

Flynn, et al. v. Sunoco Pipeline, L.P.

Docket No. C-2018-3006116

Hearing Date: October 6, 2020

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SPLPN Statement No. 12 (Angelides - Rebuttal)

SPLP Exhibit PA-1 (Angelides)

SPLPN Statement No. 5 (Perez - Rebuttal, Public Version)

SPLPN Statement No. 5 (Perez - Rebuttal, Highly Confidential)

SPLP Exhibit No. JP-1 (API RP 1162)

SPLP Exhibit No. JP-2 (HLA.17 Public Awareness Plan)

SPLP Exhibit No. JP-3 (HLA.40 Public Awareness Plan)

SPLP Exhibit No. JP-4 (Affected Public and Excavator
Brochure)

SPLP Exhibit No. JP-5 (Emergency Responder and Public
Official Brochure)

SPLP Exhibit No. JP-6 (Excavator Brochure)

SPLP Exhibit No. JP-7 (HLA.17 Public Awareness Plan Revised,
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DiBernardino Cross Exhibit 1 (Notice of Probable Violation
and Proposed Compliance Order)

Ms. DiBernardino Cross Exhibit 2 (PHMSA Final Order and
Letter 6/26/20)

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SPLP Statement No. 6-RJ (McGinn - Rejoinder)

SPLP Exhibit No. JM-1 (curriculum vitae)

SPLP Exhibit No. JM-2 (4/6/20 letter to Mr. McGinn from Mr.

Boyce

SPLP Exhibit No. 48 (Chester County letter)

SPLP Exhibit No. 49 (Delaware County letter)

SPLP Exhibit No. 43 (WHP-AM ad)

SPLP Exhibit No. 44 (WHP-AM ad)

SPLP Exhibit No. 45 (PA Pipeline Safety web site)

SPLP Exhibit No. 46 (PA Pipeline Safety Instagram account)

SPLP Exhibit No. 47 (PA Pipeline Safety Facebook page)

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

MEGHAN FLYNN et al.	:	Docket Nos.	C-2018-3006116 (consolidated)
	:		P-2018-3006117
MELISSA DIBERNARDINO	:	Docket No.	C-2018-3005025 (consolidated)
REBECCA BRITTON	:	Docket No.	C-2019-3006898 (consolidated)
LAURA OBENSKI	:	Docket No.	C-2019-3006905 (consolidated)
ANDOVER HOMEOWNER'S ASSOCIATION, INC.	:	Docket No.	C-2018-3003605 (consolidated)

v.

SUNOCO PIPELINE L.P.

**REBUTTAL TESTIMONY
OF PETER ANGELIDES, PH.D., AICP
ON BEHALF OF SUNOCO PIPELINE, L.P.**

Dated: June 15, 2020

**SPLP
N12**

C-2018-3006116
10/6/20 JK

1 **Q. What is your full name and position?**

2 **A.** My name is Peter Angelides. I am a Principal of the Econsult Solutions, Inc. located in
3 Philadelphia, Pennsylvania. We conduct economic, financial and strategic analyses for public and
4 private entities. My concentrations include real estate development, transportation, economic
5 development, economic and fiscal impacts, and financial modeling. I am also a Lecturer at the
6 University of Pennsylvania, Fels Institute of Government in the Department of City and Regional
7 Planning, and have had that position since 2004.

8

9 **Q. What is your educational background?**

10 **A.** I received a Bachelor of Arts degree with a major in Urban Studies and a Minor in
11 Mathematics in 1987 from the University of Pennsylvania. I received a Master of Science in
12 Economics in December 1996 from the University of Minnesota, and a Doctor of Philosophy in
13 Economics in February 1998 also from the University of Minnesota.

14

15 **Q. Please describe your professional employment history?**

16 **A.** While studying for my Master of City Planning at the University of Pennsylvania and after
17 receiving it in May 1988, I worked as a Planner/Intern for approximately two years for the Central
18 Philadelphia Development Corporation. While there, I supported the activities of various of the
19 organization's committees and conducted numerous analyses in support of its initiative to create
20 what became the Center City District in Philadelphia. I then worked for approximately two years
21 as an Urban and Environmental Planner for Wallace Roberts & Todd in Philadelphia, Pennsylvania
22 where I provided planning services to private developers, state and county governments, and the
23 Washington Metropolitan Area Transportation Authority. In 1993, I went back to school for my

1 Master and Ph.D. degrees and taught eleven undergraduate and master's level economics classes
2 and supervised over thirty independent-study projects while at the University of Minnesota. I then
3 worked as a Consultant for PHB Hagler Bailly/Putnam, Hayes & Bartlett in Washington, D.C. for
4 approximately two years, where I did economic and litigation consulting in the
5 telecommunications, energy, pharmaceutical, and postal industries. I then moved to Charles River
6 Associates, also in Washington, D.C., where I was a Senior Associate. There, I provided economic
7 analysis, primarily for Fortune 500 companies seeking federal regulatory approval for mergers or
8 joint ventures. I then moved back to Philadelphia where I worked for the consulting firm
9 PricewaterhouseCoopers as a Manager and then Director, where I provided economic and
10 statistical modeling and analysis in business consulting, litigation and regulatory matters. I worked
11 there until I joined my current firm in 2008 as Vice President and Director and have been a
12 Principal since 2012. As described earlier, I conduct economic, financial and strategic analyses
13 for public and private entities.

14

15 **Q. Can you describe some of your more significant projects?**

16 A. They are listed in my CV, but as examples, I performed an analysis for the Legislative
17 Budget and Finance Committee of the Commonwealth of Pennsylvania to assess the state of the
18 casino industry in Pennsylvania, to forecast future revenue for the Commonwealth in the face of
19 increasing competition from other states, and estimated the value of potential additional forms of
20 gaming. For the Philadelphia Growth Coalition, I modeled impacts on Philadelphia employment,
21 real estate values and tax revenues from proposed changes in Philadelphia's tax structure. For
22 SEPTA, I valued the economic impact of SEPTA's expenditures and its importance to the region's
23 productivity. For a mid-western state, I estimated the economic impact of a proposed coal mine,

1 including a calculation of the overall economic impact on the state, including output, wages, jobs
2 and taxes. For the Delaware Valley Regional Planning Commission, I analyzed the ability of tolls
3 on U.S. Route 422 to finance roadway upgrades and the re-establishment of commuter rail service
4 to Philadelphia. There are many others identified on my CV.

5

6 **Q. Do you have any certifications?**

7 A. I am a certified planner and a member of the American Institute of Certified Planners.

8

9 **Q. Is SPLP Exhibit No. PA-1 a copy of your CV, which generally describes your**
10 **educational background, experience, and publications in economic, strategic and financial**
11 **analysis, including for major construction and infrastructure projects?**

12 A. Yes, it does.

13

14 **Q. Have you provided expert testimony in court or administrative proceedings?**

15 A. Yes; on numerous occasions, including in a hearing before the Pennsylvania
16 Environmental Hearing Board on a previous challenge to the environmental permits issued by the
17 Pennsylvania Department of Environmental Protection for the construction of the Mariner 2 and
18 2X pipelines.

19

20 **Q. Sunoco Pipeline L.P. proffers Dr. Angelides as an expert on the economic impacts**
21 **from development and infrastructure projects.**

22

1 **Q. What is the purpose of performing a financial analysis of the economic impacts of a**
2 **major development or infrastructure project?**

3 A. The purpose of an economic-impact analysis is to measure the economic footprint of a
4 project and to determine how that investment trickles through the economy and provides direct
5 and indirect benefits to the economy.

6

7 **Q. What is the accepted practice in the field for performing such an analysis?**

8 A. There are several computer programs and standard methods. Using the Mariner East
9 pipeline project as an example, because Sunoco Pipeline is making a significant financial
10 investment to design, construct, and then operate this infrastructure project, the purpose of the
11 financial analysis is to measure the economic impact of that project, of all of those dollars spent,
12 on the Commonwealth of Pennsylvania and its citizens. So, the impact of the investment is greater
13 than the amount of the investment itself. Dollars invested will be spent again and again, and the
14 purpose is to measure all of the other spending that occurs and all of the economic benefits that
15 accrue as a result of the initial investment on the planning, construction, and operation of the
16 pipelines. Of course, the easiest financial benefit to measure is the actual dollars expended on the
17 project. But there are other financial benefits as well. In addition to the dollars expended, there is
18 an indirect impact and an induced impact from those dollars expended. An example of an indirect
19 impact is that when Sunoco Pipeline purchases steel pipe, the manufacturers of that steel pipe must
20 purchase the raw ingredients to make it. An example of the induced impact is that the employees
21 who are paid wages will then spend those wages on other things, such as food, clothing, cars and
22 other items. The dollars will be spent again by the companies that sell those products. That

1 induced spending can be projected and quantified to determine the total impact or total footprint
2 on the Commonwealth of Sunoco Pipeline's investment in this Mariner East pipeline project.

3

4 **Q. What computer program do you use to perform the economic footprint analysis and**
5 **how does it work?**

6 A. We used a standard program called IMPLAN from the Minnesota IMPLAN Group. It's
7 the program used by most persons who perform this type of financial analysis. The program
8 models the expenditure on the project, how much of that expenditure is expended in Pennsylvania
9 and how much is expended outside of Pennsylvania, and then how much leads to indirect and
10 induced expenditures in Pennsylvania. IMPLAN is the industry standard approach to assess the
11 economic and job-creation impacts of economic development projects, the creation of new
12 businesses, and public policy changes within its surrounding area. The expenditures lead to a
13 substantial amount of employment, which consists of construction and other jobs that last for the
14 length of the construction project as well as jobs to operate and maintain the pipelines after they
15 have been constructed. Approximately half of the jobs are construction jobs and the other half are
16 jobs for architectural, engineering, legal and other services, and then there are additional jobs
17 created because of the indirect and induced spending. We performed this analysis on two separate
18 occasions, for two different components of the project. We modeled the construction and
19 operation of the pipelines and the Marcus Hook Industrial Complex.

20

21 **Q. Does the IMPLAN model account for the fact that the Mariner East pipelines and**
22 **Marcus Hook Industrial Complex may attract additional businesses to the Commonwealth?**

1 A. It does not. IMPLAN is a static model, which means that it does not account for the
2 underlying change in the economy from an infrastructure investment. In this case, there is the
3 potential for additional economic impact because the pipelines and Marcus Hook Industrial
4 Complex bring substantial additional natural gas liquids supply to the Southeastern Pennsylvania
5 region. The surety of supply can and likely will attract additional industries to the region. Those
6 would be additional economic benefits that are not included with the INPLAN model.

7

8 **Q. What would be the impact of a temporary shutdown?**

9 A. Any benefit from operations would be lost forever during the period of shutdown. Any
10 benefit from additional industrial development would be lost forever during the period of the
11 shutdown. There is no opportunity to recover that lost benefit and economic activity in the future.
12 Another way to visualize that is to consider a commercial airline that departs with empty seats.
13 Those empty seats are lost forever. The same is true here. Once the day has passed, it is gone and
14 cannot be recouped in the future. There is also the possibility that ancillary industrial development
15 would be lost because of a shutdown due to the uncertainty created because that industrial
16 development could choose to locate elsewhere.

17

18 **Q. What were the benefits projected by the IMPLAN model?**

19 A. When we initially performed our analysis before construction had begun, we projected a
20 total of \$6.14 billion expenditure as the one-time construction impact and a total of 42,630 jobs,
21 meaning full-time equivalent jobs for one year. So, if one person is employed for one year, that is
22 one full-time job equivalent. If one person is employed for three years, that is three full-time job
23 equivalents. The total added to 42,630 full-time job equivalents. The magnitude of those

1 projections is still on target, and many of the benefits from the construction have, of course, been
2 realized as construction has proceeded and is nearing completion. Some of those benefits are still
3 to be realized as construction is completed.

4
5 **Q. Did you perform an analysis to project the tax revenue produced for the**
6 **Commonwealth?**

7 A. Yes. That is an analysis separate from the IMPLAN output, but it is based upon that output.
8 We developed our own model to assess the projected tax revenues to the Commonwealth. For
9 construction alone, we anticipated tax revenues to the Commonwealth of approximately \$97
10 million. Approximately two-thirds of that amount was from personal income tax and the balance
11 was from sales-and-use taxes and business taxes.

12
13 **Q. Did you also perform a valuation to project the ongoing economic impact after**
14 **construction, and what were the results of that?**

15 A. Yes, we did. We modeled the financial footprint after construction is completed, and those,
16 of course, are annual impacts for the operating life of the infrastructure project. We calculated
17 recurring annual tax revenues for the Commonwealth due to the operations of the Mariner East
18 pipelines, the fractionation facility, and associated improvements at the Marcus Hook Industrial
19 Complex between \$1.4 and \$2.1 million per year. In addition, because of increased real estate tax
20 assessments, there will be additional property taxes paid to the Chichester School District, Marcus
21 Hook Borough, and Delaware County combined of approximately \$4.8 million annually. Those
22 economic impacts will be realized on an annual basis over the operating life of the pipeline project.

23

1 **Q. Were any other benefits identified?**

2 A. Yes. The Mariner East pipelines make the transport of propane in Pennsylvania more
3 efficient, reduce transportation costs, and could help to stabilize the retail price of propane in
4 Pennsylvania. Additional propane delivered and produced at the Marcus Hook Industrial Complex
5 will boost the region's reserves, which will ease supply constraints during the peak heating season

6

7 **Q. Are your opinions provided to a reasonable degree of professional certainty?**

8 A. Yes, they are.

Exhibit SPLP PA-1

SPLP
PA-1

C-2018-3006116
10/6/20 JK

PETER A. ANGELIDES, PhD, AICP

Econsult Solutions, Inc.
1435 Walnut Street, 4th Floor
Philadelphia, PA 19102
215-717-2777
Email: angelides@econsultsolutions.com

EDUCATION

University of Minnesota

Doctor of Philosophy in Economics, February 1998
Master of Science in Economics, December 1996
Thesis topic: "Auto Ownership and Mode Choice: A Structural Approach"
Fields: Industrial Organization, Financial Economics

University of Pennsylvania

Master of City Planning, May 1988
Bachelor of Arts – Major: Urban Studies (Honors); Minor: Mathematics, May 1987

WORK EXPERIENCE

CURRENT POSITIONS

Econsult Solutions, Inc., Philadelphia, PA, *Principal*, 2013 – Present.

- Conduct economic, financial and strategic analyses for public and private entities.
- Concentrations include real estate development, transportation, economic development, economic and fiscal impacts, and financial modeling.

University of Pennsylvania, Philadelphia, PA, *Lecturer*, 2004 – Present

Delaware Valley Smart Growth Alliance – Juror, 2012, Board member, 2018, Treasurer, 2019

Design Advocacy Group – Steering Committee, 2014

Passyunk Avenue Revitalization Corporation – Vice Chair, 2019

PenTrans – Board of Directors, 2015

Racquet Club of Philadelphia—Board of Governors, 2016, Vice President, 2017, Treasurer, 2018

Urban Land Institute –Technical Assistance Program Council, 2013, Co-Chair, 2017

PAST POSITIONS

Econsult Corporation, Philadelphia, PA, *Vice President and Director*, 2008 – 2012.

PricewaterhouseCoopers, Philadelphia, PA, *Manager, Director*, 2001-2008

- Provided economic and statistical modeling and analysis in business consulting, litigation and regulatory matters.
- Major work included litigation support in a variety of industries and case-types, setting prices for intellectual property and services, and evaluating the impact of royalty licensing agreements.

Charles River Associates, *Senior Associate*, Washington, DC, 1999-2001

- Provided economic analysis, primarily for Fortune 500 companies seeking Federal regulatory approval for mergers or joint ventures. Antitrust, commercial damages.

PHB Hagler Bailly / Putnam, Hayes & Bartlett, *Consultant*, Washington, DC, 1997-1999

- Economic and litigation consulting in the telecom, energy, pharmaceutical, and postal industries

University of Minnesota, *Instructor*, 1993-1997

- Taught eleven undergraduate and master's level economics classes and supervised more than 30 independent study projects.

Wallace Roberts & Todd, Philadelphia, PA, *Urban and Environmental Planner*, 1990-1992

- Provided planning services to private developers, state and county government, and the Washington Metropolitan Area Transportation Authority.
- Projects included preparation of county level master plans, analyzing the impact of statewide zoning changes, updating municipal zoning codes, and preparation of environmental impact statements.

Central Philadelphia Development Corporation, *Planner/Intern*, 1988-1990

- Supported the activities of CPDC committees and conducted numerous analyses in support of CPDC's initiative to create what became the Center City District.

Healthy Rowhouse Project – Philadelphia, PA – Working Team, 2014-2015

Healthy Rowhouse Project – Strategic Vision Team, Philadelphia, 2016-2018

Transportation Research Board, Washington, DC – TCRP G-15 Panel Member, 2015

St. Peter's School – Finance Committee, 2010-2016

Mayor's Task Force on Historic Preservation, Philadelphia, 2017-2019

American Institute of Certified Planners – Exam question writing task force, 2012-2018

SELECTED PROJECTS

Consulting and Planning

- Economic Development and Retail Revitalization Plans
 - Chester, PA – *Revitalization Plan for the Chester Transportation Center.*
 - Coatesville, PA – Economic Development Strategy
 - City of Coatesville, PA – *Vision plan and retail study as part of Coatesville’s economic development strategy*
 - City of Trenton, NJ – Analyzed the impact of the potential reconfiguration of Rt. 29.
 - Marcus Hook – *Economic Development Agenda for Marcus Hook.*
 - Media Borough, PA – Economic development, retail, and placemaking plan
 - Ohio City, Cleveland, OH – Economic development and retail analysis and strategy
 - Regional Municipality of Wood Buffalo (Alberta, Canada) – *Real Estate Solutions for the Regional Municipality.*
 - Rowan College at Gloucester County – Market feasibility analysis for several development scenarios, including student housing, retail, and an academic building.
 - Sussex County, DE – Economic development, retail, and placemaking plan
 - Williamsburg, VA – Economic development, retail, and placemaking plan

 - Economic Impact Studies
 - ARIPPA – Economic and environmental impact of waste-coal fires power plants
 - Kentucky – Economic impact of a proposed coal mine on Kentucky.
 - SEPTA – *Understanding SEPTA’s Statewide Economic Impact.*
 - US Squash – Evaluated the economic impact of the new US Squash headquarters in Philadelphia
 - Virtua Health – Evaluated the economic impact of a new hospital facility.

