WHAT TO DO IN THE EVENT A LEAK WERE TO OCCUR:

- ***Turn off*** any equipment and eliminate any ignition sources without risking injury.
- ***Leave the area*** by foot immediately. Try to direct any other bystanders to leave the area. Attempt to stay upwind.
- If known, from a safe location, notify the pipeline operator immediately and call **911** or your local emergency response number. The operator will need your name, your phone number, a brief description of the incident, and the location so the proper response can be initiated.

WHAT NOT TO DO IN THE EVENT A LEAK WERE TO OCCUR:

- ***Do Not*** cause any open flame or other potential source of ignition such as an electrical switch, vehicle ignition, light a match, etc. Do not start motor vehicles or electrical equipment. Do not ring doorbells to notify others of the leak. Knock with your hand to avoid potential sparks from knockers.
- ***Do Not*** come into direct contact with any escaping liquids or gas.
- ***Do Not*** drive into a leak or vapor cloud while leaving the area.
- ***Do Not*** attempt to operate any pipeline valves yourself. You may inadvertently route more product to the leak or cause a secondary incident.
- ***Do Not*** attempt to extinguish a petroleum product or natural gas fire. Wait for local firemen and other professionals trained to deal with such emergencies.

HOW CAN YOU HELP?

- Become familiar with the pipelines and pipeline facilities in the area.
- Record the operator name, contact information and any pipeline information from nearby marker/facility signs and keep in a permanent location near the telephone.
- Be aware of unusual or suspicious activities or unauthorized excavations taking place within or near the pipeline right-of-way or pipeline facility; report such activities to the pipeline operator and local law enforcement.

HIGH CONSEQUENCE AREA 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.

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.

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.

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

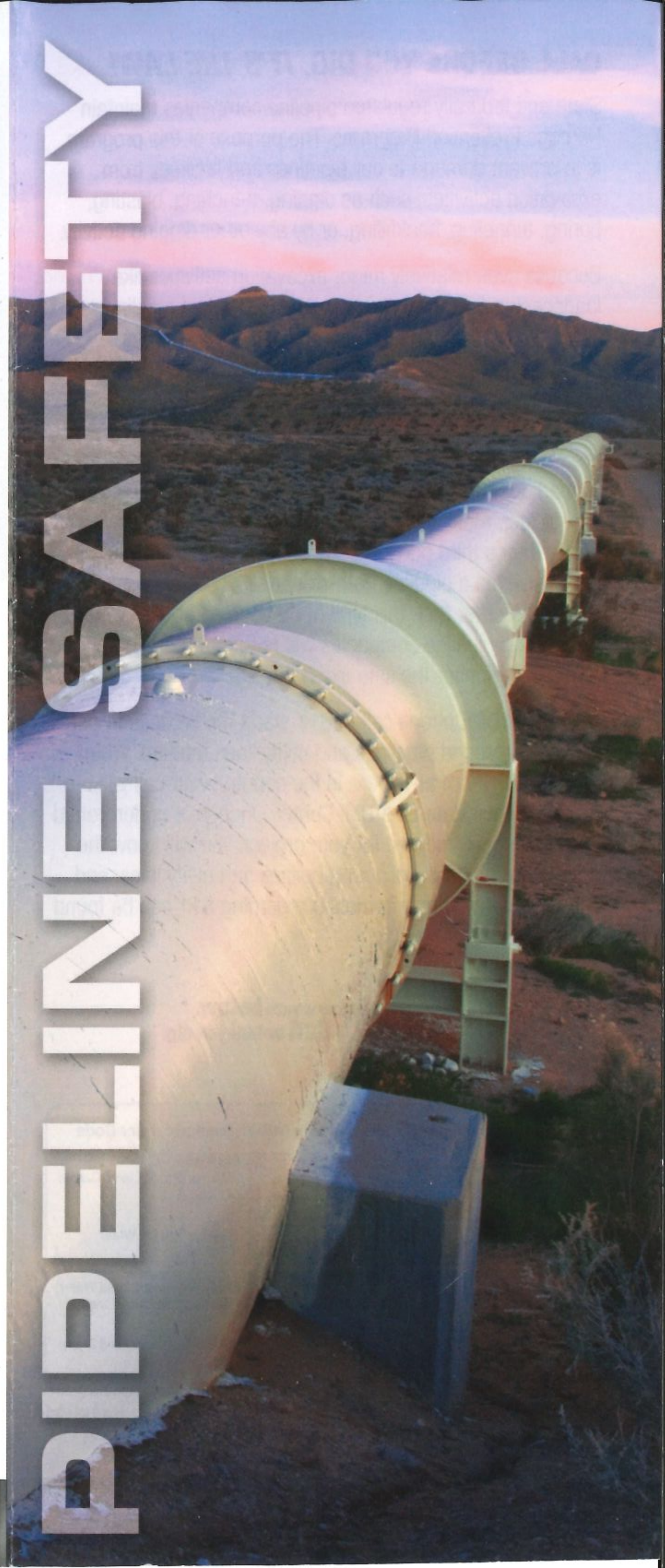
FOR MORE INFORMATION REGARDING PIPELINE SAFETY AND AN OVERVIEW OF THE PIPELINE INDUSTRY PLEASE VISIT THE FOLLOWING WEB SITES:

