

FLORIDA



PIPELINE SAFETY TRAINING



PROGRAM GUIDE

Overview

Pipeline Safety

Excavation Best Practices Checklist

Signs Of A Pipeline Release

What To Do If A Leak Occurs

Pipeline Emergency

Common Ground Alliance Best Practices

Pipelines In Our Community

Damage Prevention Programs

Pipeline Damage Reporting Law

2025

EMERGENCY CONTACT LIST

COMPANY	EMERGENCY NUMBER
Buckeye Partners, L.P.	1-866-514-8380
CITGO Petroleum Corporation	1-800-471-9191
Florida Gas Transmission Company	1-800-238-5066
Gainesville Regional Utilities	1-352-334-2550
Genesis Energy, L.P.	1-800-806-5463
Gulf South Pipeline Company, LLC	1-800-850-0051
Gulfstream Natural Gas System	1-800-440-8475
Pensacola Energy	1-850-474-5300
Peoples Gas Systems, Inc.	1-877-832-6747
Sabal Trail Transmission, LLC (Operated by Enbridge)	1-888-568-7269
SeaCoast Gas Transmission	1-877-832-6747
Southern Natural Gas Company	1-800-252-5960

Note: The above numbers are for emergency situations.
Additional pipeline operators may exist in your area.
Visit the National Pipeline Mapping System at www.npms.phmsa.dot.gov for companies not listed above.

ONE-CALL SYSTEM	PHONE NUMBER
Sunshine 811	811 or 1-800-432-4770
National One-Call Referral Number	1-888-258-0808
National One-Call Dialing Number	811

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Pipeline Purpose and Reliability

- Critical national infrastructure
- Over 2.7 million miles of pipeline provide 65% of our nation's energy
- 20 million barrels of liquid product used daily
- 21 trillion cubic feet of natural gas used annually

Safety Initiatives

- Pipeline location
 - Existing right-of-way (ROW)
- ROW encroachment prevention
 - No permanent structures, trees or deeply rooted plants
- Hazard awareness and prevention methods
- Pipeline maintenance activities
 - Cleaning and inspection of pipeline system

Leak Recognition and Response

- Sight, sound, smell – indicators vary depending on product
- Diesel engines – fluctuating RPMs
- Black, dark brown or clear liquids/dirt blowing into air/peculiar odors/dead insects around gas line/dead vegetation
- Rainbow sheen on the water/mud or water bubbling up/frozen area on ground/frozen area around gas meter
- Any sign, gut feeling or hunch should be respected and taken seriously
- Take appropriate safety actions ASAP

High Consequence Area (HCA) Regulation

- Defined by pipeline regulations 192 and 195
- Requires specialized communication and planning between responders and pipeline/gas personnel
- May necessitate detailed information from local response agencies to identify HCAs in area

One-Call

- One-Call centers are not responsible for marking lines
- Each state has different One-Call laws. Familiarize yourself with the state you are working in
- Not all states require facility owners to be members of a One-Call
- You may have to contact some facility owners on your own if they are not One-Call members
- In some states, homeowners must call before they dig just like professional excavators



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

Pipeline Emergency Response Training

Contractor and Excavator Personnel

EXCAVATOR

PIPELINE SAFETY PROGRAM

Instructor: Bill Greenwalt



EXCAVATOR 811

This presentation was developed as a training aid for excavators and contractors. It is not intended to be used as a substitute for any other training or safety materials. The user will be responsible for ensuring that the information is presented in a clear and concise manner.

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Continuing Education Unit (CEU) Opportunities

This course is approved by the Florida State Fire College for 2.0 hours of continuing education as course number: ATPC20396.

To receive this credit, please **legibly print** your **name** and **FCDICE number** on the special sign-in sheet provided by your instructor.

For Fire Marshals: This is course CRS3574 through DBPR.

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Industrial Overview

3 MILLION MILES

THERE ARE OVER THREE MILLION MILES OF PIPELINE

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Pipeline Operator Challenges

- Timely notification of the incident
- Denied entry at scene of incident
- Quick access to remote valves/ICP
- Getting equipment into the area
- Communications with incident command
- Clear lines of communication (both ways)
- Face to face meetings with local officials
- Pre-planning with emergency services



Do contractors and excavators face some of these same challenges?