 - Fiscal Impact Studies
 - Concord Township – Evaluated fiscal impact of a proposed residential development on the host municipality and school district
 - Camden – Evaluated the fiscal impact of several development projects, including two phases of a mixed use project on the waterfront and an industrial expansion
 - South Fayette Township – Evaluated fiscal impact of a proposed mixed use development. The analysis included a custom calculation of potential public school children likely to live in the development.
 - Upper Darby Township – Evaluated comminute impact of a proposed new middle school

 - Market Studies
 - RAL – Market study for 1300 Fairmount Avenue
 - Camden, NJ – market studies of proposed market rate apartments
-

- Hoboken, NJ – North End Redevelopment Plan
- Affordable Housing
 - New Jersey Municipalities – Created a comprehensive methodology to assist municipalities calculate their “fair share” affordable housing obligations in Mt. Laurel cases in New Jersey, pursuant to the Mt. Laurel IV and Mt. Laurel V rulings in March 2015 and January 2017.
 - New Jersey League of Municipalities – Analyzed a report quantifying each municipality’s “fair share” of affordable housing under the Mt. Laurel IV court case.
 - New Jersey Council On Affordable Housing (COAH)
 - Created a general real estate development feasibility model for COAH to review development proposals.
 - Analyzed housing and employment growth at the municipal level for purposes of determining affordable housing requirements in the state.
 - New Jersey Housing Mortgage and Finance Agency (HMFA) – *Analysis of Four HOPE VI Development Proposals*. Evaluated the appropriateness of development costs for several affordable housing projects. (New Jersey)
 - New Jersey Housing and Mortgage Finance Agency (HMFA) – Analyze the economic feasibility of multiple housing developments with and without tax credit assistance. (New Jersey). More than 20 projects evaluated since 2013.
- Gaming
 - Commonwealth of Pennsylvania, Legislative Budget and Finance Committee - *The Current Condition and Future Viability of Casino Gaming in Pennsylvania*. Assessed the state of the casino industry in Pennsylvania, forecast future revenue for the state in the face of increasing competition from other states, identified profit enhancing regulatory changes, and estimated the value of potential additional forms of gaming.
- Tax Analyses
 - Philadelphia Growth Coalition – Modeling impacts on Philadelphia employment, real estate values and tax revenues from proposed changes in Philadelphia’s tax structure.
 - Earned Income Tax Calculations: Estimated the value of potential tax receipts if a community implemented an Earned Income Tax. Conducted the analysis for several communities, including:
 - Middletown Township, Bucks County
 - Bensalem Township, Bucks County
 - Falls Township, Bucks County
 - Upper Darby Township, Delaware County
 - Coalition for Main Street Fairness - *The Impact of Not Collecting Sales and Use Taxes from Internet Sales into Pennsylvania*. Analyzed the economic consequences to

- Pennsylvania if it were able to collect sales tax from all internet retailers (Pennsylvania)
 - Philadelphia Parking Association – Analyzed impact of the Parking tax on the ability to construct new facilities profitably. Estimated the potential revenue from changes to meter rates, loading zone fees, and similar charges
- General Real Estate
 - University of Delaware – Participated in the creation of a strategic plan for a large newly acquired parcel adjacent to its main campus. (Newark, DE)
 - Philadelphia Water Department – *Economic Analysis of Stormwater Fee Changes on Philadelphia Businesses* (Philadelphia, PA)
 - King of Prussia Business Improvement District – *Development Incentives Package For the King of Prussia Business Improvement District* (King of Prussia, PA)
 - Studied strategic investments in commercial corridors in Philadelphia. The study combined extensive, locally unprecedented data gathering with thorough econometric analysis to investigate the drivers of commercial success for all 265 retail corridors in Philadelphia. The study included an examination of which City and non-profit based interventions in corridors were effective in improving corridor performance. The analysis also included a simulation tool to model and predict the impact of future interventions on corridors.
 - Lower Merion Township TOD - Evaluated proposals for the mixed-use, transit-oriented development in Ardmore, PA. Helped Lower Merion Township evaluate alternative development proposals for downtown Ardmore.
 - Prepared a land consumption analysis for a Mid-Atlantic state experiencing rapid suburbanization and construction on the fringes of metropolitan areas. The county-by-county analysis projected the percent of land that would remain undeveloped after 30 years of growth.
 - Bureau of Labor Statistics - *Analysis of Possible Data Sources for the Estimation of Owner Equivalent Rent*. Conducted four analyses for the BLS to help them improve calculation of the Consumer Price Index. (Washington, DC)
 - Monroe County – Prepared analyses in support of a master plan for Monroe County, Florida. The analysis included the preparation of thematic maps, proposed land uses, and calculations regarding housing capacity. A major constraint was consideration of evacuation capacity in the event of a hurricane. (Florida)
 - Prepared a strategic plan to assist the Parkway Council Foundation realize its vision for the Benjamin Franklin Parkway in Philadelphia as an exceptional cultural destination. (Philadelphia, PA)
- Transportation
 - Delaware Valley Regional Planning Commission – *Using Toll Revenue to Finance Highway and Transit Capital Improvements*. Analyzed the ability of tolls on US 422

- to finance roadway upgrades and the re-establishment of commuter rail service to Philadelphia. (Pennsylvania)
 - Select Greater Philadelphia – *US 422 Improvements – Potential Economic Impacts*. Prepared an assessment of the potential economic impacts of restored passenger rail service and upgraded highway infrastructure in the US 422 corridor. (Pennsylvania)
 - Central Philadelphia Development Corporation (CPDC) – Fiscal Impacts of the Proposed 22nd Street Subway Station. Evaluated potential economic and fiscal impacts. (Philadelphia, PA).
 - Prepared Environmental Impact Statements for the Washington Metropolitan Transportation Authority as it sought regulatory approval for the expansion of its heavy rail network.
 - Examined alternatives for reconfiguring Eakins Oval in front of the Philadelphia Museum of Art and the intersection of 25th Street, Pennsylvania Avenue, Kelly Drive and Fairmount Avenue.
 - Surveyed users of parking and loading zones on Washington Avenue (Philadelphia, PA)
- Benefit-Cost Analysis
 - Many of these BCA's were prepared for Transportation Investment Generating Economic Recovery (TIGER), Better Utilizing Investments to Leverage Development (BUILD) and similar grant programs:
 - Bronx River Alliance – Bronx River Greenway multiuse trail (New York City) \$10 million awarded
 - Central Philadelphia Development Corporation – Bicycle Lanes and Pedestrian Improvements to Market Street and JFK Boulevard (Philadelphia, PA)
 - Central Philadelphia Development Corporation – Renovation of Dilworth Plaza (Philadelphia, PA) \$15 million awarded
 - Delaware River and Bay Authority – Bridge abutments protection project
 - Haddam and East Haddam – Side path for a swing bridge (Connecticut)
 - King of Prussia – New slip ramp from I-76 to First Avenue (King of Prussia, PA)
 - Lower Merion Township – Ardmore Transportation Center (Lower Merion, PA)
 - New Haven (City) – Downtown Crossing urban boulevard, Phase II (New Haven, CT)
 - Norwalk – Route 7 intersection redesign (Norwalk, CT)
 - PATCO – Franklin Square station reopening (Philadelphia, PA)
 - Passaic County – Paterson-Hamburg Turnpike Intersection at Alps Road
 - Passaic City – infrastructure upgrades along Main Avenue
 - Philadelphia Museum of Art – Roadway and Pedestrian Concourse Improvements (Philadelphia, PA)
 - Philadelphia Regional Port Authority – Infrastructure investment to improve capacity and warehousing (Philadelphia, PA)
 - Sandusky, Ohio – Riverfront Greenway

- Streetworks – Quincy Green project (Quincy, MA)
 - Waretown – Roadway Improvements for a New Town Center (Waretown, NJ)
 - Secaucus Brownfield Development Corporation – Parking lot at the Lautenberg – Secaucus Train Station (Secaucus, NJ)
 - Southeastern Pennsylvania Transportation Authority (SEPTA)
 - Track Segregation of the West Trenton line so CSX and SEPTA traffic does not intermix (Bucks County, PA). \$10 million awarded.
 - 30th Street Station Rehabilitation (\$15 million awarded)
 - 5th Street Station Rehabilitation
 - Lawndale Grade Separation
 - Tobyhanna Township – infrastructure improvements as part of the Pocono Summit Economic Development District
 - SEPTA – Lawndale Grade Separation Waterbury Connecticut – Waterbury Green bicycle path, access improvements and other greening elements (Waterbury, CT) \$10 million awarded
 - Wilmington – Wilmington Riverfront Transportation Infrastructure Project. Full application
 - Hoboken – Rebuild by Design – Prepared a BCA for the proposed storm surge barrier in Hoboken, NJ. Submitted to the Army Corps of Engineers.
- General Analysis
 - Delaware Valley Healthcare Funders – *The Economic and Fiscal Impacts of Medicaid Expansion in Pennsylvania*. Conducted analysis regarding the incremental effect of Medicaid expansion from the baseline set by the Affordable Care Act.
 - District of Columbia – Staffed the 2015 District of Columbia Infrastructure Task Force.
 - Evaluated the rates and claims experience of a health plan for a major health insurance company investigating the cause of an increase in claims from one of its clients.
 - Reviewed the numerical advertising claims of a software company for accuracy and appropriateness.
 - New York City Economic Development Corporation – Assessed the competitiveness of trash collection market in New York City. (New York City Economic Development Corporation)

Litigation and Regulatory

- Regulatory

- Analyzed the sales patterns of “premium cigars” by consolidating transaction level sales data from the leading online cigar retailers. (Submitted to the Food and Drug Administration)
- Electricity Markets - market power analyses (Submitted to the Federal Energy Regulatory Commission)
 - Ancillary services for the California Independent System Operator on behalf of Pacific Gas & Electric and Southern Energy.
 - Market based rate authority for sale of ancillary services to ISO New England. (FERC Section 203)
 - Market power studies in support of the purchase by the Southern Company of several generating units in New England. (FERC Section 205)
 - Market power studies in support of the purchase by the Southern Company of several generating units in New York
- Postal Rate Commission
 - Analyzed the rate structure of the U.S. Postal Service in an omnibus postal rates case, focusing on parcel post
 - Analyzed U.S. Postal Service volume forecasts and rate design for media mail and submitted testimony.
- Real Estate Litigation
 - New Jersey Municipalities – Created a comprehensive methodology to assist municipalities New Jersey Municipalities – Created a comprehensive methodology to assist municipalities calculate their “fair share” affordable housing obligations in Mt. Laurel cases in New Jersey, pursuant to the Mt. Laurel IV and Mt. Laurel V rulings in March 2015 and January 2017. Testified in trials in:
 - Mercer County
 - Middlesex County
 - Ocean County
 - Economic hardship analysis before the Philadelphia Historical Commission – Analyzed the financial feasibility of reusing historic structures.
 - Boyd Theater (2014)
 - Royal Theater (2015)
 - 1904-1920 Sansom Street (2015)
 - Trinity Church Oxford (2017)
 - Evaluated the impact of water quality regulations on the feasibility of real estate developments in Monroe County, Pennsylvania
 - Real Estate Tax Assessments – analyzed real estate tax appeals made by school districts in Pennsylvania. Projects included analyses on behalf of school districts and on behalf of taxpayers.
 - Upper Merion School District
 - Maple-Newtown School District
 - Delaware County

- Chester County
 - Downingtown Area School District
 - Monroe County
 - Calculate potential escalation in construction costs during litigation related delay
 - Institute for Advanced Study
 - 625 N. Broad Street Associates
 - Calculated the value of an easement for a billboard in a property taking case.
 - Analyzed the potential profitability of a real estate development as part of lawsuits between developers and their lenders
 - Single family home subdivision in the western suburbs of Kansas City
 - Single family home subdivision in the eastern suburbs of Kansas City
 - Vacation and primary residences in the Poconos – Monroe County, PA
 - Calculated the damages to the developer of a \$1 billion condominium building in New York of delay in selling units because of an error in condominium documentation.
 - Calculated the profitability of commercial real estate development along the Philadelphia waterfront in the absence of tax incentives.
 - Calculated the value of a ground lease to the owners of an undeveloped restaurant pad.
 - Analyzed the likely impact of a shopping center redevelopment on a lead tenant in the center.
 - Calculated the fiscal impact of a tax credit to a developer on a municipality.
 - Assessed the impact of a marijuana dispensary on nearby properties
 - Variance approval – assessed the appropriateness of proposed developments.
- Intellectual Property Litigation and Analysis
 - Microsoft – Royalties for Windows Server protocols. Determined the appropriate royalty program, including royalty rates, maximums, minimums and other terms, for sets of Windows Server protocols that the European Union required Microsoft to License as part of the remedy in an antitrust case against Microsoft.
 - Microsoft – Impact of licensing. The analysis included calculating royalties paid, assessing the markets for products based on the licensed technology, and determining the ways in which the licensees' products were complimentary or competitive to the licensor's products.
 - Johnson & Johnson - Defended patent validity in a case involving an over-the-counter medication.
 - Determined damages in a copyright infringement case involving a luxury jewelry manufacturer and retailer.
 - For a direct response television marketer, determined damages in a copyright infringement case against a competing firm.
 - Analyzed a royalty distribution model used to determine payments to content creator in situations where no record of the originator of the content was kept.

- Conducted reasonable royalty calculations in a patent infringement case. The case involved both the review of the Georgia-Pacific factors to determine a reasonable royalty, and a critique of another calculation of a reasonable royalty.
 - Modeled revenues for several pharmaceutical products in an intellectual property and breach of contract dispute.
- General Litigation
 - Reviewed, analyzed and critiqued an econometrically based damage analysis that estimated how quickly shares of stock in a publicly held company could sell on the London AIM market in a marital dissolution matter.
 - Calculated damages by valuing the lost advertising value of missed appearances of an injured performed on a national television show.
 - Calculated the damages from failure to divide proceeds from the sale of a business and the associated real estate evenly among the heirs of an estate.
 - Determined the appropriate cram down interest rate in a bankruptcy proceeding.
 - Assessed the ability of a private, for-profit, golf course to continue operations as a golf course by forecasting club profit and loss based on industry growth forecasts and financing commitments made by the owners of the course.
 - Calculated the impact of a municipal regulation severely restricting the sale of cigars in packages of fewer than five cigars.
 - Determined the appropriate discount rate to use in a marital dissolution matter.
 - Assisted American Express in the preparation of its business interruption insurance claim related to damages suffered as a result of the September 11 attacks on the World Trade Center.
 - Assisted a health insurance company investigate the impact of errors in claims processing on the appropriate purchase price of the company that made the errors
 - Calculated damages to purchasers of variable universal life insurance, who allege they purchased policies based on misrepresentations made by the insurance agent.
 - Calculated damages and analyzed opposing expert's report in a state-wide class action suit between a health insurance company and member pharmacies.
 - Calculated damages to a not-for-profit organization from the allegedly wrongful actions of a local government.
 - Calculated damages resulting from a company's withdrawal of its long-term care insurance products on its outside sales forces.
 - For a large pharmaceutical company, evaluated the potential exposure of the company in a large class action lawsuit regarding drug pricing.
 - Performed several analyses with respect to drug pricing for a large pharmaceutical company.
 - In a suit alleging that an insurer with a retrospective workers compensation policy was overpaying claims, reviewed records of the largest claims to determine the appropriateness of the payments.

