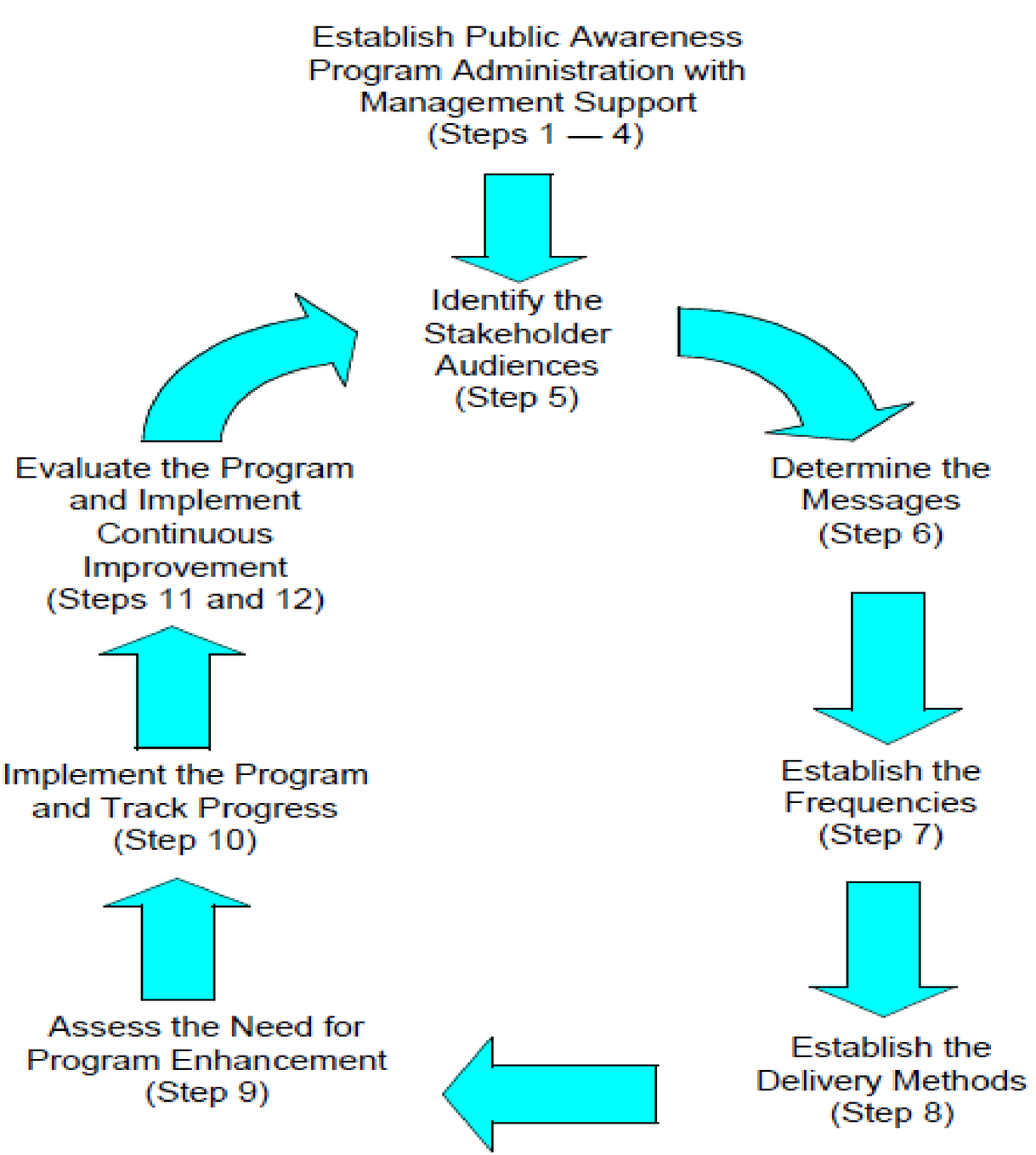
PUBLIC AWARENESS

John Harper-Instructor PHMSA TQ
John.Harper@dot.gov
405-754-0516

The Public Awareness Effectiveness reviews only cover the 12 steps in API RP-1162 1st Edition December 2003

There are several other requirements not covered in the protocol—We will some discuss today



What are Public Awareness Plans and why are they important?