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**IT'S NOT JUST
SUNSHINE 811**

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811 PROCESS



PREPARE
While lining
matches
locate
description

NOTIFY
Detailed
descriptions
remarks "need
to know"

WAIT
2 or 10 full
business days

VERIFY
Positive
Response:
HPS
notification

PROTECT
Save the marks

DIG SAFELY
Tolerance
zones

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CLEARLY DEFINE PROPOSED DIG SITE




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CALL 811
Mon thru Fri 7 am - 5 pm



Use Exactix
my.sunshine811.com

**GET A
TICKET**

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Is the locate description specific?

Weekends and holidays do not count as day 1.


Sun	Mon	Tue	Wed	Thu	Fri	Sat
				GET TICKET	Day 1	Weekend
Weekend	Holiday	Day 2	OK to DIG			



EVERY DAY. EVERY MORNING.

- Address on ticket is not where you are digging.
- Utility says marked, but there are no marks.
- Utility says clear but there are permanent markers nearby.
- You see evidence of permanent markers (especially gas) and they were not notified of your dig.





CHECK YOUR KNOWLEDGE

Verify Positive Responses

Member Operator	Response
Little Boom Gas Company	Marked
Big Bill Telecom	Unmarked
Zip Ya Electric	Marked
Wash Away Water	No Conflict

4359 54th AVE S

SUNSHINE111.COM



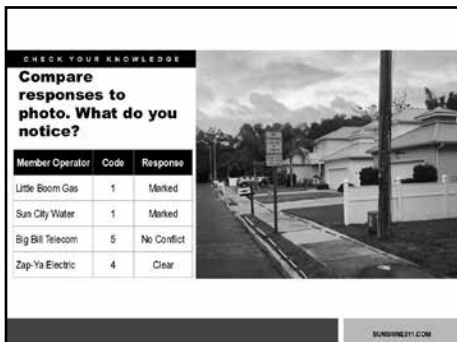
CHECK YOUR KNOWLEDGE

Compare Site to Responses

Member Operator	Response
Little Boom Gas Company	Marked
Big Bill Telecom	Unmarked
Zip Ya Electric	Marked
Wash Away Water	No Conflict

4349 84th AVE N ST PETERSBURG, FL

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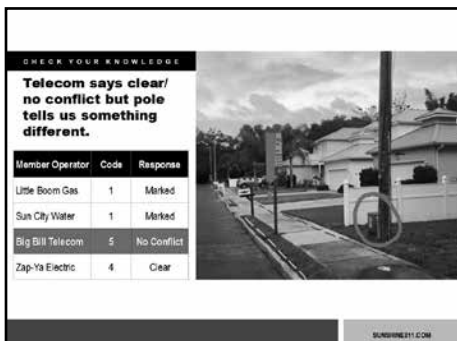


CHECK YOUR KNOWLEDGE

Compare responses to photo. What do you notice?

Member Operator	Code	Response
Little Boom Gas	1	Marked
Sun City Water	1	Marked
Big Bill Telecom	5	No Conflict
Zip-Ya Electric	4	Clear

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CHECK YOUR KNOWLEDGE


Telecom says clear/ no conflict but pole tells us something different.

Member Operator	Code	Response
Little Boom Gas	1	Marked
Sun City Water	1	Marked
Big Bill Telecom	5	No Conflict
Zip-Ya Electric	4	Clear

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RESPECT MARKS

To keep marks visible throughout your project, here are some suggestions:

-  Keep spoil piles, building materials off marks.
-  Try not to drive over marks. Offset marks can help.
-  Sweep pavement often so marks remain visible.
-  If marks are no longer visible, contact 811 for a new ticket.

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KNOW & FOLLOW TOLERANCE ZONE RULES

Before digging, find and expose the underground facilities using:

- Hand digging
- Pot holing
- Soft digging
- Vacuum excavation
- Other similar procedures

A black and white photograph of a trench. Two vertical white lines are drawn in the soil, with the text "24\"/>

KNOW & FOLLOW TOLERANCE ZONE RULES

Before digging, find and expose the underground facilities using:

- Hand digging
- Pot holing
- Soft digging
- Vacuum excavation
- Other similar procedures

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KNOW & FOLLOW TOLERANCE ZONE RULES

Used Flag to Determine Tolerance Zone

Excavator moved 30" away from mark, hitting the 10" pipe.

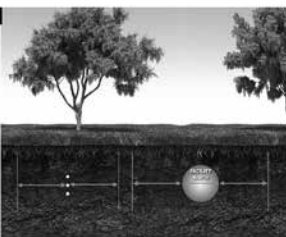
Lesson Learned

Expose the underground facility to find its actual location.