- Determined overcharges in a class-action dispute between resellers of toll-free 800 service and several Local Exchange Carriers.
- Conducted analyses, including a damages calculation, for an independent power producer in a breach of contract dispute with its host utility.
- Calculated damages in a breach of contract dispute between the owners of a chain of cell-phone kiosks in a major discount store with the host discount store.
- Wage Arbitration
 - City of Allentown – Assisted the City of Allentown, Pennsylvania negotiate with its police union.
 - Upper Darby Township – Tax Base Analysis for Upper Darby Township. Conducted a tax base analysis and testified at arbitration for Upper Darby as part of its contract negotiations with its police union. (Upper Darby, PA)
- Antitrust and Securities Litigation
 - 10b-5 damages for a provider of services to internet and small-scale retailers.
 - Evaluated the effect of the defendant’s dealer-loyalty program on the ability of new entrants to gain market share.
 - 10b-5 damages against the auditors of a manufacturer of building supplies.
 - CBS-Viacom Merger Review - evaluated the effect on the broadcast advertising market, the market for the sale of first-run television programs to the networks, and the sale of syndicated shows to the local broadcast stations. (Federal Trade Commission)
 - Coastal and El Paso Merger Review - evaluated horizontal overlaps in several geographic regions. (Federal Trade Commission).
 - El Paso and Southern Company Joint Venture review - evaluated several market overlaps and investigated the validity of the government’s anticompetitive theories, especially vertical exclusion issues (Federal Trade Commission).
 - Diageo, Pernod, and Seagrams merger review - evaluated the effect of the combination of brands on the consumer. (Department of Justice)

RELEVANT SKILLS

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University of Pennsylvania, 2004-present

CPLN 502/633: Urban and Regional Economics

CPLN 502: Urban Redevelopment and Infrastructure Finance

CPLN 540: Introduction to Property Development

CPLN 705: Studio

G AFL 622/522: Economic Principals of Public Policy

GAFI 724/534: Infrastructure Investment and Economic Growth
URBS 456: Economics and Urban Affairs

University of Minnesota, 1993-1997

Cost - Benefit Analysis, Industrial Organization, Welfare Economics, Principals of Microeconomics, Intermediate Microeconomics, Principals of Macroeconomics, International Trade and Payments

STUDENTS SUPERVISED

Joshua Warner – Commercial Corridor Revitalization. University of Pennsylvania, PhD in City Planning, 2020

Mengke Chen – *Agglomeration Economies and High Speed Rail*. University of Pennsylvania, PhD in City Planning, Independent Study, 2012

Jonathan Broder – *New York City Highline*. University of Pennsylvania, Master of Liberal Arts, Capstone Paper, 2011

University of Pennsylvania Studio – *Cost Benefit Analysis for High Speed Rail in the Northeast Corridor*, City Planning Studio, 2011

Allyson Randolph – *The Reinvestment Fund in Baltimore: A Model for CDFI Expansion*. University of Pennsylvania, Master of Liberal Arts, Capstone Paper, 2009

Scott Zeigler – *Identifying Housing Bubbles: An Analytical Approach*. University of Pennsylvania, Master of Liberal Arts, Capstone Paper, 2008

John Culbertson – *Microfinance*. University of Pennsylvania, Master of Liberal Arts, Capstone Paper, 2007

PROFESSIONAL MEMBERSHIPS

American Economics Association
American Planning Association
American Institute of Certified Planners
Urban Land Institute

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Public Awareness Programs for Pipeline Operators

API RECOMMENDED PRACTICE 1162
FIRST EDITION, DECEMBER 2003



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Public Awareness Programs for Pipeline Operators

Pipeline Segment

API RECOMMENDED PRACTICE 1162
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FOREWORD

This document is a Recommended Practice (RP) for pipeline operators to use in development and management of Public Awareness Programs. Pipeline Operators have conducted Public Awareness Programs with the affected public, government officials, emergency responders and excavators along their routes for many years. The goal of this RP is to establish guidelines for operators on development, implementation, and evaluation of Public Awareness Programs in an effort to raise the effectiveness of Public Awareness Programs throughout the industry.

Representatives from natural gas and liquid petroleum transmission companies, local distribution companies, and gathering systems, together with the respective trade associations, have developed this Recommended Practice. The working group was formed in early 2002. Additionally, representatives from federal and state pipeline regulators have provided input at each step of development and feedback from all interested parties has been solicited through a wide variety of sources and surveys.

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Public Awareness Programs for Pipeline Operators

1 Introduction, Scope and Glossary of Terms

1.1 INTRODUCTION

This Recommended Practice (RP) provides guidance to be used by operators of petroleum liquids and natural gas pipelines to develop and actively manage Public Awareness Programs. This RP will also help to raise the quality of pipeline operators' Public Awareness Programs, establish consistency among such programs throughout the pipeline industry, and provide mechanisms for continuous improvement of the programs. This RP has been developed specifically for pipelines operating in the United States, but may also have use in international settings.

Public awareness and understanding of pipeline operations is vital to the continued safe operation of pipelines. Pipeline operators' Public Awareness Programs are an important factor in establishing communications and providing information necessary to help the public understand that pipelines are the major transportation system for petroleum products and natural gas in the United States, how pipelines function, and the public's responsibilities to help prevent damage to pipelines.

Public Awareness Programs should address the needs of different audiences within the community and be flexible enough to change as the pipeline system changes or as the public's needs for information change. When effectively and consistently managed, a Public Awareness Program can provide significant value to the pipeline operator in several areas: enhanced public safety, improved pipeline safety and environmental performance, building trust and better relationships with the public along the pipeline route, less resistance to pipeline maintenance and right-of-way activities, preservation of rights-of-way, enhanced emergency response coordination, and improved pipeline operator reputation.

Public awareness messages need to provide a broad overview of how pipelines operate, the hazards that may result from activity in close proximity to pipelines and those hazards possible due to pipeline operations, and the measures undertaken to prevent impact to public safety, property or the environment. These messages should be coupled with information regarding how pipeline operators prepare for emergencies in a way that minimizes the consequences of a pipeline incident.

This RP identifies for the pipeline operator four specific stakeholder audiences and associated public outreach messages and communication methods to choose from in developing and managing a successful Public Awareness Program. It also provides information to assist operators in establishing

specific plans for public awareness that can be evaluated and updated.

This RP is comprised of a main body (Sections 1 – 8), and Appendices. The main body of this document contains the general, baseline program recommendations and the supplemental program components. Summary tables and diagrams are also provided in the main body. These summaries can be used as quick reference guides to assist operators when customizing their Public Awareness Programs to reflect the unique characteristics of their pipeline and facilities. The Appendices provide operators with additional, optional information and resources for further reference. The Appendices repeat many areas of the main body in order to provide the operator with comprehensive information.

1.2 SCOPE

This RP is intended as a resource that can assist pipeline operators in their public awareness efforts. Operators are urged to develop, implement and actively manage Public Awareness Programs within their companies. In implementing these programs, operators should select the most appropriate mix of audiences, message types, and delivery methods and frequencies, depending on their needs and the needs of the communities along a given pipeline segment. The guidance set forth in this RP establishes a baseline for Public Awareness Programs and describes considerations for program expansion that can further enhance specific public awareness outreach.

This RP provides guidance for the following pipeline operators:

- Intrastate and interstate hazardous liquid pipelines
- Intrastate and interstate natural gas transmission pipelines
- Local distribution systems, and
- Gathering systems.

This guidance is intended for use by pipeline operators in developing and implementing Public Awareness Programs associated with the normal operation of existing pipelines. The guidance is not intended to focus on public awareness activities appropriate for new pipeline construction or for communications that occur immediately after a pipeline-related emergency. Communication regarding construction of new pipelines is highly specific to the type of pipeline system, scope of the construction, and the community and state in which the project is located. Likewise, public communications in response to emergency situations are also highly specific to the emergency and location. This RP is also not intended to provide guidance to operators for communications about operator-specific performance measures that are

addressed through other means of communication or regulatory reporting.

The primary audience for this RP is the pipeline operator for use in developing a Public Awareness Program for the following stakeholder audiences:

- The affected public—i.e., residents, and places of congregation (businesses, schools, etc.) along the pipeline and the associated right-of-way (ROW)
- Local and state emergency response and planning agencies—i.e., State and County Emergency Management Agencies (EMA) and Local Emergency Planning Committees (LEPCs)
- Local public officials and governing councils
- Excavators.

DESCRIPTION OF PIPELINE INFRASTRUCTURE

To clarify the scope of the pipeline industry covered by this RP, a brief description of the affected infrastructure components is provided below. Mainline pipe, pump and compressor stations, and other facilities that are associated with the pipeline should be considered to be included. Unless otherwise noted, the use of the term “pipeline” in this RP will refer to all three of the following types of systems. The RP recognizes some differences between the three pipeline types and provides the operator flexibility based on the needs of the stakeholders along a particular pipeline.

1.2.1 Transmission Pipelines

The transmission pipeline systems for liquid petroleum and natural gas, move large amounts of liquids and natural gas from the producing and/or refining locations to local “outlets”, such as bulk storage terminals (for liquids) and natural gas distribution systems. Transmission pipeline systems can be classified as either “intrastate pipelines”, located within one state’s borders, or “interstate pipelines” crossing more than one state’s borders. Natural gas transmission pipelines deliver gas to direct-served customers and local distribution systems’ stations, referred to as “city gates”, where the pressure is lowered for final distribution to end users. Liquids transmission pipelines usually transport crude oil, refined products, or natural gas liquids. Transmission pipelines are generally the middle of the transportation link between gathering and distribution systems.

1.2.2 Local Distribution Systems

The local distribution systems for liquid petroleum and natural gas differ because of the nature and use of the products. Liquid petroleum products are distributed from bulk terminals by other modes of transportation, such as by rail cars and tank trucks. Local natural gas distribution companies (LDCs) receive natural gas at “city gates” and distribute it through distribution systems. These consist of “mains”,

which are usually located along or under city streets and smaller service lines that connect to the mains to further distribute natural gas service to the local end users - homes and businesses.

1.2.3 Gathering Systems

Gathering pipelines link production areas for both crude oil and natural gas to central collection points. Some gathering systems include processing facilities; others do not. Some gathering systems are regulated by the Office of Pipeline Safety, U.S Department of Transportation, while most are not. Gathering systems connect to transmission pipelines for long distance transportation of crude oil and natural gas to refinery centers and distribution centers, respectively.

1.3 GLOSSARY OF TERMS

1.3.1 Appendices: The Appendices’ role is to provide a pipeline operator with additional information to develop and actively manage its Public Awareness Programs. The Appendices’ mirror the main body of the RP while providing additional information such as: resources and contacts, examples of stakeholder audiences, public awareness messages, enhanced delivery methods and media, and program evaluation information.

1.3.2 Baseline Public Awareness Program: Refers to general program recommendations, set forth in Recommended Practice 1162, The baseline recommendations do not take into consideration the unique attributes and characteristics of individual pipeline operators’ pipeline and facilities. Supplemental or enhanced program components are described in the RP to provide guidelines to the operator for enhancing its Public Awareness Programs. This is described more fully in Sections 2 and 6.

1.3.3 CFR: *Code of Federal Regulations*

1.3.4 Dig Safely: Dig Safely is the nationally recognized campaign to enhance safety, environmental protection, and service reliability by reducing underground facility damage. This damage prevention education and awareness program is used by pipeline companies, One-Call Centers, and others throughout the country. Dig Safely was developed through the joint efforts of the Office of Pipeline Safety and various damage prevention stakeholder organizations. Dig Safely is now within the purview of the Common Ground Alliance (CGA). For more information see www.commongroundalliance.com.

1.3.5 Enhanced Public Awareness Program: The concept developed in RP 1162 for assessing particular situations in which it is appropriate to enhance or supplement the Baseline Public Awareness Program. This is described more fully in Section 6.

1.3.6 High Consequence Areas (HCAs): A high consequence area is a location that is specially defined in pipeline safety regulations as an area where pipeline releases could have greater consequences to health and safety or the environment. Pipeline safety regulations require a pipeline operator to take specific steps to ensure the integrity of a pipeline for which a release could affect an HCA and, thereby, the protection of the HCA.

1.3.7 HVL (Highly Volatile Liquid): A highly volatile liquid, as defined in pipeline safety regulations, is a hazardous liquid that will form a vapor cloud when released to the atmosphere and has a vapor pressure exceeding 276kPa (40 psia) at 37.8 degrees C (100 degrees F).

1.3.8 Integrity Management Program (IMP): In accordance with pipeline safety regulations, an operator's integrity management program must include, at a minimum, the following elements:

- a process for determining which pipeline segments could affect a High Consequence Area (HCA)
- a Baseline Assessment Plan
- a process for continual integrity assessment and evaluation
- an analytical process that integrates all available information about pipeline integrity and the consequences of a failure
- repair criteria to address issues identified by the integrity assessment method and data analysis (the regulations provide minimum repair criteria for certain, higher risk, features identified through internal inspection)
- a process to identify and evaluate preventive and mitigative measures to protect HCAs
- methods to measure the integrity management program's effectiveness and
- a process for review of integrity assessment results and data analysis by a qualified individual.

1.3.9 IMP Overview: An overview of an operator's IMP program should include a description of the basic requirements and components of the program and does not need to include a summary of the specific locations or schedule of activities undertaken. The overview may only be a few pages and its availability could be mailed upon request or made available on the operator's website.

1.3.10 LDCs: Local Distribution Companies for natural gas

1.3.11 "may" versus "should": Clarification is necessary for RP 1162's use and definition of the words "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.

1.3.12 NPMS: National Pipeline Mapping System (See Section 4.6.2)

1.3.13 One-Call Center: The role of the One-Call Center is to receive notifications of proposed excavations, identify possible conflicts with nearby facilities, process the information, and notify affected facility owners/operators.

1.3.14 Operator: All companies that operate pipelines that are within the scope of this RP.

1.3.15 OPS: Office of Pipeline Safety, part of the Research and Special Programs Administration (RSPA) of the U.S. Department of Transportation. OPS develops and enforces safety and integrity regulations for pipelines and pipeline operations.

1.3.16 Pipeline Right-of-Way (ROW): a defined strip of land on which an operator has the rights to construct, operate, and/or maintain a pipeline. A ROW may be owned outright by the operator or an easement may be acquired for specific use of the ROW.

1.3.17 Supplemental Public Awareness Program: Refer to the definition above, "Enhanced Public Awareness Program".

1.3.18 Third-Party Damage: outside force damage to underground pipelines and other underground facilities that can occur during excavation activities. Advanced planning, effective use of One-Call Systems, accurate locating and marking of underground facilities, and the use of safe digging practices can all be very effective in reducing third-party damage.

2 Public Awareness Program Development

The overall goal of a pipeline operator's Public Awareness Program is to enhance public environmental and safety property protection through increased public awareness and knowledge.

PUBLIC AWARENESS PROGRAM OBJECTIVES

2.1 OBJECTIVES

- **Public Awareness of Pipelines**

Public Awareness Programs 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 pipelines in transporting energy. A more informed public along pipeline routes should supplement an operator's pipeline safety measures and should contribute to reducing the likelihood and potential impact of pipeline emergencies and releases. Public Awareness Programs will also help the public understand that while pipeline accidents are possible, 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 if they occur. Finally, a more informed public will also understand that they have a significant role in helping to prevent accidents that are caused by third-party damage and ROW encroachment.

- **Prevention and Response**

Public Awareness Programs should help the public understand the steps that the public can take to prevent and respond to pipeline emergencies. "Prevention" refers to the objective of reducing the occurrences of pipeline emergencies caused by third-party damage (versus other causes under the control of the operator) through awareness of safe excavation practices and the use of the One-Call System. "Response" refers to the objective of communicating to the public the appropriate steps to take into account in the event of a pipeline release or emergency.

These objectives, together with others that may be identified by individual pipeline operators, provide the foundation on which a pipeline Public Awareness Program is built. Two important objectives of this RP include:

- Assist each pipeline operator to develop a framework for managing its Public Awareness Program so that the quality of Public Awareness Programs can be continually improved throughout the pipeline industry and
- Provide the operator with considerations to determine how to enhance its program to provide the appropriate level of public awareness outreach for a given area and certain circumstances.

2.2 OVERVIEW FOR MEETING PUBLIC AWARENESS OBJECTIVES

In general, Public Awareness Programs should communicate relevant information to the following stakeholder audiences (as defined in Section 3):

2.2.1 The Affected Public

- Awareness that they live or work near a pipeline
- Hazards associated with unintended releases
- An overview of what operators do to prevent accidents and mitigate the consequences of accidents when they occur
- How to recognize and respond to a pipeline emergency

- What protective actions to take in the unlikely event of a pipeline release
- How to notify the pipeline operator regarding questions, concerns, or emergencies
- How to assist in preventing pipeline emergencies by following safe excavation/digging practices and reporting unauthorized digging or suspicious activity
- How community decisions about land use may affect community safety along the pipeline ROW
- How individuals can create undesirable encroachments upon a pipeline ROW
- How to contact the pipeline operator with questions or comments about public safety, additional overview information on Integrity Management Programs to protect High Consequence Areas located in their area, land use practices, emergency preparedness or other matters.

2.2.2 Local Public Officials

- Information regarding transmission pipelines that cross their area of jurisdiction
- Land use practices associated with the pipeline ROW that may affect community safety
- Hazards associated with unintended releases
- An overview of what operators do to prevent accidents and mitigate the consequences of accidents when they occur
- How to contact the pipeline operators with questions or comments about public safety, additional overview information on Integrity Management Programs to protect High Consequence Areas under their jurisdiction, land use practices, emergency preparedness or other matters.

2.2.3 Emergency Officials

- Location of transmission pipelines that cross their area of jurisdiction, and how to get detailed information regarding those pipelines
- Name of the pipeline operator and the emergency contact information for each pipeline
- Information about the potential hazards of the subject pipeline
- Location of emergency response plans with respect to the subject pipelines
- How to notify the pipeline operator regarding questions, concerns, or emergency
- How to safely respond to a pipeline emergency
- An overview of what operators do to prevent accidents and mitigate the consequences of accidents when they occur
- How to contact the pipeline operator with questions or comments about public safety, additional overview information on Integrity Management Programs to protect High Consequence Areas under their jurisdiction,

land use practices, emergency preparedness or other matters.

2.2.4 Excavators

- Awareness that digging and excavating along the ROW may affect public safety, pipeline safety and/or pipeline operations
- Information about one-call requirements and damage prevention requirements in that jurisdiction
- Information about safe excavation practices in association with underground utilities
- How to notify the operator regarding a pipeline emergency or damage to a pipeline
- Hazards associated with unintended releases
- Name of the pipeline operator and who to contact for emergency or non-emergency information.

