SDPA
South Dakota Pipeline Association
SOUTH DAKOTA PIPELINE ASSOCIATION

CORE®
COORDINATED RESPONSE EXERCISE

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

2023

EMERGENCY CONTACT LIST

COMPANY	EMERGENCY NUMBER
Basin Electric Power Cooperative	**1-800-339-5616**
or	**1-701-223-0041**
Black Hills Power Inc. d/b/a Black Hills Energy	**1-307-757-3010**
Bridger Pipeline LLC	**1-866-305-3741**
City of Sioux Falls Landfill Gas Pipeline	**1-866-412-2254**
Crooks Municipal Gas	**1-888-214-7225**
Dakota Access Pipeline (DAPL)	**1-800-753-5531**
Garretson Natural Gas	**1-888-320-2426**
Humboldt Municipal Gas Utility	**1-605-305-0400**
or	**1-605-661-5268**
Magellan Midstream Partners, L.P.	**1-800-720-2417**
MidAmerican Energy Company (Emergency Responder)	**1-800-275-5743**
MidAmerican Energy Company (Public Emergency)	**1-800-595-5325**
Montana-Dakota Utilities Company	**1-800-638-3278**
Northern Natural Gas	**1-888-367-6671**
NorthWestern Energy	**1-800-245-6977**
NuStar Energy - Central East Region	**1-800-759-0033**
South Dakota Intrastate Pipeline Company	**1-800-852-0949**
TC Energy / Keystone Pipeline L.P.	**1-866-920-0007**
TC Energy / Northern Border Pipeline Company	**1-800-447-8066**
Watertown Municipal Utilities	**1-605-882-6233**
WBI Energy Transmission	**1-888-859-7291**
Xcel Energy (Gas)	**1-800-541-8441**
Xcel Energy (Electric)	**1-800-641-4400**

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
South Dakota One Call	**1-800-781-7474**
National One-Call Referral Number	**1-888-258-0808**
National One-Call Dialing Number	**811**

Table of Contents

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South Dakota Pipeline Association
SOUTH DAKOTA PIPELINE ASSOCIATION

To: ALL EMERGENCY OFFICIALS

From: South Dakota Pipeline Association

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/2021-01/ERG2020-WEB.pdf.

Pipeline Emergency Response
PLANNING INFORMATION

ON BEHALF OF:

Basin Electric Power Cooperative
Black Hills Power Inc. d/b/a Black Hills Energy
Bridger Pipeline LLC
City of Sioux Falls Landfill Gas Pipeline
Crooks Municipal Gas
Dakota Access Pipeline (DAPL)
Garretson Natural Gas
Humboldt Municipal Gas Utility
Magellan Midstream Partners, L.P.
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South Dakota Intrastate Pipeline Company
TC Energy / Keystone Pipeline L.P.
TC Energy / Northern Border Pipeline Company
Watertown Municipal Utilities
WBI Energy Transmission
Xcel Energy

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 **www.npms.phmsa.dot.gov** to determine additional companies operating in your area.

Overview

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

Type 1 Products	Flash Point	Ignition Temperature
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

Highly Volatile Liquids

- 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

Type 3 Products	Flash Point	Ignition Temperature
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

Pipeline Emergency Response Training

First Responders and Emergency Personnel

SDPA
South Dakota Pipeline Association
SOUTH DAKOTA PIPELINE ASSOCIATION

Instructor:

Paradigm

Continuing Education Unit (CEU) Opportunities

South Dakota Emergency Medical Services (EMS) Continuing Education Units

1. South Dakota Board of Medical & Osteopathic Examiners – approved for 1-hour preparatory Course 9213A
2. South Dakota Department of Health – Approved for 1-hour preparatory Course 9627

SDPA Members

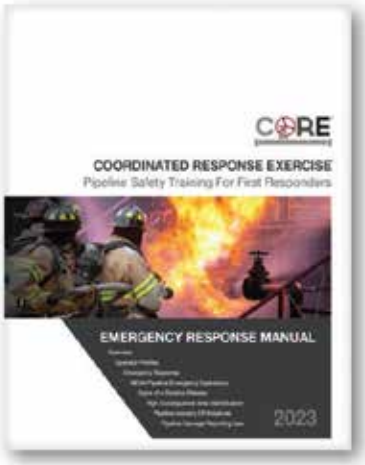
sdpa.pipelineawareness.org

Basin Electric Power Cooperative · Black Hills Energy · Belle Fourche Pipeline · City of Sioux Falls Public Works · Crooks Municipal Gas · Dakota Access Pipeline · Garretson Natural Gas · Humboldt Natural Gas · Magellan · MidAmerican Energy Company · Montana-Dakota Utilities · Northern Border Pipeline Company · Northern Natural Gas · NorthWestern Energy · NuStar · South Dakota Intrastate Pipeline Company · South Dakota 811 · TC Energy · WBI Energy Transmission · Xcel Energy

Local Operator Information*

- Operator and/or company name
- Pipeline systems and products
- Location of pipelines
- Pipeline size/operating pressure(s)
- Operator Response(s) to a pipeline emergency

*Information in the materials may not represent all pipeline companies in your area.



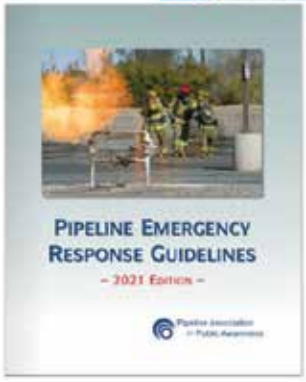
Coordinated Response Exercise®

- **Learn** your roles and responsibilities as emergency responders should a pipeline emergency happen in your jurisdiction. As well as your access to resources.
- **Acquaint** you with the operator's ability to respond to a pipeline emergency.
- **Identify** the types of pipeline emergencies.
- **Plan** how all parties can engage in mutual assistance to minimize hazards to life, property and the environment.

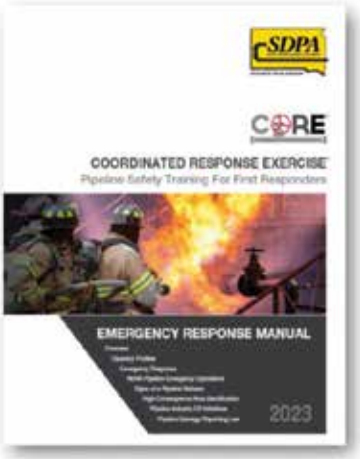
Code of Federal Regulations (CFR): 49 CFR Parts 192 and 195

Roll Call: Law Enforcement, Fire, EMS, Emergency Management, Division of Forest Service, State & Federal Officials, School Officials, PSAP & Pipeline Operators

Program Resources



Program Resources



VSM

ERP

TC

Integrity Management

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

- Internal and external cleaning 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

Pipeline Operators Emergency Response Plans

Natural gas and hazardous liquids

- Notify appropriate fire, police, and other public officials of **gas** or **liquid** pipeline emergencies, coordinate planned responses, and actual responses during an emergency
- Identify the type of incident
- Prompt and effective response measures
- Availability of personnel and equipment
- Make safe any actual or potential hazard to life, property, and the environment
- Incident investigation and review

Natural gas (49 CFR 192.615)

- Establish and maintain communication with fire, police, and other public officials
- Direct actions to protect people, then property
- Emergency shutdown to minimize hazard to life, property, and the environment
- Safely restore service

Hazardous liquid (49 CFR 195.402)

- Take necessary actions, such as emergency shutdown and pressure reduction
- Control of released hazardous liquid or carbon dioxide at scene to minimize hazards
- Minimize public exposure to injury by taking appropriate actions such as evacuations or traffic controls
- Use instrumentation to assess vapor cloud coverage and determine hazardous areas

For both natural gas and hazardous liquids pipelines

- Rupture mitigation valves must be installed on all new constructed and replaced pipelines 6" in diameter or greater for onshore gas transmission, Type A gas gathering and hazardous liquid pipelines
  - This does not include natural gas distribution pipelines
- Operators must coordinate with 9-1-1 or Emergency Management

Coordinated Response Exercise®

Discussion Based Exercise

Natural Disasters

- Tornadoes
- Wildfires/Forest Fires
- Flooding/Mudslides/Slips
- Earthquakes

Human Error

- Vehicle accidents involving above ground valve sites
- Third party strikes by contractors and excavators
- Agricultural activities, field tiling

National Security Threats

- Cyberterrorism involving pipeline systems
- IED's on pipeline assets

These training programs can also go hand in hand with Homeland Security Exercise and Evaluation Programs (HSEEP)

Virtual Scenario Manager (VSM™) Map

Coordinated Response Exercise Discussion

Discussion Questions

- Pipeline Operators: How do you typically find out about an emergency, and what protocols go into effect when a product release occurs on your system that your local emergency responders may not be aware of (behind the scenes)?
- Emergency Responders: How will we deliver coordinated, prompt, reliable and actionable information to the whole community about what is happening? (Mission: Response; Public Information & Warning)
- Pipeline Operators: Do you always know where emergency responders will set up an Incident Command Post (ICP)?
- Emergency Responders: How will we establish and maintain a unified and coordinated operations structure that appropriately integrates all critical stakeholders and supports the execution of core capabilities? (Mission: Response; Operational Coordination)

Coordinated Response Exercise Discussion

Discussion Questions

- **Pipeline Operators:** How will you get access to the scene if a secured perimeter has been established?
- **Emergency Responders:** How will we conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities? (Mission: Response; Environmental Response / Health & Safety)
- **Pipeline Operators:** How will you typically handle communications;
  - At the scene between pipeline operators?
  - At the scene between pipeline operators and the ICP / other emergency responders?
  - Between field pipeline personnel and Control Centers / SCADA Centers?
- **Emergency Responders:** How can we ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces? (Mission: Response; Operational Communications)

Discussion-Based Exercise Recap

- 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

National Emergency Number Association

Pipeline Emergency Operations Standard

NENA's pipeline emergency operations workgroup recommendations

- Awareness of pipelines affecting the 911 service area
- Pipeline leak recognition and initial response actions
- Additional notices to pipeline operators

Initial intake checklist

- Quick reference guide in program materials

Pipeline emergency operations standard/model recommendations

- Access the full report through **nena.org**

"Actions taken during this time frame significantly impact the effectiveness of the response and are critical to public safety"

Product Characteristics

Hazardous Liquids
ER Guide 128 (Pages 192-193)
- Crude oil, jet fuel, gasoline and other refined products
- **Liquid in and liquid out of the pipeline**

Highly Volatile Liquids
ER Guide 115 (Pages 166-167)
- Propane, Butane, Ethane and natural gas liquids
- **Liquid in and vapor out of the pipeline**

Natural Gas
ER Guide 115 (Pages 166-167)
- Gas in and gas out of the pipeline
- **Odorant Mercaptan added where required**

Product Characteristics Resources

Mobile Applications: Android and iPhone

Carbon Dioxide (CO_2)

Description and release characteristics
ER Guide 120 (Pages 176-177)

- CO_2 is a colorless, odorless gas in its purest form
- In the pipeline, CO_2 travels in the form of a liquid
- If a release were to occur, it would be as a gas and have a slightly musty odor
- A refrigeration effect would occur with a release, producing a vapor cloud (similar to a white smoke cloud), and could be easily dispersed by the wind
- Touching the pipeline or the escaping CO_2 near the leak could cause frostbite
- In its gas form, seeks low-lying areas such as valleys and ditches
- CO_2 is non-flammable and non-toxic, however, in large amounts it could be harmful if inhaled or lead to difficulty in breathing

Hydrogen Sulfide (H_2S)

Highly toxic, colorless gas

ER Guide 117 (Pages 170-171)

Workers in oil and natural gas drilling and refining may be exposed because hydrogen sulfide may be present in oil and gas deposits and is a by-product of the desulfurization process of these fuels.
*OSHA Oil and Gas Well Drilling and Servicing eTool

2-5ppm
Prolonged exposure may cause nausea and tearing of the eyes

100-150ppm
Loss of smell (olfactory fatigue or paralysis)

500-700ppm
Staggering, collapse in 5 minutes. Death after 30 to 60 minutes

700-1,000ppm
Rapid unconsciousness, "knockdown" or immediate collapse within 1 to 2 breaths, breathing stops, death within minutes

1,000-2,000ppm
Nearly instant death

https://www.osha.gov/SLTC/etools/oilandgas/general_safety/h2s_monitoring.html

Hydrogen (H_2)

Description and Release Characteristics

ER Guide 115 (Pages 166-167)

- Lightest of all gases
- Colorless, odorless, tasteless and nontoxic
- Dissipates quickly in its gaseous form
- Displaces Oxygen
- Flammable (burns with a pale blue, almost invisible flame)
- In liquid form, can cause cryogenic burns to skin and eyes

Methane Gas (CH_4)

Description and Release Characteristics

ER Guide 115 (Pages 166-167)