CHECK YOUR KNOWLEDGE!

The tolerance zone is _____ inches from outer edge of either side of exterior surface of marked underground facility:

- 18"
- 24"
- 48"
- 36"

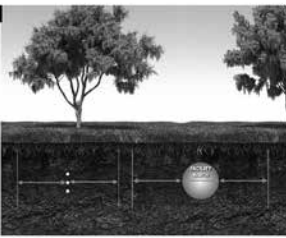


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CHECK YOUR KNOWLEDGE!

The tolerance zone is _____ inches from outer edge of either side of exterior surface of marked underground facility:

→ 18"
24"
48"
36"



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DESIGNATE AN OBSERVER

Designate a worker (observer) to watch excavation activity in tolerance zone to ensure utility is not damaged.

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RENEW TICKETS WHEN...

- Digging will continue beyond the 30-day ticket life.
- Ticket has expired and you still have work to do. Wait 2 full business days.
- Physical paint markings, flags, or stakes are destroyed.

DO NOT renew the ticket while project is on hold. **RENEW** 2 full business days before you resume digging.

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Digging near HPSIs

1. 2C Marked with Exceptions: HPSI in conflict.
2. The law requires you provide date and time. Contact the facility owner to develop a plan for working around the gas facility.
3. Communicate with the gas company for specific instructions.



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HEAVY COSTS OF IGNORING 2C

Digging without notifying the gas company when and where can result in:

- Death
- Serious bodily injury
- Property damage
- Fines up to \$50,000



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WHEN DAMAGE HAPPENS

- Stop all excavation.
- Contact facility owner.
- If hazardous material is escaping, evacuate area, call 911 and contact the pipeline operator.



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OTHER EXCAVATOR RESPONSIBILITIES

Know the safe-digging law.

Follow OSHA's Standard Number 29 Part 1926.651 excavation requirements.

Follow 49 CFR part 196, PHMSA excavation standards.

(49 CFR 196.101 and 196.102)



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811 PROCESS

 <p>PREPARE While flag matches locate description</p>	 <p>NOTIFY Obtain descriptions, remarks "need to know"</p>	 <p>WAIT 2 or 10 full business days</p>	 <p>VERIFY Positive Response: HPIS notification</p>	 <p>PROTECT "Save the marks"</p>	 <p>DIG SAFELY "Clearance zones"</p>
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RESOURCES



- FREE Education (on person, online)
- ITE Online Training
- Online Store
- Learning Center
- Email Lists
- YouTube Video Tutorials /Sunshine811


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REGIONAL DPCs

A collaborative forum for stakeholders to work solutions to common issues around the 811 System

sunshine811.com/dpc



SAFETY EDUCATION LIAISONS

sunshine811.com/education

Dredging Operations

If your company conducts dredging operations, shoreline stabilization or pile driving activities, please be aware of the following:

- Underground hazardous liquids and natural gas pipelines do traverse lakes and navigable waterways
- 811 requirements to submit a one-call ticket prior operations commencing, to include a sub-aqueous ticket option
- Identify all pipeline warning markers near the shorelines where you will be working
- Contact the pipeline company as part of your pre-planning before work begins



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Logging Operator Responsibilities

- Notify pipeline company before work begins
- No skidding of logs on right of way
- Crossing of pipeline must be approved
- Drop cut trees away from pipeline
- Do not remove existing cover
- Restore right of way



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Right-of-Way (ROW) and Pipeline Markers



DAMAGE OR REMOVAL
OF THIS SIGN IS A FEDERAL
OFFENSE SUBJECT TO A
\$5,000 FINE AND/OR
ONE YEAR IMPRISONMENT

REMOVE OR DESTROY A PIPELINE MARKER

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Integrity Management

Pipeline companies are required to have Integrity Management programs to insure safe and efficient operations:

- Internal and external clearing and inspection, of the pipeline and affected areas
 - Rights-of-Way and valves
- Supervisory Control and Data Acquisition (SCADA)
- Identification of High Consequence Areas (HCA)
- Aerial Rights-of-Way Patrols
- Public Awareness Outreach to stakeholders
- Participation as a member of 811
- Operator Qualification (OQ) Training
- Local Distribution Company (LDC)
 - Meter Testing
 - Leak Surveys
 - May also be utilized on transmission pipelines