This RP focuses on those four segments of the public, as listed above, that are most directly affected by or could have the most affect on pipeline safety. The general public is a larger audience for general pipeline awareness information. General knowledge about energy pipelines is useful to the general public and may be obtained through a variety of sources, including the Office of Pipeline Safety, US Department of Transportation, pipeline industry trade associations and pipeline operators.

2.3 REGULATORY COMPLIANCE

This RP is intended to provide a framework for Public Awareness Programs designed to help pipeline operators in their compliance with federal regulatory requirements found in 49 *CFR* Parts 192 and 195.

The three principal compliance elements include:

2.3.1 Public Education (49 *CFR* Parts 192.616 and 195.440):

These regulations require pipeline operators to establish continuing education programs to enable the public, appropriate government organizations, and persons engaged in excavation-related activities to recognize a pipeline emergency and to report it to the operator and/or the fire, police, or other appropriate public officials. The programs are to be provided in both English and in other languages commonly used by a significant concentration of non-English speaking population along the pipeline.

2.3.2 Emergency Responder Liaison Activities (49 *CFR* Parts 192.615 and 195.402):

These regulations require that operators establish and maintain liaison with fire, police, and other appropriate public officials and coordinate with them on emergency exercises or drills and actual responses during an emergency.

2.3.3 Damage Prevention (49 *CFR* Parts 192.614 and 195.442):

These regulations require pipeline operators to carry out written programs to prevent damage to pipelines by excavation activities.

2.4 OTHER RESOURCES

In addition to operator personnel, various other resources are available to assist pipeline operators in developing their Public Awareness Programs and related informational materials. These resources can often shorten development time and reduce the implementation cost of an operator's Public Awareness Program. Some of these other resources are described below.

2.4.1 Trade Associations

The major pipeline industry trade associations take an active role in sponsoring various efforts that can help operators meet public awareness objectives. These trade associations include the:

- American Petroleum Institute (API)
- Association of Oil Pipe Lines (AOPL)
- American Gas Association (AGA)
- Interstate Natural Gas Association of America (INGAA) and
- American Public Gas Association (APGA).

The websites of these associations provide a wide range of information to assist operators in developing and managing Public Awareness Programs, and developing information to use in implementing those programs. The trade associations also undertake specific efforts in public outreach, such as:

- Printing of pipeline safety brochures that can be customized by the operator
- Development and distribution of pipeline safety decals and materials
- Development of videos and brochures to aid in the education of public officials regarding pipeline emergency response
- Development of website information specifically for pipeline public awareness
- Distribution of periodic newsletters that provide additional guidance and information to operators on issues related to Public Awareness Programs
- Development and sponsorship of television and radio public service announcements (PSA)
- Participation in appropriate trade shows to inform excavators, regulators, legislators, and others.

For additional information on these efforts, contact the trade associations directly. Contact information and website addresses are provided in Appendix A.

2.4.2 One-Call Centers

The primary purpose of a One-Call System is to prevent damage to underground facilities, including pipelines, which could result from excavation activities. All states and the District of Columbia have established One-Call Systems (some states may have two or more One-Call Systems). State One-Call Centers may develop public awareness information materials and may be able to gather extensive information about excavation contractors. If available to the pipeline operator, this information will be useful to fulfill the requirements of 49 *CFR* Part 192.614 and 195.442 (Damage Prevention Programs). Many One-Call Systems perform their own public awareness outreach through public service announcements and other advertising. Some One-Call Systems may also sponsor statewide excavation hazard awareness programs. One-Call System contacts can be found at the “Dig Safely” website (see Appendix A).

2.4.3 Federal and State Agencies

Although pipeline operators are the primary sponsors of Public Awareness Programs on pipeline safety, some state agencies with regulatory authority for pipeline safety can provide training and materials. In addition, some state pipeline safety regulatory agencies sponsor or conduct pipeline public awareness efforts. The federal agency responsible for pipeline safety, the Office of Pipeline Safety of the U.S. Department of Transportation, is also a source of relevant information.

2.4.4 Common Ground Alliance

The Common Ground Alliance (CGA) is a nationally recognized nonprofit organization dedicated to shared responsibility in damage prevention and promotion of the damage prevention Best Practices identified in the landmark *Common Ground Study of One-Call Systems and Damage Prevention Best Practices*. This report is available online from CGA’s website (see Appendix A). Building on the spirit of shared responsibility resulting from the Common Ground Study, the purpose of the CGA is to ensure public safety, environmental protection, and the integrity of services by promoting effective damage prevention practices. The “Dig Safely” campaign is now a component of the Common Ground Alliance.

The Common Ground Alliance is supported by its sponsors, member organizations, the Office of Pipeline Safety, and individual members. CGA sponsorship and membership is open to all stakeholder organizations that want to support the CGA’s damage prevention efforts.

2.4.5 Outside Consultants

Many outside consultants are available to support an operators’ Public Awareness Program. Direct-mail vendors are

capable of producing pipeline safety materials and providing distribution services. These vendors can assist operators in identifying residents and special interest groups, such as excavators along the pipeline route, and can support the operator in production and distribution of the material. Public relations firms are also available to assist operators in developing material specifically geared to the intended audience. Their expertise can help heighten the readability of the public awareness materials and improve the operator’s overall success in communicating the intended message.

2.4.6 Other Pipeline Companies

Pipeline companies have developed a variety of creative ways to meet their public awareness objectives. Cooperative information exchanges or shared public awareness activities between operators can be beneficial and economical.

2.4.7 Operator Employee Participation

As members of communities and community service organizations, informed employees of a pipeline operator can play an important role in promoting pipeline awareness. An operator should include in its Public Awareness Program provisions for familiarizing its employees with its public awareness objectives. Information and material used by the operator should be made available to employees who wish to promote pipeline awareness in their communities. Many Public Awareness Programs include components for key employee training in public awareness and specific communication training for specific key employees.

Operator employees can be a key part of public awareness efforts. Grass-roots employee contacts and communications can be particularly important in effectively reaching out to a community. Employees who are interested in and capable of performing a greater public communication role should be given the necessary training, communications materials and, as appropriate, be provided with opportunities for direct involvement with the community.

2.5 MANAGEMENT SUPPORT

For a Public Awareness Program to achieve its objectives, ongoing support within the operator’s organization is crucial. Management should demonstrate its support through company policy, management participation, and allocation of resources and funding. Funding and resource requirements for an operator’s Public Awareness Program development and implementation will vary according to the program’s objectives, design, and scope. Full organizational support can make a marked difference in the way the Public Awareness Program is received and can affect the overall effectiveness and success of the program.

2.6 BASELINE AND SUPPLEMENTAL PUBLIC AWARENESS PROGRAMS

For the development of a Public Awareness Program, this RP recognizes that there are differences in pipeline conditions, release consequences, affected populations, increased development and excavation activities and other factors associated with pipeline systems. Accordingly, a “one-size-fits-all” Public Awareness Program across all pipeline systems would not be the most effective approach. For example, some geographic areas have a low population, low turn over in residents, and little development or excavation activity; whereas other areas have very high population, high turn over, and extensive development and excavation activity.

This RP provides the operator with the elements of a recommended baseline Public Awareness Program. It also pro-

vides the operator with considerations to determine when and how to enhance the program to provide the appropriate level of public awareness outreach. Details for assessing the need for program enhancement are presented in Section 6. The appropriateness of enhanced or supplemental messages, delivery frequency and methods, and/or geographic coverage area is also an aspect of program evaluation. Recommendations on the evaluation of Public Awareness Programs are presented in Section 8.

2.7 PROGRAM DEVELOPMENT GUIDE

It is recommended that pipeline operators develop a written Public Awareness Program. The following guide may be helpful to pipeline operators in the development and implementation of their Public Awareness Programs.

Overall Program Administration

Step 1. Define Program Objectives

- Define program objectives in accordance with Section 2 of this RP.

Step 2. Obtain Management Commitment and Support

- Develop a company Policy and “statement of support” for the Public Awareness Program. This should include a commitment of participation, resources, and funding for the development, implementation, and management of the program.
- Reference Section 2.5.

Step 3. Identify Program Administration

- Name program administrator(s)
- Identify roles and responsibilities
- Document program administration
- Reference Section 7.

Step 4. Identify Pipeline Assets to be Included within the Program

- The overall program may be a single Public Awareness Program for all pipeline assets, or may be divided into individual, asset-specific programs for one or more specific pipeline systems, one or more pipeline segments, one or more facilities, or one or more geographic areas. Smaller companies and LDCs may have just one overall program.
- Name an administrator for each asset specific program.
- Reference Section 7 for documentation.

Program Development (applied to each identified asset- specific program)

Step 5. Identify the Four Stakeholder Audiences

- Establish methods to be used in audience identification.
- Establish a means of contact or address list for each audience type:
 - Affected public
 - Emergency officials
 - Local public officials
 - Excavators.
- Document methods used and output.
- Reference Section 3 for detail on stakeholder audiences.

Step 6. Determine Message Type and Content for Each Audience

- Establish which message types are to be used with which audience(s).
- Determine content for each message type.
- Document message type and content selected.
- Reference Section 4 for details on message development.

Step 7. Establish Baseline Delivery Frequency for Each Message

- Suggested delivery frequencies are described in Section 2.8.
- Document delivery frequencies selected.

Step 8. Establish Delivery Methods to Use for Each Message

- Select appropriate methods.
- Utilize alternate methods as appropriate.
- Document delivery methods selected.
- Establish process for management of input/feedback/comments received.
- Reference Sections 2.8 and 5 for additional detail.

Step 9. Assess Considerations for Supplemental Program Enhancements

- Review the criteria in this RP for enhanced programs (e.g. supplemental activities).
- Assess pipeline assets contained in the program and apply supplemental program elements.
- Solicit input from appropriate pipeline personnel (e.g. pipeline operations and maintenance personnel, other support personnel, etc.).
- Apply identified supplemental program elements to the program.
- Document supplemental program elements (describes when, what, and where program enhancements are used).
- Reference Sections 2.8 and 6.

Step 10. Implement Program and Track Progress

- Develop resource and monetary budgets for program implementation.
- Identify, assign and task participating company employees needed to implement the program.
- Identify external resources or consultants needed.
- Conduct program activities (e.g. mass mailings, emergency official meetings).
- Periodically update the program with newly identified activities.
- Collect feedback from internal and external sources.
- Document the above. Reference Section 7 for documentation and record keeping recommendations.

Step 11. Perform Program Evaluation

- Establish an evaluation process.
- Determine input data sources (e.g. company surveys, industry surveys, reply cards, feedback from participating employees, and feedback from recipient audiences, etc.).
- Assess results and applicability of operator and/or industry-sponsored evaluations.
- Document evaluation results. Reference Section 8 for program evaluation recommendations.

Step 12. Implement Continuous Improvement

- Determine program changes or modifications based on results of the evaluation to improve effectiveness. Program changes may be areas such as: audience, message type or content, delivery frequency, delivery method, supplemental activities or other program enhancements.
- Document program changes.
- Determine future funding and internal and external resource requirements resulting from program changes made.
- Implement changes.

Return to Step 5; Initiate new cycle for updating the Public Awareness Program.

The figurative description of the program development process is shown below, highlighting the continuous nature of the development, implementation and evaluation process.

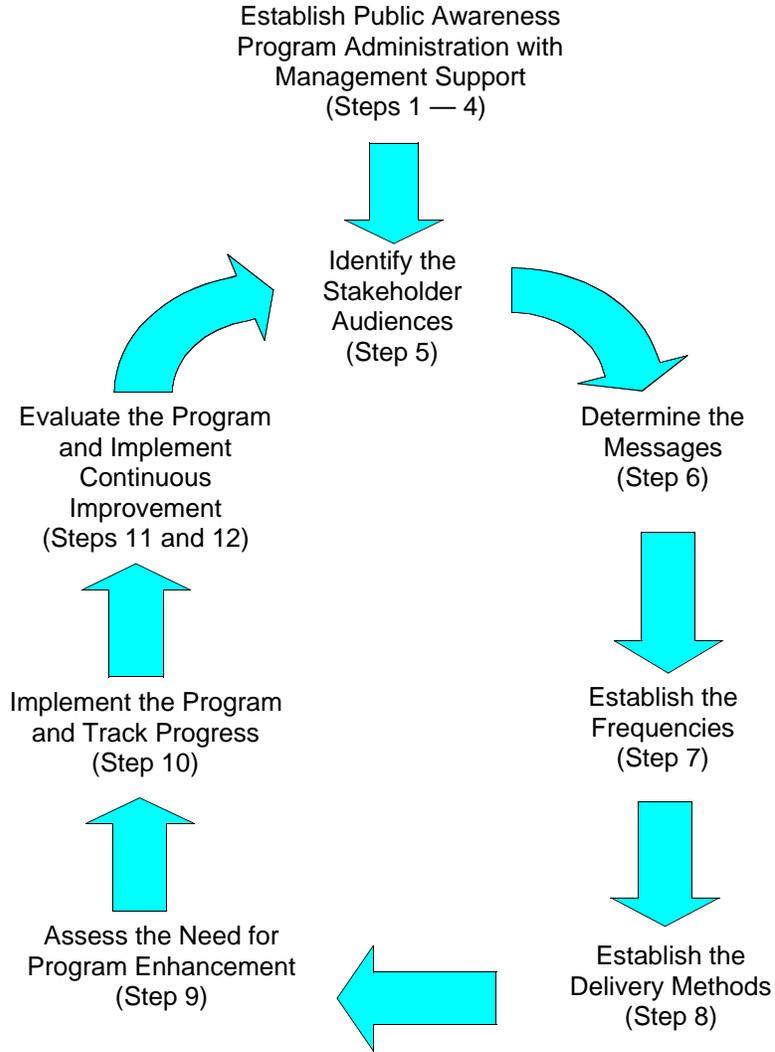


Figure 2-1—Public Awareness Program Process Guide

2.8 SUMMARY OF PROGRAM RECOMMENDATIONS

This RP has defined three categories of pipeline operators to which the RP applies. The three categories are:

1. Hazardous Liquid and Natural Gas Transmission Pipeline Operators (Table 2-1)
2. Local Natural Gas Distribution (LDC) Companies (Table 2-2)
3. Gathering Pipeline Operators (Table 2-3).

This RP recognizes that the communications and public awareness needs and activities may vary by the category of pipeline. Operators may customize their programs to best suit the needs of the stakeholder audiences and make them relevant to the type of potential hazards posed by their pipeline systems.

The tables 2-1 through 2-3 summarize the baseline recommendations for conducting public awareness for operators of Hazardous Liquid, Natural Gas Transmission, Local Natural Gas Distribution (LDC), and Gathering Pipelines. Guidance is also provided to assist the operators in determining if supplemental efforts affecting the frequency or method of message delivery and/or message content are called for, by evaluating the effectiveness of the program and the specifics of the pipeline segment or environment. Considerations for when and how an operator should implement program enhancements are described in Section 6. Further information of stakeholder audiences (Section 3); message types (Section 4); and message delivery methods (Section 5) may be found in their respective sections and related appendices.

