

# Coordinated Response Exercise (CoRE)

First Responders and Emergency Personnel - Instructor: Bill Greenwalt



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# Pipeline Incident Response



# Coordinated Response Exercise

## Purpose

1. **Learn** your responsibility and resources in the event of an emergency
2. **Acquaint** you with the operator's ability to respond to a pipeline emergency
3. **Identify** the types of pipeline emergencies
4. **Plan** how all parties can engage in mutual assistance to minimize hazards to life or property

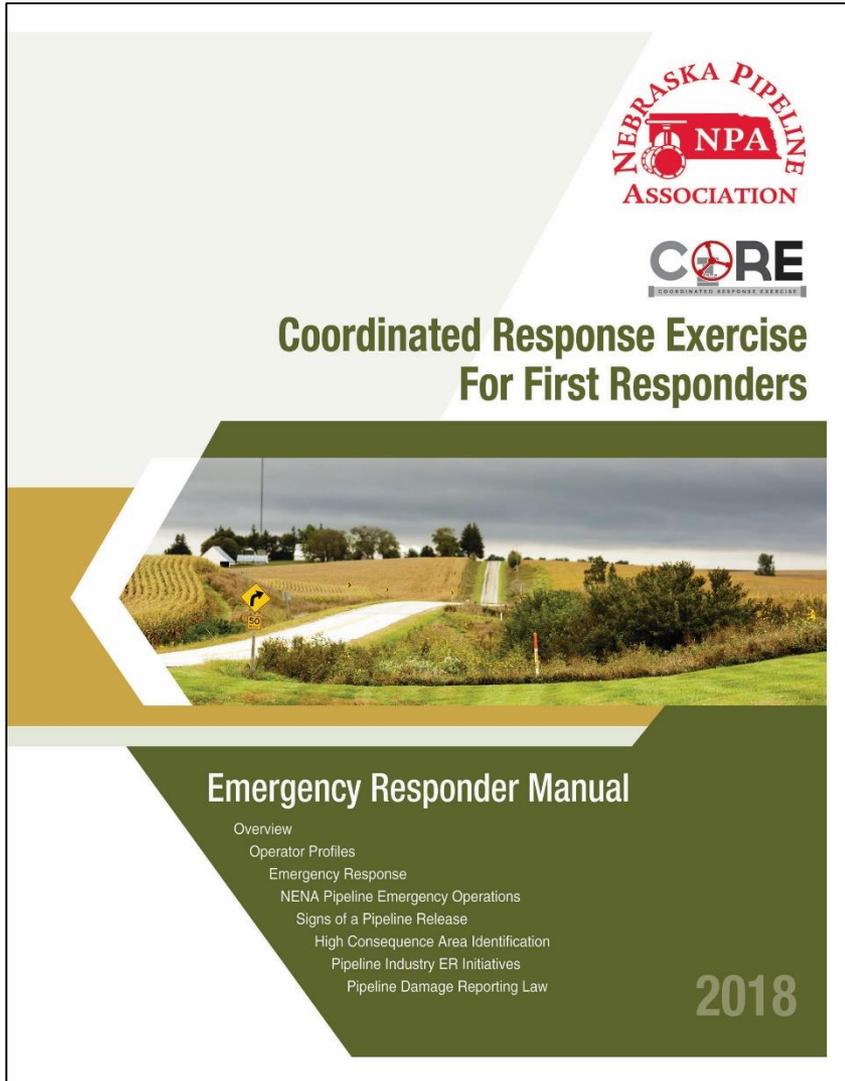
\*Code of Federal Regulations (CFR): 49 CFR Parts 192 and 195

## Roll Call

Law Enforcement, Fire, EMS, Emergency Management, Division of Forest Service,  
State & Federal Official, School Official, Others &

**Pipeline Operators**

# Program Resources



The cover of the Emergency Responder Manual 2018 features a photograph of a rural landscape with a dirt road, fields, and a house under a cloudy sky. The text is arranged in a clean, professional layout with logos at the top and a list of contents on the left side.