Pipeline Resources and Information

- 811 - www.call811.com
- Pipeline 101 - www.pipeline101.com
- Association of Oil Pipe Lines (AOPL) - www.aopl.org
- American Petroleum Institute (API) - www.api.org
- Interstate Natural Gas Association of America (INGAA) www.ingaa.org
- American Gas Association (AGA) - www.aga.org
- Common Ground Alliance (CGA) www.commongroundalliance.com
- Infrastructure Protection – NIPC - www.infragard.net
- Paradigm Liaison Services, LLC - www.pdigm.com/liaison.html
- FOR MORE INFORMATION ON THE NASFM PIPELINE EMERGENCIES PROGRAM www.pipelineemergencies.com

Government/Regulatory Agencies

- Association of Public-Safety Communications Officials International (APCO) - www.apcointl.org/
- Pipeline Hazardous Materials Safety Administration (PHMSA) phmsa.dot.gov
- Department of Transportation (DOT) - www.dot.gov
- National Transportation and Safety Board (NTSB) - www.ntsb.gov
- Federal Energy Regulatory Commission (FERC) - www.ferc.gov
- Federal Energy Regulatory Commission (FERC - Oil Pipelines) www.ferc.gov/industries/oil.asp
- Federal Emergency Management Agency - www.fema.gov
- Government Emergency Telecommunications http://www.dhs.gov/government-emergency-telecommunications-service-gets
- Occupational Safety & Health Administration (OSHA) www.osha.gov
- National Fire Protection Association (NFPA) - www.nfpa.org
- National Emergency Number Association http://www.nena.org/?page=PipelineEmergStnd
- National Pipeline Mapping System (NPMS) www.npms.phmsa.dot.gov
- National Response Center - www.nrc.uscg.mil or 800-424-8802
- FOR EMERGENCY RESPONSE INFORMATION, REFER TO DOT GUIDEBOOK. FOR COPIES: (202) 366-4900 http://www.phmsa.dot.gov/hazmat/library/erg



CALL BEFORE YOU DIG. *IT'S THE LAW!*

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

Because even relatively minor excavation activities like landscaping or fencing can cause damage to a pipeline, its protective casing and/or buried utility lines, always contact your state One-Call Center before engaging in any excavation, construction, farming or digging. Most states require 2 working days notice to the One-Call Center, (excluding weekends & holidays) to allow the utility operators to mark their pipelines and utilities at your proposed digging site. In fact, most serious damage done to pipelines is done when a third party inadvertently excavates, blasts or drills within a pipeline right-of-way. By contacting the One-Call Center first, this type of damage can be prevented. Sometimes pipeline companies will require a representative present to monitor the safe excavation.

One easy **FREE** phone call to 811 starts the process to get your underground pipelines and utility lines marked. When you call 811 from anywhere in the country, your call will be routed to your state One-Call Center. Once your underground lines have been marked for your project, you will know the approximate location of your pipelines and utility lines, and can dig safely. More information regarding 811 can be found at **www.call811.com**.

