

WASHINGTON



COORDINATED RESPONSE EXERCISE[®]

Pipeline Safety Training For First Responders



EMERGENCY RESPONSE MANUAL

Overview

Operator Profiles

Emergency Response

NENA Pipeline Emergency Operations

Signs of a Pipeline Release

High Consequence Area Identification

Pipeline Industry ER Initiatives

Pipeline Damage Reporting Law

2024

EMERGENCY CONTACT LIST

<u>COMPANY</u>	<u>EMERGENCY NUMBER</u>
Airgas	1-800-323-1970
McChord Pipeline Co.....	1-253-593-6085
NuStar Energy L.P.....	1-360-694-8591
Olympic Pipe Line Company	1-888-271-8880
Par Montana LLC	1-888-550-7766
Phillips 66 Pipelines LLC.....	1-877-267-2290
TransMontaigne.....	1-800-732-8140

**Note: The above numbers are for emergency situations.
Please see individual company sections for non-emergency contact information.
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.**

<u>ONE-CALL SYSTEM</u>	<u>PHONE NUMBER</u>
Washington 811	1-800-424-5555
National One-Call Referral Number.....	1-888-258-0808

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To: ALL EMERGENCY OFFICIALS
From: Paradigm Liaison Services, LLC
Re: Pipeline Emergency Response Planning Information

This material is provided to your department as a reference to pipelines that operate in your state in case you are called upon to respond to a pipeline emergency.

For more information on these pipeline companies, please contact each company directly. You will find contact information for each company represented throughout the material.

This information only represents the pipeline and/or gas companies who work with our organization to provide training and communication to Emergency Response agencies such as yours. There may be additional pipeline operators in your area that are not represented in this document.

For information and mapping on other Transmission Pipeline Operators please visit the National Pipeline Mapping System (NPMS) at: <https://www.npms.phmsa.dot.gov>.

For information on other Gas and Utility Operators please contact your appropriate state commission office.

Further product-specific information may be found in the US Department of Transportation (DOT) *Emergency Response Guidebook for First Responders*.

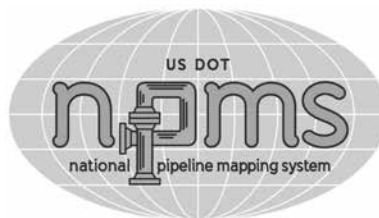
The Guidebook is available at:

<https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2024-04/ERG2024-Eng-Web-a.pdf>

Pipeline Emergency Response **PLANNING INFORMATION**

ON BEHALF OF:

Airgas
McChord Pipeline Co.
NuStar Energy L.P.
Olympic Pipe Line Company
Par Montana LLC
Phillips 66 Pipelines LLC
TransMontaigne



Note: The enclosed information to assist in emergency response planning is delivered by Paradigm Liaison Services, LLC on behalf of the above sponsoring companies. Visit the National Pipeline Mapping System at <https://www.npms.phmsa.dot.gov> to determine additional companies operating in your area.

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

Product Hazards and Characteristics

Petroleum (flow rate can be hundreds of thousands of gallons per hour)

- Flammable range may be found anywhere within the hot zone
- H2S can be a by-product of crude oil

<u>Type 1 Products</u>	<u>Flash Point</u>	<u>Ignition Temperature</u>
Gasoline	- 45 °F	600 °F
Jet Fuel	100 °F	410 °F
Kerosene	120 °F	425 °F
Diesel Fuel	155 °F	varies
Crude Oil	25 °F	varies

Natural Gas (flow rate can be hundreds of thousands of cubic feet per hour)

- Flammable range may be found anywhere within the hot zone
- Rises and dissipates relatively quickly
- H2S can be a by-product of natural gas – PPM = PARTS PER MILLION
 - 0.02 PPM Odor threshold
 - 10.0 PPM Eye irritation
 - 100 PPM Headache, dizziness, coughing, vomiting
 - 200-300 PPM Respiratory inflammation within 1 hour of exposure
 - 500-700 PPM Loss of consciousness/possible death in 30-60 min.
 - 700-900 PPM Rapid loss of consciousness; death possible
 - Over 1000 PPM Unconsciousness in seconds; death in minutes
- Incomplete combustion of natural gas may release carbon monoxide
- Storage facilities may be present around populated areas/can be depleted production facilities or underground caverns
- Gas travel may be outside the containment vessel along the natural cavern between the pipe and soil

Propane, Butane and Other Similar Products

- Flammable range may be found anywhere within the hot zone
- Products cool rapidly to sub-zero temperatures once outside the containment vessel
- Vapor clouds may be white or clear

<u>Type 3 Products</u>	<u>Flash Point</u>	<u>Ignition Temperature</u>
Propane	- 150 °F	920-1120 °F
Butane	- 60 °F	725-850 °F

Line Pressure Hazards

- Transmission pipelines – steel (*high pressure: average 800-1200psi*)
- Local gas pipeline transmission – steel (*high pressure: average 200-1000psi*)
- Local gas mains and services – steel and/or plastic (*low to medium pressure*)
 - Mains: up to 300psi
 - Service lines: up to regulator
 - Average 30-45psi and below
 - Can be up to 60-100psi in some areas
- At regulator into dwelling: ounces of pressure

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

Emergency Response Basics

- Always follow pipeline/gas company recommendations – pipeline representatives may need escort to incident site
- Advance preparation
 - Get to know your pipeline operators/tour their facilities if possible
 - Participate in their field exercises/request on-site training where available
 - Develop response plans and practice
- Planning partners
 - Pipeline & local gas companies
 - Police – local/state/sheriff
 - Fire companies/HAZMAT/ambulance/hospitals/Red Cross
 - LEPC/EMA/public officials
 - Environmental management/Department of Natural Resources
 - Army Corps of Engineers/other military officials
 - Other utilities
- Risk considerations
 - Type/volume/pressure/location/geography of product
 - Environmental factors – wind, fog, temperature, humidity
 - Other utility emergencies
- Incident response
 - Always approach from upwind/park vehicle a safe distance away/if vehicle stalls – DO NOT attempt to restart
 - Gather information/establish incident command/identify command structure
 - Initiate communications with pipeline/gas company representative ASAP
 - Control/deny entry: vehicle, boat, train, aircraft, foot traffic, media – refer all media questions to pipeline/gas reps
- Extinguish fires only
 - To aid in rescue or evacuation
 - To protect exposures
 - When controllable amounts of vapor or liquid present
- Incident notification – pipeline control center or local gas company number on warning marker
 - In ***Pipeline Emergency Response Planning Information Manual***
 - Emergency contact list in ***Program Guide***
 - Call immediately/provide detailed incident information
- Pipeline security – assist by noting activity on pipeline/gas facilities
 - Report abnormal activities around facilities
 - Suspicious excavation/abandoned vehicles/non-company personnel/non-company vehicles
 - Freshly disturbed soil/perimeter abnormalities

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

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.**
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.
- Substance may be transported hot.
- **If molten aluminum is involved, refer to GUIDE 169.**

HEALTH

- 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.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available appropriate telephone numbers can be found in the Emergency Response Guidebook.**
- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

CAUTION: For mixtures containing alcohol or polar solvent, alcohol-resistant foam may be more effective.

Small Fire

- Dry chemical, CO₂, water spray or regular foam.

Large Fire

- Water spray, fog or regular foam.

- Use water spray or fog; do not use straight streams.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

FIRST AID

- Move victim to fresh air.
- Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

PRODUCT: Crude Oil	GUIDE #:
DOT GUIDEBOOK ID #: 1267	128

PRODUCT: Diesel Fuel	GUIDE #:
DOT GUIDEBOOK ID #: 1202	128

PRODUCT: Jet Fuel	GUIDE #:
DOT GUIDEBOOK ID #: 1863	128

PRODUCT: Gasoline	GUIDE #:
DOT GUIDEBOOK ID #: 1203	128

Refer to the Emergency Response Guidebook for additional products not listed.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **EXTREMELY FLAMMABLE..**
- Will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- **CAUTION: Hydrogen (UN1049), Deuterium (UN1957), Hydrogen, refrigerated liquid (UN1966) and Methane (UN1971) are lighter than air and will rise. Hydrogen and Deuterium fires are difficult to detect since they burn with an invisible flame. Use an alternate method of detection (thermal camera, broom handle, etc.)**
- Vapors may travel to source of ignition and flash back.
- Cylinders exposed to fire may vent and release flammable gas through pressure relief devices.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Some may be irritating 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.

