(6.5)
(3)	(12)	(10)
(4)	(13.5)	(10)
(6)	(16)	(10)
(8)	(19)	(10)
(10)	(20)	(10)
(12)	(20)	(10)
(16)	(20)	
(20)	(20)	

If a Temporary Support System is Required

- > supports must be installed prior to excavating below the pipeline
- > discuss the method and materials to be used with an ENSTAR Natural Gas representative
- > the property owner or contractor is responsible for supplying all material, labor, and equipment required
- > beam(s) placed across the excavation should extend at least three feet on either side of the trench, and the pipeline is to be attached to the support beam(s) with nylon slings retaining strips, NOT CHAINS, at intervals no greater than the maximum span of unsupported pipe, as shown in Figure 5.

Note: An ENSTAR Natural Gas representative must inspect temporary support systems.

Figures 6a, 6b and 6c are examples of excavated pipeline with a temporary support system.

FIG 6a - Pole supported pipe

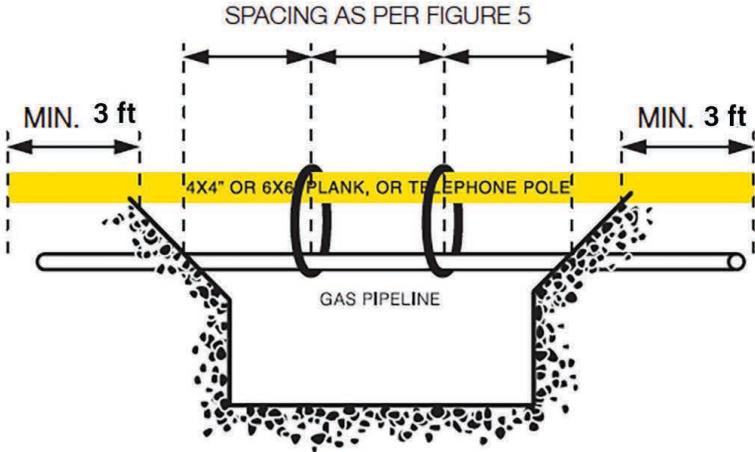


FIG 6b - Plank supported pipe

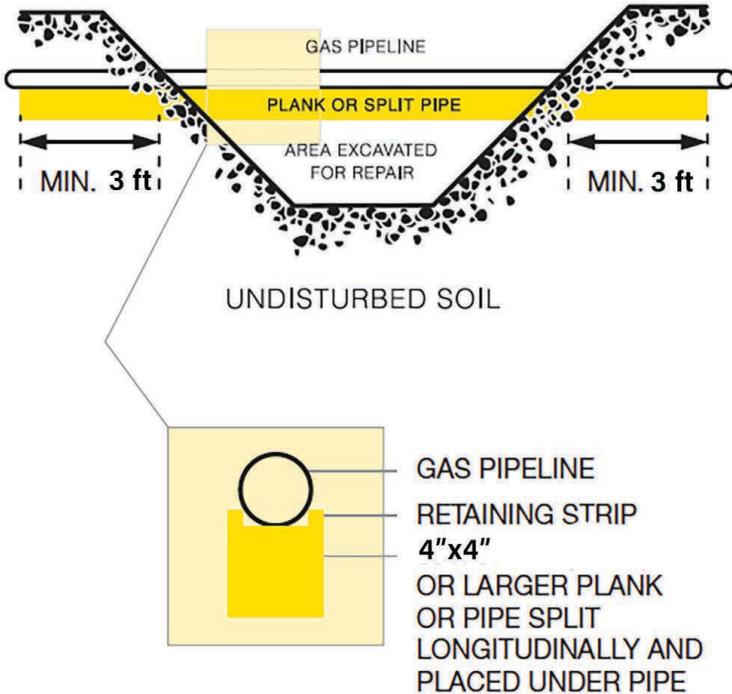
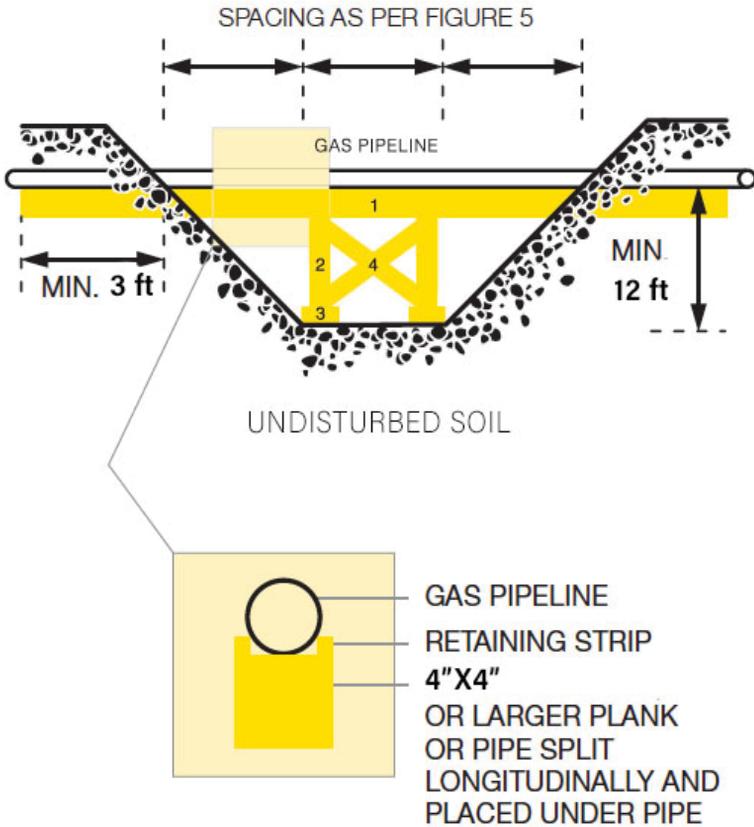