- Gas in and out of the pipeline
- Found in landfill storage fields
- Lighter than air
- Flammable, explosive and displaces Oxygen
- Has unique smell
- Will migrate
- Transported through plastic/stainless steel pipes due to corrosiveness
- **Methane is important for electrical generation by burning it as a fuel in a gas turbine or steam boilers.**

Benzene (C_6H_6)

ER Guide 130 (Pages 196-197)

Potential Hazards

- Extremely flammable
- May form explosive mixtures with air
- Vapors are initially heavier than air and spread on ground
- Vapors may travel to source of ignition and flash back
- Vapor explosion hazard indoors, outdoors or in sewers

Health Hazards

- Vapors may cause toxic effects if inhaled or absorbed through skin
- Inhalation or contact with material may irritate or burn skin/eyes
- Vapors may cause dizziness or suffocation
- Fire will produce irritating, corrosive and/or toxic gases

Public Safety

- Isolate spill or leak area for at least 150 ft in all directions
- Keep unauthorized personnel away
- Stay uphill, upwind and/or upstream
- Ventilate closed spaces before entering

Petroleum Products Batching

Emergency Response and 811

Derailments, car accidents, excavating/farming mishaps, natural disasters, and wildfires

PHMSA Advisory Bulletin (2012-08)

- Based on National Transportation Board recommendation
- Inform emergency responders about the benefits of 811
- Identify underground utilities in the area
- Notify underground utilities in the area

811

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 line/system is closed
- Beware of the potential for **Boiling Liquid Expanding Vapor Explosion (BLEVE)**

Local Distribution Systems

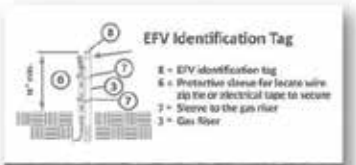
Caution

- 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



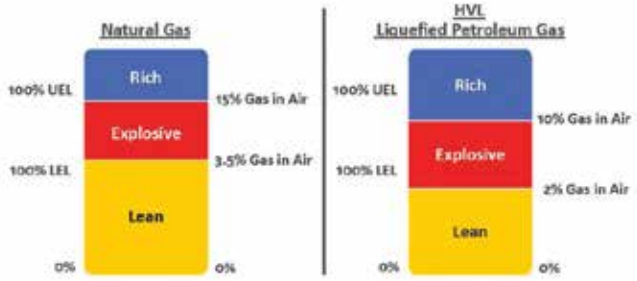
Excess Flow Valve (EFV)

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 Limit depends on characteristics of gas (SDS)

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 distribution company from a safe distance

InfraGard – Protecting Critical Infrastructure

InfraGard is a partnership between the FBI and members of the private sector for the protection of U.S. Critical Infrastructure.

https://infragard.org

16 Critical Infrastructure Sectors:

- Chemical
- Commercial Facilities
- Communications
- Critical Manufacturing
- Dams
- Defense Industrial Base
- Emergency Services
- Energy
- Financial Services
- Food and Agriculture
- Government Facilities
- Healthcare and Public Health
- Information Technology
- Nuclear Reactors, Materials, and Waste
- Transportation Services
- Water & Wastewater Systems

Emergency Response Portal (ERP)

PHMSA Advisory Bulletin issued October 2010

https://my.spatialobjects.com/admin/register/ERPP

Provides agencies secure access to participating pipeline operator profiles include:*

- Contact information
- Counties of operation
- Product(s) transported

*Additional information updated to share pipeline mapping, emergency response plans.

State Resources

Visit SDPA's website at sdpa.pipelineawareness.org

- Register for SDPA meetings
- Download SDPA Member Operator Profiles
- Learn about South Dakota's One-Call Law
- Learn about South Dakota's state pipeline regulatory agency
- **Fill out your agency's capability survey annually or if any changes occur throughout the year**

2022 $250 Gift Card Winners

- Fall River County LEPC
- Mobridge Police Department
- Brookings County EMA
- Yankton Volunteer Fire Department

Thank you for attending our SDPA meeting!

Pipeline Preparedness Training Center

Share with others in your 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

sdpa.pipelineawareness.org

Use Code: 2023CORE

911 Communications Director: Appreciate the opportunity to do this online and have it available for my staff. Very informative!

Battalion Chief: Thank you for the information; I also like the fact of being able to take the course online when I cannot make the live sessions.

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

Deputy Emergency Management Coordinator: Excellent presentation, Thank you for the resources and useful web pages.

Director of Public Safety: Excellent presentation. Thank you for the ability to take class online due to scheduling conflict.

Fire Chief: Thank you for providing this informative course. I would like to see more courses like this. It is a very good review and helps us tremendously.

Police Chief: The training is very informative, and I will pass this onto our Fire Department and our Law Enforcement Supervisors. Great job!!!

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, CO_2, water spray or regular foam.

Large Fire

- Water spray, fog or regular foam.

PRODUCT: Crude Oil	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1267	128
PRODUCT: Diesel Fuel	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1202	128
PRODUCT: Jet Fuel	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1863	128
PRODUCT: Gasoline	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1203	128

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

- 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.

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.

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 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.

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.

PRODUCT: Propane	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1075	115
PRODUCT: Butane	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1075	115
PRODUCT: Ethane	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1035	115
PRODUCT: Propylene	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1075/1077	115
PRODUCT: Natural Gas Liquids	
DOT GUIDEBOOK ID #:	**GUIDE #:**
1972	115

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

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

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.
- 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.

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- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

DOT GUIDEBOOK ID #: 1971

GUIDE #: 115

CHEMICAL NAMES:

- 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/2021-01/ERG2020-WEB.pdf

ANDROID APP ON Google play

Download on the App Store

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

BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

Communications and Marketing Support
1717 E. Interstate Ave.
Bismarck, ND 58503-0564
Phone (701) 223-0441
Website: www.basinelectric.com

ABOUT BASIN ELECTRIC POWER COOPERATIVE

The Basin Electric Power Cooperative Natural Gas Pipeline System consists of 2 pipelines in SD. The first serves the Deer Creek Station in Elkton, SD. It is a 13.2 mile pipeline with a 10" in diameter running from the Northern Border Pipeline starting approximately 1 mile east and 0.7 miles north of Astoria, SD and terminating at the Deer Creek Station 6 miles east and 2 miles south of White, SD.

The second serves Groton Generation Station in Groton, SD. It is an 11.6 miles in length, 10" in diameter steel coated pipeline. This Natural Gas Pipeline is located in Brown and Spink Counties in NE South Dakota. The Pipeline starts at Northern Border Valve Site 37 located in Spink County and runs Northeast 1.6 mile and runs adjacent to SD Highway 37 10 miles north before entering Basin Electric Power Cooperative Groton Generation Station. This pipeline is a high pressure with normal operating pressure range of 900 -1340 psi. Underground pipeline are one of the safest and most reliable modes of transportation of natural gas.

GROTON GENERATION STATION
Groton, SD - 95 MW (gas)

Groton Generation Station, Basin Electric's first peaking station near Groton, SD, has two generating units (video). Each 95-megawatt unit is powered by a GE LMS 100® simple cycle gas turbine.

The station is fueled by natural gas supplied from Dakota Gasification Company via the Northern Border Pipeline, and is connected to the electrical grid connected via a nearby substation operated by Western Area Power Administration.

Unit 1 went into commercial operation on July 1, 2006, and Unit 2 went into commercial operation on July 1, 2008.

DEER CREEK STATION - 300 MW

Located in Brookings County near Elkton, SD, Deer Creek Station is a 300-net megawatt capacity combined-cycle power plant. The $405-million Deer Creek Station began commercial operation in 2012. There are 28 full-time employees at the plant.

The power plant uses natural gas delivered via the Northern Border Pipeline and a new 14-mile underground pipeline to the plant. The gas is purchased from Dakota Gasification Company.

Deer Creek is connected to the electric grid by less than one mile of new 345-kilovolt transmission line. The plant features two turbine-generator sets: one turbine fired by natural gas; the other is driven by steam. Both of the turbines are connected to generators.

Major equipment at the plant includes a combustion turbine fueled by natural gas; a heat recovery steam generator; a steam turbine driven by steam created from the heat of the gas turbine's exhaust; and an air-cooled condenser to cool and convert steam to water for re-use.

Deer Creek Station will operate about 12-16 hours per day, five days a week (more, if during peak load periods).

THE ENVIRONMENT

Basin Electric has always been committed to meeting the needs of its members by producing electricity in the most economical and environmentally responsible manner possible. In addition to developing a broad portfolio of renewable resources and emission controls, Basin Electric operates some of the cleanest coal-based power plants in the country. More than $825 million has been invested in state-of-the-art environmental equipment for all Basin Electric and subsidiary facilities. The average annual operating, maintenance and depreciation cost for environmental control equipment is nearly $80 million. This investment is part of Basin Electric's pledge to protect the air, land and water.

EMERGENCY CONTACT:
1-800-339-5616 or 1-701-223-0041

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Brookings	Deuel
Brown	Spink

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

CONTACTS

Groton Generation Station
13870 406th Avenue
Groton, SD 57445-0186
Joe Nelson
Operations & Maintenance Supervisor

Deer Creek Station
20615 484th Ave
Elkton, SD 57026
Terry Ackerman
Superintendent of SD Operations

IN AN EMERGENCY, OR TO REPORT A SUSPECTED LEAK, PLEASE CALL:

Basin Electric Power Cooperative
1-701-223-5616 or
Toll-Free 1-800-339-5616

Black Hills Power, Inc. d/b/a Black Hills Energy
P.O. Box 1400
Rapid City, SD 57709-1400
Phone: (307) 757-3010
Website: www.blackhillsenergy.com
Click on SAFETY

ABOUT BLACK HILLS POWER, INC.

Black Hills Power, Inc. d/b/a Black Hills Energy delivers safe and reliable electric service to customers in South Dakota, Wyoming and Montana. While our base load energy resource comes from coal, on occasion it is necessary to back-up our resources with combustion turbines that are fueled by natural gas.

Black Hills Power d/b/a Black Hills Energy has been providing safe, reliable electric service to customers in the Black Hills area for more than 125 years.

Black Hills Power was incorporated on August 24, 1941, at which time we had small generating plants all over the Black Hills supplying power to our fast growing territory. Today, these plants have largely been replaced by three power generation complexes in South Dakota and Wyoming.

Black Hills Power owns and operates five natural gas fired combustion turbines, also referred to as peak load power plants, in South Dakota and one in Wyoming. They provide back-up generation to serve our customers in the event one of our base-load power plants requires maintenance or repair.

In order to provide the necessary generation from these peak load power plants, natural gas pipelines are used to transport natural gas fuel used to operate the turbines.

NATURAL GAS PIPELINES

Black Hills Power d/b/a Black Hills Energy operates 28 miles of natural gas pipeline in South Dakota and Wyoming. Natural gas pipelines are the transportation roadways for supplying natural gas to Black Hills combustions (gas) turbines. Natural gas pipelines are the nation's safest method of delivering cleanburning natural gas. And while our safety record is exceptional, it is important for anyone who lives and works near natural gas pipelines to know basic safety information.

EMERGENCY CONTACT:
1-307-757-3010

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Pennington

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

CONTACTS

Paula Ferro-Catalino
Pipeline Compliance
Phone: 719-546-5841

Sheila Suurmeier
Gen. Comp. Coordinator
Phone: 605-721-2297

811
Know what's **below.**
Call before you dig.

Website: www.truecos.com

ABOUT BRIDGER PIPELINE LLC COMPANY

Bridger Pipeline LLC is a liquids operator in North Dakota, South Dakota, Eastern Montana, and Wyoming with the ability to gather crude oil at Poplar, Fisher, Richey, Glendive, Bowman and, Marmarth for delivery to Butte Pipeline near Baker, Montana for further transportation to Guernsey, Wyoming. Bridger's Four Bears Pipeline is a 10" line that transports crude from various pipelines in North Dakota to Butte Pipeline at Baker, Montana for further transportation to Guernsey, Wyoming.