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

American Public Works Association (APWA) Uniform Color Code

WHITE - Proposed Excavation	**ORANGE** - Communication, Alarm or Signal Lines, Cables or Conduit
PINK - Temporary Survey Markings	**BLUE** - Potable Water
RED - Electric Power Lines, Cables, Conduit and Lighting Cable	**PURPLE** - Reclaimed Water, Irrigation and Slurry Lines
YELLOW - Gas, Oil, Steam, Petroleum or Gaseous Materials	**GREEN** - Sewers and Drain Lines

*The Uniform Color Code above has been gathered using the most up to date information available and provided for informational purposes only. Please visit http://www.apwa.net/ for changes to the information provided.

PIPELINE PURPOSE AND RELIABILITY

Pipelines are the safest and most efficient means of transporting natural gas and petroleum products, according to National Transportation Safety Board statistics. These pipelines transport the natural gas, which provides about 24 percent of all the energy used in the United States, and over 700 million gallons of petroleum products per day.

In the United States alone, there are over 200,000 miles of petroleum pipelines and 300,000 miles of natural gas transmission pipelines in use every day. Transmission pipelines are typically larger than gathering and distribution lines. They transport energy products across the country and to storage facilities. Compressor stations and pumping stations are located along transmission and gathering pipeline routes and help push energy products through the line.

Local Distribution Companies deliver natural gas to most homes and businesses through underground main and utility service lines. These lines cover over 800,000 miles of underground pipeline in the United States.

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.

HOW WOULD YOU KNOW WHERE A PIPELINE IS?

Most pipelines are underground, where they are more protected from the elements and minimize interference with surface uses. Even so, pipeline rights-of-way are clearly identified by pipeline markers along pipeline routes that identify the approximate—NOT EXACT—location of the pipeline. Every pipeline marker contains information identifying the company that operates the pipeline, the product transported, and a phone number that should be called in the event of an emergency. **Markers do not indicate pipeline burial depth, which will vary.** Markers are typically seen where a pipeline intersects a street, highway or railway. For any person to willfully deface, damage, remove, or destroy any pipeline marker is a federal crime.

Pipeline Marker — This marker is the most common. It contains operator information, type of product, and an emergency contact number. Size, shape and color may vary.

Aerial Marker — These skyward facing markers are used by patrol planes that monitor pipeline routes.

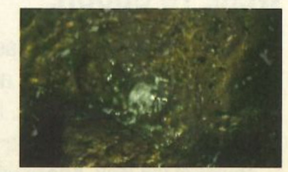
Casing Vent Marker — This marker indicates that a pipeline (protected by a steel outer casing) passes beneath a nearby roadway, rail line or other crossing.

RECOGNIZING A PIPELINE LEAK

- ***Sight:*** Liquid pools, continuous bubbling in wet or flooded areas, an oily sheen on water surfaces, and vaporous fogs or blowing dirt around a pipeline area, dead or discolored plants in an otherwise healthy area of vegetation or frozen ground in warm weather are all signs of a pipeline leak. Natural gas is colorless, but vapor and "ground frosting" may be visible at high pressures. A natural gas leak may also be indicated by dust blowing from a hole in the ground or flames if the leak is ignited.
- ***Sound:*** Volume can range from a quiet hissing to a loud roar depending on the size of the leak and pipeline system.
- ***Smell:*** An unusual smell, petroleum or gaseous odor will sometime accompany pipeline leaks. Natural Gas and Highly Volatile Liquids (HVL) are colorless, tasteless and odorless unless odorants, such as Mercaptan, is added.

  Most HVLs contain a slight hydro-carbon or pungent odor. Most are non-toxic; however, products such as ammonia are considered a toxic chemical and can burn the senses when it seeks out moisture (eyes, nose or lungs). If inhaled HVLs may cause dizziness or asphyxiation without warning.


Liquid on the ground


Mud or water bubbling up


Fire or explosion


Rainbow sheen on water


White vapor cloud


Dead vegetation in a green area

PIPELINE SAFETY