Public Awareness is designed to raise awareness of pipelines to key stakeholders, affected communities and the general public. We want to inform the stakeholders of what to do, who to call etc, in the event of a leak or rupture.

Who is required to provide a Public Awareness Plan?

Each Regulated *pipeline***** operator must develop and implement a written continuing public education program following the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 1st Edition December 2003

***Except Master Meters and Petroleum Gas Operators

When do Operators need to provide Public Awareness Plans?

Public Awareness Plans are required once a pipeline operator is established and before pipeline operations commence.

Plans are generally reviewed by the regulatory agencies within 4-5 years of operation commencing.

What is required for Public Awareness Plans?

The operator's program must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation related activities on:

Use of a one-call notification system prior to excavation and other damage prevention activities;

Possible hazards associated with unintended releases from a gas pipeline facility;

Physical indications that such a release may have occurred;

Steps that should be taken for public safety in the event of a gas pipeline release; and

Procedures for reporting such an event.

What is required for Public Awareness Plans?

The program must include activities to advise affected stakeholders of pipeline facility locations.

The program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports gas.-Mailers, Email, Radio/TV etc

The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area.

The operator's program documentation and evaluation results must be available for periodic review by appropriate regulatory agencies.

An Example of Print Material

Public Awareness & Damage Prevention

PARTNERS IN PIPELINE SAFETY

America's pipeline industry maintains an enviable record of safety and reliability. Pipelines are by far the safest means of transportation today. The purpose of our pipeline is to provide safe, dependable, natural gas to your gas burning appliances 24 hours a day, 7 days a week. However, despite strict federal oversight and the conscientious efforts of Gusher Pipeline, hazards do exist and emergencies, though infrequent, can occur. Statistics show that most of the pipeline damage is caused by third parties (construction contractors, property owners, excavators, etc.) digging near buried pipelines. Damage to a pipeline, such as scratches, gouges, creases, dents, and the cutting of tracer wire or tracer tape installed along with polyethylene plastic should be reported to the City of Hooker Third-party damage can be prevented by using a local excavation notification system known as OKIE One-Call and it's **FREE!**

In Oklahoma, the law requires anyone planning to dig or excavate near an underground pipeline to notify OKIE One-Call Center two working days (day of notification, Saturday, & Sundays and legal Holidays do not count) prior to beginning excavation activities. The OKIE One-Call center will notify member utilities that operate buried facilities in the area. A utility representative will determine if the project is near underground facilities and dispatch someone to the work site to clearly mark the route and location of buried cables and/or pipelines. Call 811 or 1-800-522-6543 and remember it's **FREE!**

Information for Emergency Officials

Secure the area around the leak.

Take steps to prevent ignition of a suspected leak.

Contact: Gusher Pipeline at

405-552-2885

Gusher Pipeline

405-552-2885

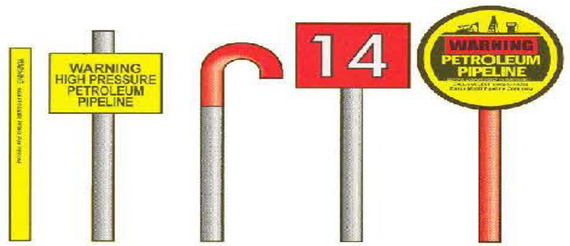
For additional information regarding pipeline safety call Gusher Pipeline

or write to us @

PO Box 67

Nowhere Oklahoma 73159

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



PIPELINE MARKERS

For public-safety reasons, most pipelines are buried several feet underground. To make pipelines easier to locate and identify, Gusher Pipeline installs markers near roads and highways, at railroad and river crossings, above ground piping and at other locations along our rights of way. These markers show a pipeline's **approximate** location and provide emergency-contact telephone numbers and product transported. Not all buried lines have markers. Therefore, prior to performing excavating activities as simple as planting a tree, installation of landscaping, building a fence, installing a swimming pool or installation of a mailbox, contact OKIE One-Call at 811 or 1-800-522-6543.