EMERGENCY CONTACT:
1-866-305-3741

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Crude Oil	1267	128

SOUTH DAKOTA COUNTIES OF OPERATION:

Harding

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

WHAT DOES BRIDGER PIPELINE LLC 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

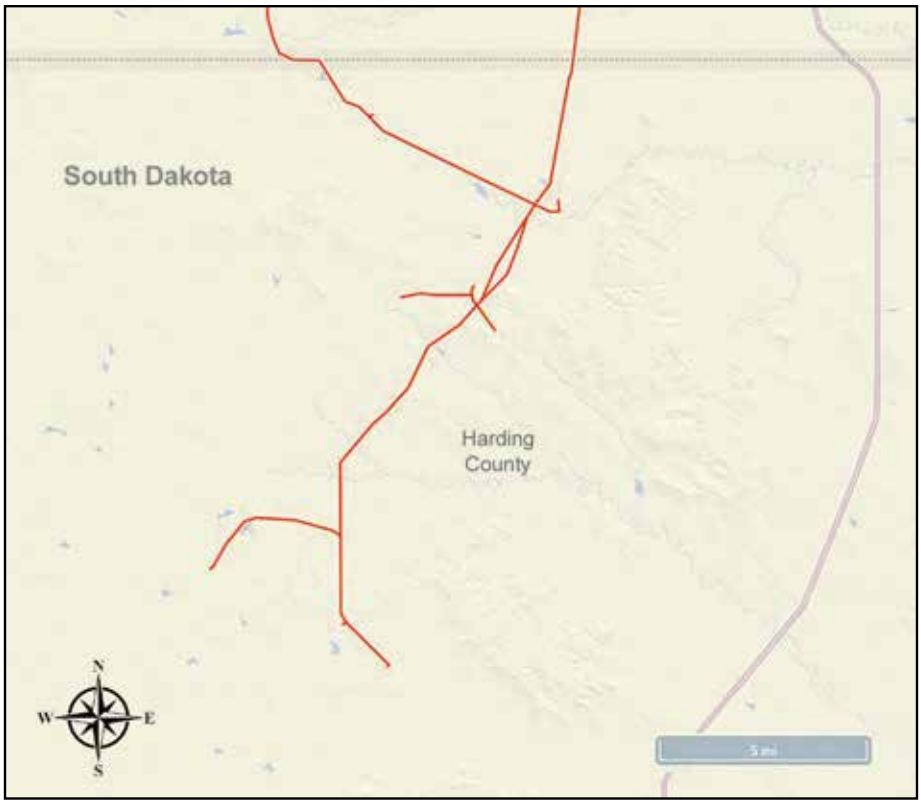
Bridger Pipeline LLC invests significant time and capital maintaining the quality and integrity of their pipeline systems. Most active pipelines are monitored 24 hours a day via manned control centers. Bridger Pipeline LLC also utilizes aerial surveillance and/or on-ground observers to identify potential 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. Motor operated control valves are utilized to isolate a leak.

HOW TO GET ADDITIONAL INFORMATION

For more information on Bridger Pipeline LLC's , go to www.truecos.com or contact us at 307-266-0300.

PRODUCTS TRANSPORTED IN YOUR AREA

PRODUCT	***LEAK TYPE***	***VAPORS***
CRUDE OIL	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.	



Base map courtesy of openstreetmap.org

CITY OF SIOUX FALLS
PUBLIC WORKS

Sanitary Landfill
26750 464th Avenue
Sioux Falls, SD 57106
Phone: 605-367-8162

GENERAL INFORMATION

The City of Sioux Falls owns and operates an 11 -mile, 12-inch diameter, low-pressure High Density Poly Ethylene (HOPE) Landfill Gas Pipeline from the Sioux Falls Regional Sanitary Landfill (Landfill) to the POET Biorefining Ethanol Plant near Chancellor, South Dakota. The majority of the pipeline route is in the public right-of-way of two townships- Home and Germantown. Both of these two rural townships reside in Turner County.

The beginning, or upstream end, of the pipeline is located on the City's Landfill property located in Minnehaha County. There is a small (approximately 33-foot) portion of the pipeline in the Minnehaha County right-of-way as it leaves the Landfill property and crosses a township road into Turner County. Off Landfill property, the pipeline runs in the public right-of-way west along 268th Street to 463rd Avenue where it turns and runs south until 277th Street, where it turns and runs west until it enters POET property and runs south to the plant. The downstream end of the pipeline is located on POET property.

For more information on the Landfill Gas Pipeline please feel free to call 605-367-8162 during normal hours or 866-412-2254 after hours.

COMMITMENT TO SAFETY, HEALTH, AND ENVIRONMENT

The City of Sioux Falls is committed to safety and protecting the health of its personnel, neighbors, the general public, and its customers as well as the surrounding environment. Safe practices need to be taught and reinforced throughout the year in an effort to prevent accidents and ensure safe operation. There is no substitute for sound judgment of the situation by the person or persons involved; the safety and well-being of the public, responders, and personnel must always be given prime consideration. Training is conducted by the City to mock certain emergency situations. This will be an aid in emergency preparation and coordination among emergency responders.

Landfill Gas Pipeline Marker

Remember, People First then Property and Environment.

The City of Sioux Falls is committed to review its pipeline operations on an on-going basis to enhance the protection of people, property, and Landfill Gas Pipeline Marker the environment.

The primary cause of pipeline damage is from third party dig-ins. As a result, the City strongly supports the use of the South Dakota One-Call System (dial 811) which is a free call and requires facility operators such as pipelines to accurately mark the location of buried utilities to prevent such damage.

EMERGENCY CONTACT:
1-866-412-2254

Landfill Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Minnehaha Turner

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

CROOKS
MUNICIPAL GAS

PO Box 785
Crooks, SD 57020
Website: www.cityofcrooks.net

ABOUT CROOKS MUNICIPAL GAS

Crooks Municipal Gas is our city-owned natural gas company. Construction of the pipeline began in 1997. Crooks Municipal Gas continues to grow, adding services and gas mains yearly. Serving over 750 customers in Crooks, Renner and Rural Sioux Falls, the city's emphasis is on safety and customer satisfaction

NATURAL GAS

Natural Gas is a colorless, odorless non toxic substance. We add an odorant to the gas to warn you in the event of a natural gas leak. Because you may not be able to detect a natural gas leak only by smell, you should also be aware of other ways to spot a leak. If you see or hear any of the following indicators on or near our pipeline, immediately call the toll free number listed on the nearest pipeline marker (1-888-214-7225).

WHAT ARE THE SIGNS OF A NATURAL GAS PIPELINE LEAK?

- Blowing or hissing sound
- Dust blowing from a hole in the ground
- Continuous bubbling in wet or flooded areas
- Gaseous or hydrocarbon odor
- Dead or discolored vegetation in a green area
- Flames, if a leak has ignited

WHAT SHOULD I DO IF I SUSPECT A PIPELINE LEAK?

Your personal safety should be your first concern:

- Evacuate the area and prevent anyone from entering
- Abandon any equipment being used near the area
- Avoid any open flames
- Avoid introducing any sources of ignition to the area (such as cell phones, pagers, 2-way radios)
- Do not start/turn off motor vehicles/ electrical equipment
- Call 911 or contact local fire or law enforcement
- Notify the pipeline company
- Do not attempt to extinguish a natural gas fire
- Do not attempt to operate any pipeline valves

PIPELINE MARKERS

Pipeline markers indicating the presence of an underground facility can be found at places where pipelines cross roads, highways or railways. A marker contains important safety information including:

- The name and phone number of the operator
- The word CAUTION, WARNING or DANGER
- The product being transported

EMERGENCY CONTACT:
1-888-214-7225

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Minnehaha

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

CONTACT

Ginny Beck
Utility Superintendent
Office: 605-543-5238 or 605-359-2371
Emergency Number 1-888-214-7225

1300 Main St
Houston, TX 77002
Phone: 713-989-7000
Website: www.energytransfer.com

Energy Transfer Partners, a Texas-based energy company founded in 1995 as a small intrastate natural gas pipeline company, is now one of the largest and most diversified master limited partnerships in the United States.

Strategically positioned in all of the major U.S. production basins, the company owns and operates a geographically diverse portfolio of energy assets, including midstream, intrastate and interstate transportation and storage assets. Energy Transfer operates nearly 120,000 miles of natural gas, crude oil, natural gas liquids and refined products pipelines and related facilities, including terminalling, storage, fractionation, blending and various acquisition and marketing assets in 41 states

Dakota Access Pipeline is an approximately 1,200-mile crude oil pipeline that extends from the Bakken/Three Forks production area in North Dakota to a storage and terminalling hub near Patoka, Illinois. Dakota Access, a joint venture, is operated by Sunoco Pipeline.

For more information about local operations of Dakota Access Pipeline, please contact us:

Beadle, Campbell, Edmunds, Faulk, Kingsbury, Lake, Lincoln, McCook McPherson, Miner, Minnehaha, Spink and Turner counties:

Matt Ryan
Operations Manager
701-421-6971 (m)
matthew.ryan@energytransfer.com

EMERGENCY CONTACT:
1-800-753-5531

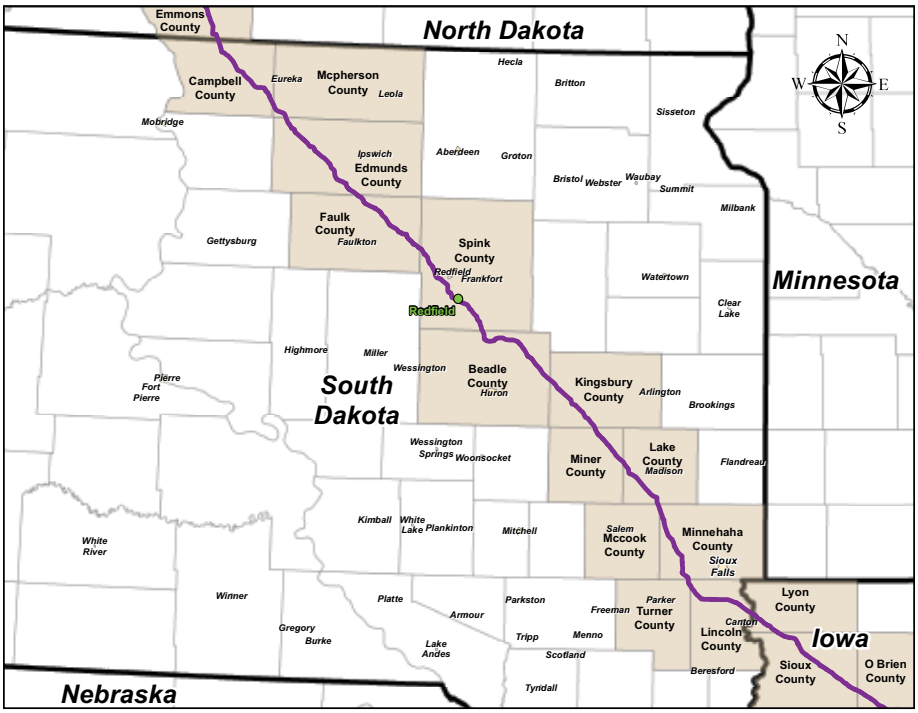
PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Crude Oil	1267	128

SOUTH DAKOTA COUNTIES OF OPERATION:

Beadle	McCook
Campbell	McPherson
Edmunds	Miner
Faulk	Minnehaha
Kingsbury	Spink
Lake	Turner
Lincoln	

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



GARRETSON
Natural Gas

PO Box 370
Garretson, SD 57030
Phone: 605-594-6723
605-359-2341

ABOUT GARRETSON NATURAL GAS

Garretson Natural Gas Utility is a Municipally owned Natural Gas Distribution System established in 1997. Garretson Natural Gas utility operates 11 miles of 2 inch plastic pipe and 13 miles of steel coated pipe. The utility has 580 customers. Garretson Natural Gas Utility is committed to operating our pipeline in a safe and efficient manner. This commitment extends to protecting the environment, and complying with the applicable federal, state and local regulations.

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- Avoid any open flames
- Avoid introducing any sources of ignition to the area (such as cell phones, pagers, 2-way radios)
- Do not start/turn off motor vehicles/ electrical equipment
- Call 911 or contact local fire or law enforcement
- Notify the pipeline company
- Do not attempt to extinguish a natural gas fire
- Do not attempt to operate any pipeline valves

PIPELINE SAFETY

System failures occur infrequently along the nation's network of interstate natural gas pipeline facilities, and many of these are caused by damage from others digging near the pipeline. We watch for unauthorized digging, but we request your help to notify us.

EMERGENCY CONTACT:
1-888-320-2426

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

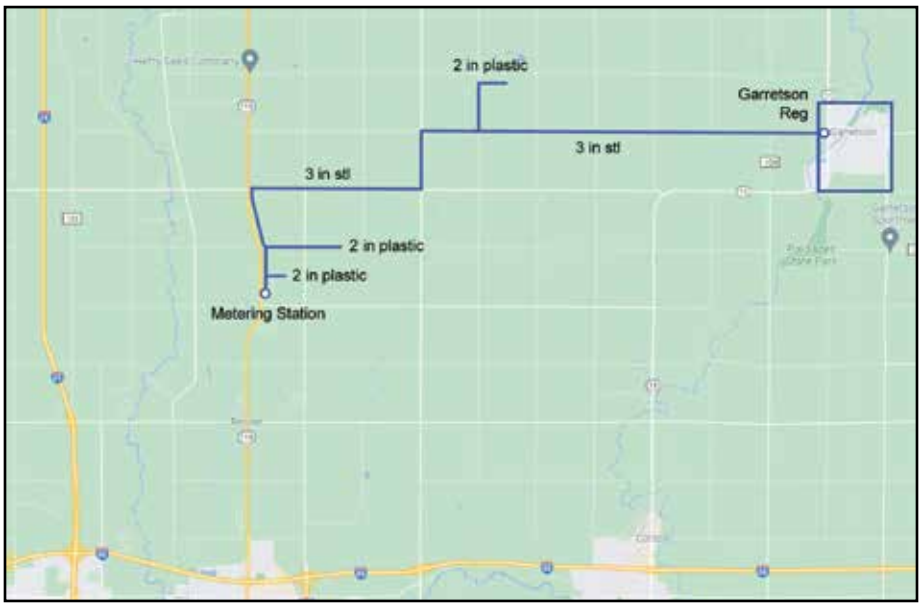
Minnehaha

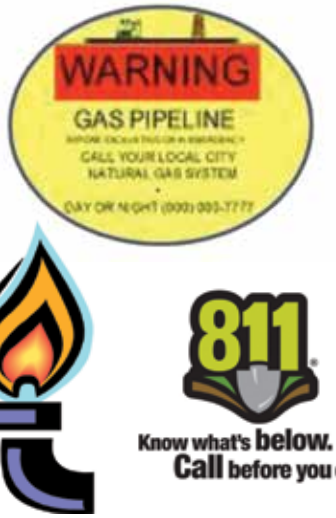
Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.