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Product Characteristics

Hazardous Liquids

- ER Guide 128 (Pages 186-187)
- Crude oil, jet fuel, gasoline and other refined products
 - Liquid in and liquid out of the pipeline

Highly Volatile Liquids

- ER Guide 115 (Pages 160-161)
- Propane, Butane, Ethane and natural gas liquids
 - Liquid in and vapor out of the pipeline

Natural Gas

- ER Guide 115 (Pages 160-161)
- Gas in and gas out of the pipeline
 - Odorant Mercaptan added where required



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Natural Gas, Compressed

Description and Release Characteristics

ER Guide 115 (Pages 166-167)

- Gas in and out of the pipeline
- Compression lowers the volume of natural gas by more than 99%
- Lighter than air
- Flammable, explosive and displaces Oxygen
- Has unique smell (odorized)
- Will migrate
- Wants to rise and dissipate
- Predominantly made up of Methane (CH₄)
- Stored onboard vehicles under pressure up to 3600 psi
- One of the primary uses of CNG is as an alternative fuel for vehicles.



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Petroleum Products Batching



PIPELINE COMPANIES USE BATCHING LINES

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Above Ground Storage Tanks

Considerations when responding to tank farms/ terminals

Work with your local operator to:

- Develop an effective response plan
- Identify products and hazards
- Determine evacuation radius

Response recommendations:

- Cool tank(s) or nearby containers by flooding with water
- Use unmanned hose holders/monitor nozzles
- Do not direct water at safety devices or icing may occur
- Let product burn, even after air supply lines/systems is closed
- Beware of the potential for Boiling Liquid Expanding Vapor Explosion (BLEVE)

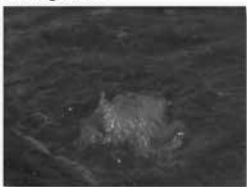


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Leak Recognition

- Pools of liquid on the ground near a pipeline
- Dense white cloud or fog over a pipeline
- Discolored vegetation surrounding a pipeline
- Unusual dry spot in an otherwise moist field
- Dirt blowing up from the ground
- Bubbling in marshland, rivers or creeks
- Oily sheen appearing on water surfaces
- Frozen ground near a pipeline
- Unusual noise coming from a pipeline
- Unusual smell or gaseous odor



SIGHT

SOUND

SMELL

Local Distribution Systems

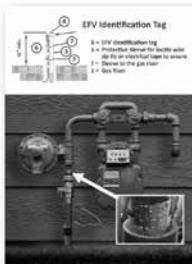
Caution

- Be aware, not all natural gas leaks are from excavation, unintended leaks from stoves, water heaters, furnaces, etc. can occur
- When called out on natural gas leak events, use combustible gas indicators
- Mercaptan can be stripped as it travels through soil
- Frost heaves, breaking pipes
- Gas meter breaks due to snow buildup from melting snow falling from roofs

Excess flow valve meter tags

Identification tags [192.381(c)]

- The presence of an excess flow valve on the service lines must be marked with an identification tag. The identification tag will typically be located at the top of the service riser below the meter stop valve



Excess Flow Valve (EFV)

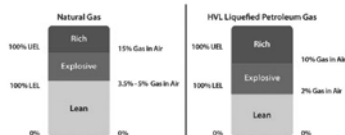
Local Distribution Lines

- Automatic reduction of gas flow should a service line break
- May not completely stop the flow of natural gas
- May not hear a distinct hissing sound
- Migration and ignition sources may still exist
- Always work a coordinated response with your local operator
- Not all service lines have an EFV installed



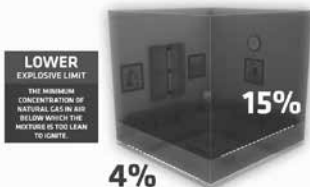
Explosive Limits

Explosive Limits vs. Percent of Gas in Air



Lower / Upper explosive limits depend on characteristics of specific products

Explosive Limits



FOR NATURAL GAS RANGES BETWEEN ROUGHLY FOUR PERCENT *Paradigm*

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Farm Taps

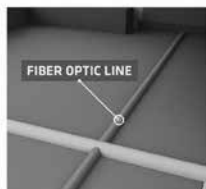
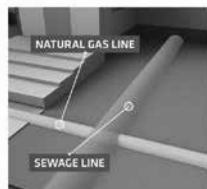
- Mainly in rural areas, some natural gas pipeline companies may have facilities commonly referred to as "farm tap"
- These natural gas settings are made up of valves, pipes, regulators, relief valves and a meter. It may be located near the home or within the general vicinity
- To report the smell of gas near a farm tap, call 911 and the local gas company from a safe distance
- The lines after a farm tap or residential meter may or may not be PRIVATE LINES, be aware of these