Public Awareness & Damage Prevention

Fortunately, pipeline accidents are extremely rare, but they can occur. Natural Gas is flammable and potentially hazardous and explosive under certain circumstances. Gusher Pipeline undertakes many prevention and safety measures to ensure the integrity of its pipeline system. Some preventive measures include gas leakage surveys, corrosion control, and continuing surveillance. For additional information regarding pipeline safety or questions call Gusher Pipeline at 405-552-2885

PUBLIC AWARENESS & DAMAGE AWARENESS

PIPELINE SAFETY IS BUILT IN

PHMSA (Pipeline & Hazardous Material Safety Administration) imposes rigorous standards for pipeline design, construction, maintenance, testing and operation. Gusher Pipeline's policies and procedures are designed to meet and, in most cases, exceed these standards. Our commitment to safety begins before a pipeline is built or expanded. We build safety into our system by:

- carefully researching and planning the safe construction of each project.
- using pipe that is inspected and tested at the factory to comply with both federal and industry standards.
- providing steel pipe with a coating and other measures that protect it from external corrosion, the use corrosive resistant polyethylene plastic
- inspecting the integrity of the pipe during construction.
- testing the finished pipeline at pressures higher than normal operating pressure before it's placed into service.

SAFETY IS MAINTAINED DURING OPERATION

Once a pipeline is built, tested and placed in service, Gusher Pipeline controls and monitors the safety of its system in several ways, including routinely patrolling our pipeline route on the ground to inspect for leakage and identify potential problems and assist in preventing third-party excavation damage. Other maintenance of facilities including:

- over-pressure protection devices inspections
- cathodic protection inspection (a means of adding negative DC current to steel pipelines to slow corrosion)
- advising periodically, state and local emergency officials to review accident-prevention and emergency-response procedures
- posting markers with emergency telephone numbers along our rights of way, at highway,

NATURAL GAS LEAKS: RECOGNITION AND RESPONSE

Natural gas pipeline leaks or failures are rare, but an informed public can help prevent emergencies and minimize potential damage or injury in the unlikely event of an accident by knowing how to recognize and report pipeline problems.

HOW TO IDENTIFY A LEAK

The following signs may indicate a natural gas pipeline leak or failure:

SIGHT—A dense fog, mist, or white cloud. Bubbling in water and creeks or blowing dust and discolored or dying vegetation.

SMELL—Natural Gas is naturally odorless, so a rotten egg odor is added to aid in leak detection.

SOUND—Whistling, hissing, or roaring noise.

What NOT to do…

Do NOT **touch, breath, or contact the leak.**

DO NOT **light a match, turn on or off light switches, use a home phone or cell phone or do anything that may create a spark.**

DO NOT **attempt to extinguish any natural gas fire.**

DO NOT **attempt to operate any valves.**

What to DO…

DO **leave the home, building or area of any suspected leak.**

DO **call Gusher Pipeline or 911 once safely out of the area.**

DO **Warn others to stay out of the area**

For additional information contact

www.npms.phmsa.dot.gov

For other helpful resources contact.

www.phmsa.dot.gov--PHMSA

www.commongroundalliance.com --Common Ground Alliance

www.occeweb.com –Oklahoma Corporation Commission

Who?
When?
How?

Who does the operator inform?

The affected public-i.e., residents, and places of congregation (businesses, schools, etc.) along the pipeline and the associated right-of-way (ROW), for liquid generally people within 1000 feet of the pipeline

Local and state emergency response and planning agencies-i.e., State and County Emergency Management Agencies (EMA) and Local Emergency Planning Committees (LEPCs)—generally those who would respond to an Incident/Accident

Who does the operator inform?

Local public officials and governing councils—City Councilmen, Mayor, those who control access to city streets and alleys

Excavators—those excavator's within the county plus 10 miles is an example—it could be greater

- Affected public
- Emergency officials
- Local public officials
- Excavators.

The operator should consider tailoring its communication coverage area to fit its particular pipeline location and release consequences. The operator would be expected to consider areas of consequence as defined in federal regulations. Where specific circumstances suggest a wider coverage area for a certain pipeline location, the operator should expand its communication coverage area as appropriate.

The "Stakeholder Audience" definitions listed in the table below are used in the remaining sections of this RP, as applicable.

1.3.11 “may” versus “should”:

The use of the word “may” provides the operator with the option to incorporate the identified component into its Public Awareness Program.

The use of the word “should” provides the operator with the Public Awareness Program components that are recommended to be incorporated into the operator’s Public Awareness Program.