PIPELINE LOCATION AND MARKERS

Pipeline markers are used to indicate the approximate location of a natural gas pipeline and to provide contact information. Aerial patrol planes also use the markers to identify the pipeline route. Markers should never be removed or relocated by anyone other than a pipeline operator.

You can also find out where other companies' pipelines are in your area by going to the National Pipeline Mapping System website at www.npms.phmsa.dot.gov.





811
Know what's below.
Call before you dig.

PO Box 72
Humboldt, SD 57035
Phone: 605-363-3789
605-305-0400

ABOUT UGI ENERGY SERVICES

The Humboldt Municipal Gas Utility is a Municipally owned Natural Gas Distribution System established in 1996. The Humboldt Municipal gas utility operates 4 miles of 2 inch plastic pipe in the city limits of Humboldt and 8 miles of steel coated pipe down SD Hwy 38 east to Hartford. The utility has 264 customers. The Humboldt Municipal Gas Utility is committed to operating our pipeline in a safe and efficient manner. This commitment extends to protecting the environment, and complying with the applicable federal, state and local regulations.

WHAT ARE THE SIGNS OF A NATURAL GAS PIPELINE LEAK?

- Blowing or hissing sound
- Dust blowing from a hole in the ground
- Continuous bubbling in wet or flooded areas
- Gaseous or hydrocarbon odor
- Dead or discolored vegetation in a green area
- Flames, if a leak has ignited

WHAT SHOULD I DO IF I SUSPECT A PIPELINE LEAK?

Your personal safety should be your first concern:

- Evacuate the area and prevent anyone from entering
- Abandon any equipment being used near the area
- Avoid any open flames
- Avoid introducing any sources of ignition to the area (such as cell phones, pagers, 2-way radios)
- Do not start/turn off motor vehicles/ electrical equipment
- Call 911 or contact local fire or law enforcement
- Notify the pipeline company
- Do not attempt to extinguish a natural gas fire
- Do not attempt to operate any pipeline valves

PIPELINE LOCATION AND MARKERS

Pipeline markers are used to indicate the approximate location of a natural gas pipeline and to provide contact information. Aerial patrol planes also use the markers to identify the pipeline route. Markers should never be removed or relocated by anyone other than a pipeline operator.

You can also find out where other companies' pipelines are in your area by going to the National Pipeline Mapping System website at www.npms.phmsa.dot.gov.

ALWAYS CALL 811 BEFORE YOU DIG!

EMERGENCY CONTACT:
605-305-0400 or 605-661-5268

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Minnehaha

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

Magellan Pipeline Company, LP
Magellan Crude Oil Pipeline Company LP
Magellan Pipelines Holdings LP
Magellan Terminals Holdings LP
Magellan Operating Company, LLC

One Williams Center
Tulsa, OK 74172
(Headquarters) (800) 574-6671
(Local Toll Free) (800) 772-0480
Website: www.magellanlp.com

SYSTEM OVERVIEW

Name of system:
Magellan Midstream Partners, L.P.

Name of operator:
Magellan Midstream Partners, L.P.

Type of system: Transmission

List of products transported in system:
Fuel Oil, Refined Petroleum Products (Diesel Fuel, Gasoline), and Jet Fuel.

OPERATOR OVERVIEW

Magellan Midstream Partners, L.P. is a publicly traded limited partnership , principally engaged in the transportation, storage and distribution of refined products and crude oil. Magellan operates a 9,800 mile refined products pipeline system with 54 connected terminals as well as 25 independent terminals not connected to our pipeline system, two marine terminals (one of which is owned through joint venture) and a 2,200 mile crude oil pipeline system.

Our pipeline markers can be typically identified by the black and red bands at the top.

COMMITMENT TO SAFETY, HEALTH & ENVIRONMENT

Magellan Midstream Partners, L.P is committed to the safe, reliable delivery of refined products, and crude oil. Our pipelines are designed, installed, tested,operated, and maintained according to strict standards employed by our company, the pipeline industry and the federal government. Safety, honesty, responsibility, and efficiency are at the core of Magellan's business.

FREQUENTLY ASKED QUESTIONS

1. **How can an emergency responder or LEPC obtain maps of the pipeline?**

   Emergency responders and local planning/zoning authorities may obtain detailed maps of our system from field operations staff or contact us directly via email at: damageprevention@ magellanlp.com or call 888-945-2255. In addition, the National Pipeline Mapping System (www.npms.phsa.dot.gov) provides a list of pipeline operators in your community as well as the location of pipelines and other information.

2. **How will Magellan and response agencies work together during Pipeline Emergencies?**

   Local response agencies are expected to play a key role in the first few hours of a response, protecting the public, isolating the area and using local materials such as dirt or sand to help safely contain the event. Magellan personnel will join a Unified Command and can provide key response equipment such as air monitors, vacuum trucks, emergency spill contractors, heavy construction equipment and specialized command post contractors

EMERGENCY CONTACT:
(800) 720-2417

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Diesel Fuel	1202/1993	128
Fuel Oil	1202	128
Jet Fuel	1863	128
Gasoline	1223	128

SOUTH DAKOTA COUNTIES OF OPERATION:

Codington	Lincoln
Custer	Minnehaha
Deuel	Moody
Fall River	Pennington

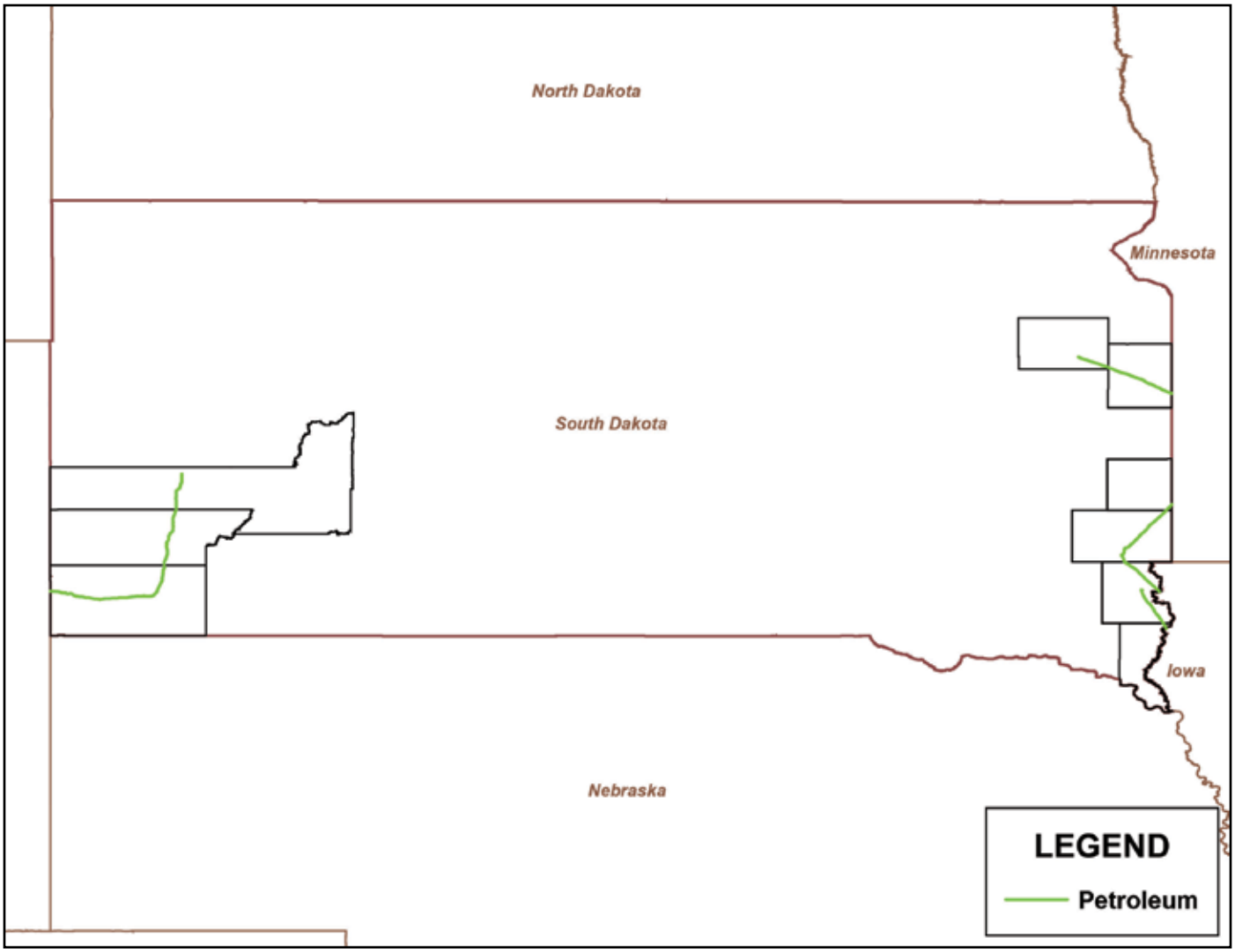
Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.

3. **How can an emergency responder learn more about the company's official emergency plans?**

   If interested in learning more about our facility response plan, please contact your local Magellan field representative or contact Magellan Corporate directly via email at: damageprevention@ magellanlp.com.

4. **How can responders learn more about pipeline responding training opportunities?**

   Visit www.pipelineemergencies.com. or visit www.magellanlp.com for more information and additional resources.


North Dakota
Minnesota
South Dakota
Iowa
Nebraska
LEGEND
Petroleum

PO Box 657
Des Moines, IA 50306-0657
Phone: 888-427--5632
Website: MidAmericanEnergy.com

MIDAMERICAN ENERGY COMPANY
Obsessively, Relentlessly At Your Service™

COMMITMENT TO SAFETY, HEALTH & ENVIRONMENT

MidAmerican Energy is a combination gas and electric utility with its corporate office in Des Moines, Iowa. MidAmerican Energy operates over 12,700 miles of distribution main and approximately 680 miles of transmission pipeline in Iowa, Illinois, South Dakota and Nebraska. MidAmerican Energy serves over 765,000 gas customers and over 783,000 electric customers.

MidAmerican Energy receives gas from four primary pipeline transportation companies: Northern Natural, Northern Border, Natural Gas Pipeline and ANR Pipeline. MidAmerican Energy only transports natural gas and does not transport liquids. MidAmerican Energy operates three storage facilities to augment pipeline supplies during high consumption days. Liquefied natural gas plants are located in Waterloo, Des Moines and Bettendorf.

Upon request, MidAmerican Energy will provide training related to gas emergency response. The MidAmerican Energy website provides general company information, gas safety notices, and other safety related information. Specific gas safety (nonemergency) questions, requests for training, or requests to review MidAmerican's emergency response plan can be sent to PublicAwareness@midamerican.com.

COMMITMENT TO SAFETY, HEALTH & ENVIRONMENT

MidAmerican Energy is committed to the safety of its employees, customers, and the general public.

MidAmerican Energy designs, constructs, operates, and maintains its facilities in compliance with all the requirements of DOT 49 CFR 192 "Transportation of Natural and Other Gas by Pipeline: Federal Safety Standards." To assure compliance with all regulations and the operation of safe and reliable pipeline facilities, the company has an active internal auditing process that inspects and evaluates company facilities.

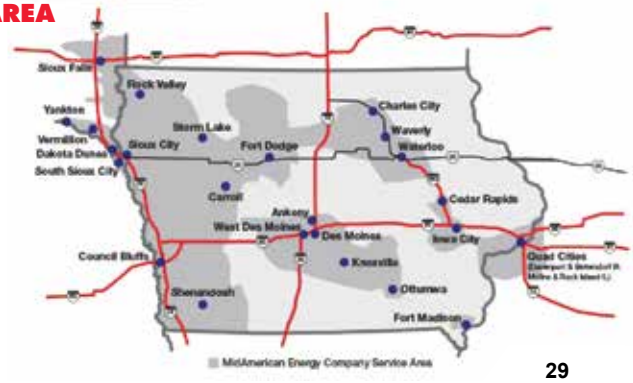
The primary cause of all pipeline incidents is third-party dig-ins. MidAmerican Energy is an enthusiastic and active supporter of state One Call systems.