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Horizontal Directional Drilling (Cross Bore)



THROUGH A SEWAGE LINE, LOCAL DISTRIBUTION, TRANSMISSION *Paradigm*

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Pipeline Awareness Training Center

Share with others in your crew, company, or agency unable to attend today's program

- Access to your local pipeline sponsor information
- Download the same documents presented in this program
- Certificate of completion provided upon completion of course: trainingcenter.pdigm.com

Use Code: 2025EX

Ahora en Español



Commissioner: Very informative and increased my awareness of the resources available to our county leadership in case of an emergency.

Geologist: Concise, informative, appreciate the audio and visual components, and the course documents provided.

Laborer: Great course, as a reminder of what's out there and how to deal with it.

Safety Manager: This is a good course to add to our Excavation Safety Program Training and New Hire Training Package.

Technician: Very informative and ESSENTIAL to anyone doing or planning to do any kind of excavation work.

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EXCAVATOR RESPONSIBILITIES:

- ☐ Call Before You Dig - It's the Law!
- ☐ Wait the required time for the markings!
(state specific time – check your local One Call Law)
- ☐ Tolerance Zones – May vary by state and/or company!
- ☐ Respect the marks!
- ☐ Dig with care!

RISK CONSIDERATIONS

- ☐ Type/volume/pressure/location/geography of product
- ☐ Environmental factors – wind, fog, temperature, humidity
- ☐ Sight, sound, smell – indicators vary depending on product
- ☐ Black, dark brown or clear liquids/dirt blowing into air/peculiar odors/dead insects around gas line/dead vegetation
- ☐ Rainbow sheen on the water/mud or water bubbling up/frozen area on ground/frozen area around gas meter
- ☐ Other utility emergencies

PIPELINE MARKERS

The U.S. Department of Transportation (DOT) requires the use of signs to indicate the location of underground pipelines. Markers like these are located on road, railroad, and navigable waterway crossings. Markers are also posted along the pipeline right-of-way. Markers may not be located directly over the pipeline it marks.

The markers display:

- ☐ The product transported
- ☐ The name of the pipeline operator
- ☐ The operator's emergency number



- ☐ White Lining (Pre-marking)
 - ☐ One Call Facility Request
 - ☐ One Call Access
 - ☐ Locate Reference Number
-
- ☐ Separate Locate Request
 - ☐ Pre-excavation Meeting
 - ☐ Facility Relocations
 - ☐ One Call Reference Number at Site
 - ☐ Contact Names and Numbers
 - ☐ Positive Response
 - ☐ Facility Owner/Operator Failure to Respond
 - ☐ Locate Verification
 - ☐ Work Site Review with Company Personnel
 - ☐ Documentation of Marks
 - ☐ Facility Avoidance
 - ☐ Marking Preservation
 - ☐ Excavation Observer
 - ☐ Excavation Tolerance Zone
 - ☐ Excavation within the Tolerance Zone
 - ☐ Vacuum Excavation
 - ☐ Mismarked Facilities
 - ☐ Exposed Facility Protection
 - ☐ Locate Request Updates
 - ☐ Facility Damage Notification
 - ☐ Notification of Emergency Personnel
 - ☐ Emergency Coordination with Adjacent Facilities
 - ☐ Emergency Excavation
 - ☐ Backfilling
 - ☐ As-built Documentation
 - ☐ Trenchless Excavation
 - ☐ No Charge for Providing Underground Facility Locations
 - ☐ Federal and State Regulations



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

Signs Of A Pipeline Release

SIGHT*

- Liquid on the ground
- Rainbow sheen on water
- Dead vegetation in an otherwise green area
- Dirt blowing into the air
- White vapor cloud
- Frozen area on ground

*Signs vary based upon product

SMELL

- Odors such as gas or oil
- Natural gas is colorless and odorless
 - Unless Mercaptan has been added (rotten egg odor)