4.10 PIPELINE MAINTENANCE CONSTRUCTION ACTIVITIES

Pipeline maintenance-related construction activities should be communicated to the audience affected by the specific activity in a timely manner appropriate to the nature and extent of the activity.

How is this accomplished?

The operator **should** consider each of the following factors applied along the entire route of the pipeline system:

- Potential hazards
- High Consequence Areas
- Population density
- Land development activity
- Land farming activity
- Third-party damage incidents
- Environmental considerations
- Pipeline history in an area
- Specific local situations
- Regulatory requirements
- Results from previous Public Awareness Program evaluations
- Other relevant needs

Documentation of Supplemental Reviews

Supplemental Checklist

Plan Administrator(s)	Title:	Phone:

Person Conducting Assessment	Assessment Date:

Note: This checklist has been developed for use as a guide in determining the need for supplemental program enhancement.

Consideration Factors	Compliance	Remarks
1. Does a new potential hazard exist that was not communicated to a required stakeholder audience since the last message delivery? If yes, identify the potential hazard and intended audience.	YES NO	
2. Has a new HCA been identified that was not communicated to a required stakeholder audience since the last message delivery? If yes, identify HCA location and intended audience.	YES NO	
3. Has a change in population density occurred since the last message delivery? If yes, identify location of change & intended audience.	YES NO	
4. Has land development activity increased since last delivery message? If yes, identify location of activity & intended audience.	YES NO	
5. Has land farming activity increased since last message delivery? If yes, identify location of activity & intended audience.	YES NO	
6. Has the number of incidents due to 3rd party damage increased since last message delivery?	YES NO	
7. Has there been a new or changed environmental consideration since the last message delivery? If yes, identify consideration & intended audience	YES NO	
8. Has a change in pipeline operation, product transported, improvement, or any other activity occurred that may affect the pipeline history in an area since the last message delivery? If yes describe activity & intended audience.	YES NO	
9. Has there been a change in local considerations or heightened public sensitivity since last message delivery?	YES NO	
10. Has there been a change in applicable regulatory requirements since last message delivery?	YES NO	
11. Have results from previous evaluations been considered since last message delivery?	YES NO	
12. Has any issue not referred to above that reveals the need for a supplemental message been identified since last message delivery? If yes, identify issue & intended audience.	YES NO	

What information needs to be provided to stakeholders?

Operators will determine the message, delivery method, and frequency for their intended audience. API RP-1162 will be used as a reference

Actions to be taken by the stakeholder in the event of a pipeline emergency must include:

How to identify a potential hazard

How to protect themselves

How to notify emergency response personnel

How to notify the pipeline operator

Emergency Official--Gathering

Table 2-3—Summary Public Awareness Communications for Gathering Pipeline Operators (Continued)

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
2-3.2 Emergency Officials			
Emergency Officials	**Baseline Messages:** • Gathering pipeline location and purpose • Awareness of hazards • Prevention measures undertaken • Emergency preparedness communications, company contact and response information • Specific description of products transported and any potential special hazards • How to get additional information	**Baseline Frequency** = Annual	**Baseline Activity:** • Personal contact (generally preferred) OR • Targeted distribution of print materials OR • Group meetings OR • Telephone calls with targeted distribution of print materials
	Supplemental Messages: • Planned maintenance construction activity • Special emergency procedures if sour gas or other segment specific reason		**Supplemental Activity:** • Emergency tabletop deployment exercises • Facility tour • Open house
2-3.3 Local Public Officials			
Public Officials	**Baseline Messages:** • General location and purpose of gathering pipeline	**Baseline Frequency** = 3 years	**Baseline Activity:** • Targeted distribution of print materials

Local Public Officials--Transmission

Table 2-1 - Summary Public Awareness Communications for Hazardous Liquids and Natural Gas Transmission Pipeline Operators (Continued)

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
2-1.2 Emergency Officials			
Emergency Officials	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency Preparedness Communications • Potential hazards • Pipeline location information and availability of NPMS • How to get additional information	**Baseline Frequency =** Annual	**Baseline Activity:** • Personal contact (generally preferred) OR • Targeted distribution of print materials OR • Group meetings OR • Telephone calls with targeted distribution of print materials
	Supplemental Message: • Provide information and /or overview of Integrity measures undertaken • Maintenance construction activity	**Supplemental Frequency:** Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Emergency tabletop, deployment exercises • Facility tour • Open house
2-1.3 Local Public Officials			
Public Officials	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency preparedness communications • One-call requirements • Pipeline location information and	**Baseline Frequency** = 3 years	**Baseline Activity:** • Targeted distribution of print materials