MidAmerican Energy has trained personnel to respond to gas leaks and other gas emergencies in a timely manner. Responders are supported by an automated dispatch system, continuous contact with a 24/7 dispatch center, and an Emergency Plan that can quickly establish communication with support personnel and mobilize resources rapidly.

MidAmerican Energy believes responsible environmental management is good business; it benefits our customers and improves the quality of the environment in which we live.

All MidAmerican Energy employees are responsible and accountable for incorporating environmental compliance requirements into their daily work activities with obligation to bring issues and concerns forward for resolution.

SERVICE AREA



PUBLIC EMERGENCY CONTACT:
1-800-595-5325

EMERGENCY RESPONDERS:
1-800-275-5743

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:		
Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Clay	Turner	McCook
Moody	Lincoln	Yankton
Lake	Union	Minnehaha

IOWA COUNTIES OF OPERATION:

Adair	Franklin	Montgomery
Audubon	Fremont	Muscatine
Benton	Guthrie	O'Brien
Black Hawk	Harrison	Page
Boone	Humboldt	Palo Alto
Bremer	Ida	Plymouth
Buchanan	Jackson	Polk
Buena Vista	Jasper	Pottawattamie
Butler	Johnson	Poweshiek
Calhoun	Keokuk	Sac
Cass	Kossuth	Scott
Cedar	Lee	Shelby
Cerro Gordo	Linn	Sioux
Cherokee	Lyon	Union
Chickasaw	Madison	Wapello
Clinton	Mahaska	Warren
Dallas	Marion	Washington
Dubuque	Mills	Webster
Emmet	Monona	Woodbury
Floyd	Monroe	Wright

ILLINOIS COUNTIES OF OPERATION:

Henry Rock Island

NEBRASKA COUNTIES OF OPERATION:

Dakota

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

MONTANA-DAKOTA UTILITIES CO.
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Montana-Dakota Utilities Co.
400 N. Fourth St.
Bismarck, ND 58501
Website: www.montana-dakota.com

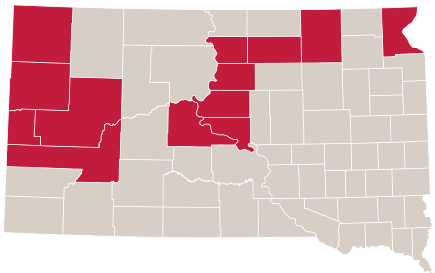
PIPELINE PURPOSE AND RELIABILITY

Montana-Dakota Utilities Co. (MDU) operates approximately 7,500 miles of natural gas pipeline. This natural gas is delivered for household, commercial and industrial use. MDU operates a safe and efficient pipeline distribution network of stations, mains, services and meters. Natural gas is the most popular home heating fuel in America, and natural gas pipelines are among the safest and most secure methods of transporting energy.

In addition, pipeline operators are extensively regulated by federal and state regulations with regard to design, construction, operation and maintenance. The natural gas industry works diligently to stay abreast of new safety methods and technologies to ensure the highest levels of security. MDU maintains memberships in industry associations, and we continually evaluate our security procedures for enhancement. At MDU our primary goal is to deliver natural gas reliably and safely to you, our customer. In doing so, we want you to know what to do if you ever smell gas or if a natural gas pipeline emergency occurs where you live or work.

HAZARD AWARENESS & PREVENTION MEASURES

Natural gas pipelines have the best safety record of any type of transportation system in the United States. Natural gas is clean, convenient and efficient, which makes it the popular energy of choice.



Like all forms of energy, however, it must be handled properly. Despite an excellent safety record, a gas leak caused by damage to a pipeline may pose a hazard and has the potential to ignite. MDU works diligently to ensure the safety of our pipeline through a variety of measures.

UTILITY MARKERS

For your safety, markers show the approximate location of pipelines and identify the companies that own and operate them. Markers may be anywhere along the right-of-way or directly over the pipelines. The pipeline may not follow a straight course between markers. While markers are helpful in locating pipelines, they provide limited information. They provide no information, for example, on depth or number of pipelines in the right-of-way. The markers can be found where pipelines intersect a street, highway or railroad. These markers display the material transported in the pipeline, the name of the pipeline operator, and telephone number where the pipeline operator can be reached in the event of an emergency. You should be aware of any pipeline markers in your neighborhood and, if possible, write down the name and phone numbers appearing on the pipeline markers in case of an emergency.

EMERGENCY CONTACT:
1-800-638-3278

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Brown	Pennington
Butte	Potter
Edmunds	Roberts
Harding	Stanley
Hughes	Sully
Lawrence	Walworth
Meade	

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

For additional information please contact MDU at awareness@mdu.com or 1-800-638-3278.

Northern Natural Gas
A BERKSHIRE HATHAWAY ENERGY COMPANY

1111 South 103rd Street
Omaha, NE 68124
Emergency: 888-367-6671
Website: www.northernnaturalgas.com

Please share this important information with others in your organization

COMPANY PROFILE

Northern Natural Gas (Northern) is a subsidiary of Berkshire Hathaway Energy, based in Omaha, Nebraska, and operates an interstate natural gas high pressure, transmission pipeline system extending from Texas to the upper Midwest. The system includes over 14,000 miles of natural gas pipeline, capable of 5.8 billion cubic feet per day (Bcf/d) of market area capacity, plus 1.78 Bcf/d of field capacity. Northern has a total of five natural gas storage facilities, three of which are underground facilities and the other two are Liquefied Natural Gas (LNG) facilities. All five total 75 Bcf which includes 4 Bcf of liquefied natural gas. At times, Northern's pipelines may be odorized, please check with your Northern Natural Gas representative to learn more. Northern provides transportation and storage services to approximately 81 utilities and numerous end-use customers in the upper Midwest. Pipeline pressures can reach as high as 1,600 pounds per square inch gauge. Pipeline sizes range from 2 inches to 36 inches in diameter. The maximum potential impact radius (PIR) is 1,000 feet.

Call 811 before digging. A pipeline representative must be present when excavating within 25 feet of the pipeline.

EMERGENCY CONTACT:
1-888-367-6671

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Beadle	Day	Miner
Bon Homme	Hamlin	Minnehaha
Brookings	Hanson	Moody
Brown	Hutchinson	Spink
Clark	Kingsbury	Turner
Clay	Lake	Union
Codington	Lincoln	Yankton
Davison	McCook	

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

HOW CAN YOU TELL WHERE A PIPELINE IS LOCATED?

Since natural gas pipelines are built underground, line markers are used to indicate the approximate location of the pipelines. However, these markers do not indicate how deep the pipeline is buried. Also the route can take twists and turns between markers. It is a crime for any person to deliberately damage, destroy, or remove any pipeline sign or right-of-way marker. Never assume the pipeline lies in a straight line. Always call your state One Call Center before digging. Pipelines can lose cover by natural erosion or other forces. Certain types of deep farming activities require advanced notification before disturbing the soil. Some examples are: chisel plowing, waterway work and drain tiling. If you observe indications that a pipeline is shallow, exposed or damaged, immediately contact the Northern Natural Gas 24-hour Operations Communication Center at 1-888-367-6671. Call 811 or visit NPMS at: www.npms.phmsa.dot.gov to learn more.

WHO SHOULD I CALL IF I DETECT A GAS LEAK IN MY HOME?

If you suspect a natural gas leak inside your home or on your service line, immediately evacuate and contact 911 and your local gas company from a safe location. Northern operates the pipeline that delivers gas to local distribution companies. The distribution companies then deliver the gas to homes and businesses.

IF YOU ARE A PUBLIC SAFETY OFFICIAL:

A public safety official must take whatever steps are necessary to safeguard the public in the event of a pipeline emergency. The following points are offered as a guide.

- Notify the appropriate pipeline company. Report the type (leak, rupture, fire) and the location of the emergency. If it is a Northern Natural Gas pipeline, call the toll-free 24-hour Operations Communication Center: 1-888-367-6671.
- Establish a safety zone around the emergency site and control access.
- Use initial evacuation of 1,320 feet (1/4 mile) until advised further.
- If gas is not burning, avoid doing anything that may ignite it. Be aware of wind direction and remove potential ignition sources.

While emergency response agencies are doing their part, Northern employees will do what needs to be done to protect lives and property.

- They will first protect people.
- If a fire does not already exist, they will remove all sources of ignition.
- They will help people in distress.
- They will eliminate the natural gas source. If it is possible to do so from the location of the emergency, they will. In many cases, the natural gas must be shut off at a remote location. It is important for you to know that Northern employees are responsible for operating the valves that isolate the affected facilities.
- Is your group or agency interested in a presentation or additional information? Call the Northern emergency number at 1-888-367-6671 and ask to establish a public education liaison. Together we will determine the appropriate Northern field location nearest you and then provide you a means to contact Northern's local representative for more details.
- For more information visit www.pipelineawareness.org/training

811
Know what's below.
Call 811 before you dig.
www.call811.com

3010 West 69th Street
Sioux Falls, SD 57108
Phone: 800-245-6977
Website: www.northwesternenergy.com

South Dakota Natural Gas Fact Sheet

OUR SERVICE

NorthWestern Energy, headquartered in Sioux Falls, SD, is an investor owned utility and one of the largest providers of electricity and natural gas in the northwest quadrant of the United States. We serve approximately 699,000 customers - 368,200 electric and 278,000 natural gas - in Montana, South Dakota, and Nebraska. Our geographical service territory is one of the largest in the country.

In South Dakota, there are 49,000 customers in 60 communities, 1,600 miles of distribution pipelines, and 55 miles of intrastate transmission pipelines.

OUR COMMITMENT TO SAFETY, HEALTH AND ENVIRONMENT

NorthWestern Energy is committed to public safety, protection of the environment, and operation of its facilities in compliance with all applicable rules and regulations. NorthWestern Energy adheres to the regulatory oversight of the Office of Pipeline Safety in the U.S. Department of Transportation. The company is proud of its safety record and follows many regulations and procedures to monitor and ensure the integrity of its pipelines.

EMERGENCY CONTACT: SD & NE: 800-245-6977

We're on call 24 hours a day to respond to your emergencies. Make sure you place your call from a telephone located far enough away from the danger area. Be sure to tell us the following information:

- The location including the street address and city where the incident is taking place
- Details of the incident
- Whether gas is leaking or burning inside or outside
- Details of any evacuations (numbers of people affected and the area affected)
- Your name and organization

EMERGENCY CONTACT:
1-800-245-6977

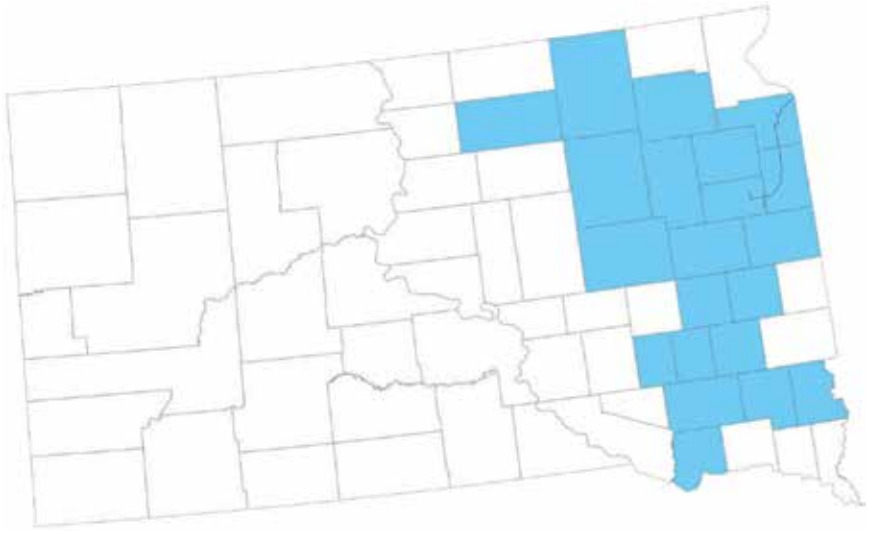
PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Beadle	Hamlin
Bon Homme	Hanson
Brookings	Hutchinson
Brown	Kingsbury
Clark	Lake
Codington	Lincoln
Davison	McCook
Day	Miner
Deuel	Spink
Edmunds	Turner
Grant	

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



Our Natural Gas Transmission Lines and Distribution Service Area

EMERGENCY RESPONSE PLANS

For additional resources specifically concerning natural gas training and/or review of NorthWestern Energy's emergency response plan contact:

Teresa McGrath (406) 497-2446
teresa.mcgrath@northwestern.com

Julie Janacaro (406) 497-2446
julie.janacaro@northwestern.com

NATURAL GAS INCIDENTS

Please familiarize yourself with these general rules.