- or confined areas (sewers, basements, tanks).
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available appropriate telephone numbers can be found in the Emergency Response Guidebook.**
- As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 800 meters (1/2 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED. CAUTION: Hydrogen (UN1049), Deuterium (UN1957) and Hydrogen, refrigerated liquid (UN1966) burn with an invisible flame. Hydrogen and Methane mixture, compressed (UN2034) may burn with an invisible flame.**

Small Fire

- Dry chemical or CO2.

Large Fire

- Water spray or fog.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire

- Prevent spreading of vapors through sewers, ventilation systems and confined areas.
- Isolate area until gas has dispersed. **CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.**

FIRST AID

- Move victim to fresh air.
- Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.

PRODUCT: Propane	
DOT GUIDEBOOK ID #: 1075	GUIDE #: 115
PRODUCT: Butane	
DOT GUIDEBOOK ID #: 1075	GUIDE #: 115
PRODUCT: Ethane	
DOT GUIDEBOOK ID #: 1035	GUIDE #: 115
PRODUCT: Propylene	
DOT GUIDEBOOK ID #: 1075/1077	GUIDE #: 115
PRODUCT: Natural Gas Liquids	
DOT GUIDEBOOK ID #: 1972	GUIDE #: 115
<i>Refer to the Emergency Response Guidebook for additional products not listed.</i>	

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- or confined areas (sewers, basements, tanks).
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PROTECTIVE CLOTHING

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- Do not direct water at spill or source of leak.
- Prevent spreading of vapors through sewers, ventilation systems and confined areas.

DOT GUIDEBOOK ID #:	GUIDE #:
1971	115
CHEMICAL NAMES:	
<ul style="list-style-type: none"> • Natural Gas • Methane • Marsh Gas • Well Head Gas • Fuel Gas • Lease Gas • Sour Gas* 	
CHEMICAL FAMILY:	
Petroleum Hydrocarbon Mix: Aliphatic Hydrocarbons (Alkanes), Aromatic Hydrocarbons, Inorganic Compounds	
COMPONENTS:	
Methane, Iso-Hexane, Ethane, Heptanes, Propane, Hydrogen Sulfide*, (In "Sour" Gas), Iso-Butane, Carbon, Dioxide, n-Butane, Nitrogen, Pentane Benzene, Hexane, Octanes	

Product INFORMATION



The Emergency Response Guidebook is available at:
<https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2024-04/ERG2024-Eng-Web-a.pdf>



This app is only available on the App Store for iOS devices.



ABOUT AIR LIQUIDE

Airgas, an Air Liquide Company (Airgas) offers gas and energy solutions to large industry to improve their process efficiency and help them with their environmental responsibilities. In the U.S., this business serves the refining, natural gas, chemical and metals industries. It operates a pipeline system in Washington state.

EMERGENCY RESPONSE CAPABILITIES

Commitment

Airgas is committed to the protection of the public and the environment through the safe operation and maintenance of its pipeline systems. Airgas has committed the necessary resources to fully respond to any pipeline related emergency involving any Airgas pipeline network.

For additional information about Airgas, please contact:

Grayson Taylor
12800 West Little York Rd
Houston, Tx. 77041
Grayson.taylor@airgas.com

**EMERGENCY CONTACT:
1-800-323-1970**

PRODUCTS/ DOT GUIDEBOOK ID#/ GUIDE#:		
Hydrogen	1049	115

**WASHINGTON
COUNTIES OF OPERATION:**

Cowlitz

Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.



McCHORD PIPELINE CO.



A Subsidiary of U.S. Oil & Refining Co.

COMPANY PROFILE

The McChord Pipeline Co. is the primary supplier of jet fuel to Joint Base Lewis-McChord (JBLM). The pipeline is a single 6-inch diameter, 14.25-mile long pipeline that originates in the U.S. Oil & Refining Co. refinery, located in the Tacoma Tide Flats, and terminates at storage tanks located on the Base. This pipeline transports JP-8, a kerosene-based jet fuel, as its sole product.

PETROLEUM PIPELINES IN YOUR COMMUNITY

There are over 200,000 miles of petroleum pipeline in the United States. According to National Transportation Safety Board statistics, pipelines are the safest method of transporting petroleum products. Pipelines transport two-thirds of all the crude oil and refined products in the United States. Pipelines are made of steel, covered with a protective coating and buried underground. They are tested and maintained through the use of cleaning devices, diagnostic tools, and cathodic protection. Since Americans consume over 700 million gallons of petroleum products per day, pipelines are an essential component of our nation's infrastructure.

For more information about pipelines, visit www.pipeline101.com.

To view a list of transmission pipelines and operators in your area, visit www.npms.phmsa.dot.gov.

For information regarding excavation practices around underground utilities, visit www.commongroundalliance.com.

For more information about McChord Pipeline Company, visit www.mcchordpipeline.com

PIPELINE SAFETY AND INTEGRITY

McChord is committed to safe pipeline operations. Our pipeline pressure and flows are monitored 24 hours a day, 7 days a week. We spend significant time to ensure our pipeline operations are

maintained according to our company standards in addition to the standards of the pipeline industry and federal and state government. If you would like to learn more about our Integrity Management Program and the prevention measures undertaken, please contact us at 253-593-6085.

HOW WOULD YOU KNOW WHERE A PIPELINE IS?

Pipeline markers are important for the safety of the general public and provide emergency responders with critical information. Most pipelines are underground, where they are more protected from the elements and minimize interference with surface uses. Even so, pipeline rights-of-way are clearly identified by pipeline markers along pipeline routes that identify the approximate—NOT EXACT—location of the pipeline. Every pipeline marker contains information identifying the company that operates the pipeline, the product transported, and a phone number that should be called in the event of an emergency.

Markers do not indicate pipeline burial depth. Markers are typically seen where a pipeline intersects a street, highway

EMERGENCY CONTACT:
1-253-593-6085

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:		
Jet Fuel	1202	128

WASHINGTON COUNTIES OF OPERATION:

Pierce

Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.

or railway. For any person to willfully deface, damage, remove, or destroy any pipeline marker is a federal crime.

Pipeline Marker - This marker is the most commonly seen. It contains operator information, type of product, and an emergency contact number.

Casing Vent Marker - This marker indicates that a pipeline (protected by a steel outer casing) passes beneath a nearby roadway, rail line or other crossing.



Pipeline Markers

Casing Vent Markers

SIGNS OF A PETROLEUM PRODUCT RELEASE

Sight - A pool of liquid on the ground near a pipeline, a rainbow sheen on water, a dense white cloud or fog over a pipeline, or discolored vegetation.

Sound - An unusual noise coming from the pipeline, like a hissing or roaring sound.

Smell - An unusual chemical odor such as gas or oil.

WHAT TO DO IF A LEAK OCCURS

Leave the leak area immediately on foot.

Do not touch, breathe, or make contact with leaking liquids.

Do not start your car or truck, light a match, use a telephone, switch on/off light switches or do anything that may create a spark in the vicinity of the suspected leak.

From a safe location, call **911** and McChord's 24-hour emergency number. Give your name, phone number, a description of the leak and its location.

Warn others to stay away from the area.

Do not use a vehicle to leave the area.

FIVE STEPS TO A SAFE EXCAVATION

1. Survey and mark.

Survey the area where you plan to dig. Be sure your contractor makes a list of all the companies that have underground pipelines at or near that area.

2. Call Before You Dig.

One call is all it takes to have underground pipelines located at the area you plan to excavate. Have your contractor call your state's One Call two working days prior to digging.

811 is the federally-mandated number designated by the FCC to consolidate all local "Call Before You Dig" numbers and help save lives by minimizing damages to underground utilities.

3. Wait the time required.

Two working days notice allows McChord time to review our underground facility records and respond to your contractor. McChord will provide you information about the location of our pipelines by marking or staking the horizontal path of our pipelines with yellow markings, or advise on clearance.

4. Respect the marks.

Maintain the pipeline marks throughout the duration of your project. If any of the markings are not visible, call your state's One Call to request a remarking.

5. Dig with care.

Those working with your contractor should hand excavate when they are within two feet, either side, of the outside diameter of the marked pipeline. Please notify McChord's state emergency number immediately of any damage or contact, scrape, dent, or nick to our pipelines and associated equipment.