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

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
2-1.1 Affected Public			
Residents located along transmission pipeline ROW and Places of Congregation	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage prevention awareness • One-call requirements • Leak recognition and response • Pipeline location information • How to get additional information • Availability of list of pipeline operators through NPMS 	Baseline Frequency = 2 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Pipeline markers
	Supplemental Message: <ul style="list-style-type: none"> • Information and/or overview of operator’s Integrity Management Program • ROW encroachment prevention • Any planned major maintenance/construction activity 	Supplemental Frequency: Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	Supplemental Activity: <ul style="list-style-type: none"> • Print materials • Personal contact • Telephone calls • Group meetings • Open houses
Residents near storage or other major operational facilities	Supplemental Message: <ul style="list-style-type: none"> • Information and/or overview of operator’s Integrity Management Program • Special incident response notification and/or evacuation measures <i>if</i> appropriate to product or facility • Facility purpose 	Supplemental Frequency: Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	Supplemental Activity: <ul style="list-style-type: none"> • Print materials • Personal contact • Telephone calls • Group meetings • Open houses

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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Personal contact (generally preferred) OR <ul style="list-style-type: none"> • Targeted distribution of print materials OR <ul style="list-style-type: none"> • Group meetings OR <ul style="list-style-type: none"> • Telephone calls with targeted distribution of print materials
	Supplemental Message: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Emergency tabletop, deployment exercises • Facility tour • Open house
2-1.3 Local Public Officials			
Public Officials	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency preparedness communications • One-call requirements • Pipeline location information and availability of NPMS • How to get additional information 	Baseline Frequency = 3 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials
	Supplemental Message: <ul style="list-style-type: none"> • If applicable, provide information about designation of HCA (or other factors unique to segment) and summary of integrity measures undertaken • ROW encroachment prevention • Maintenance construction activity 	Supplemental Frequency: <ul style="list-style-type: none"> • If in HCA, then annual contact to appropriate public safety officials • Otherwise, as appropriate to level of activity or upon request 	Supplemental Activity: <ul style="list-style-type: none"> • Personal contact • Telephone calls • Videos and CDs

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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Personal contact • Group meetings
Land Developers	Supplemental Messages: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Targeted distribution of print materials • Pipeline markers • Personal contact • Group meetings • Telephone calls
One-Call Centers	Baseline Messages: <ul style="list-style-type: none"> • Pipeline location information • Other requirements of the applicable One-Call Center 	Baseline Frequency: <ul style="list-style-type: none"> • Requirements of the applicable One-Call Center 	Baseline Activity: <ul style="list-style-type: none"> • Membership in appropriate One-Call Center • Requirements of the applicable One-Call Center • Maps (as required)
	Supplemental Messages: <ul style="list-style-type: none"> • One-Call System performance • Accurate line location information • One-Call System improvements 	Supplemental Frequency: As changes in pipeline routes or contact information occur or as required by state requirements	Supplemental Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Personal contact • Telephone calls

Table 2-2—Summary Public Awareness Communications for Local Natural Gas Distribution (LDC) Companies

Stakeholder Audience	Message Type	Suggested Frequency	Suggested Delivery Method and/or Media
2-2.1 Affected Public			
Residents along the Local Distribution System (LDC)	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage prevention awareness • Leak recognition and response • How to get additional information 	Baseline Frequency = Annual	Baseline Activity: <ul style="list-style-type: none"> • Public service announcements, OR • Paid advertising, OR • Bill stuffers (for combination electric & gas companies)
		Supplemental Frequency: <ul style="list-style-type: none"> • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment 	Supplemental Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Newspaper and magazines • Community events or • Community neighborhood newsletters
LDC Customers	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage Prevention Awareness • Leak Recognition and Response • How to get additional information 	Baseline Frequency = Twice annually	Baseline Activity: <ul style="list-style-type: none"> • Bill stuffers
		Supplemental Frequency: <ul style="list-style-type: none"> • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment 	Supplemental Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials
2-2.2 Emergency Officials			
Emergency Officials	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency preparedness communications • How to get additional information 	Baseline Frequency = Annual	Baseline Activity: <ul style="list-style-type: none"> • Print materials, OR • Group meetings
		Supplemental Frequency: <ul style="list-style-type: none"> • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment 	Supplemental Activity: <ul style="list-style-type: none"> • Telephone calls • Personal contact • Videos and CDs
2-2.3 Local Public Officials			
Public Officials	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency preparedness communications • How to get additional information 	Baseline Frequency = 3 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials
		Supplemental Frequency: <ul style="list-style-type: none"> • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment 	Supplemental Activity: <ul style="list-style-type: none"> • Group meetings • Telephone calls • Personal contact

Table 2-2—Summary Public Awareness Communications for Local Natural Gas Distribution (LDC) Companies (Continued)

Stakeholder Audience	Message Type	Suggested Frequency	Suggested Delivery Method and/or Media
2-2.4 Excavators			
Excavators / Contractors	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Leak recognition and response • One-call requirements • How to get additional information 	Baseline Frequency = Annual	Baseline Activity: <ul style="list-style-type: none"> • One-Call Center outreach OR • Group meetings
		Supplemental Frequency: <ul style="list-style-type: none"> • Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment 	Supplemental Activity: <ul style="list-style-type: none"> • Personal contact • Videos and CDs • Open houses
One-Call Centers	Baseline Messages: <ul style="list-style-type: none"> • Pipeline location information • Other requirements of the applicable One-Call Center 	Baseline Frequency: <ul style="list-style-type: none"> • Requirements of the applicable One-Call Center 	Baseline Activity: <ul style="list-style-type: none"> • Membership in appropriate One-Call Center • Requirements of the applicable One-Call Center • Maps (as required)
		Supplemental Messages: <ul style="list-style-type: none"> • One-Call System performance • Accurate line location information • One-Call System improvements 	Supplemental Frequency: <ul style="list-style-type: none"> • As changes in pipeline routes or contact information occur or as required by state requirements

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

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
2-3.1 Affected Public			
Residents, and Places of Congregation within area of potential impact	Baseline Messages: <ul style="list-style-type: none"> • Gathering pipeline purpose • Awareness of hazards • Prevention measures undertaken • Damage prevention awareness • One-call requirements • Leak Recognition and Response • How to get additional information 	Baseline Frequency = 2 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials OR • Personal contact
		Supplemental Messages: <ul style="list-style-type: none"> • Planned maintenance construction activity • Special emergency procedures if sour gas or other segment specific reason. 	Supplemental Frequency: <ul style="list-style-type: none"> • Annually for sour gas gathering lines • Additional frequency as determined by specifics of the pipeline segment or environment.

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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Personal contact (generally preferred) OR <ul style="list-style-type: none"> • Targeted distribution of print materials OR <ul style="list-style-type: none"> • Group meetings OR <ul style="list-style-type: none"> • Telephone calls with targeted distribution of print materials
	Supplemental Messages: <ul style="list-style-type: none"> • Planned maintenance construction activity • Special emergency procedures if sour gas or other segment specific reason 		Supplemental Activity: <ul style="list-style-type: none"> • Emergency tabletop deployment exercises • Facility tour • Open house
2-3.3 Local Public Officials			
Public Officials	Baseline Messages: <ul style="list-style-type: none"> • General location and purpose of gathering pipeline • Awareness of hazards • Prevention measures undertaken • Copies of materials provided to affected public and emergency officials • Company contacts • How to get additional information 	Baseline Frequency = 3 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials
	Supplemental Message: <ul style="list-style-type: none"> • ROW encroachment prevention • Maintenance construction activity • Special emergency procedures if sour gas or other segment specific reasons. 	Supplemental Frequency: <ul style="list-style-type: none"> • If in HCA, then more frequent or annual contact with appropriate public safety officials • Otherwise as appropriate to level of activity or upon request 	Supplemental Activity: <ul style="list-style-type: none"> • Personal contact • Telephone calls • Videos and CDs

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

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
2-3.4 Excavators			
Excavators / Contractors	Baseline Messages: <ul style="list-style-type: none"> • General location and purpose of gathering pipeline • Awareness of hazards • Prevention measures undertaken • Damage prevention awareness • One-call requirements • Leak recognition and response • How to get additional information 	Baseline Frequency = Annual	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • One-Call Center outreach • Pipeline markers Supplemental Activity: <ul style="list-style-type: none"> • Personal contact • Group meetings • One-Call Center outreach • mass media
Land Developers	Supplemental Messages: <ul style="list-style-type: none"> • General location and purpose of gathering pipeline • Awareness of hazards • Prevention measures undertaken • Damage prevention awareness 	Supplemental Frequency: Frequency as determined by specifics of the pipeline segment or environment	Supplemental Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Personal contact • Group meetings • Telephone calls
One-Call Centers	Baseline Messages: <ul style="list-style-type: none"> • Pipeline location information • Other requirements of the applicable One-Call Center 	Baseline Frequency: <ul style="list-style-type: none"> • Requirements of the applicable One-Call Center 	Baseline Activity: <ul style="list-style-type: none"> • Membership in appropriate One-Call Center • Requirements of the applicable One-Call Center • Maps (as required)
	Supplemental Messages: <ul style="list-style-type: none"> • One-Call System performance • Accurate line location information • One-Call System improvements 	Supplemental Frequency: As changes in pipeline routes or contact information occur or as required by state requirements	Supplement Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Personal contact • Telephone calls • Maps (as required)

3 Stakeholder Audiences

One of the initial tasks in developing a Public Awareness Program is to identify the audience(s) that should receive the program’s messages. This section defines the intended audiences for the operator’s Public Awareness Program and provides examples (not all inclusive) of each audience. Further explanation and examples are included in Appendix B. This information should help the operator clarify whom it is trying to reach with its program. The following audiences are considered “stakeholders” of the pipeline operator’s Public Awareness Program. The four intended “Stakeholder Audiences” include:

- 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.

3.1 THE AFFECTED PUBLIC

Stakeholder Audience	Audience Definition	Examples
Residents located adjacent to the transmission pipeline ROW	People who live adjacent to a natural gas and/or hazardous liquid transmission pipeline ROW.	<ul style="list-style-type: none"> • Occupants or residents • Tenants • Farmers • Homeowners associations or groups • Neighborhood organizations
Residents located along distribution systems	People who live on or immediately adjacent to the land wherein gas distribution pipelines are buried.	<ul style="list-style-type: none"> • LDC customers • Non-customers living immediately adjacent to the land wherein distribution pipelines are buried
Gas transmission pipeline customers	Businesses or facilities that the pipeline operator provides gas directly to for end use purposes. This does not include LDC customers.	<ul style="list-style-type: none"> • Power plants • Businesses • Industrial facilities
LDC customers	People that are served by gas distribution facilities.	<ul style="list-style-type: none"> • LDC customers
Residents near liquid or natural gas storage and other operational facilities along transmission lines	People who live adjacent to or near a tank farm, storage field, pump/compressor station and other facilities.	<ul style="list-style-type: none"> • Occupants or residents tenants • Farmers • Homeowner associations or groups • Neighborhood organizations
Places of congregation	Identified places where people assemble or work on a regular basis—on or along a transmission pipeline ROW, unrelated to habitation.	<ul style="list-style-type: none"> • Businesses • Schools • Places of worship • Hospitals and other medical facilities • Prisons • Parks & recreational areas • Day-care facilities • Playgrounds
Residents located along rights-of-way for gathering pipelines	<ul style="list-style-type: none"> • People who live or work on land along which the gathering pipeline is located, and within the right-of-way. • For higher consequence gathering lines (e.g. H₂S), people who live or work a distance on either side of right-of-way that is based on the potential impact in the event of an emergency. 	<ul style="list-style-type: none"> • Occupants or residents • Tenants • Farmers • Businesses • Schools

3.2 EMERGENCY OFFICIALS

Stakeholder Audience	Audience Definition	Examples
Emergency officials	Local, state, or regional officials, agencies and organizations with emergency response and/or public safety jurisdiction along the pipeline route.	<ul style="list-style-type: none"> • Fire departments • Police/sheriff departments • Local Emergency Planning Commissions (LEPCs) • County and State Emergency Management Agencies (EMA) • Other emergency response organizations • Other public safety organizations

3.3 LOCAL PUBLIC OFFICIALS

Stakeholder Audience	Audience Definition	Examples
Public officials	Local, city, county or state officials and/or their staffs having land use and street/road jurisdiction along the pipeline route.	<ul style="list-style-type: none"> • Planning boards • Zoning board • Licensing departments • Permitting departments • Building code enforcement departments • City and county managers • Public and government officials • Public utility boards • Includes local “Governing Councils” as defined by many communities • Public officials who manage franchise or license agreements

3.4 EXCAVATORS

Stakeholder Audience	Audience Definition	Examples
Excavators	Companies and local/state government agencies who are involved in any form of excavation activities.	<ul style="list-style-type: none"> • Construction companies • Excavation equipment rental companies • Public works officials • Public street, road and highway departments (maintenance and construction) • Timber companies • Fence building companies • Drain tiling companies • Landscapers • Well drillers
Land developers	Companies and private entities involved in land development and planning.	<ul style="list-style-type: none"> • Home builders • Land developers • Real estate sales
One-Call Centers	Excavation One-Call Centers relevant to the area.	<ul style="list-style-type: none"> • Each state, region, or other organization established to notify underground facility owner/operators of proposed excavations. Excavation One-Call Centers relevant to the area.

4 Message Content

An operator should select the optimum combination of message, delivery method, and frequency that meets the needs of the intended audience. Information materials may also include supplemental information about the pipeline operator, pipeline operations, the safety record of pipelines and other information that an operator deems appropriate for the audience. The operator is reminded that communications materials should be provided in the language(s) spoken by a significant portion of the intended audience.

The basic message conveyed to the intended audience should provide information that will allow the operator to meet the program objectives. The communications should include enough information so that in the event of a pipeline emergency, the intended audience will know how to identify a potential hazard, protect themselves, notify emergency response personnel, and notify the pipeline operator. Several components of these messages are discussed in this section.

4.1 PIPELINE PURPOSE AND RELIABILITY

Operators should consider providing a general explanation of the purpose of the pipeline and/ or facilities and the reliability of pipelines to meet the energy needs of the region, even though this is not a primary objective of pipeline public awareness. Operators should provide assurances that security is considered.

4.2 HAZARD AWARENESS AND PREVENTION MEASURES

Operators should provide a very broad overview of potential hazards, their potential consequences and the measures undertaken by the operator to prevent or mitigate the risks from pipelines (including, at the operator's discretion, an overview of the industry's safety record). Additionally, operators should provide an overview of their preventative measures to help assure safety and prevent incidents. The scope of the hazard awareness and prevention message should be more detailed for the emergency responder audience than for other audiences, and should include how to obtain more specific information upon request from the operator.

4.3 LEAK RECOGNITION AND RESPONSE

The pipeline operator should provide information in the following key subject areas to the affected public and excavator stakeholder groups.

4.3.1 Potential Hazards of Products Transported

Information about specific release characteristics and potential hazards posed by hazardous liquids or gases should be included.

4.3.2 How to Recognize a Pipeline Leak

Information should address how to recognize a pipeline leak through the senses of sight, unusual sound, and smell and describe any associated dangers as appropriate to the product type.

4.3.3 Response to a Pipeline Leak

Information should address an outline of the appropriate actions to take if a pipeline leak or release is suspected.

4.3.4 Liaison with Emergency Officials

Information should describe the ongoing relationship between the operator and local emergency response officials to help prevent incidents and assure preparedness for emergencies.

4.4 EMERGENCY PREPAREDNESS COMMUNICATIONS

Communicating periodically with local emergency officials is an important aspect of all Public Awareness Programs. Operators should provide a summary of emergency preparedness information to local public officials and should indicate that detailed information has been provided to emergency response agencies in their jurisdictions. The following information should be provided to the emergency officials stakeholder audience.

4.4.1 Priority to Protect Life

The operator's key messages to emergency officials should emphasize that public safety and environmental protection are the top priorities in any pipeline emergency response.

4.4.2 Emergency Contacts

Contact information for the operator's local offices and 24-hour emergency telephone line should be shared with local and state emergency officials. Operators should also use the contacts with emergency officials to confirm that both emergency officials and the operators have the current, correct contact information and calling priorities.

4.4.3 Emergency Preparedness Response Plans

Operators are required by federal regulations to have emergency response plans. These plans should be developed for use internally and externally, with appropriate officials, and in accordance with applicable federal and state emergency regulations. 49 *CFR* 192 and 195 and some state regulations outline the specific requirements for emergency response plans and who to contact for additional information. The operator should include information about how emergency officials

can access the operator's emergency response plans covering their jurisdiction.

4.4.4 Emergency Preparedness—Drills and Exercises

A supplemental means of two-way communication about emergency preparedness is to establish a liaison with emergency response officials through operator or joint emergency response drills, exercises or deployment practices. Information on “unified command system” roles, operating procedures and preparedness for various emergency scenarios can be communicated effectively and thoroughly through a hands-on drill or exercise.

4.5 DAMAGE PREVENTION

Because even relatively minor excavation activities can cause damage to a pipeline or its protective coating or to other buried utility lines, it is important that operators raise the awareness of the need to report any suspected signs of damage. Operators should keep their damage prevention message content consistent with the key “Dig Safely” messages developed by the Common Ground Alliance (CGA). CGA contact information is located in Appendix A.

The use of an excavation One-Call Notification system should be explained to the audience. Information on the prevalence of digging-related damage, also known as “third-party” damage, should be provided as appropriate. The audience should be requested to call the state or local One-Call System in their area before they begin any excavation activity. If the state or locality has established penalties for failure to use established damage prevention procedures, that fact may also be communicated, depending on the audience and situation. Additional information is located in Appendix C.

Additionally, third-party contractors are subject to the Occupational Safety and Health Administration's (OSHA) requirements. OSHA cites in its “General Duty Clause” possible regulatory enforcement action that could be taken against excavation contractors who place their employees at risk by not utilizing proper damage prevention practices. The lack of adequate damage prevention could subject the excavator to OSHA regulatory enforcement. OSHA contact information is located in Appendix A.

4.6 PIPELINE LOCATION INFORMATION

4.6.1 Transmission Pipeline Markers

The audience should know how to identify a transmission pipeline ROW by recognition of pipeline markers—especially at road crossings, fence lines and street intersections. The operator's awareness communications should include information about what pipeline markers look like, and the fact that telephone numbers are on the markers for their use if

an emergency is suspected or discovered. Communications should also be clear that pipeline markers do not indicate the exact location or depth of the pipeline and may not be present in certain areas. As such, use of the One-Call Notification system should be encouraged. Additional detail is located in Appendix C.

4.6.2 Transmission Pipeline Mapping

Pipeline maps developed by transmission pipeline operators can be an important component of an operator's Public Awareness Program. The level of detail provided on the map should, at a minimum, include the line size, product transported and the approximate location of the pipeline, as well as any other information deemed reasonable and necessary by the operator. National energy infrastructure security issues should be considered in determining information and distribution related to pipeline maps. The public can also receive information about which pipelines operate in their community by accessing the National Pipeline Mapping System (NPMS). The NPMS will provide the inquirer a list of pipeline operators and operator contact information. Operators should include information on the availability of the NPMS within their public awareness materials. NPMS information is provided in Appendix A. Additional mapping information is provided in Appendix C.

4.7 HIGH CONSEQUENCE AREAS (HCAs) AND INTEGRITY MANAGEMENT PROGRAM OVERVIEW FOR TRANSMISSION OPERATORS

4.7.1 Message Content for Affected Public within HCAs

Public awareness materials should include a general explanation that, in accordance with federal regulations, some segments along transmission pipelines have been designated as High Consequence Areas (HCAs) and that supplemental hazard assessment and prevention programs (called Integrity Management Programs) have been developed. Information provided to the affected public should indicate where an overview of the operator's Integrity Management Programs can be obtained or viewed upon request.

4.7.2 Message Content for Emergency Officials within HCAs

For emergency official stakeholder audiences whose jurisdiction includes an HCA as defined by 49 *CFR* Parts 192 or 195, the operator should include an overview of the operator's Integrity Management Programs. Inclusion of this information during emergency official liaison interface will provide an opportunity for feedback from the emergency official on the operator's Integrity Management Programs.