When Natural Gas is Escaping Outside and Burning	When Natural Gas is Escaping Inside and Burning
1. Clear the area. 2. Call NorthWestern Energy's emergency number (1-800-245-6977) 3. Let the natural gas burn until the source of the fuel is shut off. 4. Prevent ignition of nearby combustibles.	1. Clear occupants from the building. 2. Call NorthWestern Energy's emergency number (1-800-245-6977) 3. Let the fire burn until the gas has been shut off. 4. Shut off gas at the meter.
When Natural Gas is Escaping Outside and Not Burning	**When Natural Gas is Escaping Inside and Not Burning**
1. Clear the area. 2. Call NorthWestern Energy's emergency number (1-800-245-6977) 3. Close air intake sources, such as windows, doors, and ventilation systems in nearby windows. 4. Reroute or restrict traffic. 5. Remove or extinguish open flames. 6. Prohibit smoking. 7. Do not use anything electrical including lights, switches, or phones, or take any other actions that might produce sparks. Turn any equipment or vehicles off, if possible, because running equipment can be a source of ignition. Leave the equipment in place - do not try to move it out of the gaseous environment.	1. Clear occupants from the building. 2. Call NorthWestern Energy's emergency number (1-800-245-6977) 3. Turn off gas supply. 4. Eliminate sources of ignition. 5. Ventilate the building by opening windows and doors. 6. Do Not - • Allow smoking • Ring the doorbell • Use the telephone • Operate electrical switches (on and off) • Pull the electric meter • Use power fans or exhausters
If it is necessary to close or turn off a natural gas valve before your NorthWestern Energy gas service technician arrives, leave it closed until NorthWestern Energy personnel can restore service.	

NuStar Pipeline Operating Partnership L.P.

NuStar Energy - Central East Region
7340 W. 21st North, Suite 200
Wichita, KS 67205
Phone: 316-773-9000
Website: www.nustarenergy.com

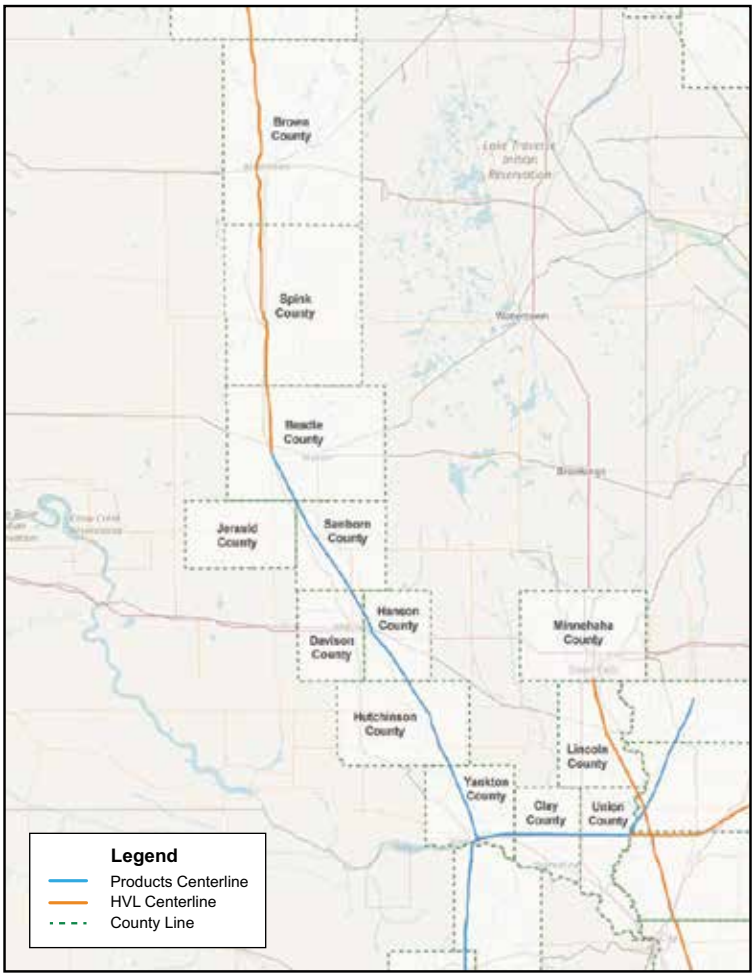
ABOUT NUSTAR PIPELINE OPERATING PARTNERSHIP L.P.

The goal of the NuStar Energy Pipeline Public Awareness Program is to enhance safety and environmental protection through increased public awareness and knowledge. Public awareness programs should raise the awareness of the affected public and key stakeholder audiences of the presence of pipelines in their communities and increase their understanding of the role of pipelines in transporting energy.

NuStar Pipeline Operating Partnership L.P. is a subsidiary of NuStar Energy L.P. Our business unit consists of pipeline systems, ranging between 3" to 16" in diameter, that transports refined petroleum products, including gasoline, diesel, and propane throughout Kansas, Nebraska, Iowa, South Dakota, North Dakota, and Minnesota. We also operate an anhydrous ammonia pipeline system in Louisiana, Arkansas, Missouri, Illinois, Indian, Iowa and Nebraska ranging between 3" to 10" in diameter. Anhydrous ammonia is primarily used as agricultural fertilizer and used as a feedstock to a number of industrial applications.

Please read and keep these important safety messages located in the brochure and company profile provided in the event you need to reference them in the future.

Contact us for more information about our Integrity Management Program or Emergency Response Plan.



EMERGENCY CONTACT:
1-800-759-0033

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Diesel Fuel	1202/1993	128
Gasoline	1203	128
Propane	1075/1978	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Beadle	Lincoln
Brown	Minnehaha
Clay	Sanborn
Davison	Spink
Hanson	Union
Hutchinson	Yankton
Jerauld	

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

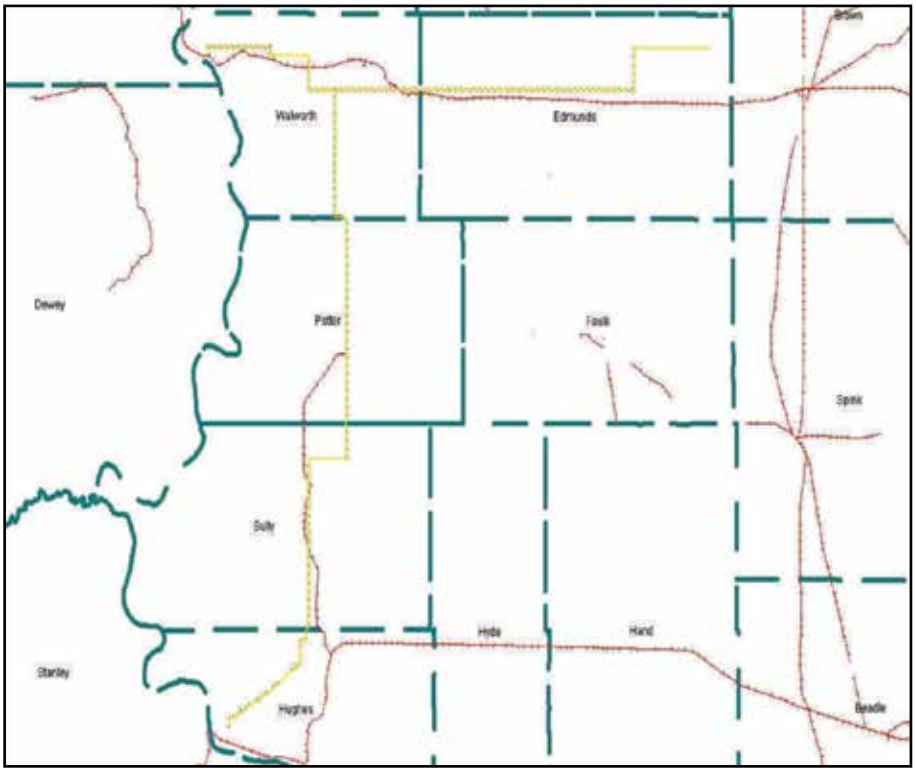
COMMITMENT TO SAFETY, HEALTH & ENVIRONMENT

At NuStar, the health and safety of our personnel, customers, and neighbors and the protection of the environment are core business values. NuStar is committed to achieving health, safety and environmental (HSE) excellence throughout the organization. NuStar emphasizes its HSE commitment through internal audits, public awareness, damage prevention, pipelines integrity management, emergency response preparedness, and other programs. In addition, most of NuStar's pipelines are operated via satellite communication systems from a central control room located in San Antonio, TX. This control center is equipped with state-of-the-art computer systems designed to continuously monitor real-time operational data, operate equipment associated with the delivery of crude oil, refined products, and anhydrous ammonia, and control safety measures to ensure smooth and safe operation of our pipelines.

1415 N. Airport Rd.
Pierre, SD 57501
Phone: (605) 224-0949
Emergency: (800) 852-0949
Website: www.sdipco.com

ABOUT SDIP ENERGY SERVICES

South Dakota Intrastate Pipelind Company is a privately owned natural gas transmission pipeline operator. SDIP operates 178 miles of combined 8, 6 and 3 inch welded high pressure steel pipeline in central South Dakota, serving several communities along our pipeline route, as well as the state capital of Pierre, South Dakota. At SDIP, we are committed to operating our pipeline in a safe and efficient manner. This commitment extends to protecting the environment, and complying with applicable federal, state and local regulations.



EMERGENCY CONTACT:
1-800-852-0949

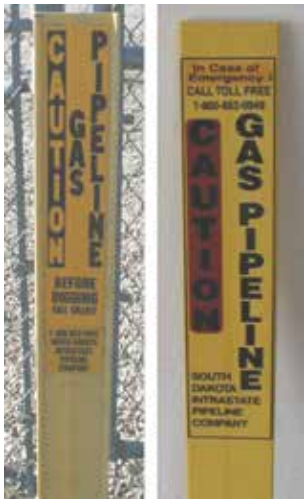
PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Edmunds	Sully
Hughes	Walworth
Potter	

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



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

TC Energy

EMERGENCY CONTACT:
1-866-920-0007

TC Energy is meeting the growing demand for energy across North America — and maximizing our pipeline infrastructure — through innovative and strategic pipeline solutions that will transport Canadian crude oil, as well as U.S. domestic crude oil to key U.S. markets in the Midwest and U.S. Gulf Coast.

KEYSTONE PIPELINE SYSTEM

The Keystone Pipeline System is a 2,639-mile pipeline system that transports crude oil from Canada to markets in the American Midwest and the U.S. Gulf Coast. The U.S. portion of the pipeline enters North Dakota, then runs south through South Dakota and Nebraska. At Steele City, Nebraska one arm of the pipeline runs east through Missouri for deliveries to Wood River and Patoka, Illinois. Another arm runs south through Oklahoma for deliveries into Cushing and continues south for deliveries into the Port Arthur and Houston, Texas areas.
pursue other required permits for the construction of this project.

For additional information contact Public Awareness at:
(855) 458-6715 or via email at: public_awareness@tecenergy.com

COMMITMENT TO SAFETY, HEALTH & ENVIRONMENT

TC Energy's Public Awareness Program is dedicated to ensuring the safety of those living and working near our facilities We aim to educate the public about the importance of calling before they dig or cross, reporting any suspicious activity near our facilities and detecting pipeline leaks. TC Energy has developed a detailed Emergency Management System (EMS). We train our staff to know our systems and what to do if an emergency occurs.

As part of our Public Awareness Program, we engage local first responders and community officials on how to jointly co-ordinate a response. We provide information and direction to safely respond to a pipeline emergency.

Typical TC Energy Keystone marker sign on the pipeline right of way (ROW) at road/ railway and canal crossings

EMERGENCY CONTACT:
1-866-920-0007

PRODUCTS	DOT GUIDEBOOK ID#	GUIDE#
Crude Oil	1267	128

SOUTH DAKOTA COUNTIES OF OPERATION:

Beadle	Kingsbury
Clark	Marshall
Day	McCook
Hanson	Miner
Hutchinson	Yankton

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

TC Energy Keystone Pipeline Company Contact Information

Public Awareness at: (855) 458-6715 or via email at: public_awareness@tcenergy.com

Northern Border Pipeline Company
Operated by TransCanada

EMERGENCY CONTACT:
1-800-447-8066

TC Energy operates the 1,249-mile Northern Border Pipeline interstate pipeline system that transports natural gas from the Montana-Saskatchewan border to interconnecting pipelines in the upper Midwestern United States and the Chicago market area.

You may obtain access to view maps for Nothern Border Pipeline facilities by following the instructions at:

http://www.npms.phmsa.dot.gov

For more detailed information on Nothern Border Pipeline facilities, please use the Public Awareness contact information shown below.

Northern Border Pipeline Company Contact Information

EMERGENCY CONTACT:
1-800-447-8066

Public Awareness: 1-855-458-6715 or
public_awareness@tcenergy.com

Know what's **below.**
Call **811** before you dig.