FIG 6c - Truss supported pipe



MATERIALS

- 1. **4"x4" OR LARGER TREATED PLANK WITH RETAINING STRIPS**
- 2. **4"x4" TREATED POST**
- 3. **4"X 8"X 24"**
- 4. **2"X4" ANGLE BRACES**

Support Systems for Parallel Trenches

Supports are required if the distance from the pipe to the nearest wall of the proposed trench is less than the depth of the proposed trench. Please contact ENSTAR Natural Gas for the support system design information.

What to do if you contact a natural gas pipeline and there is no apparent gas leak.

Report **all contacts** to ENSTAR Natural Gas. This includes all contact with pipeline, coatings, and tracer wire.

Contact may cause damage upstream or downstream that can result in a leak which will require immediate attention.

Repairs to coating and tracer wire are free of charge.

WHAT DO I NEED TO KNOW ABOUT BACKFILLING?

- 1) Call ENSTAR Natural Gas for local pipe inspection requirements prior to backfill.
- 2) Compact the fill under the pipe to provide support and prevent stress.
- 3) Requirements governing **depth of cover after backfilling** are specified by the Alaska Department of Transportation, Anchorage Municipality, and Boroughs;
 - > excavation and backfilling activities should neither remove nor add to the depth of cover without ENSTAR permission
 - > **use clean, lump-free material to cover the natural gas pipeline**
 - > **do not place frozen dirt, rocks or lumps directly on the natural gas pipeline**
- 4) When backfilling with filcrete, use a two step process. The first mix is brought up to one foot below the pipe and allowed to harden. The pipe is then sand-padded with a minimum of six inches of cover. A second mix of filcrete then completes the backfill.

FOR DEEP EXCAVATIONS WITH PIPE SUPPORTS

ENSTAR Natural Gas must inspect deep excavation backfills before the natural gas pipeline is concealed. Please call ENSTAR when the backfill is within one foot of the pipeline. This will help the ENSTAR representative safely inspect the pipeline and repair any coating damage the support system may have caused.



Backfill must be compacted to provide support for the existing pipe.

Remember it is important to carefully replace the ground you disturbed during the backfilling process. Your work should ensure that it does not interfere with the integrity of underground natural gas facilities.

Clearance Requirements

For natural gas pipelines with diameters 4" and smaller, a 12" minimum separation is required from other utilities and/or structures not associated with ENSTAR's pipeline system. For pipe diameters 6" and larger, a 36-inch minimum separation is required. For underground utilities or structures that do not run parallel to ENSTAR's pipeline, but terminate nearby or cross the pipeline in localized areas, the minimum clearance may be reduced to 12".