Excavators--Transmission

Table 2-1 - Summary Public Awareness Communications for Hazardous Liquids and Natural Gas Transmission Pipeline Operators (Continued)

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
2-1.4 Excavators			
Excavators / Contractors	**Baseline Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage prevention awareness • One-call requirements • Leak recognition and response • How to get additional information	**Baseline Frequency =** Annual	**Baseline Activity:** • Targeted distribution of print materials • One-Call Center outreach • Pipeline markers
	Supplemental Messages: Pipeline purpose, prevention measures and reliability	**Supplemental Frequency:** Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Personal contact • Group meetings
Land Developers	**Supplemental Messages:** • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage Prevention Awareness • One-call Requirements • Leak Recognition and Response • ROW Encroachment Prevention • Availability of list of pipeline operators through NPMS	**Supplemental Frequency:** Frequency as determined by specifics of the pipeline segment or environment	**Supplemental Activity:** • Targeted distribution of print materials • Pipeline markers • Personal contact • Group meetings • Telephone calls

The initial baseline effectiveness will be completed within 4 years or earlier of the effective date of Public Awareness Program.

The baseline effectiveness is performed and the operator's data is compared to data of similar pipeline operators in their industry.

An effectiveness review is held thereafter every 4 years

How are Effectiveness Surveys performed?

The operator will survey each of the 4 stakeholders to determine:

Outreach—How many Stakeholders are receiving the message

Understandability –The measure of understanding and retention of key information

Behaviors—The measure to determine prevention behaviors are being learned—The What to do in the event of a pipeline incident

Bottom Line results—Near misses from Excavation Damage, Tracking of leaks caused by Excavation Damage—DO you define Near Miss?

Surveys are usually telephonic or by the use of “Business Reply Card” a questionnaire sent to the stakeholder, where the stakeholder is asked to answer questions and return to the operator. The data is compiled and compared to the operator’s previous data—to determine if improvements are needed.

Sample questions for each stakeholder group and the attribute measured – Affected Public

Outreach-Questions example

In the last year (or 2 years), have you seen or heard any information from (our company) relating to pipeline safety?
Yes or No

Knowledge –Question example

Do you live close to a petroleum or gas pipeline?
Yes or No

Sample questions for each stakeholder group and the attribute measured – Emergency Officials

Knowledge

Do you have Hazardous Liquid pipelines running through your community? Yes or No

Outreach

Have you seen, heard, or received any information regarding Hazardous Liquid pipeline safety in any media in the last year? Yes or No

Sample questions for each stakeholder group and the attribute measured – Public Officials

Knowledge

Do you have Hazardous Liquid pipelines running through your community? Yes or No

Outreach

Have any of your local citizens or businesses expressed concern in the last 12 months about any issue regarding Hazardous Liquid pipeline safety? Yes or No

Sample questions for each stakeholder group and the attribute measured - Excavators

Outreach

In the past 12 months, have you been contacted or received written information from (local pipeline operator) regarding pipeline safety? Yes or No

Behavior –

Have you contacted (pipeline operator name) in the past year to inquire about the location of pipelines? Yes or No

Effective Survey Summary and tabulated results

(Complete a review of the data using your survey questions & data for each audience surveyed.)

ABC Energy
2018 Public Awareness Effectiveness Evaluation – Affected Public Survey (do for each audience)

Surveys Sent: 750 **Completed Surveys Returned:** 100 **Return Rate:** 13.3%

2018 Responses:			2014 Responses:			Target Rate Increase/Decrease
Question #1: Do you know how to recognize a pipeline leak? YES / NO (Target answer: YES)						
YES	NO	Rate	YES	NO	Rate	
97	3	97%	82	18	82%	+15% (positive increase, no action required.)
Question#2: Do you know how to recognize a pipeline location? YES / NO (Target answer: YES)						
YES	NO	Rate	YES	NO	Rate	
92	8	92%	76	14	76%	+16% (positive increase, no action required.)
Question #3: What number would you call prior to any excavation activities? 811 / 911 (Target answer: 811)						
811	911	Rate	811	911	Rate	
85	15	85%	87	13	87%	- 2% (slight decrease, see summary.)