4.7.3 Message Content for Public Officials within HCA's

For public official stakeholder audiences whose jurisdiction includes an HCA as defined by 49 *CFR* Parts 192 or 195, the operator should indicate where an overview of the operator's Integrity Management Programs can be obtained or viewed upon request.

4.8 CONTENT ON OPERATOR WEBSITES

Pipeline operators who maintain websites can include the following information (further examples of this information are provided in Appendix C):

- Company information
- General information on pipeline operations
- General or system pipeline map(s)
- Affected public information
- Emergency and security information
- Damage prevention awareness and One-Call Notification.

4.9 RIGHT-OF-WAY ENCROACHMENT PREVENTION

Pipeline operators should communicate that encroachments upon the pipeline ROW inhibit the operator's ability to respond to pipeline emergencies, eliminate third-party damage, provide ROW surveillance, perform routine maintenance, and perform required federal/state inspections. Stakeholder specific information is listed in Appendix D.

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.

4.11 SECURITY

Where applicable and in accordance with the national Homeland Security efforts, pipeline operators should communicate an overview pertaining to security of their pipelines and related facilities.

4.12 FACILITY PURPOSE

Where appropriate, communication with the affected public and emergency and public officials in proximity to major facilities (such as storage facilities, compressor or pump stations) should include information to promote understanding of the nature of the facility. Operators should communicate general information regarding the facility and product(s) stored or transported through the facility. Communication

with emergency officials should also include emergency contact information for the specific facility.

5 Message Delivery Methods and/or Media

This section describes several delivery methods and tools available to pipeline operators to foster effective communications with the intended stakeholder audiences previously described. The operator is reminded that not all methods are effective in all situations. The content of the communication efforts should be tailored to:

- Needs of the audience
- Type of pipeline and/or facilities
- Intent of the communication, and
- Appropriate method/media for the content.

A more detailed discussion of the summary information below is provided in Appendix D.

5.1 TARGETED DISTRIBUTION OF PRINT MATERIALS

The use of print materials is an effective means of communicating with intended audiences. Because of the wide variety of print materials, operators should carefully select the type, language and formatting based on the audience and message to be delivered. Generally, an operator will use more than one form of print materials in its Public Awareness Program. While not all inclusive, several types are discussed below.

5.1.1 Brochures, Flyers, Pamphlets, and Leaflets

Brochures, flyers, pamphlets and leaflets are probably the most common message delivery methods currently used by the pipeline industry. These print materials can convey important information about the company, the industry, pipeline safety, or a proposed project or maintenance activity and should provide contact information where the recipient can obtain further information. These print materials also afford an effective opportunity to communicate content in a graphical or pictorial way.

5.1.2 Letters

Research has indicated that letters mailed to residents along the pipeline ROW are an effective tool to communicate specific information, such as how to recognize and what to do in the event of a leak, how to identify and report suspicious activity, and notification of planned operator activities.

5.1.3 Pipeline Maps

Pipeline maps can be an important component of an operator's Public Awareness Program and should be considered where they can enhance the appropriate stakeholder(s) aware-

ness of the operator's pipeline and facilities. Additional information regarding pipeline mapping is available in Appendix C.

5.1.4 Response Cards

Often referred to as either bounce back cards or business reply cards, these preprinted, preaddressed, postage paid response cards are often mailed to the affected public as an integral part of, or as an attachment to, other items. The inclusion of a response card can be used in a variety of ways (refer to Appendix D).

5.1.5 Bill Stuffers

Bill stuffers are printed brochures frequently used by local distribution companies (LDCs) in conjunction with customer invoices. Due to the nature of customers for transmission and gathering pipelines, bill stuffers are not considered an appropriate option. LDCs using bill stuffers can easily reach their customers with appropriate messages and can increase their effectiveness by using bill stuffers repeatedly. For those LDCs that are combined with other energy utilities such as electric or water systems, bill stuffers regarding pipeline safety and underground damage prevention can be delivered to virtually all surroundings residents, even those that may not be natural gas customers.

5.2 PERSONAL CONTACT

Personal contact describes face-to-face contacts between the operator and the intended stakeholder audience. This method is usually a highly effective form of communication and allows for two-way discussion. Personal contacts may be made on an individual basis or in a group setting. Some examples of personal contact communications are described further in Appendix D and include:

- Door-to-door contact along pipeline ROW
- Telephone calls
- Group meetings
- Open houses
- Community events
- Charitable contribution presentations by pipeline companies.

5.3 ELECTRONIC COMMUNICATION METHODS

5.3.1 Videos and CDs

There are a variety of approaches operators may use to supplement their public awareness efforts with videos and CDs. While considered a supplement to the baseline components of an effective Public Awareness Program, videos and CDs may be quite useful with some stakeholders or audiences in some situations. These media can show activities such as construction, natural gas or petroleum consumers, pipeline routes, preventive maintenance activities, simulated or actual

spills and emergency response exercises or actual responses in ways that printed materials cannot.

5.3.2 E-mail

Electronic mail ("e-mail") can be a means of sending public awareness information to a variety of stakeholder audiences. The content and approach is similar to letters or brochures, but the information is sent electronically rather than delivered by postal mail or personal contact.

5.4 MASS MEDIA COMMUNICATIONS

5.4.1 Public Service Announcements

Public Service Announcements (PSAs) can be an effective means for reaching a large sector of the public. Radio and television stations occasionally make some airtime available for PSAs. They are no longer required by law to donate free airtime and as a result, there is great competition from various public interest causes for the small amount of time made available. If the operator is an advertiser with the radio or television station, this might be leveraged to gain advantage in acquiring PSA time.

5.4.2 Newspapers and Magazines

Newspaper and magazine articles don't have to be limited to the reactive coverage following an emergency or controversy. Pipeline companies can submit or encourage reporters to write constructive and informative articles about pipeline issues, such as local projects, excavation safety, or the presence of pipelines as part of the energy infrastructure.

5.4.3 Paid Advertising

The use of paid advertising media such as television ads, radio spots, newspapers ads, and billboards can be an effective means of communication with an entire community.

5.4.4 Community and Neighborhood Newsletters

Posting of pipeline safety or other information to community and neighborhood newsletters can be done in conjunction with other outreach to those communities and/or neighborhoods. This method can be particularly effective in reaching audiences near the pipeline, namely neighborhoods and subdivisions through which the pipeline traverses.

5.5 SPECIALTY ADVERTISING MATERIALS

Specialty advertising can be a unique and effective method to introduce a company or maintain an existing presence in a community. These materials also provide ways of delivering pipeline safety messages, project information, important phone numbers and other contact information. The main benefit of this type of advertising is that it tends to have a longer

retention life than printed materials because it is otherwise useful to the recipient. Because of the limited amount of information that can be printed on these items, they should be used as a companion to additional printed materials or other delivery methods. Examples are included in Appendix D.

5.6 INFORMATIONAL OR EDUCATIONAL ITEMS

Companies can develop informational and educational materials to heighten pipeline awareness. The cost-effectiveness of producing such materials can be increased through partnering with an industry association or group of other operators.

5.7 PIPELINE MARKER SIGNS

The primary purposes of aboveground transmission pipeline marker signs are to:

- Mark the approximate location of a pipeline
- Provide public awareness that a buried pipeline or facility exists nearby
- Provide a warning message to excavators about the presence of a pipeline or pipelines
- Provide pipeline operator contact information in the event of a pipeline emergency and
- Facilitate aerial or ground surveillance of the pipeline ROW by providing aboveground reference points.

Refer to Section 4 and Appendix C for additional information on marker sign types and information content.

Below-ground markers, such as warning tape or mesh, can also be effective warnings to excavators of the presence of buried pipe. When burying pipe following repairs, relocations, inspections, etc., operators should consider whether it is appropriate to add below-ground markers in the location.

5.8 ONE-CALL CENTER OUTREACH

Most state One-Call Centers provide community outreach or conduct public awareness activities about one-call requirements and damage prevention awareness, as discussed in Section 4. Pipeline operators should encourage One-Call Centers to provide those public awareness communications and can account for such communication as a part of their own Public Awareness Programs. Many One-Call Centers host awareness meetings with excavators to further promote the damage prevention and one-call messages. It is the operator's responsibility to request documentation for these outreach activities.

To enhance Dig Safely and one-call public awareness outreach by One-Call Centers, operators are required by 49 *CFR* Parts 192 and 195 to become one-call members in localities where they operate pipelines. Since all One-Call Center members share the center's public awareness outreach costs, the costs to an individual operator are usually comparatively low.

5.9 OPERATOR WEBSITES

Pipeline operators with websites can enhance their communications to the public through the use of a company website on the Internet. Additional information located in Appendix C.8 describes features for a company's pipeline operations that should fit into any corporate structure and overall website design. A company's website will supplement the other various direct outreach delivery tools discussed in this RP.

6 Recommendations for Supplemental Enhancements of Baseline Public Awareness Program

The pipeline operator has a number of stakeholder audiences for delivering messages regarding the safe operation of pipelines. The message content, the delivery medium, delivery frequency, and audience's retention of the delivered message should be carefully considered during the development and implementation of the operator's Public Awareness Program to achieve maximum effectiveness. Many of the communications should be available on demand or evergreen (e.g., websites, pipeline markers) and others are periodic in nature (e.g., mass mailings, public meetings, and advertisements). The combination of the specific messages, delivery methods, and delivery frequencies should be designed into the operator's program for each audience. These elements should allow each audience to develop and maintain an awareness of the pipeline's safe operation appropriate to the audience's responsibilities for pipeline awareness, response to pipeline emergencies, and its possible exposure to pipeline emergencies.

Section 2 includes summary tables of the overall Public Awareness Program recommendations. The summary tables include a baseline Public Awareness Program for the three pipeline categories. The tables also provide a recommended delivery frequency for each of the message types intended for the respective audiences. These frequencies are the suggested baselines and the pipeline operator should consider to what extent an enhanced, supplemental program is warranted.

The term "program enhancement" refers to the operator's decision to supplement its Public Awareness Program beyond the recommended baseline. Throughout this RP the terms "enhancement" and "supplemental" are used interchangeably and mean those communications measures added to the Public Awareness Program beyond the baseline program elements. To support this decision, the operator should consider external factors along the pipeline system and determine if some additional level of public awareness communications is warranted, beyond the recommended baseline program. Those supplemental aspects would then be incorporated into the Public Awareness Program for that pipeline segment or system. Supplemental enhancement considerations are discussed in detail on the following pages.

In addition, the operator should include in its Public Awareness Program Evaluation a periodic review and evaluation of its program (see Section 8), determine if supplemental public awareness efforts/activities are warranted and include those enhancements and related documentation into its program.

6.1 CONSIDERATIONS FOR SUPPLEMENTAL ENHANCEMENTS FOR THE BASELINE PROGRAM

This RP recognizes that there are differences in pipeline conditions, consequences, population, property development, excavation activities and other issues along pipeline systems. Accordingly, a “one-size-fits-all” Public Awareness Program across all pipeline systems would not be the most effective approach. This RP recommends that an operator enhance its baseline program with supplemental program components when conditions along the pipeline suggest a more intensive effort is needed.

Baseline program recommendations are established for each of the three pipeline categories. The following sections are provided for guidance when the operator’s consideration of relevant factors along the pipeline route indicates that supplemental program enhancement is warranted. Three primary forms of enhancement are provided for consideration in the development and administration of each Public Awareness Program:

6.1.1 Increased Frequency (Shorter Interval)

Increased frequency refers primarily to providing communications to specific stakeholder audiences on a more frequent basis (shorter interval) than the baseline recommended components to reach the intended audience.

6.1.2 Enhanced Message Content and Delivery/ Media Efforts

Enhanced message content and delivery/media efforts refer to providing additional or supplemental communications activities beyond those identified in the baseline, using an enhanced or custom-tailored message content and/or different, or additional, delivery methods/media to reach the intended audience.

6.1.3 Coverage Areas

Coverage areas refer to broadening or widening the stakeholder audience coverage area beyond those contained in the baseline for delivery of certain communications messages. This can also be considered relative to widening the buffer distance for reaching the stakeholder audience along the pipeline route.

6.2 CONSIDERATIONS OF RELEVANT FACTORS

When the operator develops its Public Awareness Program and performs subsequent periodic program evaluations, it is recommended that a step for assessing relevant factors along the pipeline route be included to consider what components of the Public Awareness Program should be enhanced.

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.

The presence of federally designated High Consequence Areas (HCAs) should prompt an operator to consider public awareness activity above the baseline level described in the RP. For natural gas transmission pipelines, 49 *CFR* Part 192.761 defines HCAs related to the population or places of congregation. For hazardous liquid transmission pipelines, 49 *CFR* Part 195.450 describes HCAs related to high population, Unusually Sensitive Areas (USAs) and navigable waterways.

Another factor to consider is the hazard associated with the pipeline as perceived by either the operator or the audience. For example, if a pipeline segment has experienced third-party damage, the operator could increase the frequency of messages to those third-parties and other relevant audiences. If the public’s confidence in pipeline safety is undermined by a high profile emergency, even though an individual operator is experiencing no upward trend in incidents, that operator could consider expanding its public awareness communications to its public audiences to further increase awareness of its nearby pipeline system.

Further detail of considerations for program enhancement is discussed in the following sections.

6.3 HAZARDOUS LIQUID AND NATURAL GAS TRANSMISSION PIPELINE OPERATORS

Since Hazardous Liquids and Natural Gas Transmission pipelines are similar in many aspects with respect to public awareness, the two categories of pipelines have been combined.

Considerations for program enhancement for transmission pipelines could include, for example:

6.3.1 The Affected Public

Consideration should be given to *supplemental program enhancement* where:

- The occurrences indicate an elevated potential for third-party damage. Examples include:
 - A mailing to farmers along the right-of-way just prior to the deep plowing season where deep till plow methods are used
 - An additional or interim mass mailing to or face-to-face communications with residents of new housing developments in areas along the pipeline route that may not have previously been reached
 - Increasing the frequency of baseline communication efforts
- The pipeline runs through heavily developed urban areas that are more likely to have a frequently changing population than a more stable, less dense suburban or rural areas. Frequently changing population in an identified audience area should be considered when determining supplemental efforts to:
 - Residents in areas such as multi-family developments or densely populated urban areas
 - Increase the frequency of communications to residents
- Right-of-way encroachments have occurred frequently. Examples of supplemental efforts include:
 - Enhanced mailings to, face-to-face communications with, or increasing the frequency of communications to residents/developers/contractors in areas of right-of-way encroachment
- The potential for concern about consequences of a pipeline emergency is heightened. Consideration should be given to widening the coverage area for:
 - HVL pipelines in high population areas, extend the coverage area beyond the 1/8th mile minimum distance each side of the pipeline
 - Large diameter, high pressure, high volume pipelines where a pipeline emergency would likely affect the public outside of the specified minimum coverage area—extend the coverage area to a wider distance as deemed prudent.

6.3.2 Public Officials

Consideration should be given to *supplemental program enhancement* where:

- Heightened public sensitivity to pipeline emergencies exists in the area, independent of cause or which operator was involved
- Significant right-of-way encroachments (such as new construction developments) are occurring.

6.3.3 Emergency Officials

Consideration should be given to *supplemental program enhancement* where:

- Emergency officials have heightened sensitivity to pipeline emergencies
- After post-emergency review, or where there's potential for enhanced "liaison activities" between the operator and emergency officials that could have improved the emergency response to a pipeline emergency
- Requested by emergency officials to provide additional communications.

6.3.4 Excavators/Contractors and One-Call Centers

Consideration should be given to *supplemental program enhancement* where:

- There are instances that indicate an elevated potential for third-party damage
- Developers and contractors are performing a high number of excavations along a pipeline route in developing areas
- There are instances of problems identified with excavators' use or lack of use of the One-Call System. In those cases the operator should also request that the one-call Center perform additional public awareness outreach activities

6.4 LOCAL NATURAL GAS DISTRIBUTION COMPANIES (LDCs)

Many of the aspects of Public Awareness Programs for LDCs are similar to liquid and transmission pipeline operators. However, there are some differences because LDCs serve a different audience. Unlike transmission pipeline operators, LDCs have many more individual customers and have existing communication paths with those customers through monthly billing statements and other customer relationships. Table 2-2, for LDCs, in Section 2, provides baseline and supplemental communication recommendations for each of the different audiences.

Among LDCs there may be some variability in the frequency of communications with specific audiences. Public officials and emergency response personnel in a small rural city will likely be more accessible to the LDC pipeline operators than those in a major metropolitan area. Therefore, LDC operators should tailor their programs based on specific local considerations.

6.5 GATHERING PIPELINE OPERATORS

Gathering pipelines are usually small in diameter and operate at low pressures. In general, the audiences involved in public awareness communications for gathering pipelines tend to be in rural areas. The operator should tailor the spe-

cific communication program to fit the needs of the audiences and the circumstances in the particular area. Table 2-3 for gathering pipeline operators provides baseline and supplemental recommended communication frequencies for different audiences.

7 Program Documentation and Recordkeeping

Each operator should establish policies and procedures necessary to properly document its Public Awareness Program and retain those key records for purposes of program evaluation.

7.1 PROGRAM DOCUMENTATION

Each operator of a hazardous liquid pipeline system, natural gas transmission pipeline system, gathering pipeline system or a natural gas distribution pipeline system should establish (and periodically update) a written Public Awareness Program designed to cover all required components of the program described in this RP.

