### <u>Purpose</u>

The purpose of the program is to provide pipeline safety information to Emergency Responders.

### **Scope**

The program is directed toward local, state, or regional officials, agencies, and organizations with emergency response and/or public safety jurisdiction over areas involving pipelines. These agencies include:

- Fire Departments
- Police and Sheriff's Departments
- Public Safety Answering Points (PSAP)
- County Emergency Management Agencies (CEMA)
- Other local emergency response and public safety organizations

Emergency Officials will be identified through commercially available data sources, member information, and the web sign up database. Commercial data is obtained from the National Public Safety Information Bureau (NPSIB). Information about this data can be found at: <a href="https://www.safetysource.com">www.safetysource.com</a>. Substations identified in the USGS data are also included in the mailing. The primary mailing list will be maintained internally by the Association. A listing of the NPSIB department descriptions along with the corresponding SIC Code and SIC descriptions are included below.

### **Program Elements**

The elements in the program include:

- A direct mailing of the Pipeline Emergency Response Guidelines booklet and the Pipeline Awareness newsletter for public officials. The mailing packet will include a customized cover letter listing the names of member companies in the county along with a description of the types of facilities they operate and their emergency and non-emergency phone numbers. A solicitation for emergency response capability information and a form to provide feedback, propose a planning meeting, schedule a mock drill or training exercise, or request additional information are included in the cover letter. The packet is sent first class and contains a postage paid return envelope.
- Quarterly email communications with Emergency Officials,
- An online interactive training web site with various pipeline emergency scenarios.
- The online training resource: Responding to Utility Emergency Emergencies.
- A mobile friendly web application providing pipeline information for specific locations.
- A web-based listing of emergency response capabilities for pipeline members and emergency response agencies.
- A password protected web-based mapping application and downloadable application displaying pipeline specific information for emergency planning purposes (company name, product transported, pipeline size, recommended evacuation distance, emergency phone, non-emergency phone, and links to additional documents).

### Message Content

Messages shall include the required messages contained in 49CFR192.615(c)(1) thru (4), 49CFR195.402(c)(12), 49CFR192.616, 49CFR195.440 and API RP-1162. These messages are listed below with the sections in the Pipeline Emergency Response Guidelines booklet or other program element where they are located shown in parenthesis. Refer to the table of contents for specific page numbers.

- Pipeline purpose and reliability (Pipeline Basics)
- Location and purpose of gathering pipelines
  - (Pipeline Basics)
- Pipeline location information and availability of NPMS (Pipeline Basics)
- Damage prevention activities
  - (Security and Damage Prevention)
- Awareness of hazards and prevention measures undertaken (Products Transported, Security and Damage Prevention, Appendix A)
- Physical indications of a pipeline release
  - (Products Transported and Appendix A)
- Steps to take to protect the public in the event of a pipeline release (Incident Response Steps and Appendix A)
- Procedures for reporting a pipeline emergency
  - (Incident Response Steps)
- Emergency preparedness communications (*Emergency Preparedness*)
- The types of pipeline emergencies of which the operator notifies the officials (Products Transported and Emergency Preparedness)
- The responsibility and resources of government organizations that may respond (Emergency Response Capabilities)
- The operator's ability in responding to an emergency, and means of communication (*Incident Response Steps, Emergency Response Capabilities*)
- How the operator and officials can engage in mutual assistance to minimize hazards (Emergency Preparedness, Incident Response Steps, Security and Damage Prevention, Emergency Response Capabilities)
- Overview of operator's Integrity Management Programs (Security and Damage Prevention)
- Company contacts
  - (Additional Resources and back page of cover letter)
- How to get additional information
  - (Additional Resources, cover letter, Information Request Form)
- Liaison request for feedback regarding mutual understanding and cooperation (cover letter, emails to Emergency Officials)

### **Program Evaluations**

Measures of message understandability, and desired behaviors are evaluated every four years. Bottom line results are evaluated by each individual member company. The last effectiveness evaluation covering message understandability and desired behaviors was conducted in 2022.