**NEBRASKA PIPELINE NPA ASSOCIATION**

**CORE**  
COORDINATED RESPONSE EXERCISE

## Coordinated Response Exercise For First Responders

### Emergency Responder 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

**2018**



[Nebraskapipeline.com](http://Nebraskapipeline.com)



# Pipeline Mileage Overview\*

<u>Pipeline Type</u>	<u>Nebraska</u>	<u>Nationwide</u>
Hazardous Liquid	968	199,653
Gas Transmission	5,826	301,791
Gas Gathering	0	17,621
Gas Distribution Main	13,047	1,266,010
Gas Distribution Service	7,359	902,772
<b>Total Mileage</b>	<b>27,200</b>	<b>2,687,848</b>

\*Pipeline and Hazardous Materials Safety Administration (PHMSA)

# Thank You



[nebraskapipeline.com](http://nebraskapipeline.com)

# Pipeline System Types

## Gathering

Transport gases and liquids such as oil or natural gas, from the commodity's source to a processing facility and/or storage facilities.

## Transmission

Can vary in size and have greater flow and pressure than other types of pipelines. They can transport natural gas or other refined products from a gathering, processing, or storage facility to processing, or additional storage facilities.

## Distribution

Are unique to natural gas systems. These pipelines are used to deliver product to end-users or customers and tend to be in populated areas.

## Storage Facilities

Above or underground facilities used to receive and store hazardous liquid or natural gas transported by a pipeline for reinjection and continued transportation by pipeline.

# National Pipeline Mapping System (NPMS)

npms.phmsa.dot.gov

- NPMS is built from data submitted by operators. Since 2002, operators have been required to submit mapping information and update their submissions annually.
- NPMS **does not contain** information on interconnects, pump and compressor stations, valves, direction of flow, capacity, throughput, operating pressures, **distribution or gathering pipelines.**

**npms** NATIONAL PIPELINE MAPPING SYSTEM

Search

**GOVERNMENT OFFICIAL**

**PIPELINE OPERATOR**

**GENERAL PUBLIC**

**FIRST-TIME VISITOR**

**PIMMA USER LOGIN**  
PASSWORD PROTECTED VIEWING RESTRICTED TO GOVERNMENT OFFICIALS AND PIPELINE OPERATORS

**APPLY FOR PIMMA ACCESS**

**PUBLIC MAP VIEWER**  
PIPELINE MAPS FOR THE GENERAL PUBLIC - NO PASSWORD REQUIRED

**ABOUT PUBLIC MAP VIEWER** **USE PUBLIC MAP VIEWER** **PUBLIC VIEWER IPHONE APP**

Home About NPMS What's New Contact Us

FAQs FOIA Privacy Policy

**PHMSA**  
Pipeline and Hazardous Materials  
Safety Administration

The National Pipeline Mapping System contains information about hazardous liquid and gas transmission pipelines under the jurisdiction of **US DOT PHMSA**

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

U.S. Department of Transportation

# Product Characteristics

## Hazardous Liquids

(Crude oil, jet fuel, gasoline, other refined products)

**Liquid in and liquid out of the pipeline**

**ER Guide 128** (Page 194)

## Highly Volatile Liquids

(Propane, butane, ethane, natural gas liquids)