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

PRODUCT TRANSPORTED

Product:

Hazardous Liquids [Jet Fuel]: Jet fuel is a petroleum product similar to kerosene.

Leak Type:

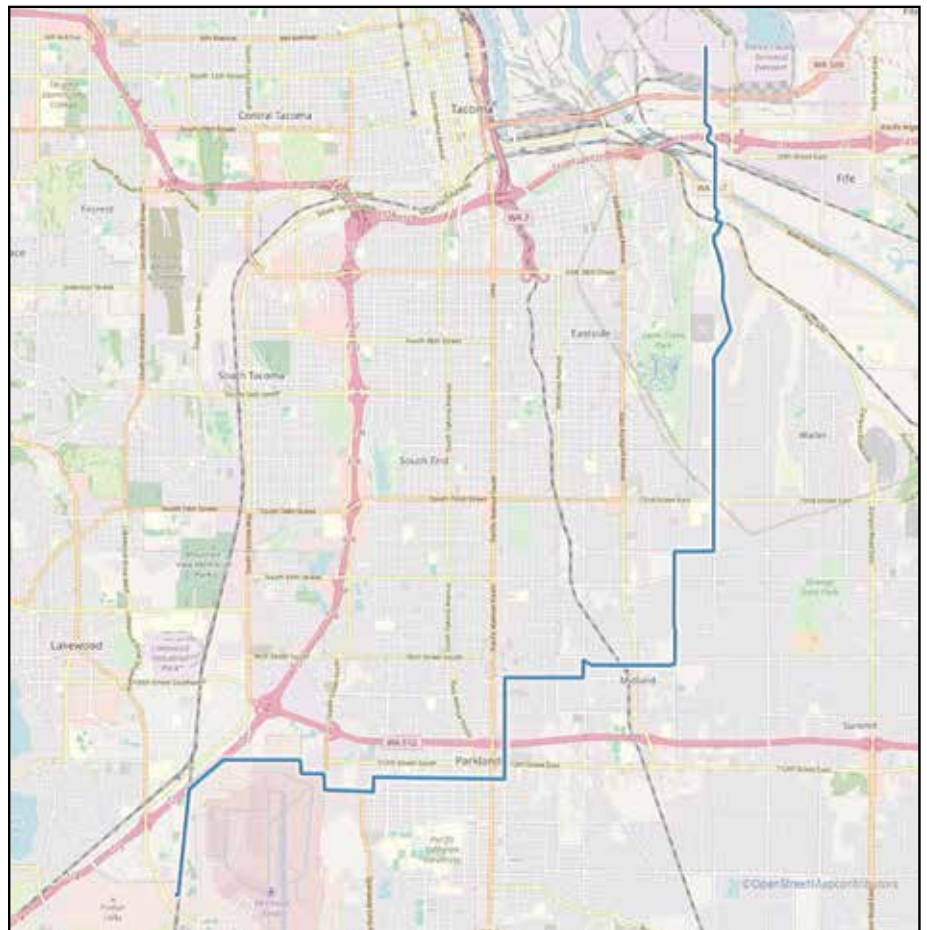
Liquid

Vapors:

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.

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. It is flammable but not highly volatile. Additional hazards associated with a release are contamination of the soil, potential groundwater contamination and ignition resulting in a fire.



Base map courtesy of openstreetmap.org



ABOUT SHORE TERMINALS LLC

NuStar Shore Terminals LLC operations include two petroleum bulk storage facilities connected by short pipelines in Vancouver, Washington.

WHAT DOES NUSTAR DO IF A LEAK OCCURS?

To prepare for the event of a leak, pipeline companies regularly communicate, plan and train with local emergency responders. Upon the notification of an incident or leak the pipeline company will immediately dispatch trained personnel to assist emergency responders.

Pipeline operators and emergency responders are trained to protect life, property and facilities in the case of an emergency.

Pipeline operators will also take steps to minimize the amount of product that leaks out and to isolate the pipeline emergency.

MAINTAINING SAFETY AND INTEGRITY OF PIPELINES

Safety and environmental performance is NuStar's first priority. Ensuring the mechanical integrity of our pipelines helps us to successfully meet our goal of protecting employees, customers, contractors, and the public and environment. The NuStar Pipeline Integrity Management Program defines how we work to achieve this goal and comply with applicable laws and regulations.

The NuStar Pipeline Integrity Management Program assists us in preventing leaks and spills, determining pipelines that could affect High Consequence Areas (HCA's), and identifying evaluation and improvement opportunities.

PRODUCTS TRANSPORTED

Product: Jet Fuel

Leak Type: Liquid

Vapors: 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.



EMERGENCY CONTACT:

1-360-694-8591

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Jet Fuel	1863	128
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WASHINGTON COUNTIES OF OPERATION:

Clark

Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.

HOW TO GET ADDITIONAL INFORMATION

For more information, please visit our website at sunocolp.com.



Base map courtesy of openstreetmap.org



8230 Whitcomb St.
 Merrillville, IN 46410
 Emergency Phone: 1-888-271-8880
 Non-Emergency Phone: 1-800-548-6482
 Email: bpDamagePrevention@bp.com
 Website: bp.com/pipelines

COMPANY PROFILE

BP Pipelines (North America) Inc. business moves and delivers the energy that helps power economic growth, serving both the Midwest and Pacific Northwest regions. Every day, BP Pipelines (North America) Inc. manages more than 3,200 miles of pipelines carrying 1.1 million barrels of crude oil, natural gas and refined products. It also has an ownership stake in close to 1,500 miles of additional pipelines. The combined network of pipelines that BP Pipelines (North America) Inc. owns or manages is long enough to stretch from Chicago to London. The business currently maintains 70 above-ground storage tanks with a combined capacity of about 5.3 million barrels.



COMMITMENT TO SAFETY, HEALTH AND ENVIRONMENT

Safety is the foundation of everything BP does, every single day. Its goals are clear: no accidents, no harm to people and no damage to the environment. That's a huge responsibility — one BP does not take for granted.

In fact, whether looking at oil and gas production or refining and petrochemicals, BP's rate of Tier 1 events are below the published industry sector average. BP is proud of this progress, but also recognizes that it cannot rest on past achievements. Complacency undermines safety, which is why BP is working every day to become even better, even safer. Even as BP has prepared to respond to an accident, it also has worked hard to ensure that such a response is never needed. Among its many initiatives are:

- Visual inspections of BP's pipeline right-of-ways are conducted by airplanes, drones and/or ground patrols.
- Above ground marker signs are displayed along the right-of-ways to alert the public and contractors to the existence of our pipelines.
- Internal pipeline inspections are conducted periodically by sophisticated computerized equipment called "smart pigs".
- Cathodic Protection on our pipelines protects them from external corrosion through the use of an electrostatic current.
- BP is a member and/or participant of numerous damage prevention associations and a member of the "one-call" systems in every state in which we have pipeline facilities within.

**EMERGENCY CONTACT:
 1-888-271-8880**

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:		
Butane	1971	115
Diesel	1202	128
Fuel, Aviation	1863	128
Gasoline	1203	128
Natural Gas	1971	115