EMERGENCY CONTACT:
1-800-447-8066

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Brown	Edmunds
Clark	Hamlin
Codington	McPherson
Deuel	Spink

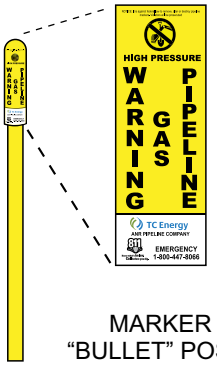
Changes may occur. Contact the operator to discuss their pipeline systems and areas of operation.

Northern Border Pipeline System Pipeline Markers and Signs

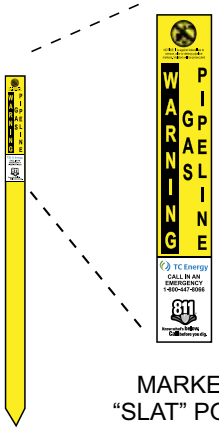
Right of Way Signs

A. Pipeline Markers are placed along the Right of Way, at Road Crossings, at Railroad Crossings andwhere each pipeline enters or leaves a fenced facility. Pipeline markers similar to these shown below are located above and near the pipe centerline. They display the name of the operator, product and emergency contact number.

MARKER SIGNS



MARKER
"BULLET" POST



MARKER
"SLAT" POST

Facility Markers

B. Danger signs are located along the perimeter of gas facilities, and at roadway entrance gates. These signs are to warn visitors and inform Emergency Responders of high pressure natural gas precautions.


V-31 ZEELAND
V-32
V-33
V-34
V-35
V-36
V-37
V-38
V-39
V-40
V-41
V-42
V-43
V-44
V-45
MINNESOTA SMS
EDMOND COMPRESSOR STATION
DAVIS SMS
WARNER SMS
ABERDEEN SMS
GROTON SMS
WEBSTER SMS
CLARK COMPRESSOR STATION
WATERTOWN SMS
MILBANK SMS
ESTELLINE SMS
BRANDT SMS
IVANHOE SMS
TYLER SMS
MARSHALL SMS
BALATON SMS
Emmons
McIntosh
McPherson
Edmunds
Brown
Spink
Clark
Codington
Deuel
Hamlin
Lyon
Lincoln
Lake Traverse Indian Reservation
Lake Oahe
South Dakota
Pierre

901 Fourth Ave SW
Watertown, SD 57201

ABOUT WATERTOWN MUNICIPAL UTILITIES

Watertown Municipal Utilities is a combination gas, water and electric utilities with our office located at:

Watertown Municipal Utilities Department
901 Fourth Ave SW
Watertown, SD 57201
605-882-6233

Watertown Municipal Utilities operates 248 miles of distribution mains, with 10,617 gas services lines and has 10,548 gas meters installed. We service Watertown, Lakes Kampeska, Pelican and rural areas around the edges of the city limits. WMU operates on gas pressures from¼ psig downstream of the meter, with mains pressures from 10 psig to 500 psig. WMU receives its primary natural gas from Northern Border Pipeline and has Northern Natural Gas as a backup. Our company only distributes natural gas and does not transport any liquids. WMU could operate a propane-air standby plant to help service our customers. The WMU website provides information on gas safety, rates, general information, 811 information, gas policies, and emergency phone numbers.

The Watertown Municipal Utilities Department is committed to providing excellent service and safety to our customers, employees, and the general public.

EMERGENCY CONTACT:
1-605-882-6233

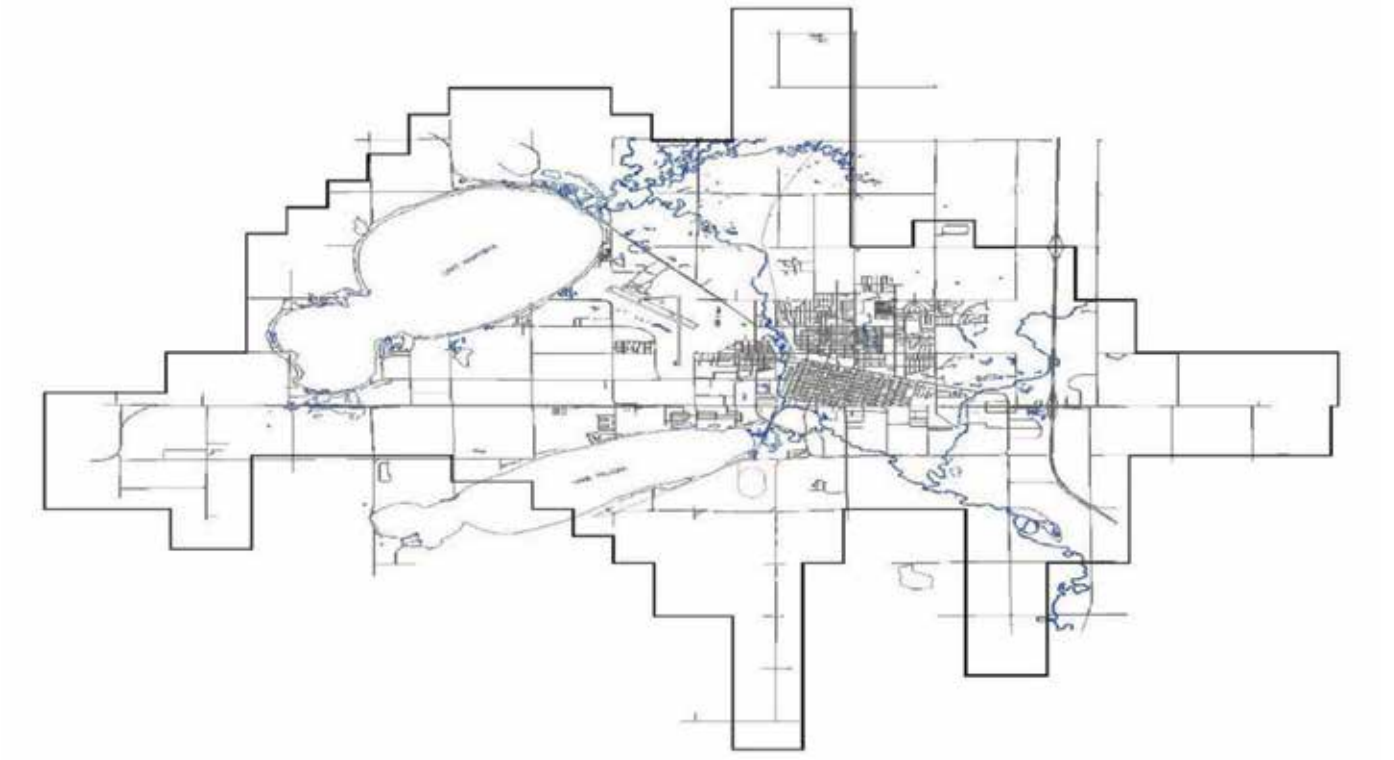
PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Codington Hamlin

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



Local Office
1014 E. Montana Avenue
Baker, MT 59313
Phone: 406-778-3338

Headquarters
2010 Montana Avenue
Glendive, MT 59330
Phone: 406-359-7200

Website: www.wbienergy.com

ABOUT WBI ENERGY TRANSMISSION

WBI Energy Transmission transports natural gas. As a safety precaution, odorant is added to our transmission lines to make natural gas detectable to the sense of smell. Our steel coated pipelines vary in size from 2 inches to 16 inches in diameter. The maximum operating pressures range from as little as 100 lbs. to 1,468 lbs. The gas travels at an average speed of about 15 miles an hour in the lines. Compressor stations are located along the line to maintain this rate. A computerized gas control center monitors the system 24 hours a day and can be reached at 1-888-859-7291 .

EMERGENCY CONTACT:
1-888-859-7291

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

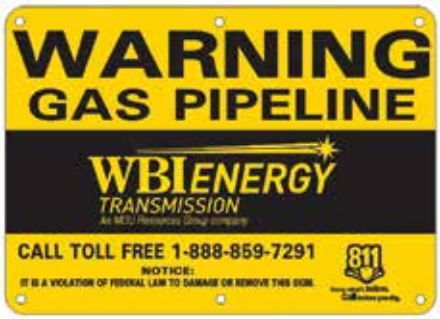
SOUTH DAKOTA COUNTIES OF OPERATION:

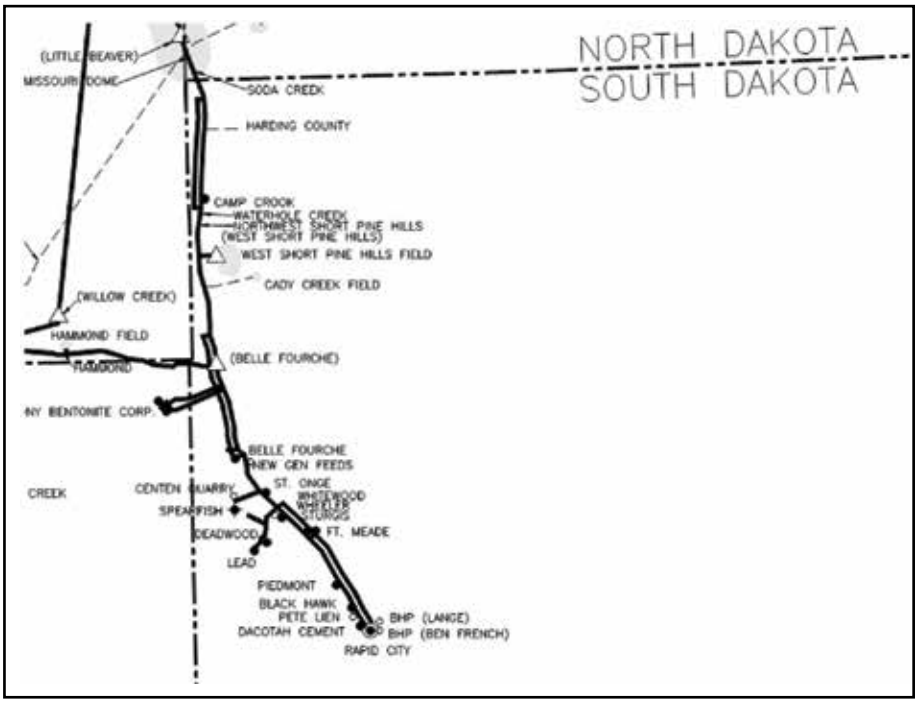
Butte
Harding
Lawrence
Meade
Pennington

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

COMMITMENT TO SAFETY, HEALTH & ENVIRONMENT

Unfortunately, some emergencies do not exhibit warnings of imminent failure while others develop because the warnings were not recognized. We must therefore be prepared to respond effectively when an emergency develops. The key to effective emergency management and response preparedness is clear, concise communication and effective cooperation. When you call the 24-hour emergency phone number located on our marker signs or as listed in this document, you will speak with someone at our gas control center. The control center is the heart of the pipeline operations, where information about the pipeline and operating equipment is constantly monitored. As an emergency responder, you can help control the incident by being prepared to communicate as much information as possible to the control center about the current incident situation. Every incident is different - each will have special problems and concerns, carefully select actions to protect people, property and the environment and continue to gather information and monitor the situation until the threat is removed.





Xcel Energy®
RESPONSIBLE BY NATURE®

To arrange a local meeting with an Xcel Energy gas emergency response representative, call 1-800-895-4999 and ask to be directed to the local community service area or gas operations manager. Your request will be directed to the appropriate field operations area.

FIRST RESPONSE FOR NATURAL GAS EMERGENCIES

Safety is a top priority for Xcel Energy. We safely install, maintain and routinely check our gas lines. And our employees are trained to assure a safe response to gas emergencies.

It's our goal to prevent injury to anyone - our employees, emergency responders and the public - and reduce any potential for damages that may result from a natural gas emergency.

Working in partnership with emergency responders helps us collectively provide a safe response. Knowing what your personnel can expect from us, and vice versa, goes a long way to providing a safer response.

In the event that you learn of a natural gas emergency first, you can help us by:

- Immediately contacting our non-published gas emergency number **1-800-541-8441**
- Indentifying the fire district calling
- Providing a complete address, or if unknown, the closest address or best directions possible
- Providing an accurate description of the nature of the situation, such as:
  - Inside gas leaking/blowing
  - Outside gas leaking/blowing
  - Inside fire
  - Outside fire
  - Injured parties
- Referring all public calls to our published customer gas emergency/ gas odor number: **1-800-895-2999** and never to our non-published number.

Gas emergencies can result from numerous events. Events that may affect our pipeline system can include:

1. Vehicles or equipment striking a natural gas pipeline or facility.
2. Leaking or blowing gas near or involving a pipeline or facility.
3. Natural gas detected inside or near a building.
4. Fire located near or directly involving a pipeline or pipeline facility.
5. An explosion near or directly involving a pipeline facility.
6. Substantial service interruptions to a pipeline or pipeline facility.
7. A natural disaster, such as:
   a. Wind storms
   b. Hail
   c. Blizzard
   d. Flooding
   e. Tornado
   f. Earthquake
8. Civil disturbance
9. Any unusual situation whereby human life or significant property is endangered

PRIMARY FIRST RESPONDER ACTION

First Responders Responsibilities Include:

- Clearing a safe area around the location and roping or barricading it off
- Closing airspace surrounding area if necessary
- Controlling any crowd that may assemble
- Routing traffic away from the scene
- Fighting any Class-A perimeter fires
- Prohibiting smoking and other sources of ignition of any sort

If natural gas is burning, we ask that you protect nearby exposure, but do not attempt to put out the natural gas fire unless life is in jeopardy. Trying to put out a natural gas fire before the gas source is isolated could cause an explosion due to re-ignition.