(Question #4, 5, & 6… Continue documenting the data for each question on your survey!)

(Follow the question data comparisons with a summary of the evaluation results and base the summarization wording on the data resulting from your survey accordingly, similar to that below.)

Summary:
Question #1 comparison of 2018 to 2014 survey responses show an increase in the target response rate indicating the audience is understanding and retaining the information, no further action or change to program required at this time.

Question #2 comparison of 2018 to 2014 survey responses show an increase in the target response rate indicating

Operator Checklist of information Inspectors will need to know

Public Awareness Inspection/PAPEI

Required documentation & records to be reviewed

Local Natural Gas Distribution (LDC) Companies

List of each stakeholder group including contact information such as address, email address, phone number, etc. (4 stakeholder groups - Affected Public (AP), Emergency Officials (EO), Public Officials (PO), Excavators (EX))

Flyers

*A copy of the flyer with all required content (make sure One-Call notice is correct)

*Proof of delivery including dates and delivery method required

*Examples of delivery methods for All

Public service announcements, paid advertising (radio, commercials, newspapers, etc.), bill stuffers, telephone calls, personal contact, group meetings, hand delivered, One-Call Center

*Information for frequencies of flyers

AP - residents along the Local Distribution System (LDC) = annual, LDC Customers = twice annually

EO = annual

PO = 3 years

EX = annual

Identify the plan administrator (example gas supervisor/lead, office person)

Annual plan reviews (example Forms 1 and 2)

Annual Management Support Acknowledgement

Annually perform and maintain Capability Survey with appropriate emergency and public officials (Possibly done at a town meeting if all are present)

Summary

Provide public awareness material, Radio/TV, mail-- as required

Annually review of the Plan—see next slides- how is it documented

Establish and maintain Public Liaison with Emergency Officials
(Annually)

Complete the 4 year Effectiveness Survey timely—within every 4 years

Tabulate results and provide a summary of any required changes

Insert company name Pipeline Awareness Plan

Note: Provide explanation of deficiencies, corrective action required, etc. under remarks

A. Program Development & Documentation	**Compliance**	**Remarks**
1. Does the operator have a written Public awareness plan	YES NO	
2. Have all the elements described in RP-1162 Section 2 been incorporated into the written plan? 2.1 Public Awareness Objectives 2.2 Stakeholder Audiences 2.3 Regulatory Compliance 2.4 Utilization of available resources 2.5 Management Support 2.6 Baseline & Supplemental Program assessment 2.7 Program Development Guide.	YES NO	
3 Does he program address all required Objectives?	YES NO	
3.1 Program should raise the awareness of the affected public and key stakeholders of the presence of pipelines in their communities and increase their understanding of the role of the pipelines in transporting energy.	YES NO	

3.2 Program will help the public to understand that while pipelines are a relatively safe mode of transportation that pipeline operators undertake a variety of measures to prevent pipeline accidents, and that pipeline operators anticipate and plan for management of accidents.	YES NO	
3.3 A more informed public will understand that they have a significant role in the prevention of accidents cased by 3rd party damage and ROW encroachment.	YES NO	
4. Does the written program address regulatory requirements identified in RP-1162 Section 2.2 and other requirements that the operator must comply with? • Affected Public • Local Public Officials • Emergency Officials Excavators	YES NO	
5. Does written plan include a schedule for implementing the program	YES NO	
6. Does written plan include requirements to update responsibilities as organizational changes are made?	YES NO	
7. Is the program updated and current with any significant organizational or major new pipeline system changes that may have been made?	YES NO	
8. Are personnel assigned responsibilities in the written program aware of their responsibilities and do they have management support to perform their responsibilities of the program?	YES NO	
9. Has the program implementation been properly and adequately documented?	YES NO	

10. Have all the required elements of the program been implemented in accordance with the written plan?	YES NO	
11. Does the operator have documentation of the results of evaluating the program for effectiveness?	YES NO	
12. Are the results of the evaluation of program effectiveness being used in a structured manner to improve the program or determine if supplemental actions are warranted? (e.g. Revised message, additional delivery methods, increased frequency)	YES NO	
13. Does plan require changes due to the effectiveness evaluation, if so have they been implemented? Document in comments the required changes.	YES NO	

QUESTIONS