**Liquid in and vapor out of the pipeline**

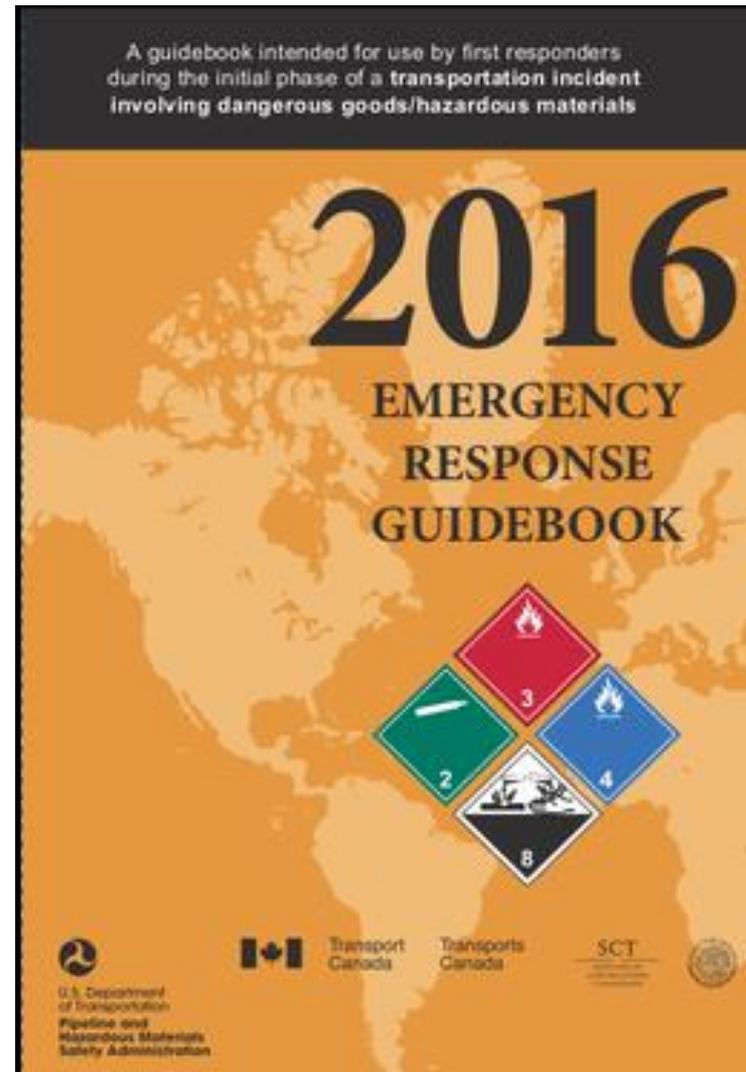
**ER Guide 115** (Page 168)