While emergency response agencies are doing their part, Xcel Energy's gas emergency responders will do what needs to be done to protect lives and property.

- We will first protect people from injury by removing all persons from the danger zone. If a fire doesn't already exist, we will remove any sources of ignition.
- We will help persons in distress.
- Once all persons are protected, we will do what is possible to protect property.

EMERGENCY CONTACT:
1-800-541-8441 Gas
1-800-641-4400 Electric

PRODUCTS/DOT GUIDEBOOK ID#/GUIDE#:

Natural Gas	1971	115

SOUTH DAKOTA COUNTIES OF OPERATION:

Lincoln Minnehaha

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

- We will eliminate the natural gas source. If it is possible to do so from the location of the emergency. In many cases, the natural gas must be shut off at a remote location. Xcel Energy employees are responsible for operating the valves that isolate the affected facilities, for eliminating the source and for reducing pressure in the pipeline where necessary. Our employees must perform these critical steps. Should others take well meaning, but incorrect, action, it could result in further damage and loss of service to many.
- Xcel Energy installs gas line markers to identify the presence of gas main and transmission lines and could be in the location of an emergency. The pipeline markers are for the identification of the existence of a gas facility in order to reduce damage or interference to the facility, and to inform the public how to contact the company for facility locates and damage response.

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*

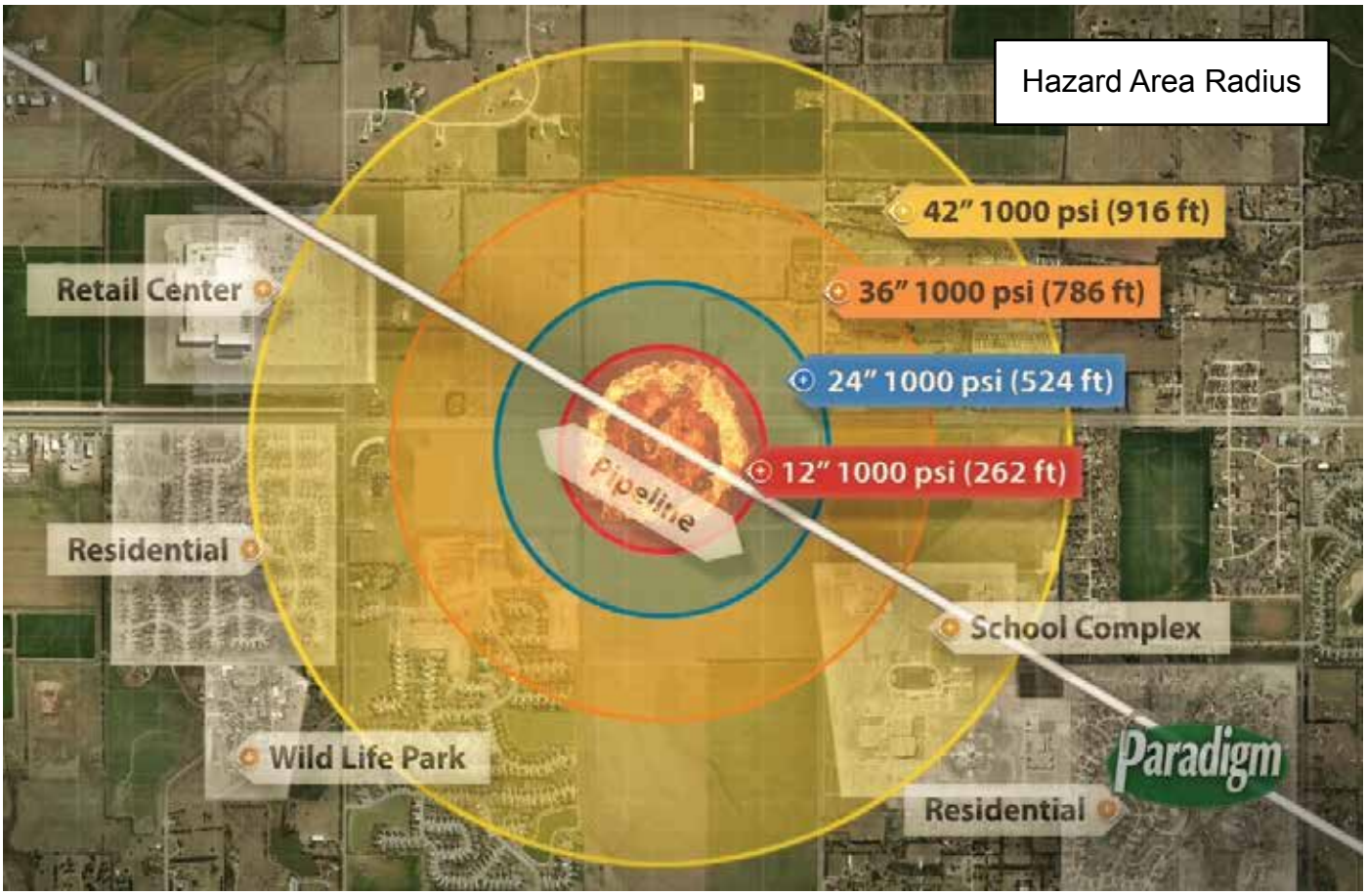
Hazardous Liquids

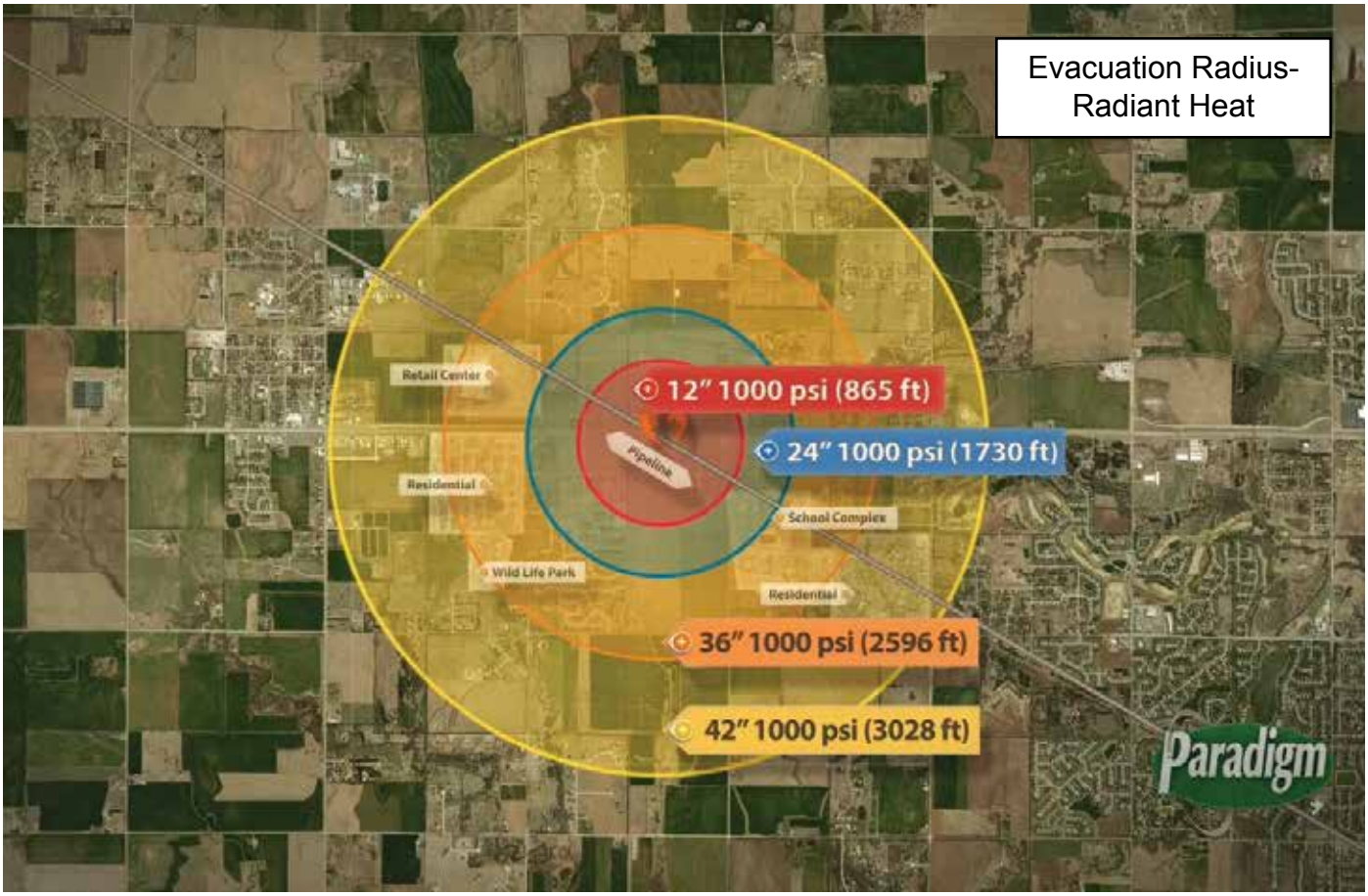
(a) General: Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once 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*


Hazard Area Radius
42" 1000 psi (916 ft)
36" 1000 psi (786 ft)
24" 1000 psi (524 ft)
12" 1000 psi (262 ft)
Pipeline
Retail Center
Residential
School Complex
Wild Life Park
Residential
Paradigm


Evacuation Radius-
Radiant Heat
12" 1000 psi (865 ft)
24" 1000 psi (1730 ft)
36" 1000 psi (2596 ft)
42" 1000 psi (3028 ft)
Pipeline
Retail Center
Residential
School Complex
Wild Life Park
Residential
Paradigm

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

PSAP - Notification of Potential Rupture Rule

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:

811

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://sdpa.pipelineawareness.org 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
https://www.nena.org/?

National Fire Protection Association (NFPA)
www.nfpa.org

National Pipeline Mapping System
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

Paradigm®

VSM™
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Presenter/Contact Information:	Key Take-Aways:
	✓
	✓
	✓
	✓
	✓

Comments to Remember

Questions to Ask

New Concepts to Explore

Additional Notes

Additional Notes

South Dakota One Call

Use South Dakota 811 to locate underground utilities before you dig. Excavators planning any operation in which earth, rock, or other material in or below the ground is moved or otherwise displaced by means of tools, equipment, or explosives, and includes grading, trenching, digging, ditching, drilling, augering, tunneling, scraping, and cable or pipe plowing or driving should make the required locate request to South Dakota 811 two working 811 days excluding Saturdays, Sundays and legal holidays of the state before the planned work. Homeowners and landowners planning their own excavation activities are required to notify South Dakota 811 as well.

The law regarding damage reporting was changed in two areas- who to report damages to and calling 911:

1. 49-7A-12. Notification of damage to underground facility--Repairs--Flammable, toxic, or corrosive gas or liquid.

   If any underground facility is damaged, dislocated, or disturbed in advance of or during excavation work, the excavator shall immediately notify the one-call notification center and, if known, the operator of the facility of the damage, dislocation, or disturbance. No excavator may conceal or attempt to conceal any damage, dislocation, or disturbance, nor may that excavator attempt to make any repair to the facility unless authorized by the operator of the facility. If the damage, dislocation, or disturbance results in the escape of any flammable, toxic, or corrosive gas or liquid, the excavator shall immediately report the escape to the authorities by calling the 911 emergency telephone number and notifying the one-call notification center and, if known, the operator of the facility.

2. Also we now have Voluntary Positive Response in place. It's not required that companies utilize this, but is a start in getting companies familiar with the process.

SOUTH DAKOTA

South Dakota 811: 800-781-7474 or 811
Website: www.sdonecall.com
Hours: 24 hours
Advance Notice: 48 hours (excluding weekends and holidays)
Marks Valid: 21 working days from start date and time on ticket
Law Link:
http://primis.phmsa.dot.gov/comm/DamagePreventionSummary.htm

** Damage reporting required. The excavator shall immediately notify the one-call notification center and, if known, the operator of the facility. If damage, dislocation, or disturbance results in the escape of any flammable, toxic, or corrosive gas or liquid, the excavator shall immediately report the escape to 911, the one-call center and, if known, the operator of the facility*

*** For agricultural tilling and road and ditch maintenance to a depth of 18" only; homeowners have a 12" depth exception for tilling of soil and gardening.*

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
N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y *	N	N	N	N	N **	Y	Y	Y	N	Y	18"

SDPA
South Dakota Pipeline Association
SOUTH DAKOTA PIPELINE ASSOCIATION

1.877.477.1162 • sdpa.pipeline-awareness.org