The written program should include:

- a. A statement of management commitment to achieving effective public/community awareness.
- b. A description of the roles and responsibilities of personnel administering the program.
- c. Identification of key personnel and their titles (including senior management responsible for the implementation, delivery and ongoing development of the program).
- d. Identification of the media and methods of communication to be used in the program, as well as the basis for selecting the chosen method and media.
- e. Documentation of the frequency and the basis for selecting that frequency for communicating with each of the targeted audiences.
- f. Identification of program enhancements, beyond the baseline program, and the basis for implementing such enhancements.
- g. The program evaluation process, including the evaluation objectives, methodology to be used to perform the evaluation and analysis of the results, and criteria for program improvement based on the results of the evaluation.

In addition, some operators are required to have an Operations and Maintenance Procedure (O&MP) manual under 49 CFR Part 192 or 195. While the overall written program will likely be too extensive and schedule-specific to be suitable for an O&MP manual, the operator should include in the manual an overall statement of management commitment, roles and responsibilities (by group or title), a requirement for a written

program and evaluation process, and a summary of the operator's Public Awareness Program.

7.2 PROGRAM RECORDKEEPING

The operator should maintain records of key program elements to demonstrate the level of implementation of its Public Awareness Program. Record keeping should include:

- a. Lists, records or other documentation of stakeholder audiences with whom the operator has communicated.
- b. Copies of all materials provided to each stakeholder audiences.
- c. All program evaluations, including current results, follow-up actions and expected results.

7.3 RECORD RETENTION

The record retention period for each category in Section 7.2 should be a minimum of five (5) years, or as defined in the operator's Public Awareness Program, whichever is longer.

8 Program Evaluation

This section provides guidance to operators on how to periodically evaluate their Public Awareness Programs. The overall written plan for the Public Awareness Program should include a section describing the operator's evaluation program that includes the baseline elements described in the following paragraphs. Also included are suggestions for operators to consider in periodically supplementing their evaluation efforts in a particular segment, with a selected stakeholder audience or to provide greater depth of evaluation. This section includes only a brief description of each element. Appendix E provides additional explanations and examples for operator personnel who are new to developing Public Awareness Program evaluations.

8.1 PURPOSE AND SCOPE OF EVALUATION

The primary purposes of the evaluation of the Public Awareness Program are to:

- Assess whether the current program is effective in achieving the objectives for operator Public Awareness Programs as defined in Section 2.1 of this RP, and
- Provide the operator information on implementing improvements in its Public Awareness Program effectiveness based on findings from the evaluation(s).

A secondary purpose for Public Awareness Program evaluation is to demonstrate to company management and regulators, for pipelines subject to federal or state pipeline safety jurisdiction, the status and validity of the operator's Public Awareness Programs.

8.2 ELEMENTS OF EVALUATION PLAN

A program evaluation plan should include the measures, means and frequency for tracking performance. The selected set of measures should reflect:

- Whether the program is being implemented as planned—**the process**
- Whether the program is effective—**program effectiveness**.

Based on the results of the evaluation addressing these two questions, the operator may need to make changes in the program implementation process, stakeholder identification effort, messages, means and/or frequency of delivery. The sections below suggest specific measures and methods recommended to complete a baseline evaluation of the Public Awareness Program.

8.3 MEASURING PROGRAM IMPLEMENTATION

The operator should complete an annual audit or review of whether the program has been developed and implemented according to the guidelines in this RP. The purpose of the audit is to answer the following two questions:

- Has the Public Awareness Program been developed and written to address the objectives, elements and baseline schedule as described Section 2 and the remainder of this RP?
- Has the Public Awareness Program been implemented and documented according to the written program?

Appendix E includes a sample set of questions that will aid an operator in auditing the program implementation process.

The operator should use one of the following three alternative methodologies when completing an annual audit of program implementation.

- Internal self-assessments using, for example, an internal working group, or
- Third-party audits where the evaluation is undertaken by a third-party engaged to conduct an assessment and provide recommendations for improving the program design or implementation, or
- Regulatory inspections, undertaken by inspectors working for federal or state regulators who inspect operator pipeline programs subject to pipeline safety regulations.

8.4 MEASURING PROGRAM EFFECTIVENESS

Operators should assess progress on the following measures to assess whether the actions undertaken in implementation of this RP are achieving the intended goals and objectives:

- Whether the information is reaching the intended stakeholder audiences

- If the recipient audiences are understanding the messages delivered
- Whether the recipients are motivated to respond appropriately in alignment with the information provided
- If the implementation of the Public Awareness Program is impacting bottom-line results (such as reduction in the number of incidents caused by third-party damage).

The following four measures describe how the operator should evaluate for effectiveness:

8.4.1 Measure 1—Outreach: Percentage of Each Intended Audience Reached with Desired Messages

This is a basic measurement indicating whether the operator's public awareness messages are getting to the intended stakeholders. A baseline evaluation program should establish a methodology to track the number of individuals or entities reached within an intended audience (e.g., households, excavating companies, local government, and local first responder agencies). Additionally, this measure should estimate the percentage of the stakeholders actually reached within the target geographic region along the pipeline. This measurement will help to evaluate the effectiveness of the delivery methods used.

- **Supplemental measures:** Other indicators that an operator may want to consider tracking as a supplement to measuring program outreach effectiveness include:
 - Track the number of inquiries by phone to operator-personnel or to the public awareness portions of an operator's website (however operators are cautioned that unless such information is specifically sought by the operator, this measure would not define if the caller or website viewer is a member of the target stakeholder audience nor whether this measure includes counts of repetitive website reviewers)
 - Track input received via feedback postcards (often called reply or bounce-back cards) from representatives of the stakeholder audience at events or meetings, sent by mail, or as a result of the operator's canvassing of the rights-of-way
 - Track the number of officials or emergency responders who attend emergency response exercises (this is an indicator of interest and the opportunity to gain knowledge).

8.4.2 Measure 2—Understandability of the Content of the Message

This measure would assess the percentage of the intended stakeholder audience that understood and retained the key information in the message received. This measurement will help to evaluate the effectiveness of the delivery media and

the message style and content. This measurement will also help to assess the effectiveness of the delivery methods used.

- **Pre-test materials:** Operators should pre-test public awareness materials for their appeal and the messages for their clarity, understandability and retain-ability before they are widely used. A pre-test can be performed using a small representative audience, for example, a small sample group of operator employees not involved in developing the Public Awareness Program, a small section of the intended stakeholder audience or others (often referred to as focus groups described more fully in Appendix E).
- **Survey target stakeholder audiences:** An effective method for assessing understandability is to survey the target stakeholder audience in the course of face-to-face contacts, telephone or written surveys. Sample surveys are included in Appendix E. Factors to consider when designing surveys include:
 - Sample size appropriate to draw general conclusions
 - Questions to gauge understandability of messages and knowledge or survey respondent
 - Retention of messages
 - Comparison of the most effective means of delivery.

Program effectiveness surveys are meant to validate the operator's methodologies and the content of the materials used. Upon initial survey, improvements should be incorporated into the program based on the results. Once validated in this initial manner, a program effectiveness survey is only required about every four years. However, when the operator introduces major design changes in its Public Awareness Program a survey to validate the new approaches may be warranted.

An operator may choose to develop and implement its own program effectiveness survey in-house; have a survey designed with the help of third-party survey professionals; or participate in and use the results of an industry group or trade-association survey. If the latter approach is used, the industry or trade-association survey should allow the operator to assess the results relevant to the operator's own pipeline corridors and Public Awareness Programs.

8.4.3 Measure 3—Desired Behaviors by the Intended Stakeholder Audience

This measure is aimed at determining whether appropriate prevention behaviors have been learned and is taking place when needed and whether appropriate response or mitigation behaviors would occur and have taken place. This is a measure of learned and, if applicable, actual reported behavior.

- **Baseline evaluation:** The survey conducted as the means of assessing Measure 2 (above) should be designed to include questions that ask respondents to report on actual behaviors following incidents.

- **Supplemental evaluation:** As a supplement to these measures, operators may also want to assess whether the Public Awareness Program successfully drove other behaviors. Operators may consider the following examples as a supplemental means of assessing this measure:
 - Whether excavators are following through on all safe excavation practices, in addition to calling the One-Call Center
 - The number of notifications received by the operator from the excavation One-Call Center (e.g. is there a noticeable increase following distribution of public awareness materials?)
 - An assessment of first responder behaviors, including the response to pipeline-related calls, and a post-incident assessment to determine whether their actions would be and were consistent with the key messages included in the public awareness communications. Assessments of actual incidents should recognize that each response would require unique on-scene planning and response to specifics of each emergency.
 - Measuring the appropriateness of public stakeholders' responses is also anecdotal but could include tracking whether an actual incident that affected residents was correctly identified and whether reported and personal safety actions undertaken were consistent with public awareness communication.

8.4.4 Measure 4—Achieving Bottom-Line Results

One measure of the "bottom-line results" is the damage prevention effectiveness of an operator's Public Awareness Program and the change in the number and consequences of third-party incidents. As a baseline, the operator should track the number of incidents and consequences caused by third-party excavators. This should include reported near misses; reported pipeline damage occurrences that did not result in a release; and third-party excavation damage events that resulted in pipeline failures. The tracking of leaks caused by third-party excavation damage should be compared to statistics of pipelines in the same sector (e.g. gathering, transmission, local distribution). While third-party excavation damage is a major cause of pipeline incidents, data regarding such incidents should be evaluated over a relatively long period of time to determine any meaningful trends relative to the operator's Public Awareness Program. This is due to the low frequency of such incidents on a specific pipeline system. The operator should also look for other types of bottom-line measures. One other measure that operators may consider is the affected public's perception of the safety of pipelines.

8.5 SUMMARY OF BASELINE EVALUATION PROGRAM

Table 8-1—Summary of Baseline Evaluation Program

The results of the evaluation need to be considered and revisions/updates made in the public awareness program plan, implementation, materials, frequency and/or messages accordingly

Evaluation Approaches	Evaluation Techniques	Recommended Frequency
Self Assessment of Implementation	Internal review, <i>or</i> third-party assessment <i>or</i> regulatory inspection	Annually
Pre-Test Effectiveness of Materials	Focus groups (in-house or external participants)	Upon design or major redesign of public awareness materials or messages
Evaluation of effectiveness of program implementation: <ul style="list-style-type: none"> • Outreach • Level of knowledge • Changes in behavior • Bottom-line results 	<ol style="list-style-type: none"> 1. Survey: Can assess outreach efforts, audience knowledge and changes in behavior <ul style="list-style-type: none"> • Operator-designed and conducted survey, or • Use of pre-designed survey by third-party or industry association, or • Trade association conducted survey segmented by operator, state or other relevant separation to allow application of results to each operator. 2. Assess notifications and incidents to determine anecdotal changes in behavior. 3. Documented records and industry comparisons of incidents to evaluate bottom-line results. 	No more than four years apart. Operator should consider more frequent as a supplement or upon major redesign of program.
Implement changes to the Public Awareness Program as assessment methods above suggest.	Responsible person as designated in written Public Awareness Program	As required by findings of evaluations.

APPENDIX A—RESOURCE CONTACT INFORMATION

A.1 Trade Associations

American Petroleum Institute
www.api.org
1220 L Street, NW
Washington, DC 20005

Association of Oil Pipe Lines
www.aopl.org
1101 Vermont Avenue, NW, Suite 604
Washington, DC 20005

American Gas Association
www.aga.org
400 N. Capitol Street, NW
Washington, DC 20001

American Public Gas Association
www.apga.org
11094-D Lee Highway, Suite 102
Fairfax, VA 22030-5014

Interstate Natural Gas Association of America
www.ingaa.org
10 G Street NE, Suite 700
Washington, DC 20002

A.2 Government Agencies

Office of Pipeline Safety
www.ops.dot.gov
Research and Special Programs Administration,
U.S. Department of Transportation
400 Seventh Street, SW, Rm. 7128
Washington, DC 20590-0001

The National Pipeline Mapping System (OPS/DOT)
www.npms.rspa.dot.gov
Research and Special Programs Administration,
U.S. Department of Transportation
400 Seventh Street, SW, Room 7128
Washington, DC 20590-0001

Transportation Safety Institute
www.tsi.dot.gov
Research and Special Programs Administration,
U.S. Department of Transportation
6500 South MacArthur Blvd.
Oklahoma City, OK 73169

Occupational Safety and Health Administration
www.osha.gov
“Hazards Associated with Striking Underground Gas Lines”
www.osha.gov/dts/shib/shib_05_21_03_sugl.pdf

A.3 Private Organizations

Common Ground Alliance
www.commongroundalliance.com

Dig Safely
www.digsafely.com

A.4 Publications

The AGA’s Gas Pipeline Technology Committee’s GPTC
Guide—ASC GPTC Z-380.1

APPENDIX B—EXAMPLES OF STAKEHOLDER AUDIENCES

When a Public Awareness Program is being developed, one of the initial tasks is to identify the audience(s) that should receive the program's messages. Section 3 identified the intended audiences for the operator's Public Awareness Program and included a "Stakeholder Audience Definition Table". This appendix will provide further examples. The four intended "Stakeholder Audiences" include:

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

B.1 Stakeholder Audience Identification

Identification of the individual stakeholder audiences (i.e., members of the four target audiences) may be done by any means available to the operator. Several methods are available. Operators may identify their stakeholder audiences on their own or may elect to hire outside consultants who specialize in audience identification. Where lists are developed, they should be kept current or redeveloped prior to effecting a particular communication.

B.1.1 AFFECTED PUBLIC

Some examples of how an operator may determine specific affected public stakeholder addresses along the pipeline, such as within a specified distance either side of the pipeline centerline, include the use of nine-digit zip code address databases and geo-spatial address databases. These databases generally provide only the addresses and not the names of the persons occupying the addresses. Broad communications to this audience are typically addressed to "Resident." It is important to note that when contacting apartment dwellers, individual apartment addresses should be used, not just the address of the apartment building or complex.

Some operators maintain "line lists" which provide current information on names and addresses of people who own property on which the pipeline is located. It should be noted, however, that not all property owners live on the subject property and that the program should address those people living on the property. Additionally, where the operator has a customer base, the operator can use its customer databases for identifying audience members.

For the sub-groups "Residents located along transmission pipeline ROW" and "Places of Congregation," it is recommended that transmission pipeline operators provide communications within a minimum coverage area distance of 660 feet on each side of the pipeline, or as much as 1000 feet in some cases. The transmission pipeline operator should tailor its communications coverage area (buffer) to fit its particular pipeline, location, and potential impact consequences. At a

minimum, operators should 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 the coverage area accordingly.

A sub-set of the affected public that the operator may desire to send specific public awareness materials to is farmers. Farmers engage in deep plowing and clearing activities that could impact pipelines. One method of determining names and addresses of farmers along a pipeline route is the use of third-party vendors who purchase periodicals databases related to the farming and agricultural community. Due to the size of farming operations in some areas and the proximity of farming residents, it is recommended that the operator increase its affected public awareness mailing coverage as appropriate.

B.1.2 EMERGENCY OFFICIALS

There are several methods used by operators to identify the names and addresses of emergency officials. Depending upon the size of the county or parish, this may include all emergency officials in the affected jurisdiction.

The means used by many operators is through the use of SIC (Standard Industrial Classification) code. Where SIC codes are utilized to identify emergency officials, the operator should include the list of code categories applicable to the emergency officials stakeholder group.

The pipeline operator should consider all appropriate emergency officials who have jurisdiction along the pipeline route and should communicate with any emergency officials that the operator deems appropriate for a given coverage area. This will generally include all emergency officials whose jurisdictions are traversed by the pipeline.

B.1.3 LOCAL PUBLIC OFFICIALS

Operators use several methods to identify names and addresses for specific public officials. These primarily include the use of local company resources, local phone books, and the Internet. Where SIC codes are used to identify public officials, the operator should include the categories applicable to the public officials stakeholder group.

B.1.4 EXCAVATORS

While "excavators" is a broad category, its use here is intended to identify companies that perform or direct excavation work. Operators should identify, on a current basis, persons who normally engage in excavation activities in the areas in which the pipeline is located. There are several methods used by pipeline operators to identify specific excavator stakeholder names and addresses.

Where SIC codes are used to identify excavators, the operator should include the categories applicable to the Excavator stakeholder group. The SIC/NAICS list should be considered the minimum for excavator audience identification where those codes are used. The operator may add to or expand the list as other excavator information becomes available.

Another source for identifying excavators is the One-Call Center that covers the area designated by the Public Awareness Program. Several One-Call Centers provide “excavator lists” to their members. This may also be accomplished by the use of a third-party vendor who specializes in this service.

APPENDIX C—DETAILED GUIDELINES FOR PUBLIC AWARENESS MESSAGES

Section 4 of this RP recommends that an operator should select the optimum combination of message, delivery method, and frequency that meets the needs of the intended audience. This appendix expands that recommendation by providing further explanation or examples of the content of messages to be communicated.

Information materials may include supplemental information about the pipeline operator, pipeline operations, the safety record of pipelines and other information that an operator deems appropriate for the audience. The operator is reminded that communications materials should be provided in the language(s) spoken by a significant portion of the intended audience.

The basic message is conveyed to the intended audience should provide information that will allow the operator to meet the program objectives set forth in Section 2. The communications should include enough information so that in the event of a pipeline emergency, the intended audience members will know how to identify a potential hazard, protect themselves, notify emergency response personnel, and notify the pipeline operator.

C.1 Pipeline Purpose and Reliability

While not a primary objective, pipeline operators should consider providing general information about pipeline transportation, such as:

- The role of pipelines in U.S. energy supply
- Pipelines as part of the energy infrastructure
- Efficiency and reliability of pipelines
- Positive messages about the energy transportation pipeline safety record
- The individual operator's pipeline safety actions and environmental record.