Outreach evaluations are conducted annually with the returns from the mailing. The emergency responder mailing is sent first class, so any undeliverable mail is returned. Returns received within 45 days of the mailing are researched, and if the addresses can be corrected, the returned packets are then resent to the agencies. Reports of the processed returns are posted in the ER Follow-up documentation folder for that year.

#### **Documentation**

All program documentation will be available from the <u>website</u>, including: identity of participating members, Emergency Responders contacted, copies of communications, and any survey results or feedback received.

### **Follow-up Communications**

Stakeholders are encouraged to use the online "Information Request" form to request additional information from pipeline members in their county. They can also send an e-mail to the Association at: <a href="mailto:pipeline.association@pipelineawareness.info">pipelineawareness.info</a> The organization will respond directly to all incoming e-mails and may forward specific requests to local members. Follow up emails from the Association are archived in a program documentation folder entitled "Follow-Up Communications".

#### **Dues**

The base dues for participation in the program are \$230 per county. This will be lowered in states where participation levels are sufficient to create cost sharing. The final per county dues for each state will be established at the end of January when all participation levels are known. Members can expect to receive invoices in February or March.

### Sign up

Companies may sign up by sending an email to <a href="mailto:admin@pipelineawareness.info">admin@pipelineawareness.info</a> indicating the states and counties they wish to register. The deadline for registering in the program is January 15. The deadline for supplying company specific GIS files and pipeline information for the ISEPA mapping application is July 1.

Participating Members should provide company specific information for the mapping application. The information will be managed and maintained in accordance with the Association's *Confidential Member Information Policy* posted on the Association's web site. Additional details about the information and how it will be used are below:

*Pipeline location* – location information should be provided in a common GIS format. The preferred projection is WGS84. It should be reasonably accurate and contain the information

necessary for the program. After initial processing, Members will be sent a KML file for verification. Members will be requested to review the information and confirm that it is approved for use in the program. Members should also provide updated information when there are significant changes to their pipeline system or facilities.

Product transported – the product contained in the pipeline must be provided by the Member. If the product is not provided, the pipeline information cannot be included in the application. Products should be identified with one of the product categories listed in the table below. Natural gas and petroleum gas must also be identified as odorized or un-odorized.

*Pipeline size* – this is the nominal outside diameter (OD) of the pipeline. It is not mandatory for the application. However, if it is provided, it may be included in the application and can be used to calculate recommended evacuation distances for natural gas.

*Pipeline pressure* - this not displayed in the ISEPA application. However, if it is provided, it can be used to determine the recommended evacuation distances for natural gas pipelines.

Recommended initial evacuation distance – this should be provided by the Member. If it is not provided, then the default distance used in the application will follow the guidelines below. These distances are based on information taken from the DOT ERG.

Product	Distance (feet)	
Natural Gas (Odorized and Un-odorized)	2640 feet (1/2 mile), unless additional information is provided; size only – may use pipeline size x 100 size and pressure – may use square root of pressure x size x 2.28	
Petroleum Gas (Odorized and Un-odorized)	2640 feet (1/2 mile) in all cases	
Petroleum Liquids	1000 feet in all cases	
Anhydrous Ammonia	1000 feet in all cases	
Carbon Dioxide	330 feet in all cases	
Ethanol	1000 feet in all cases	
Hydrogen Gas	2640 feet (1/2 mile), unless additional information is provided; size only – may use pipeline size x 100	
Sour Gas (H2S)	Distance is dependent on H2S concentrations and must be provided by the Member	
Sour Crude Oil (H2S)	Distance is dependent on H2S concentrations and must be provided by the Member	
Liquids & Natural Gas	2640 feet (1/2 mile), unless additional information is provided; size only – may use pipeline size x 100 size and pressure – may use square root of pressure x size x 2.28	

### **Liaison with Emergency Officials**

This section describes how various program elements support "establishing and maintaining liaison" with appropriate fire, police, and other public officials.

Title 49 Code of Federal Regulations states:

192.615 (c) Each operator must establish and maintain liaison with the appropriate public safety answering point(i.e., 9-1-1 emergency call center) where direct access to a 9-1-1 emergency call center is available from the location of the pipeline, as well as 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.