OTHER - NEAR PIPELINE OPERATIONS

- Burning eyes, nose or throat
- Nausea

SOUND

- A hissing or roaring sound

What To Do If A Leak Occurs

- Evacuate immediately upwind
- Eliminate ignition sources
- Advise others to stay away
- **CALL 911** and the pipeline company – number on warning marker
 - Call collect if necessary
- Make calls from safe distance – not “hot zone”
- Give details to pipeline operator:
 - Your name
 - Your phone number
 - Leak location
 - Product activity
 - Extent of damage
- DO NOT drive into leak or vapor cloud
- DO NOT make contact with liquid or vapor
- DO NOT operate pipeline valves (*unless directed by pipeline operator*):
 - Valve may be automatically shut by control center
 - Valve may have integrated shut-down device
 - Valve may be operated by qualified pipeline personnel only, unless specified otherwise
- Ignition sources may vary – a partial list includes:
 - Static electricity
 - Metal-to-metal contact
 - Pilot lights
 - Matches/smoking
 - Sparks from telephone
 - Electric switches
 - Electric motors
 - Overhead wires
 - Internal combustion engines
 - Garage door openers
 - Firearms
 - Photo equipment
 - Remote car alarms/door locks
 - High torque starters – diesel engines
 - Communication devices

Pipeline Emergency

Call Gas Control Or Pipeline Control Center

Use **Pipeline Emergency Response Planning**

Information Manual for contact information

Phone number on warning markers

Use state One-Call System, if applicable

Control Center Needs To Know

Your name & title in your organization

Call back phone number – primary, alternate

Establish a meeting place

Be very specific on the location (**use GPS**)

Provide City, County and State

Injuries, Deaths, Or Property Damage

Have any known injuries occurred?

Have any known deaths occurred?

Has any severe property damage occurred?

Traffic & Crowd Control

Secure leak site for reasonable distance

Work with company to determine safety zone

No traffic allowed through any hot zone

Move sightseers and media away

Eliminate ignition sources

Fire

Is the leak area on fire?

Has anything else caught on fire besides the leak?

Evacuations

Primary responsibility of emergency agency

Consult with pipeline/gas company

Fire Management

Natural Gas – DO NOT put out until supply stopped

Liquid Petroleum – water is NOT recommended;

foam IS recommended

Use dry chemical, vaporizing liquids, carbon dioxide

Ignition Sources

Static electricity (*nylon windbreaker*)

Metal-to-metal contact

Pilot lights, matches & smoking, sparks from phone

Electric switches & motors

Overhead wires

Internal combustion engines

Garage door openers, car alarms & door locks

Firearms

Photo equipment

High torque starters – diesel engines

Communication devices – not intrinsically safe

In 1999, the Department of Transportation sponsored the Common Ground Study. The purpose of the Common Ground Study was to identify and validate existing best practices performed in connection with preventing damage to underground facilities. The collected best practices are intended to be shared among stakeholders involved with and dependent upon the safe and reliable operation, maintenance, construction, and protection of underground facilities. The best practices contain validated experiences gained that can be further examined and evaluated for possible consideration and incorporation into state and private stakeholder underground facility damage prevention programs.

The current Best Practices Field Manual is divided into nine chapters that provide a collection of current damage prevention best practices. The nine chapters include:

1. Planning & Design Best Practices
2. One Call Center Best Practices
3. Location & Marking Best Practices
4. Excavation Best Practices
5. Mapping Best Practices
6. Compliance Best Practices
7. Public Education Best Practices
8. Reporting & Evaluation Best Practices
9. Miscellaneous Practices

To view the latest version of the Best Practices please visit www.commongroundalliance.com



Pipelines In Our Community

According to National Transportation Safety Board statistics pipelines are the safest and most efficient means of transporting natural gas and petroleum products, which are used to supply roughly two-thirds of the energy we use. These pipelines transport trillions of cubic feet of natural gas and hundreds of billions of ton/miles of liquid petroleum products in the United States each year.

This system is comprised of three types of pipelines: transmission, distribution and gathering. The approximately 519,000 miles of transmission pipeline* transport products, including natural gas and petroleum products, across the country and to storage facilities. Compressor stations and pumping stations are located along transmission and gathering pipeline routes and help push these products through the line.

Approximately 2.2 million miles of distribution pipeline* is used to deliver natural gas to most homes and businesses through underground main and utility service lines. Onshore gathering lines are pipelines that transport gas from a current production operation facility to a transmission line or main. Production operations are piping and equipment used in production and preparation for transportation or delivery of hydrocarbon gas and/or liquids.