**WASHINGTON
 COUNTIES OF OPERATION:**

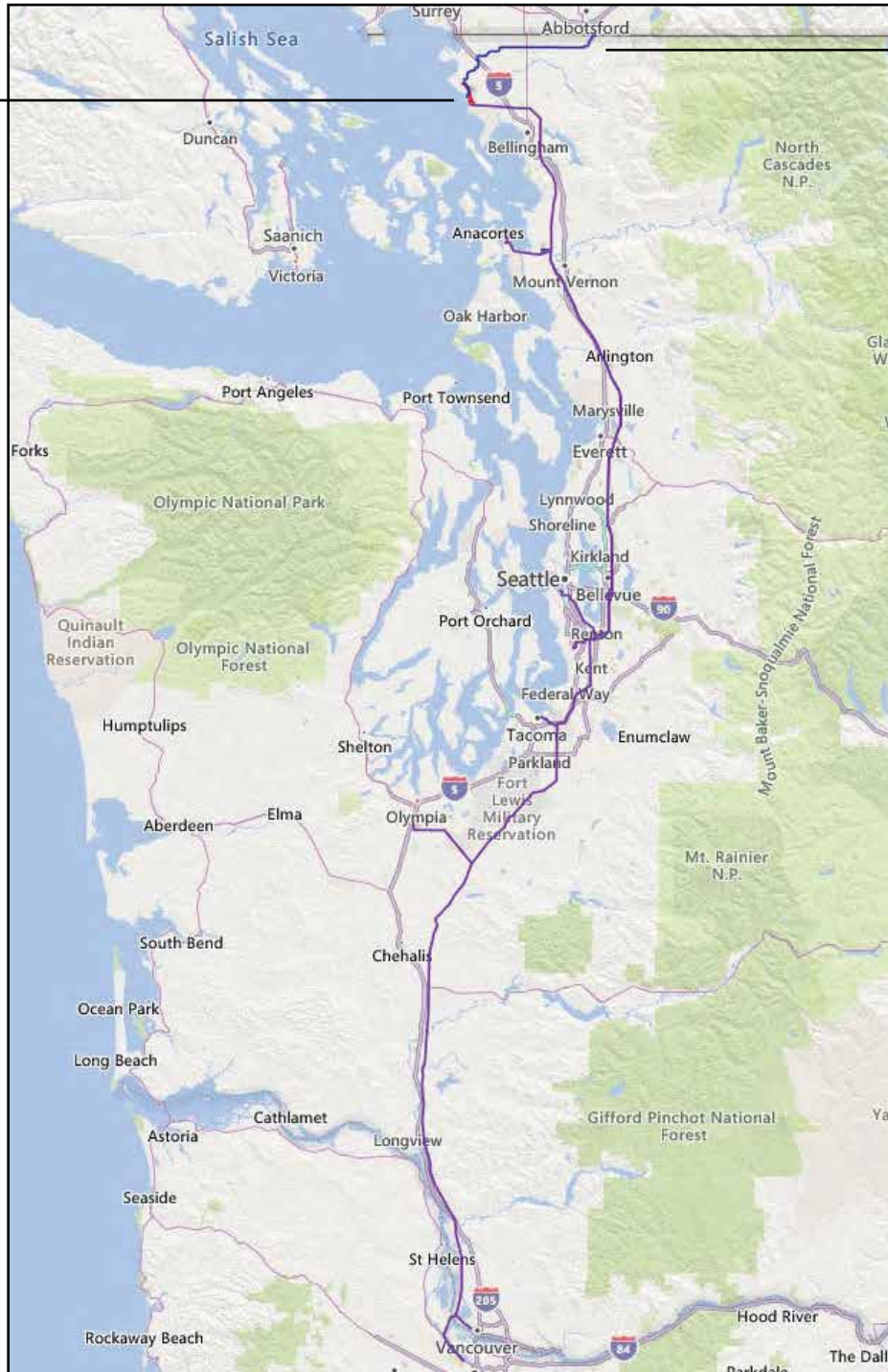
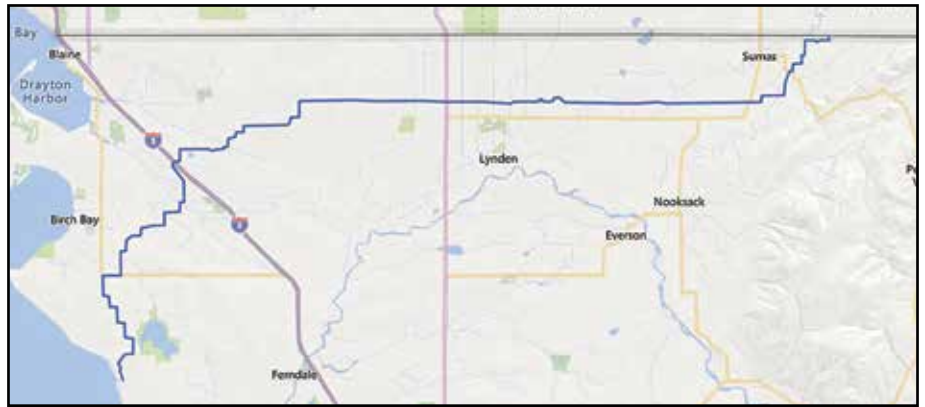
Clark	Skagit
Cowlitz	Snohomish
King	Thurston
Lewis	Whatcom
Pierce	

Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.

- Emergency preparedness and planning measures are in place at BP Pipelines (North America) Inc. in the event that a pipeline incident occurs. The company also works closely with local emergency response organizations to educate them regarding our pipelines and how to respond in the unlikely event of an emergency. For more information regarding BP's emergency response plans and procedures, contact us at bpDamagePrevention@bp.com
- You can find out where our pipelines and other companies' pipelines are in your area by going to the National Pipeline Mapping System website at www.npms.phmsa.dot.gov.

The pipeline system operated by BP Pipelines (North America) Inc. is a key element of the economic and security infrastructure of the United States. Our extensive network of pipes safely and reliably delivers the energy that America needs to heat homes, businesses and schools, and it also delivers the energy that fuels the vehicles, airplanes and machines that make modern life possible.

Olympic Pipe Line Company





Par Montana



Par Pacific

ABOUT PAR MONTANA LLC

Par Montana LLC is a growth-oriented company that owns and operates market-leading energy and infrastructure businesses in logistically-complex markets. Par Montana LLC combines experience in the oil and gas industry with logistics expertise to deliver transportation fuels to the Rocky Mountain region. The company has operations across the Rockies, including Billings, Bozeman, Helena, and Spokane.

MAINTAINING SAFETY AND INTEGRITY OF PIPELINES

Par Montana LLC is committed to maintaining the quality and integrity of its facility and pipeline systems through established Integrity Management and Damage Prevention plans. Par's systems are operated by well-trained and experienced pipeline operators and our priorities are public safety and environmental protection. There is an operator on call 24 hours a day to assist with concerns or emergency responses

to situations that may arise. Additionally, our personnel patrol the systems to identify potential dangers. Any identified potential dangers are addressed immediately.

WHAT DOES PAR MONTANA LLC DO IF A LEAK OCCURS?

Pipeline companies regularly communicate, plan, and train with local emergency responders. Par Montana LLC is prepared to assist emergency responders if a leak or other incident occurs.

Pipeline operators and emergency responders are trained to protect people, the environment, and facilities in case of an emergency. Par operators will also take steps to minimize the amount of product that leaks out and to isolate the emergency.

PRODUCTS TRANSPORTED IN YOUR AREA

Product: Hazardous Liquids (such as Diesel Fuel and Gasoline)

**EMERGENCY CONTACT:
1-888-550-7766**

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Diesel	1202	128
Gasoline	1203	128

**WASHINGTON
COUNTIES OF OPERATION:**

Spokane

Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.

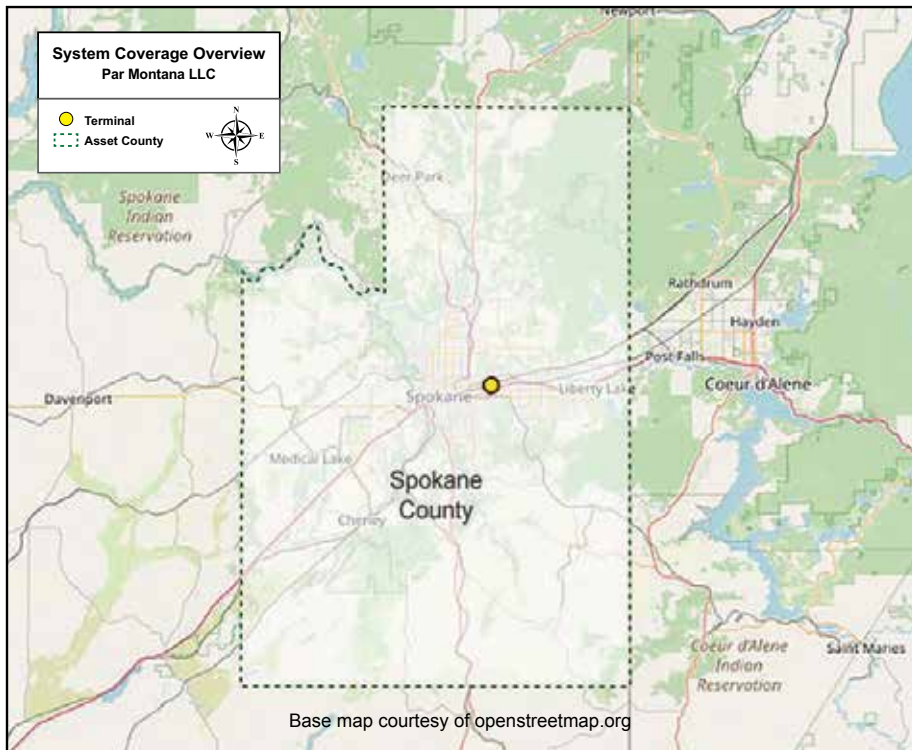
Leak Type: Liquid

Vapors: 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.