195.402 (c) (12) Establishing and maintaining adequate means of communication with the appropriate public safety answering point (i.e., 9-1-1 emergency call center), where direct access to a 9-1-1 emergency call center is available from the location of the pipeline, and fire, police, and other public official Operators must determine the responsibilities, resources, jurisdictional area(s), and emergency contact telephone numbers for both local and out-of-area calls of each Federal, State, and local government organization that may respond to a pipeline emergency, and inform the officials about the operator's ability to respond to the pipeline emergency and means of communication during emergencies. Operators may establish liaison with the appropriate local emergency coordinating agencies, such as 9-1-1 emergency call centers or county emergency managers, in lieu of communicating individually with each fire, police, or other public entity.

#### Common dictionary definitions of "liaison" are:

- communication or cooperation which facilitates a close working relationship between people or organizations (Oxford)
- communication between people or groups who work with each other (Cambridge English Dictionary)
- communication for establishing and maintaining mutual understanding and cooperation (Merriam-Webster)

The word "communication" appears in each of the common definitions of liaison. It is defined as "the exchange of information through verbal or written means". However, if a communication is to qualify as "liaison", it must involve the goal of creating a mutual understanding between the parties regarding cooperation on specific matters or activities. This is the essence of what makes liaison different from ordinary communications and why the Merriam-Webster definition: communication for establishing and maintaining mutual understanding and cooperation is the most comprehensive.

## **KEY ELEMENTS OF THE REGULATIONS**

The essential elements identified in the regulations are:

- 1. *Mutual Understanding* includes the general expectations of the organizations and how they can engage in mutual assistance and cooperation.
- 2. Capabilities includes the resources of the agencies and the abilities of the operators.
- 3. *Emergencies* primarily involves pipeline leaks but could include other types of hazardous conditions.
- 4. *Communications* how the organizations will notify each other of an emergency and communicate during emergencies.

### METHODS and OBJECTIVES

Liaison can be established and maintained through in person meetings, email communications, via the internet, over the telephone, through regular mail, or any other method that facilitates an exchange of information between the parties. The communications must address the essential elements contained in the regulations and must request feedback regarding the information provided. Emergency drills and exercises are one of the most effective ways to conduct liaison because each party can directly experience how the organizations will cooperate in a coordinated response and provide immediate feedback.

### **COMMUNICATION ACTIVITIES**

The components in the program and the essential elements of liaison they support are:

- Pipeline Emergency Response Guidelines
  - Mutual Understanding
  - o Emergencies
  - Communications
- Cover Letter and Return Envelop in the Annual Mailing Packet—
  - Request for Capability Information
  - Solicitation of a Response or Feedback
- Emergency Response Capabilities Application
  - Capabilities
  - Mutual Understanding
- Feedback / Information Request Form -
  - Solicitation of a Response or Feedback
- Email Communications with Emergency Officials
  - Solicitation of a Response or Feedback
  - o Additional Elements (if included in the communication)
- Supplemental ER Meetings
  - All Elements, or Specific Elements Requested by the Agency

### **Department Descriptions and Standard Industry Classifications**

NPSIB Department Description	SIC	SIC Description
State Police Troop Locations	922102	State Govt. Police
Sheriff's Departments	922103	Sheriff
Police Departments	922104	Police Departments
Campus Law Enforcement	922104	Police Departments
Bureau of Indian Affairs	922104	Police Departments
Airport Police Departments	922104	Police Departments
Harbor Police Departments	922104	Police Departments
Railroad Law Enforcement	922104	Police Departments
Fire Departments	922404	Fire Departments
Airport Departments	922404	Fire Departments
Harbor Departments	922404	Fire Departments
Emergency Management Agencies	922903	County Govt. Public Order Safety
Public Safety Answering Points (911)	922903	County Govt. Public Order Safety