*mileage according to the Pipeline Hazardous Materials Safety Administration (PHMSA).



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

Training Center

Supplemental training available for agencies and personnel that are unable to attend:

- Train as your schedule allows
- Download resources including pipeline operator specific information
 - Sponsoring pipeline operator contact information
 - Product(s) transported
- Receive Certificate of Completion

Visit <https://trainingcenter.pdigm.com/> to register for training



Damage Prevention Programs

Pursuant to 49 CFR Parts 192.614 (c)(2)(i) and 195.442 (c)(2)(i) pipeline operators must communicate their Damage Prevention Program's "existence and purpose" to the public in the vicinity of the pipeline and persons who normally engage in excavation activities in the area in which the pipeline is located.

State and federally regulated pipeline companies maintain Damage Prevention Programs. The purpose of which is to prevent damage to pipelines and facilities from excavation activities, such as digging, trenching, blasting, boring, tunneling, backfilling, or by any other digging activity.

Pipeline Markers

The U.S. Department of Transportation (DOT) requires the use of signs to indicate the location of underground pipelines. Markers like these are located on road, railroad, and navigable waterway crossings. Markers are also posted along the pipeline right-of-way.

The markers display:

- The material transported
- The name of the pipeline operator
- The operator's emergency number

MARKER INFORMATION

- Indicates area of pipeline operations
- May have multiple markers in single right-of-way
- May have multiple pipelines in single right-of-way
- DOES NOT show exact location
- DOES NOT indicate depth (*never assume pipeline depth*)
- DOES NOT indicate pipeline pressure



Call Before You Dig

Statistics indicate that damage from excavation related activities is a leading cause of pipeline accidents. If you are a homeowner, farmer, excavator, or developer, we need your help in preventing pipeline emergencies.

1. Call your state's One-Call center before excavation begins - regulatory mandate as state law requires.
2. Wait the required amount of time.
3. A trained technician will mark the location of the pipeline and other utilities (private lines are not marked).
4. Respect the marks.
5. Dig with care.

National One-Call Dialing Number:



For More Details Visit: www.call811.com

American Public Works Association (APWA) Uniform Color Code

	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 - Communication, Alarm or Signal Lines, Cables or Conduit
	BLUE - Potable Water
	PURPLE - Reclaimed Water, Irrigation and Slurry Lines
	GREEN - Sewers and Drain Lines

OSHA General Duty Clause

Section 5(a)(1) of the Occupational Safety and Health Act (OSHA) of 1970, employers are required to provide their employees with a place of employment that "is free from recognizable hazards that are causing or likely to cause death or serious harm to employees."

<https://www.osha.gov/laws-regs/oshact/section5-duties>

Product Characteristics

PRODUCT	LEAK TYPE	VAPORS
HIGHLY VOLATILE LIQUIDS [SUCH AS: BUTANE, PROPANE, ETHANE, PROPYLENE, AND NATURAL GAS LIQUIDS (NGL)]	Gas	Initially heavier than air, spread along ground and may travel to source of ignition and flash back. Product is colorless, tasteless and odorless.
HEALTH HAZARDS	Will be easily ignited by heat, sparks or flames and will form explosive mixtures with air. Vapors may cause dizziness or asphyxiation without warning and may be toxic if inhaled at high concentrations. Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite. Fire may produce irritating and/or toxic gases.	

PRODUCT	LEAK TYPE	VAPORS
NATURAL GAS	Gas	Lighter than air and will generally rise and dissipate. May gather in a confined space and travel to a source of ignition.
HEALTH HAZARDS	Will be easily ignited by heat, sparks or flames and will form explosive mixtures with air. Vapors may cause dizziness or asphyxiation without warning and may be toxic if inhaled at high concentrations. Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.	

PRODUCT	LEAK TYPE	VAPORS
HAZARDOUS LIQUIDS [SUCH AS: CRUDE OIL, DIESEL FUEL, JET FUEL, GASOLINE, AND OTHER REFINED PRODUCTS]	Liquid	Initially heavier than air and spread along ground and collect in low or confined areas. Vapors may travel to source of ignition and flash back. Explosion hazards indoors, outdoors or in sewers.
HEALTH HAZARDS	Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control or dilution water may cause pollution.	