HOW TO GET ADDITIONAL INFORMATION

For more information about Par's IMP, please call us at 1-888-550-7766.



Par Montana

**In Case Of Emergency
Call 888-550-7766**

Corporate Headquarters:
 Phillips 66 Pipeline LLC
 2331 Citywest Blvd
 Houston, TX 77042
www.phillips66pipeline.com



PHILLIPS 66 PIPELINE LLC OWNS OR OPERATES OVER 132 MILES OF PIPELINE AND 4 STORAGE TERMINALS IN WASHINGTON

Operating with Integrity

Pipelines are one of the most reliable methods to move energy products, helping to meet our nation’s growing economic and energy needs. They operate under many government regulations and industry standards. These measures address all aspects of pipeline operation, such as where and how they are built, operated and maintained -- and Phillips 66 Pipeline LLC applies best practices that often exceed requirements.

Committed to Safety and Reliability

Our commitment to safety goes further, with the goal that everyone who lives or works near our assets is aware of our lines and facilities, adopts safe digging practices, learns the signs of a potential pipeline leak and knows how to quickly respond if he or she suspects a problem. As part of our on-going damage prevention program, we employ many tactics to ensure the safety of our communities.

Emergency Response Capabilities

Phillips 66 Pipeline LLC has committed resources to prepare and implement its emergency response plans and has obtained, through contract, the necessary private personnel and equipment to respond to a worst case discharge, to the maximum extent practical.

Communications

Phillips 66 Pipeline LLC employs a 24-hour Control Center as a hub of communication in emergency response situations. On-site communications are conducted using cellular phones; and portable radios and/or land-line telephone systems from facilities and offices.

Incident Command System

Phillips 66 Pipeline LLC utilizes an expandable Incident Command System. Personnel and federal, state and local agencies may be integrated into the Unified Command Structure, scalable to the size and complexity of an incident.

Spill Response Equipment

Phillips 66 Pipeline LLC maintains emergency response trailers and equipment at strategically-located facilities. Response equipment may include spill boom (as needed and of various types, sizes and lengths), absorbent materials, boats, motors, hand and power tools, pumps, hoses, personal protective equipment (PPE), first aid and miscellaneous supplies. Each trailer is inspected; equipment is deployed during drills on a regular basis.

Oil Spill Contractors

Certified Oil Spill Response Organizations (OSROs) are under contract by Phillips 66 Pipeline LLC for use in this area. Oil Spill Response Limited (OSRL) and associated STAR Contractors are used globally.

The Phillips 66 Pipeline LLC Emergency Response Action Plan (ERAP) contains specific contact and resource information for these companies. In addition, these OSROs are invited to participate in training and pre-planning exercises with Phillips 66 Pipeline LLC local and regional response teams. OSROs and Co-Ops can be relied upon for an appropriate level of response, with spill response equipment and trained personnel.

**EMERGENCY CONTACT:
 1-877-267-2290**

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:		
Butane	1170	127
Crude Oil	1267	128
Diesel	1202	128
Ethanol	1170	127
Gasoline	1203	128
Jet Fuel	1863	128

**WASHINGTON
 COUNTIES OF OPERATION:**

Adams	Pierce
Grant	Lincoln
King	Spokane

Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.

Response Plans and Maps

To view and download emergency response plans and procedures, visit <https://my.spatialobjects.com/erpp/home>.

To view maps of our locations, visit <https://www.phillips66pipeline.com/maps/>



ADDITIONAL INFORMATION AND RESOURCES

Visit the following industry and government sites for important safety references and educational materials.

National Association of State Fire Marshal’s “Pipeline Emergencies”
www.pipelineemergencies.com

PHMSA Emergency Response Guidebook
www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg

National Pipeline Mapping System
www.npms.phmsa.dot.gov

Phillips 66 Pipeline LLC ERAP Portal
<https://my.spatialobjects.com/erpp/home>

Pipelines and Informed Planning Alliance
<http://primis.phmsa.dot.gov/comm/pipa/landuseplanning.htm>

CONTACT

PHILLIPS 66 PIPELINE LLC

Phillips 66 Pipeline LLC Headquarters
 2331 Citywest Blvd
 Houston, TX 77042
www.phillips66pipeline.com

Non-Emergency Phone Number
 800-231-2566

Emergency Phone Number
 877-267-2290



TRANSMONTAIGNE / SEAPORT SOUND TERMINAL

TransMontaigne / SeaPort Sound Terminal LLC is a leading provider of renewable products, storage, transportation, and related services to the energy industry. Our terminal and pipeline provide essential storage and transportation services for our customers, who are distributors and marketers for a wide array of petroleum products and renewable fuels.

TransMontaigne / SeaPort Sound Terminal maintains a Damage Prevention Program in accordance with state and federal guidelines. The purpose of this program is to prevent damage to our pipelines and facilities from excavation activities, such as digging, trenching, blasting, boring, tunneling, backfilling, or by any other digging activity.

- *Name of system:* SeaPort Sound Terminal, LLC
- *Name of owner & operator:* TransMontaigne
- *Type of system:* Pipeline
- *Length of system:* 2.8 miles
- *List of products transported in system:* Gasoline and Diesel
- *Range of diameter of pipelines in system:* 10.75"

For additional information about TransMontaigne, or for information regarding their emergency response plans and procedures, please contact:

TransMontaigne
 Luis Deleon
 10150 Old HWY 48
 Brownsville, TX 78521
 (956) 554-4029 – (Office)
 (956) 346-2591 – (Cell)

EMERGENCY CONTACT: 1-800-732-8140		
PRODUCTS / DOT GUIDEBOOK ID# / GUIDE#:		
Diesel Fuel	1202	128
Gasoline	1203	128
WASHINGTON COUNTIES OF OPERATION:		
King		Pierce
<i>Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.</i>		

Emergency Response Plans for Gas and Hazardous Liquid Pipeline Operators

Federal regulations for both gas and hazardous liquid pipelines require operators to have written procedures for responding to emergencies involving their pipeline facility. Because pipelines are often located in public space, the regulations further require that operators include procedures for planning with emergency and other public officials to ensure a coordinated response. Please contact your local pipeline operators for information regarding their company specific emergency response plan.

Natural Gas

Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:

- Receiving, identifying, and classifying notices of events which require immediate response by the operator.
- Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials.
- Prompt and effective response to a notice of each type of emergency, including the following:
 1. Gas detected inside or near a building.
 2. Fire located near or directly involving a pipeline facility.
 3. Explosion occurring near or directly involving a pipeline facility.
 4. Natural disaster.
- The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency.
- Actions directed toward protecting people first and then property.
- Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property.
- Making safe any actual or potential hazard to life or property.
- Notifying appropriate fire, police, and other public officials of gas pipeline emergencies and coordinating with them both planned responses and actual responses during an emergency.
- Safely restoring any service outage.
- Each operator shall establish and maintain liaison with appropriate fire, police, and other public officials to:
 1. Learn the responsibility and resources of each government organization that may respond to a gas pipeline emergency;
 2. Acquaint the officials with the operator's ability in responding to a gas pipeline emergency;
 3. Identify the types of gas pipeline emergencies of which the operator notifies the officials; and
 4. Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property.