### **Program History**

- 2006 Initial mailing of *Pipeline Emergency Response Guidelines* Booklet to over 26,000 agencies.
- 2007 Mailing of *Pipeline Emergency Response Guidelines* Booklet and Pipeline Emergency Contact Directory to over 26,000 agencies. The booklet included a chart of recommended evacuation distances for a natural gas pipeline leak (Appendix A) and a procedure for responding to a natural gas leak in a building (Appendix B).
- 2008 Mailing of the *Pipeline Emergency Response Guidelines* Booklet and Pipeline Emergency Contact Directory to over 24,000 agencies. An interactive training web site with emergency response scenarios and other training materials was created and launched. Safety Source became the new provider of the mailing list.
- 2009 Mailing of Pipeline Emergency Response Guidelines Booklet with the training scenarios CD, the Pipeline Emergency Contact Directory, and the Pipeline Awareness Newsletter for public officials to over 24,000 agencies. Three additional scenarios were added to the interactive training site and the CD.
- 2010 Mailing of Pipeline Emergency Response Guidelines Booklet with the training scenarios CD, the Pipeline Emergency Contact Directory, and the Pipeline Awareness Newsletter for public officials to over 24,000 agencies. Two additional scenarios were added to the interactive training site and the CD, one for 911 dispatchers and one for a gas leak in a building. The online training program: Responding to Utility Emergencies developed by Mike Callan was also added to the training site. A new emergency response capabilities database and web application was also created and provided to the agencies.

- 2011 Mailing of Pipeline Emergency Response Guidelines Booklet with the training scenarios CD and the Pipeline Awareness Newsletter for public officials to over 21,000 agencies. Scenario number 9 addressing a liquids pipeline leak near a body of water was added to the interactive training site and the CD. The cover letter for the emergency responder mailing was customized by county and included information just for the member companies in that county. The Pipeline Emergency Response Guidelines booklet was redesigned and color illustrations were added to each section. Product specific leak, hazard, and emergency response information was added as a new Appendix C. A questionnaire was included in the emergency responder mailing to facilitate two way communications with the agencies and guide program improvements going forward. An additional data source (InfoUSA) was used to enhance the mailing list for emergency responders. This increased the list by approximately 12% and added additional substation or auxiliary locations. A new video for emergency responders addressing the lessons learned from a serious pipeline incident in Lafavette IN was created. Three additional capabilities were added to the ER capabilities application: certification under NFPA 472, familiarity with NFPA 329, and accessing the National Pipeline Mapping System.
- 2012 Mailing of Pipeline Emergency Response Guidelines Booklet with the training CD and the Pipeline Awareness Newsletter for public officials to over 25,000 agencies. A standalone version of the online training course "Responding to Utility Emergencies" and a copy of the lessons learned video from the pipeline incident in Lafayette IN were included on the CD. The information in the *Pipeline Emergency Response Guidelines* booklet was reorganized and a new section titled "Emergency Preparedness" was added. A questionnaire was included in the emergency responder mailing to facilitate two way communications with the agencies and guide program improvements going forward.
- 2013 Mailing of Pipeline Emergency Response Guidelines Booklet with the training CD and the Pipeline Awareness Newsletter for public officials to over 13,000 agencies in 29 states. A stand-alone version of the online emergency response training scenarios was included on the CD. The appendices contained in the *Pipeline Emergency Response Guidelines* booklet were reorganized. Background information for various products and facilities was added to Appendix A and specific information about product characteristics was included in the new Appendix B. An additional page containing the Emergency Response Capabilities form was also added to the booklet. The Identified Site Emergency Planning Application was incorporated into the program and information about the new mapping application was included in the cover letter. The mailing was sent First Class and 27 returns were received within 25 days of the mailing. The undeliverable addresses were corrected and the packets were re-mailed.
- 2014 Mailing of Pipeline Emergency Response Guidelines Booklet with the training CD and the Pipeline Awareness Newsletter for public officials to over 13,000 agencies in 29 states. A complete copy of the Association's version of Digging Dangers #24 "Strike Three" was included on the CD. Additional content was added to the Pipeline Emergency Response Guidelines booklet. This included: information about the ISEPA mapping application, a new section for Products Transported, added information in the section on "Working Together with the Operator" and a new section in the back containing information about "Additional Resources". The cover letter included

information about emergency response capabilities and a prepaid return envelope. The mailing was sent First Class, and 250 returns were received within 35 days of the mailing. The undeliverable addresses were researched, corrected, or deleted, and packets were re-mailed.