Pipeline Damage Reporting Law As Of 2007

H.R. 2958 Emergency Alert Requirements

Any person, including a government employee or contractor, who while engaged in the demolition, excavation, tunneling, or construction in the vicinity of a pipeline facility;

- A. Becomes aware of damage to the pipeline facility that may endanger life or cause serious bodily harm or damage to property; or
 - B. Damages the pipeline facility in a manner that may endanger life or cause serious bodily harm or damage to property, shall promptly report the damage to the operator of the facility and to other appropriate authorities.
-

Websites:

Call Before You Clear

www.callbeforeyouclear.com

Common Ground Alliance

www.commongroundalliance.com

Federal Office of Pipeline Safety

www.phmsa.dot.gov

National One-Call Dialing Number: 811

www.call811.com

National Pipeline Mapping System

www.npms.phmsa.dot.gov

National Response Center

<https://www.epa.gov/emergency-response/national-response-center> or 800-424-8802

Occupational Safety & Health Administration (OSHA)

www.osha.gov

Paradigm Liaison Services, LLC

www.pdigm.com

United States Environmental Protection Agency (EPA)

www.epa.gov/comeo

Wireless Information System for Emergency Responders (WISER)

<https://wiser.nlm.nih.gov/>



Register for access to
Training Center
Code: EX



Operator Information

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Paradigm is public awareness. We provide public awareness and damage prevention compliance services to assist with the regulatory requirements of 49 CFR 192 and 195, as well as API RP 1162. Since 2001, the oil and gas industry has worked with Paradigm to fulfill public education and community awareness requirements.

Our history of implementing public awareness programs and compliance services pre-dates API RP 1162. Most of the pipeline industry's large, mid-sized and small operators, as well as many local distribution companies utilize Paradigm's compliance services.

In serving our clients, Paradigm performs full-scope compliance programs from audience identification through effectiveness measurement. In addition, we offer consulting services for plan evaluation and continuous improvement. At the completion of each compliance program, we provide structured documentation which precisely records all elements of the program's implementation to assist with audits.

Paradigm leads the way in industry service. Pipeline operators and local distribution companies trust in Paradigm to implement their public awareness and damage prevention programs. Each year we:

- Distribute 25 million pipeline safety communications
- Compile and analyze roughly 250,000 stakeholder response surveys
- Facilitate over 1,200 liaison programs
- Implement approximately 1,000 public awareness compliance programs
- Provide audit support and assistance with over 50 public awareness audits

Contact Paradigm for more information regarding custom public awareness solutions.

Contact us:

Paradigm Liaison Services, LLC
PO Box 9123
Wichita, KS 67277
(877) 477-1162
Fax: (888) 417-0818
www.pdigm.com



Operator Information

[illegible]

This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal black lines across the entire width of the page, providing a guide for writing. The background is a solid off-white color.

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Sunshine 811 Puts You In Touch With Those Who Locate Buried Facilities & Educates On Making Your Job Sites Safer.

We do this by:

- Processing an excavator's dig site and contact information.
- Sending the excavator's information to member utility companies.
- Maintaining and operating a positive response process that facility owners use to tell excavators if a dig site is clear/no conflict, marked, or unmarked and why. IMPORTANT FOR GAS: utility response code 2C lets you know that a High Priority Subsurface Installation (gas) is within 15 feet of your dig site and the owner wants to be notified of the date and time of your excavation.
- Providing virtual and on-site educational sessions on a variety of 811 topics.

811 Safety Education Representatives

Schedule a FREE educational session with a Sunshine 811 Safety Education Representative by contacting the representative for your region below. To find out what counties they represent, visit <https://www.sunshine811.com/education>.

Brian Dean..... West Region brian.dean@sunshine811.com 727-424-7778
 Brad Martin North Region brad.martin@sunshine811.com 850-508-4519
 John Segovia South Region john.segovia@sunshine811.com 954-789-5624
 Elliot Patterson Central Region elliott.patterson@sunshine811.com 352-603-0015

FLORIDA

Sunshine 811: 811 or 800-432-4770

Website: www.sunshine811.com

Hours: 7 AM to 6 PM EST, M-F; Internet Ticket Entry and Single Address

Ticket available 24/7

Advance Notice: 2 full business days (10 if dig site is underwater)

Marks Valid: 30 days

Law Link: <https://www.sunshine811.com/law>

TICKETS			STATE LAWS & PROVISIONS									NOTIFICATION EXEMPTIONS				NOTIFICATIONS ACCEPTED						
FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Remarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone
N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	24*



1.877.477.1162 • fl.pipeline-awareness.com