**Reference 49 CFR 192.615*

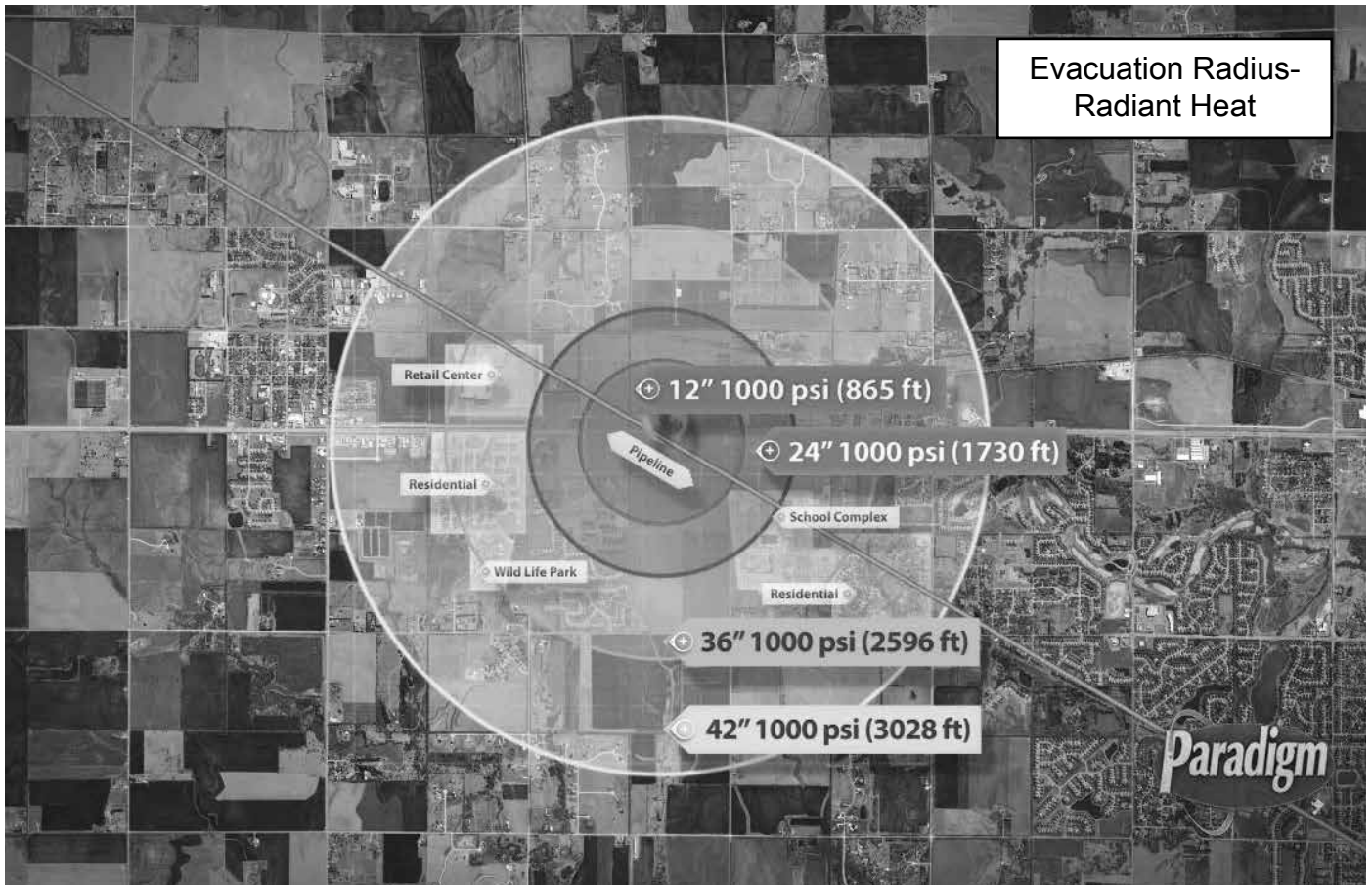
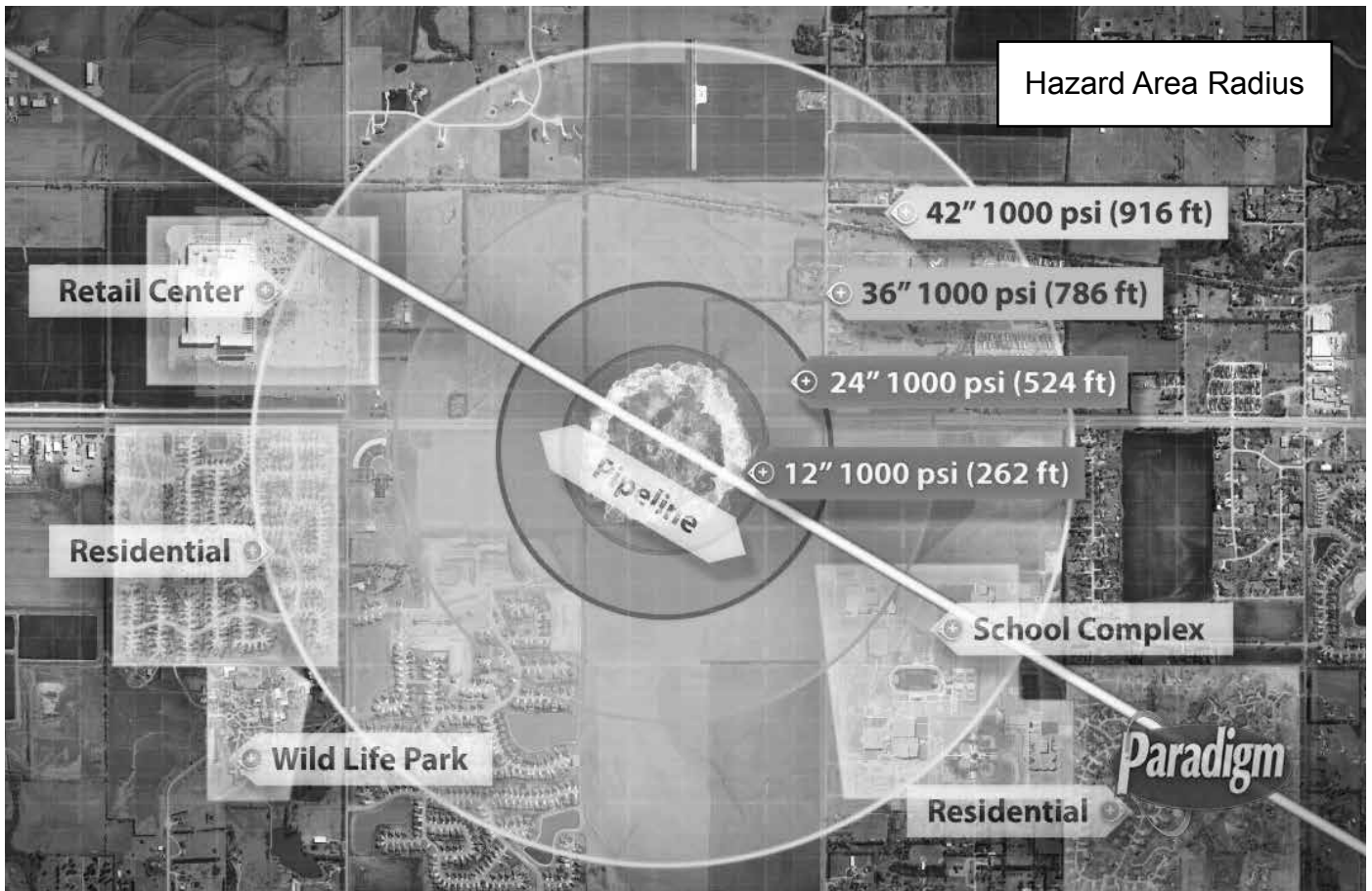
Hazardous Liquids

(a) General: Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

Emergencies. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when an emergency condition occurs:

- Receiving, identifying, and classifying notices of events which need immediate response by the operator or notice to fire, police, or other appropriate public officials and communicating this information to appropriate operator personnel for corrective action.
- Prompt and effective response to a notice of each type emergency, including fire or explosion occurring near or directly involving a pipeline facility, accidental release of hazardous liquid or carbon dioxide from a pipeline facility, operational failure causing a hazardous condition, and natural disaster affecting pipeline facilities.
- Having personnel, equipment, instruments, tools, and material available as needed at the scene of an emergency.
- Taking necessary action, such as emergency shutdown or pressure reduction, to minimize the volume of hazardous liquid or carbon dioxide that is released from any section of a pipeline system in the event of a failure.
- Control of released hazardous liquid or carbon dioxide at an accident scene to minimize the hazards, including possible intentional ignition in the cases of flammable highly volatile liquid.
- Minimization of public exposure to injury and probability of accidental ignition by assisting with evacuation of residents and assisting with halting traffic on roads and railroads in the affected area, or taking other appropriate action.
- Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid.
- In the case of failure of a pipeline system transporting a highly volatile liquid, use of appropriate instruments to assess the extent and coverage of the vapor cloud and determine the hazardous areas.
- Providing for a post accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found.