- 2015 Mailing of Pipeline Emergency Response Guidelines Booklet with the training CD and the Pipeline Awareness Newsletter for public officials to over 18,800 agencies in 725 counties. A complete copy of the Association's new training web site was included on the CD. A downloadable power point presentation for the material in the PERG booklet along with an instructors' guide were developed and added to the new training web site in 2016. Additional content was added to the *Pipeline Emergency Response Guidelines* booklet. This included four pages of additional content with images and information about various types of pipeline facilities. The cover letter included information about emergency response capabilities and a prepaid return envelope. The mailing was sent First Class and 114 returns were received within 35 days of the mailing. The undeliverable addresses were researched, corrected or deleted, and packets were remailed.
- 2016 Mailing of Pipeline Emergency Response Guidelines Booklet with the training CD and the Pipeline Awareness Newsletter for public officials to over 20,500 agencies in 745 counties. A complete copy of the Association's new training web site was included on the CD. A case study of the 2010 hazardous liquids release into the Yellowstone River was created. A video of this case study, the natural gas case study and the general pipeline safety video were added to the training web site and the CD. The cover letter included information about emergency response capabilities and a prepaid return envelope. The mailing was sent First Class and 179 returns were received within 35 days of the mailing. The undeliverable addresses were researched, corrected or deleted, and 80 packets were re-mailed.
- 2017 Mailing of Pipeline Emergency Response Guidelines Booklet with the training CD and the Pipeline Awareness Newsletter for public officials to over 30,500 agencies in 1162 counties. Eight pages of new content were added to the PERG booklet, including: a new appendix covering storage facilities, enhanced security messaging, information about EFV's and curb valves and additional Layar content for NPMS. The response steps were modified to more closely match the response steps identified in the DOT ERG. The cover letter included information about emergency response capabilities and a prepaid return envelope. The mailing was sent First Class and 244 returns were received within 45 days of the mailing. The undeliverable addresses were researched, corrected or deleted, and 90 packets were re-mailed.
- 2018 Mailing of Pipeline Emergency Response Guidelines Booklet with the training CD and the Pipeline Awareness Newsletter for public officials to over 27,000 agencies in 1052 counties. The NVFC Toolkit was added to the Additional Resources section of the PERG booklet. The cover letter included a new section to submit requests for additional information from pipeline members along with the request for response capabilities information. The nine training scenarios were completely redeveloped in HTML5 to render in a responsive format without the need to run in Adobe Flash. The Digging Dangers 24 video was edited and retitled "Excavation Emergencies". The video was included on the training web site and the training DVD. The mailing was sent First Class

- and 198 returns were received within 45 days of the mailing. The undeliverable addresses were researched, corrected, or deleted, and 142 packets were re-mailed.
- 2019 Mailing of Pipeline Emergency Response Guidelines Booklet and the Pipeline Awareness Newsletter for public officials to over 27,000 agencies in 1052 counties. The cover letter included a new section to submit requests for additional information from pipeline members along with the request for response capabilities information. Zapper replaced Layar as the technology used to access video content from the PERG booklet. The mailing was sent First Class, and 132 returns were received within 45 days of the mailing. The undeliverable addresses were researched, corrected, or deleted, and 101 packets were re-mailed. Quarterly emails were sent to the County Emergency Managers.
- 2020 Mailing of Pipeline Emergency Response Guidelines Booklet and the Pipeline Awareness Newsletter for public officials to over 22,700 agencies in 894 counties. A quidance document clarifying how various elements in the ER Program support liaison with emergency officials was developed and posted in the General Documents folder. The content of the Pipeline Emergency Response Guidelines booklet was revised to more closely follow the six response steps outlined in the DOT ERG and Step 7 was revised to outline the mutual understanding between operators and agencies concerning coordination of response actions. The cover letter included a new section to submit feedback about the coordinated response activities identified in Step 7 or request additional information from pipeline members. A series of videos depicting the entire content of the PERG booklet was developed. The PPT presentation and other training tools on the ER training web site were updated to reflect the revised content in the PERG booklet. A flipbook of the PERG booklet was posted on the web site to make the content more accessible on mobile devices. A new section was added to the online Emergency Response Capabilities Application that included key actions organizations should take during a pipeline emergency. The mailing was sent First Class, and 114 returns were received within 45 days of the mailing. The undeliverable addresses were researched, corrected, or deleted, and 79 packets were re-mailed. Emails were sent to the County Emergency Managers in the third and fourth quarters.
- 2021 Mailing of Pipeline Emergency Response Guidelines Booklet and the Pipeline Awareness Newsletter for public officials to over 23,000 agencies in 893 counties. The quidance document clarifying how various elements in the ER Program support liaison with emergency officials was incorporated into the program outline. The content of the Pipeline Emergency Response Guidelines booklet was revised to include information about odor fade and the term "wildland" was added to the Emergencies Affecting Pipelines section. The Zapper codes containing links to the videos were replaced with QR codes and a QR code to the digital flipbook was added on the inside front cover. The feedback form in the cover letter included a specific question regarding the mutual understanding between operators and agencies concerning coordination of response actions. The scenarios on the ER training web site were updated to include the revised edition of the PERG and the DOT ERG. Emails were sent to the PSAP's (first quarter), Fire Departments (second quarter), County Emergency Managers (third quarter) and Law Enforcement (fourth quarter). The mailing was sent First Class, and 162 returns were received within 60 days of the mailing. The undeliverable addresses were researched, corrected, or deleted, and 109 packets were re-mailed.