Electrical utilities paralleling an ENSTAR pipeline of any diameter must maintain 36" of separation. ENSTAR requires a 36-inch minimum separation from any grounded components i.e. ground rods, non-insulated conductors and associated structures

Pipeline Cover

ENSTAR pipelines in public rights-of-way are generally installed with 36 inches to 48 inches of cover, and in private rights-of-way with 12 inches to 36 inches of cover. Projects that decrease cover or increase cover in excess of 60 inches must receive prior approval from ENSTAR Engineering Department (907) 334-7740. ENSTAR has limited ability to prevent the removal of cover over gas pipelines. Increasing pipeline cover more than five feet or decreasing pipeline cover to less than three feet may be considered a damage that may result in relocation of the gas pipeline at the expense of the Excavator. The depth of cover listed above cannot be assumed after installation. The excavator is responsible for any damage to ENSTAR pipelines regardless of the depth at which they are encountered.

Landscaping

Most landscaping activities require locates, and when it is determined that landscaping activities are within five feet of a distribution pipeline, or 10 feet of a transmission pipeline, inspection/standby requirements as listed above are applicable. Planting of trees and shrubs over existing pipelines is not permissible and can present a safety and reliability hazard to the pipeline.

Cross Bores

A "cross bore" is when a natural gas line runs through an existing underground utility, typically a sewer or septic line. If you discover a clogged sewer or septic line, you must call 811 for an emergency locate prior to performing any work. Utilizing CCTV and non-cutting plumbing snakes are recommended best practices when a cross bore is possible.

SECTION 3

Emergency procedures

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WHAT TO DO IF YOU SMELL GAS:

Natural gas does not have a natural odor, but mercaptan compounds are added to distribution system gas to enable you to smell a leak. If you smell the characteristic sulphur odor, call ENSTAR at 1-844-SMELL GAS (1-844-763-5542)

QUALIFIED PERSONNEL REQUIREMENTS

Only qualified individuals meeting all applicable requirements may perform work on natural gas facilities. At a minimum, such individuals must comply with applicable federal, state, and local regulation, statutes, and ordinances.

EMERGENCY PROCEDURES FOR DAMAGED AND BLOWING/LEAKING NATURAL GAS PIPELINES

If you damage a gas line, immediately call 911 and ENSTAR at 1-844-SMELL GAS (1-844-763-5542). It's the law.

Gas lines that have been pulled, stretched, kinked or bent could be damaged underground away from where the line was connected. If you pull or stretch gas lines call ENSTAR at 907-277-5551 and an ENSTAR Representative will investigate for possible underground leakage.

- 1) **Clear all people** from the vicinity of the natural gas leak.
- 2) **Call 911** a safe distance away from the leak.
- 3) **Shut-off or extinguish any source of ignition** including equipment and vehicles, communication equipment including cell phones, cigarettes and/or open flames.
- 4) **Contact ENSTAR Natural Gas for help.**

ENSTAR Natural Gas emergency number:

**ALL AREAS:
1-844-SMELL GAS
(1-844-763-5542)**



5) **Remain a safe distance away from the leak** while you wait for assistance.



Do not attempt to repair the leak. Allow the natural gas to vent into the atmosphere. *(Attempting to repair the leak yourself can result in property damage and serious injury to yourself and others.)*

NATURAL GAS FIRES

- 1) **Clear all people** from the vicinity of the fire.
- 2) **Contact the fire department (911) and ENSTAR Natural Gas immediately at 1-844-SMELL GAS (1-844-763-5542).**
- 3) **Stay a safe distance away from the fire** while you wait for the fire department.

Do not attempt to extinguish natural gas fires!

Beware of static electricity

- > Static electricity is a stationary electrical charge on an object generated by friction.
- > Static electricity in the pipe or in your clothes can be a source of ignition around natural gas facilities. An accumulation of static electricity can cause a spark.

**For more information on working around natural gas, please
contact ENSTAR Natural Gas.**

Questions:

907-277-5551

1-877-907-9767 (outside of Anchorage)

To report a damage:

1-844-SMELL GAS (1-844-763-5542)

ENSTAR Natural Gas:

www.enstarnaturalgas.com

PHMSA/DOT:

<https://phmsa.dot.gov/pipeline>

Common Ground Alliance:

<http://www.commongroundalliance.com>



**works
for your
safety**

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