**Reference 49 CFR 195.402*



NENA Pipeline Emergency Operations - Call Intake Checklist

In accordance with NENA Pipeline Emergency Operations Standard/Model Recommendation NENA 56-007 (<https://www.nena.org/?page=PipelineEmergStnd>)

GOALS FOR INITIAL INTAKE:

1. Obtain and Verify Incident Location, Callback and Contact Information
2. Maintain Control of the Call
3. Communicate the Ability to HELP the Caller
4. Methodically and Strategically Obtain Information through Systematic Inquiry to be Captured in the Agency's Intake Format
5. Recognize the potential urgency of situations involving the release of dangerous gases or liquids related to pipelines or similar events of this nature and immediately begin the proper notifications consistent with agency policy
6. Perform all Information Entries and Disseminations, Both Initial and Update

FIRST RESPONSE CALL INTAKE CHECKLIST

The focus of this Standard is on the first minute of the call intake process. Actions taken during this time frame significantly impact the effectiveness of the response and are critical to public safety.

The following protocol is intended as a solid framework for call intake, but should not in any manner rescind or override agency procedures for the timing of broadcasts and messaging.

These procedures are established as recommended practices to consider with existing agency policy and procedure to ensure the most swift and accurate handling of every incident involving the release of dangerous gases or hazardous liquids.

All information should be simultaneously entered, as it is obtained by the telecommunicator, into an electronic format (when available) that will feed/populate any directed messages which will be sent to emergency responders in conjunction with on-air broadcasts.

Location:

Request exact location of the incident (structure addresses, street names, intersections, directional identifiers, mile posts, etc.) and obtain callback and contact information.

Determine Exactly What Has Happened:

Common signs of a pipeline leak are contained in Table 1 below. If any of these conditions are reported, THIS IS A PIPELINE EMERGENCY.

TABLE 1
Common Indications of a Pipeline Leak

Condition	Natural Gas (lighter than air)	LPG & HVL (heavier than air)	Liquids
An odor like rotten eggs or a burnt match	X	X	
A loud roaring sound like a jet engine	X	X	
A white vapor cloud that may look like smoke		X	
A hissing or whistling noise	X	X	
The pooling of liquid on the ground			X
An odor like petroleum liquids or gasoline		X	X
Fire coming out of or on top of the ground	X	X	
Dirt blowing from a hole in the ground	X	X	
Bubbling in pools of water on the ground	X	X	
A sheen on the surface of water		X	X
An area of frozen ground in the summer	X	X	
An unusual area of melted snow in the winter	X	X	
An area of dead vegetation	X	X	X

From April Heinze at NENA October 2022

A recent change made at the federal level will begin to impact your Emergency Communications Center (ECC) very soon. In April 2022, the Pipeline and Hazardous Materials Safety Administration (PHMSA), a subset of the National Highway Traffic Safety Administration (NHTSA), updated a rule for Pipeline Operators. The rule went into effect on October 5, 2022. The PHMSA rule is 49 CFR § 192.615(a)(8) and § 195.402(e)(7). It requires pipeline operators to contact the appropriate PSAP immediately upon notification of a potential rupture. The rule specifies the following:

A **Notification of Potential Rupture** is an observation of any unanticipated or unexplained:

- Pressure loss outside of the pipeline's normal operating pressure
- Rapid release of a large volume of a commodity (e.g., natural gas or hazardous liquid)
- Fire or explosion in the immediate vicinity

ECCs will begin to receive calls from pipeline operators for situations that may not be dispatchable. Of the three potential rupture notifications, the "pressure loss outside of the pipeline's normal operating pressure" will be the most difficult for responders to locate and mitigate. The operators will contact the ECC at the same time they are sending a technician to check the potential problem and determine the actual location. Many pipeline segments span an extensive area that could cross multiple ECC and Fire Department boundaries. Based on recent discussions with pipeline operators, they will call ECCs to fulfill the rule requirements to place the ECC on standby for a potential problem. They also want the ECC to contact them if the ECC receives any calls that may confirm there is a problem.

PHMSA and pipeline operators lack an understanding of local ECC and first responder policies and procedures. Some pipeline operators have already sent letters to ECCs that serve the areas their pipeline infrastructure is located. It does not appear that PHMSA engaged the ECC community before adopting the rule, nor have they communicated this information to the responder community.

So, what does this mean for your ECC? ECCs are responsible for intaking information and dispatching appropriate resources. They are not in the habit of intaking details of a potential emergency and doing nothing with it. To do nothing creates liability issues for your ECC. ECC Managers should work with local Fire Departments to develop local policy regarding handling these calls. The policy will need to address whether to hold the information until further information is provided from the pipeline operator or, if a dispatch is to be made, what resources need to be sent. The policy should also address how to properly notify the pipeline operator if the ECC or responders discover that a potential rupture is, in fact, an actual rupture. ECC management should incorporate pipeline maps into their local GIS systems or maintain a map easily accessible to call-takers of the pipeline infrastructure within their jurisdiction. PHMSA has a pipeline mapping system that ECCs can use, <https://www.npms.phmsa.dot.gov/>. In addition, the ECC should consider specific questions within their call intake guides.

Specific Questions that ECCs may want to incorporate for potential rupture situations include:

1. What commodity might be leaking, and how severe does the potential leak appear?
2. What is the point-to-point location span of the potential rupture?
3. Is any special equipment needed for responders to mitigate the potential problem?

To comply with the new PHMSA rule, pipeline operators must contact ECCs reliably. Some pipeline operators are local or regional companies with existing relationships with the ECCs in their area. However, many pipeline operators serve a large geographic area and may not have established relationships with every ECC within their service area. Those pipeline operators may utilize the NENA Enhanced PSAP Registry and Census (EPRC) to obtain PSAP contact information. NENA strongly encourages you to verify the accuracy of your PSAP's contact information in the EPRC database. ECC 24/7/365 emergency contact number(s) should be 10-digit lines answered as quickly as possible. Callers should not be required to interact with a phone tree or wait on hold if possible. Access to the EPRC is free for ECCs. To learn more and to request user accounts if you do not already use the EPRC, visit nena.org/eprc.

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).

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

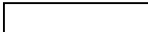


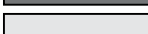




- Indicates area of pipeline operations
- May have multiple markers in single right-of-way
- May have multiple pipelines in single right-of-way
- DOES NOT show exact location
- DOES NOT indicate depth (*never assume pipeline depth*)
- DOES NOT indicate pipeline pressure



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.

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

National One-Call Dialing Number:



Know what's below.
Call before you dig.

For More Details Visit: www.call811.com

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
- Mud or water bubbling up
- 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

High Consequence Areas Identification*

Pipeline safety regulations use the concept of “High Consequence Areas” (HCAs), to identify specific locales and areas where a release could have the most significant adverse consequences. Once identified, operators are required to devote additional focus, efforts, and analysis in HCAs to ensure the integrity of pipelines.

Releases from pipelines can adversely affect human health and safety, cause environmental degradation, and damage personal or commercial property. Consequences of inadvertent releases from pipelines can vary greatly, depending on where the release occurs, and the commodity involved in the release.

What criteria define HCAs for pipelines?

Because potential consequences of natural gas and hazardous liquid pipeline releases differ, criteria for HCAs also differ. HCAs for natural gas transmission pipelines focus solely on populated areas. (Environmental and ecological consequences are usually minimal for releases involving natural gas.) Identification of HCAs for hazardous liquid pipelines focuses on populated areas, drinking water sources, and unusually sensitive ecological resources.

HCAs for hazardous liquid pipelines:

- Populated areas include both high population areas (called “urbanized areas” by the U.S. Census Bureau) and other populated areas (areas referred to by the Census Bureau as a “designated place”).
- Drinking water sources include those supplied by surface water or wells and where a secondary source of water

supply is not available. The land area in which spilled hazardous liquid could affect the water supply is also treated as an HCA.

- Unusually sensitive ecological areas include locations where critically imperiled species can be found, areas where multiple examples of federally listed threatened and endangered species are found, and areas where migratory water birds concentrate.