## Natural Gas

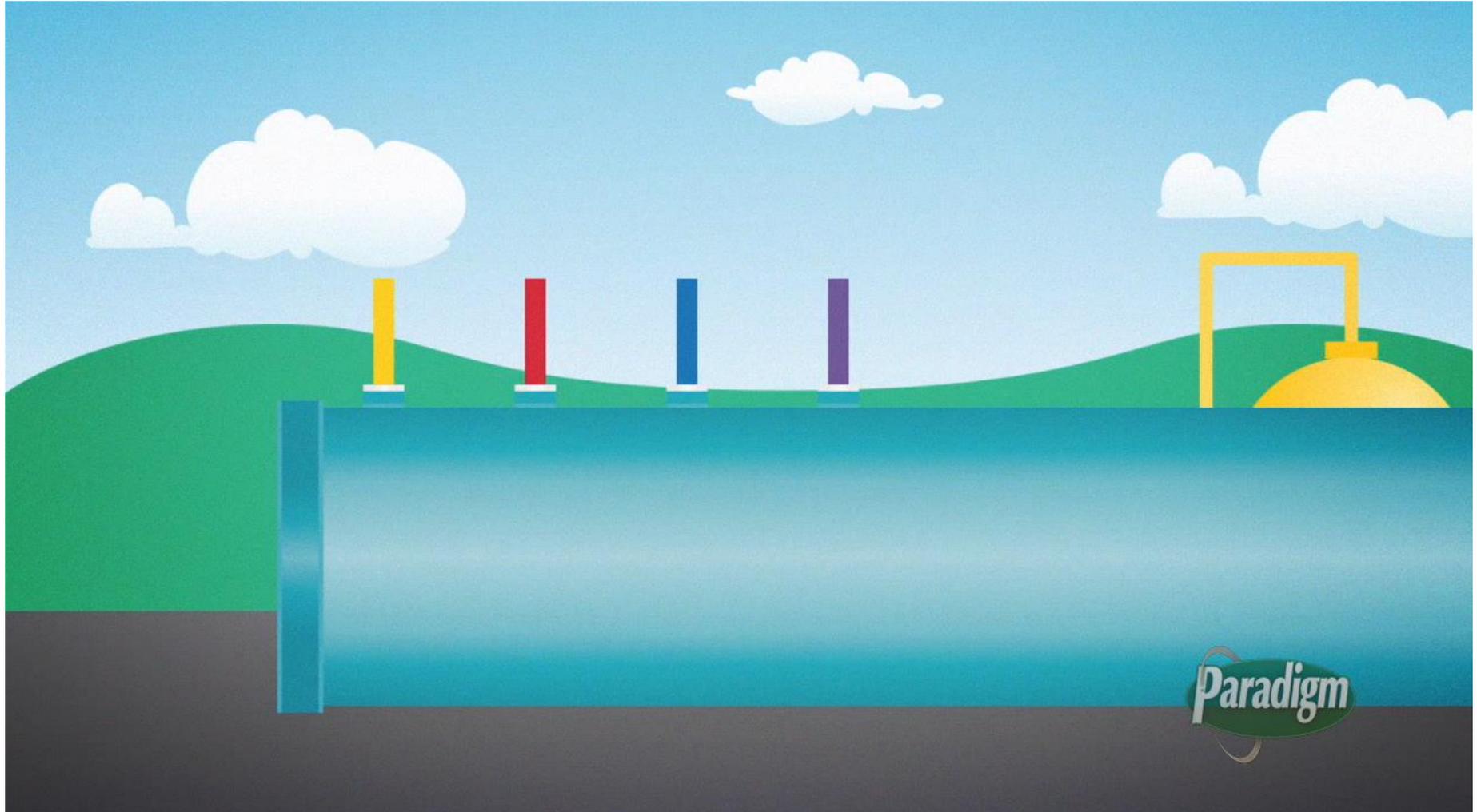
**Gas in and gas out of the pipeline**

**ER Guide 115** (Page 168)

**\*Odorant (if added) is Mercaptan**



# Petroleum Products



Paradigm

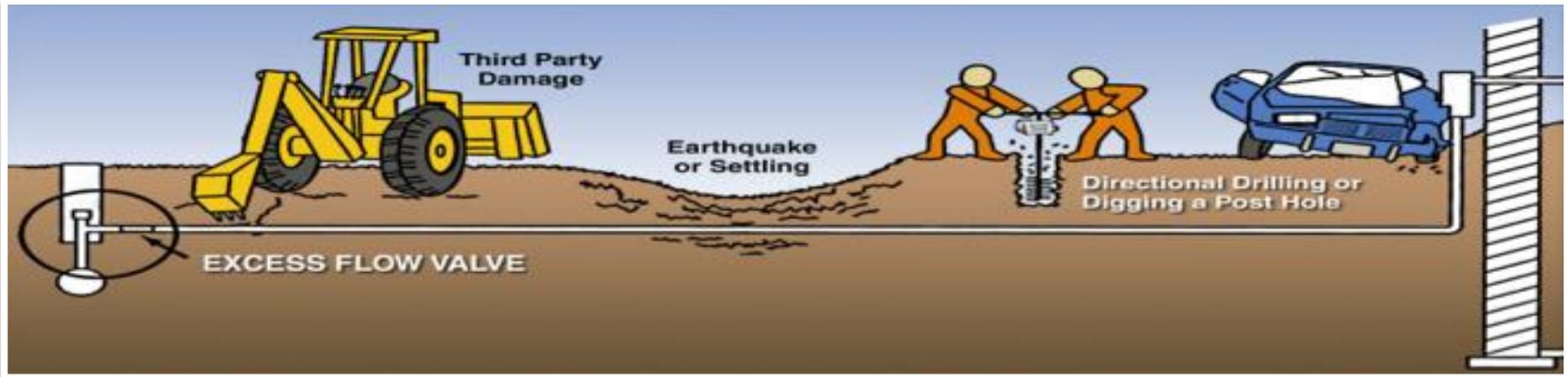
# Local Distribution Systems



- Be aware not all natural gas leaks are from excavation; Unintended leaks from stoves, water heaters, furnaces, etc.
- **Caution:** use combustible gas indicators on sites when called out on natural gas leak events
- Mercaptan can be stripped as it travels through soil
- Frost heaves, breaking pipes
- Gas meters break due to snow build up from melting snow falling from roofs

# Excess Flow Valve (EFV)

## Local Distribution Lines



- Automatic reduction of gas flow should 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***

# Farm Taps

- In mainly rural areas, some natural gas pipeline companies may have facilities commonly referred to as a “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.