- 2022 Mailing of Pipeline Emergency Response Guidelines Booklet and the Pipeline Awareness Newsletter for public officials to nearly 23,000 agencies in 892 counties. The cover of the PERG was updated with a new design. Additionally, the "Incident Response Checklist" was redesigned and move to the inside cover of the guide to make this key resource more prominent. A PDF version of the checklist was made available on the homepage and ER Training Resources sections of the website. A laminated, 3-hole punch hard copy version was developed and is available for request on the materials section the website. The back cover of the PERG was also redesigned to feature the most important resources for emergency responders. A separate webpage and QR code were developed to collect responses to a survey question to gauge "mutual understanding" as well as capabilities information. An Emergency Response Program Committee was launched to guide the ER Program. The group supported development of a process to host "Supplemental Emergency Response Meetings," to follow-up with agencies who indicate they are unsure or do not have mutual understanding with pipeline operators. The training website and Vimeo pages were refreshed with new graphics. The PowerPoint presentations available for training emergency responders were also updated. Emails were sent to the Fire Services (first quarter), Emergency Managers (second quarter) and Emergency Manager, Fire Services, Law Enforcement and 911 (third and fourth quarter). The first and second quarter campaigns promoted the new "Shelter-in-Place or Evacuate" guidance document. The third quarter campaign focused on the mapping webinar offered by PAPA. The fourth quarter campaign provided a digital copy of the PERG and the Incident Response Checklist. The ISEPA desktop application was updated, and development of the mobile version also kicked off. An effectiveness evaluation was conducted in 2022.
- 2023 A survey of the emergency responder audience was conducted via email. A complete report is available in the program documentation. Key findings were used to enhance the PERG. Most notably, PAPA found that emergency responders had a preference for having changes to the guide highlighted. PAPA included a summary of key changes in the cover letter, guide cover and flagged these changes in the table of contents and on each page. The "Shelter-In-Place" Guidance Document developed by PAPA in 2022 continues to be a trusted and highly utilized resource. The QR code has more than 831 scans in the last two years. PAPA continued to survey responders on "mutual understanding" via email and the ER mailing and facilitated follow-up contact working in coordination with state associations and individual operators. Documentation on followup activities is included in the program documentation. Email campaign frequency was increased, based on the 2022 effectiveness evaluation. A total of six campaigns were sent to the Fire Services, Law Enforcement and 911 promoting a variety of resources including the regulatory change on notification of potential pipeline ruptures, ER training materials and PERG, a reminder to report unusual conditions, PHMSA grant opportunities, the mapping webinar, mapping resources and collect feedback. The ISEPA application was rebranded as "PipeVision," and promoted via the mapping webinar, PERG and in various e-campaigns. The PipeVision QR code has received 466 scans in 2023. PAPA expanded promotion of its RTUE program and developed an RTUE flyer.