HCAs for natural gas transmission pipelines:

- An equation has been developed based on research and experience that estimates the distance from a potential explosion at which death, injury or significant property damage could occur. This distance is known as the “potential impact radius” (or PIR), and is used to depict potential impact circles.
- Operators must calculate the potential impact radius for all points along their pipelines and evaluate corresponding impact circles to identify what population is contained within each circle.
- Potential impact circles that contain 20 or more structures intended for human occupancy; buildings housing populations of limited mobility; buildings that would be hard to evacuate. (Examples are nursing homes, schools); or buildings and outside areas occupied by more than 20 persons on a specified minimum number of days each year, are defined as HCA’s.

* <https://primis.phmsa.dot.gov/comm/FactSheets/FSHCA.htm>

Identified Sites*

Owners and companies of gas transmission pipelines are regulated by the US Department of Transportation (DOT). According to integrity management regulations, gas pipeline companies are required to accept the assistance of local public safety officials in identifying certain types of sites or facilities adjacent to the pipeline which meets the following criteria:

- (a) A small, well-defined outside area that is occupied by twenty or more persons on at least 50 days in any twelve-month period (the days need not be consecutive). Examples of such an area are playgrounds, parks, swimming pools, sports fields, and campgrounds.
- (b) A building that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12 month period (the days and weeks need not be consecutive). Examples included in the definition are: religious facilities, office buildings, community centers, general stores, 4-H facilities, and roller rinks.
- (c) A facility that is occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate. Examples of such a facility are hospitals, schools, elder care, assisted living/nursing facilities, prisons and child daycares.

Sites within your jurisdiction will fit the above requirements, please go to my.spatialobjects.com/admin/register/ISR to provide this valuable information to pipeline companies.

* 49 CFR §192.903.

IDENTIFIED SITE REGISTRY

Pipeline operators need your help keeping people and property safe.

Identified Sites - locations where many people occupy an area near a pipeline asset or facility. These are places where people may gather from time to time for a variety of reasons.

Some of these sites are very difficult for companies to obtain without help from those with local knowledge of the area.

Please use the following website to gain secure access, so you can assist in identifying sites where people congregate in your community:

my.spatialobjects.com/admin/register/ISR

Pipeline operators are required by law to work with public officials who have safety or emergency response, or planning responsibilities that can provide quality information regarding identified sites.



Maintaining Safety and Integrity of Pipelines

Pipeline companies invest significant time and capital maintaining the quality and integrity of their pipeline systems. Most active pipelines are monitored 24 hours a day via manned control centers. Pipeline companies also utilize aerial surveillance and/or on-ground observers to identify potential dangers. Control center personnel continually monitor the pipeline system and assess changes in pressure and flow. They notify field personnel if there is a possibility of a leak. Automatic shut-off valves are sometimes utilized

to isolate a leak. Gas transmission and hazardous liquid pipeline companies have developed supplemental hazard and assessment programs known as Integrity Management Programs (IMPs). IMPs have been implemented for areas designated as “high consequence areas” (HCAs) in accordance with federal regulations. Specific information about companies’ programs may be found on their company web sites or by contacting them directly.

How You Can Help Keep Pipelines Safe

While accidents pertaining to pipeline facilities are rare, awareness of the location of the pipeline, the potential hazards, and what to do if a leak occurs can help minimize the number of accidents. A leading cause of pipeline incidents is third-party excavation damage. Pipeline companies are responsible for the safety and security of their respective pipelines. To help maintain the integrity of pipelines and their right-of-way, it is essential that pipeline and facility neighbors protect against unauthorized excavations or other destructive activities. You can help by:

- Being aware of any unusual or suspicious activities or unauthorized excavations taking place within or near the pipeline right-of-way or pipeline facility.
 - Develop contacts and relationships with pipeline company representatives, i.e. participate in mock drill exercises with your local pipeline company.
 - Share intelligence regarding targeting of national infrastructure, and specific threats or actual attacks against pipeline companies.

- Assist with security steps for pipeline facilities during heightened national threat levels, i.e., increased surveillance near facilities.
- Monitor criminal activity at the local level that could impact pipeline companies, and anti-government/pipeline groups and other groups seeking to disrupt pipeline company activities.
- Keeping the enclosed fact sheets for future reference.
- Attending an emergency response training program in your area.
- Familiarizing yourself and your agency with the Pipelines and Informed Planning Alliance (PIPA) best practices regarding land use planning near transmission pipelines.
- Completing and returning the enclosed postage-paid survey.
- Report to the pipeline company localized flooding, ice dams, debris dams, and extensive bank erosion that may affect the integrity of pipeline crossings.

National Pipeline Mapping System (NPMS)

The National Pipeline Mapping System (NPMS) is a geographic information system created by the U.S. Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS) in cooperation with other federal and state governmental agencies and the pipeline industry to provide information about companies and their pipelines. The NPMS web site is searchable by ZIP Code or by county and state, and can display a printable county map.

Within the NPMS, PHMSA has developed the Pipeline Integrity Management Mapping Application (PIMMA) for use by pipeline companies and federal, state, and

local government officials only. The application contains sensitive pipeline infrastructure information that can be viewed via internet browsers. Access to PIMMA is limited to federal, pipeline companies. PIMMA access cannot be given to any person who is not a direct employee of a government agency.

For a list of companies with pipelines in your area and their contact information, or to apply for PIMMA access, go to npms.phmsa.dot.gov. Companies that operate production facilities, gas/liquid gathering piping, and distribution piping are not represented by NPMS nor are they required to be.

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

- Submit Agency Capabilities Survey
 - Receive Certificate of Completion
- Visit <https://trainingcenter.pdigm.com/> to register for training



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:

Association of Public-Safety Communications Officials - International (APCO)

www.apcointl.org/

Common Ground Alliance

www.commongroundalliance.com

Federal Emergency Management Agency

www.fema.gov

Federal Office of Pipeline Safety

www.phmsa.dot.gov

Government Emergency Telecommunications

www.dhs.gov/government-emergency-telecommunications-service-gets

Infrastructure Protection – NIPC

www.dhs.gov/national-infrastructure-protection-plan

National Emergency Number Association

www.nena.org/?

National Fire Protection Association (NFPA)

www.nfpa.org

National Pipeline Mapping System

<https://www.npms.phmsa.dot.gov>

National Response Center

www.nrc.uscg.mil or 800-424-8802

Paradigm Liaison Services, LLC

www.pdigm.com

United States Environmental Protection Agency (EPA)

www.epa.gov/cameo

Wireless Information System for Emergency Responders (WISER)

www.wiser.nlm.nih.gov

FOR MORE INFORMATION ON THE NASFM PIPELINE EMERGENCIES PROGRAM

www.pipelineemergencies.com

FOR EMERGENCY RESPONSE INFORMATION, REFER TO DOT GUIDEBOOK.

FOR COPIES: (202) 366-4900

www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg

About Paradigm

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



HSEEP

Homeland Security Exercise
and Evaluation Program

Presenter/Contact Information:

Key Take-Aways:

✓
✓
✓
✓
✓

Comments to Remember

Questions to Ask

New Concepts to Explore



A FREE service paid for by buried utility operators, Washington811 provides call before you dig service to facility owners in Washington & Montana.

We provide accurate cost-effective one-call service. Through communication, education, and leadership prevent damage to underground utilities and ultimately enhance public safety.

For more information please visit our website at www.DigSafeWA.com.

WASHINGTON

Washington 811: "811" or 800-424-5555

Website: www.DigSafeWA.com

Hours: 24 hours, 365 days

Advance Notice: 2 business days

Marks Valid: 45 days

Law Link: www.DigSafeWA.com/resources

TICKETS			STATE LAWS & PROVISIONS								NOTIFICATION EXEMPTIONS					NOTIFICATIONS ACCEPTED						
FAX	Online	Mobile	Statewide Coverage	Civil Penalties	Emergency Clause	Mandatory Membership	Excavator Permits Issued	Mandatory Premarks	Positive Response	Hand Dig Clause	Damage Reporting	DOT	Homeowner	Railroad	Agriculture	Depth	Damage	Design	Emergency	Overhead	Large Projects	Tolerance Zone
Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	12"	N	Y	N	Y	Y*	Y	N	Y	24"



1.877.477.1162 • wa.pipeline-awareness.com