# Pipeline Operators Emergency Response Plans

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

## Natural Gas (CFR 49 192.615)

- Establishing and maintaining communication with fire, police and other public officials
- Direct actions to protect people, then property
- Emergency shutdown and pressure reduction to minimize hazards to life or property
- Safely restore service

## Hazardous Liquid (CFR 49 195.402)

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

# Emergency Response and 811\*

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

## PHMSA Advisory Bulletin (2012-0176)

- Based on National Transportation Safety Board recommendation
- Inform Emergency Responders about the benefits of 811
- Identification of underground utilities in the area
- Notification of underground utilities that an incident has occurred



**Nebraska 811**

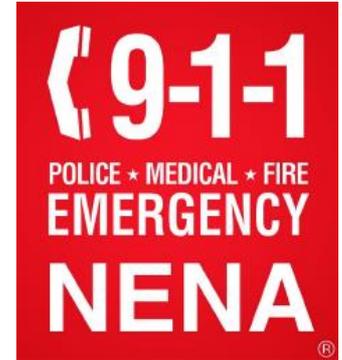
**Cherry Valley, IL  
Train Derailment**

# National Emergency Number Association (NENA)

## 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 notifications 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](https://www.nena.org)

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



# Block I: Scenario Initial 911 Call

## **Following the initial 911 call and subsequent mobilization of the response resources assigned by dispatch:**

- What are our priorities now that we are on scene?
- What are the characteristics and hazards of HL/NG/HVL, and where do we find this information?
- What specialized resources are needed and how will we access them?
- What are the Pipeline Company's initial actions in response to this incident (Emergency Response Plan)?

## **Given our shared priorities of preserving life, property, and the environment:**

- How will we determine our protective action: evacuate (½ mile area) or shelter in place?
- What procedure(s) do(es) our 911 center have in place to contact utility companies in case of an emergency?
- While on scene, how will local response units stay in contact with our Pipeline Operator?
- By what method(s) will the local Pipeline Operator stay in contact with the SCADA/Control Center?
- Where is the SCADA/Control Center located?

## Given the situation as it currently stands:

- Who has financial responsibility for this incident and who is in charge?
- Is there potential for federal and state agencies to be involved in this incident?
- How will emergency responders and the pipeline company coordinate to feed the media?
- **Prepare a short brief PER table regarding a media release. (Be prepared to answer questions regarding your media statement)**

# Coordinated Responses

## Actual Events

**Man gets 20 years for trying to blow up pipeline (June, 2012)**

<http://www.fox4news.com/>

**Natural gas pipeline ruptures, closes two miles of river (June, 2015)**

<http://www.arktimes.com/>

**Higgins sentenced for shutting off pipeline valve in Chouteau County (November, 2017)**

<http://www.krtv.com/>

**Workers hurt in explosion when backhoe strikes gas line (July, 2015)**

<http://www.wtae.com/>

**First responders evacuate area, close roads due to H2S leak (Oct, 2013)**

<http://www.newswest9.com/>

**Plano pipeline bomber given 20-year sentence (June, 2015)**

<https://www.dallasnews.com/>

# RSVP-Nebraska Pipeline Association

[nebraskapipeline.com](http://nebraskapipeline.com)

RSVP - Today



Pipeline Operators

Emergency Officials

Excavators

Public Officials

Affected Public



Have a Meeting Invite?

Enter Your WebCode Here: XXXX-XXXX

[Get Started](#)

To view the meeting schedule and register for a program, [click here](#)

## 2019 Program Cities

**Albion, Auburn, Beatrice, Columbus, Grant, Holdrege, Lexington, Lincoln, McCook, Norfolk, North Platte, O'Neill, Ravenna, Scottsbluff, Sidney South Sioux City**



# Natural Emergencies

## Flooding

- a. Exposed pipelines

## Wildfires

- a. Cattle Disposal
- b. Fire line breaks

## Earthquakes

- a. Underground pipelines and utilities

## Tornadoes

- a. Exposed pipeline and leaks
- b. Exposed live utilities

# Thank You



[nebraskapipeline.com](http://nebraskapipeline.com)