For local distribution companies:

- Typical distribution network (stations, mains, services, meters)
- How to detect a natural gas leak (e.g., how natural gas smells)
- Who uses natural gas and why.

Many of these messages are available in print and videos from the pipeline industry trade associations listed in Section 2 and Appendix A.

The operator should describe the purpose and function of the pipeline and/or associated facilities and the nature, uses, and purposes of the products transported. Where practical, it might be helpful to communicate the benefit(s) of the pipeline to the community. Examples of "benefits" include:

- "This pipeline provides gasoline to motorists at X gas stations in the area of Y."

- "This natural gas pipeline network provides gas to X thousands of homes and businesses in Y city or Z state."

Pipelines are a safe and reliable means of transporting energy. Where appropriate, operators should describe how pipelines are a reliable means of transporting energy products and point out that they are extensively regulated by Federal and State regulations with regard to design, construction, operation and maintenance. Operators may also describe applicable operational activities that promote pipeline integrity, safety and reliability, which could include initial and periodic testing practices, internal inspections and their frequency, patrolling types and frequencies, and other such information. Operators may also reference the National Transportation Safety Board finding that pipelines provide the highest level of public safety as compared to other transportation modes.

C.2 Hazard Awareness and Prevention Measures

C.2.1 OVERVIEW OF POTENTIAL HAZARDS

General information about the nature of hazards posed by pipelines should be included in the message, while also assuring the stakeholder audience that accidents are relatively rare. The causes of pipeline failures, such as third-party excavation damage, corrosion, material defects, worker error, and events of nature can also be communicated.

C.2.2 OVERVIEW OF POTENTIAL CONSEQUENCES

Information should identify the product release characteristics and potential hazards that could result from an accidental release of hazardous liquids or gases from the pipeline.

C.2.3 SUMMARY OF PREVENTION MEASURES UNDERTAKEN

The potential hazard message should be coupled with a general overview of the preventative measures undertaken by the operator in the planning, design, operation, maintenance, inspection and testing of the pipeline. This message should also reinforce how the stakeholder audience can play an important role in preventing third-party damage and right-of-way encroachments.

C.2.4 OPTIONAL SUMMARY OF PIPELINE INDUSTRY SAFETY RECORD

Depending on the stakeholder audience and the delivery methods used, the operator may want to consider including a general overview of the industry's safety record.

Communication materials should also convey the qualification that the information provided on hazards, consequences and preventative measures is very general and that more specific information could be obtained from the operator or other sources (noting phone or website(s) for contacts). Information communicated to emergency responders needs to be more specific, provide an opportunity for two-way feedback and include additional details on the products transported, facilities located within the jurisdiction and the local emergency planning liaison. Operators may want to consider referring to publications or websites produced by the trade associations listed in Appendix A for specific example language developed to provide overviews of hazards, consequences and preventative measures tailored to each stakeholder audience.

C.3 Leak Recognition and Response

The pipeline operator should provide the following information to the affected public and excavator stakeholder groups. To accomplish this, operators may want to consider using generic or standard printed materials developed by trade associations as aides for their member companies. However, operators will need to ensure the materials used are specific to the type of pipeline and product(s) transported in their systems.

C.3.1 POTENTIAL HAZARDS

Specific information about the release characteristics and potential hazards posed by the accidental release of hazardous liquids or gases from the pipeline should be included in the operator's communications.

C.3.2 RECOGNIZING A PIPELINE LEAK

Operators should include in their communications information on how to recognize a pipeline leak through the senses of sight, unusual sound, and smell (as appropriate to the product type) and describe any associated dangers.

- By Sight—What to Look for...
- By Sound—What to Listen for...
- By Smell—What to Smell for...

C.3.3 RESPONDING TO A PIPELINE LEAK

Operators should include in their communications an outline of the appropriate actions to take once a pipeline leak or release is suspected. This information should include:

- What to do if a leak is suspected
- What not to do if a leak is suspected.

It is especially important to include specific information on detection response if the pipeline contains product that, when released, could be immediately hazardous to health (e.g. high concentration of hydrogen sulfide).

C.3.4 LIAISON WITH EMERGENCY OFFICIALS

This information should indicate that both the operator and the local emergency response officials have an ongoing relationship designed to prepare and respond to an emergency.

C.4 Emergency Preparedness Communications

Communicating periodically with local emergency officials is an important aspect of all Public Awareness Programs. The following information should be provided to the emergency officials stakeholder audience. Local public officials should be provided a summary of the information that is available in more detail from the emergency response agencies in their jurisdictions.

C.4.1 PRIORITY TO PROTECT LIFE

Operator emergency response plans and key messages relayed to emergency officials should emphasize that public safety and environmental protection are the top priorities in any pipeline emergency response.

C.4.2 EMERGENCY CONTACTS

Contact information on the operator's local offices and 24-hour emergency telephone numbers should be communicated to local and state emergency officials. Operators should also use the public awareness contact opportunity to confirm the contact information for the local and state emergency officials and calling priorities.

C.4.3 EMERGENCY PREPAREDNESS—RESPONSE PLANS

Operators are required by federal regulation to have emergency response plans. These plans should be developed for use internally and externally, with appropriate officials, and in accordance with applicable federal and state regulations. 49 *CFR* 192 and 194 and some state regulations outline the specific requirements for emergency response plans. In developing Emergency Response Plans, the operator should work with the local emergency responders to enhance communications and response to emergencies.

C.4.4 EMERGENCY PREPAREDNESS—DRILLS AND EXERCISES

A very effective means of two-way communication about emergency preparedness is the liaison with emergency officials through operator or joint emergency response drills, exercises or deployment practices. Information on "unified command system" roles, operating procedures and preparedness for various emergency scenarios can be communicated effectively and thoroughly through a hands-on drill or exercise.

C.5 Damage Prevention

Because even relatively minor excavation activities (for example: installing mail boxes, privacy fences and flag poles, performing landscaping, constructing storage buildings, etc.) can cause damage to a pipeline or its protective coating or to other buried utility lines, it is important that operators raise the awareness of the need to report any suspected signs of damage. Operators should keep their damage prevention message content consistent with the damage prevention best practices developed by the Common Ground Alliance (CGA).

The use of an excavation One-Call Notification system should be explained to the audience. The audience should be reminded to call the state or local One-Call System before beginning any excavation activity and that in most states it is required by law. Information on the prevalence of “third-party” damage should be provided as appropriate. If the state or locality has established penalties for failure to use established damage prevention procedures, that information may also be communicated, depending on the audience and situation.

As a baseline practice, excavation and one-call Information should include:

- Request that everyone contact the local One-Call System before digging
- Explain what happens when the One-Call Center is notified
- Provide the local or toll-free One-Call Center telephone numbers
- Explain that the one-call locate service is typically free (Note: Some exceptions by state)
- Remind, if applicable, that to call is required by law.

One-Call Center telephone numbers for all 50 states can be found at the Dig Safely website or by calling the Dig Safely national referral number at 1-888-258-0808.

The “Dig Safely” message should be included in public awareness materials distributed to the affected public and excavators by the operator in its communications:

- Call the One-Call Center before digging
- Wait for the site to be marked
- Respect the marks
- Dig with care.

For information see the “Dig Safely” website listed in Appendix A. Operators may also consider use of the widely recognized “No Dig” symbol in their materials.

C.6 Pipeline Location Information

C.6.1 TRANSMISSION PIPELINE MARKERS

The audience should know how to identify transmission pipeline rights-of-way by recognition of pipeline markers—especially at road crossings, fence lines and street intersections. Communications should include what pipeline markers

look like, and the fact that telephone numbers are on the markers for their use if an emergency is suspected or discovered. Communications should also be clear that pipeline markers do not indicate the exact location or depth of the pipeline and may not be present in some areas.

Public awareness materials should include illustrations and descriptions of pipeline markers used by the operator and the information that the markers contain. Displaying the penalties for removing, defacing, or otherwise damaging a pipeline marker may also be beneficial.

In addition to meeting applicable federal and state regulations, transmission pipeline markers may:

- Indicate a pipeline right-of-way (not necessarily the exact pipeline location)
- Identify the product(s) transported
- Provide the name of the pipeline operator
- Provide the operator’s telephone number, available 24-hours a day and 7-days a week
- Be brightly colored and highly visible
- Have weather resistant paint and lettering
- Include “Warning Petroleum Pipeline” or “Warning Gas Pipeline” and show the universal “No Dig” symbol
- Provide a one-call number.

Additional guidance for liquid pipeline marker design, installation, and maintenance is provided in API Recommended Practice 1109.

C.6.2 TRANSMISSION PIPELINE MAPPING

Transmission pipeline maps can be an important component of an operator’s Public Awareness Program. The level of detail in the map provided will be relevant to the stakeholder’s need, taking security of the energy infrastructure into consideration.

Members of the general public can also receive information about operators who have pipelines that might be located in their community by accessing the National Pipeline Mapping System (NPMS) on the Internet. The NPMS will provide the inquirer a list of pipeline operators and contact information for operators having pipelines in a specific area. Inquiries are made by zip code or by county and state. Operators should include information on the availability of the NPMS within their public awareness materials.

Following is a summary of the types of maps that are referred to in this RP in describing how operators can incorporate pipeline maps in their efforts to improve public awareness.

- *System Maps*—Typically system maps provide general depiction of a pipeline transmission system shown on a state, regional or national scale. This type of map generally is not at a scale that poses security concerns and is often used by operators in a number of publications available to the industry and general public. A system map generally depicts a portion of the pipeline system

shown in relationship to a region of the country. Generally these types of maps do not include any detail on the location of facilities.

- *General Maps*—General maps are another form of system map, which may be presented, in a more graphical format or smaller scale.
- *Local Maps*—Local maps are generally shown on a neighborhood, town, city or county level and usually do not show the entire pipeline system. Local maps are especially appropriate in communication with local emergency officials, One-Call Centers and elected public officials. Local maps should be distributed in accordance with regulatory or operator's company security guidelines. Local maps could include pipeline alignment maps, GIS-system produced maps, or other types of mapping that show more detail about the physical location of the pipeline system.
- *Community Pipeline Infrastructure*—Maps of communities that depict all of the natural gas and liquid transmission pipeline systems in the area. Available from the state or OPS to public and emergency officials.
- *National Pipeline Mapping System (NPMS)*—The U.S. Department of Transportation's Office of Pipeline Safety has developed the National Pipeline Mapping System, through which pipeline location maps are made available electronically to state and local emergency officials, in accordance with federal security measures.

Operators of transmission pipelines should make available appropriate system or general maps to the affected public and provide them guidance in how they can determine the location of the pipelines near where they live and work. Such maps should include company and emergency contact information and a summary of the type of products transported.

As part of the damage prevention program, all operators should also communicate the process for contacting the excavation One-Call System so that the specific location of the pipeline (and other nearby utilities) can be marked prior to excavation activity.

Operators of transmission pipelines should make available local maps to public and emergency officials in their effort to assure effective emergency preparedness and land use planning. In addition, operators must follow regulatory guidelines on providing such maps as required under 49 *CFR* Part 192 and 195. Maps should include company and emergency contacts, information on the type of products transported, and sufficient detail on landmarks, roads or location information relevant to the official's needs.

Operators should provide paper or digitized maps, or alternative information to the state or regional excavation One-Call Center, consistent with the One-Call System's requirements.

C.7 High Consequence Areas and Integrity Management Program (IMP) Overview for Transmission Pipelines

C.7.1 MESSAGE CONTENT FOR AFFECTED PUBLIC WITHIN HCAs

Information materials should include a message about where more information about High Consequence Area (HCA) designations and overviews of Integrity Management Program (IMP) Plans for transmission pipelines can be obtained. Guidelines for developing overviews of IMPs will be developed by the industry. The information should make system maps of HCAs available to the general or affected public. An overview of an operator's IMP should include a description of the basic requirements and components of the program and does not need to include a summary of the specific locations or schedule of activities undertaken. The summary may only be a few pages long and its availability could be mailed upon request or made available on the operator's website.

C.7.2 MESSAGE CONTENT FOR EMERGENCY OFFICIALS WITHIN HCAs

When conducting liaison activities with emergency officials required by the public awareness plan, operators should include information on how the emergency official may gain access to the National Pipeline Mapping System for their jurisdiction through the Office of Pipeline Safety. In addition, the operator may supplement their messages and materials by including overviews of IMPs and specifically solicit feedback from the emergency official about local conditions or activities that may be useful and/or prompt changes to the operator's IMP for that area. For example, mitigation measures that may be included in a HCA segment's risk analysis and action plan is supplemental emergency response planning, staging area identification or equipment deployment. A two-way discussion with emergency officials of the components of the HCA risk mitigation plan would be helpful.

C.7.3 MESSAGE CONTENT FOR PUBLIC OFFICIALS WITHIN HCAs

Information materials should include a message about where more information about High Consequence Area (HCA) designations and overviews of IMPs for transmission pipelines can be obtained. Guidelines for developing overviews of IMPs will be developed by the industry.

An overview of an operator's IMP plan should include a description of the basic requirements and does not need to include a summary of the specific locations or schedule of activities undertaken. The overview may only be several pages long and its availability could be mailed upon request or made available on the operator's website.

C.8 Content on Company Websites

The information listed below will guide pipeline operators who maintain websites on the recommended informational components to be included on the website.

C.8.1 COMPANY INFORMATION

In addition to describing the purpose of the pipeline and markets served, the website should include a general description of the pipeline operator and system. This could include:

- Operator and owner name(s)
- Region and energy market served
- General office and emergency contacts telephone numbers and e-mail addresses
- Products being transported by pipeline
- System or general map and location of key offices (headquarters, region or districts).

C.8.2 INFORMATION ON PIPELINE OPERATIONS

A broad overview of the operator's pipeline safety and integrity management approach should be included describing the various steps the company takes to ensure the safe operation of its pipelines. While not specifically recommended, additional information to consider for the website includes:

- General pipeline system facts
- An overview of routine operating, maintenance and inspection practices of the system
- An overview of major specific inspection programs and pipeline control and monitoring programs.

C.8.3 TRANSMISSION PIPELINE MAPS

A general or system map (see previous section describing types of maps) should be on the website. Details on how to obtain additional information should be provided, including reference to the National Pipeline Mapping System ((NPMS).

C.8.4 PUBLIC AWARENESS PROGRAM INFORMATION

The operator should include a summary of its Public Awareness Program developed under the guidance of this RP and should consider including printed material used in these efforts on the website. The public should also be provided information on company contacts to request additional information.

C.8.5 EMERGENCY INFORMATION

The website should contain emergency awareness information from two aspects. First, it should contain a summary of the operator's emergency preparedness. Second, it should contain information about how the public, and residents along the pipeline rights-of-way, and/or public officials should help

protect, recognize, report and respond to a suspected pipeline emergency. Emergency contact information should be prominent and accessible from anywhere on the pipeline portion of the website.

C.8.6 DAMAGE PREVENTION AWARENESS

Pipeline operators are encouraged to either provide or link the viewer to additional guidance on preventing excavation damage, such as "Dig Safely" program information, contact information for the One-Call System in each of the states in which the operator has pipelines, and the "Common Ground Alliance" website noted in Appendix A.

C.9 Right-of-way Encroachment Prevention

Pipeline operators should communicate that encroachments upon the pipeline right-of-way inhibit the operator's ability to reduce the chance of third-party damage, provide right-of-way surveillance and perform routine maintenance and required federal/state inspections. The communication can describe that in order to perform these critical activities, pipeline maintenance personnel must be able to access the pipeline right-of-way, as provided in the easement agreement. It should also describe that to ensure access; the area on either side of the pipeline contained within the right-of-way must be maintained clear of trees, shrubs, buildings, fences, structures, or any other encroachments that might interfere with the operator's access to the pipeline. It should also point out that the landowner has the obligation to respect the pipeline easement or right-of-way by not placing obstructions or encroachments within the right-of-way, and that maintaining a pipeline right-of-way free of encroachments is an essential element of maintaining pipeline integrity and safety.

Residents, excavators, and land developers should be requested to contact the pipeline operator if there are questions concerning the pipeline or the right-of-way, especially if property improvements or excavations are planned that might impact the right-of-way. These audiences should also be informed that they are required by state law to provide at least 48 hours advance notice, more in some states, to the appropriate One-Call Center prior to performing excavation activities. Longer lead times for planning major projects are advised and sometimes required by state law.

Operators should consider communicating with local authorities regarding information concerning effective zoning and land use requirements/restrictions that will protect existing pipeline rights-of-way from encroachment. Communications with local land use officials could include consideration of:

- How community land use decisions (e.g. planning, zoning,) can impact community safety
- Establishing setback requirements for new construction and development near pipelines

- Requiring prior authorization from easement holders in the permit process so that construction/development does not impact the safe operation of pipelines
- Requiring pipeline operator involvement in road widening or grading, mining, blasting, dredging, and other activities that may impact the safe operation of the pipeline.

C.10 Communication of Pipeline Maintenance Activities

When planning pipeline maintenance-related construction activities, operators should communicate to the audience affected by the activity in a manner that is appropriate to the nature and extent of the activity. For major maintenance construction projects (such as main-line rehabilitation or replacement projects) operators should also notify appropriate emergency and local public officials and include information on further communications appropriate to the nature or local impact of the maintenance or construction activity. Operators should communicate appropriately in accordance with requirements associated with the acquisition of permits.

C.11 Security

Operators should include in their communications, where applicable, appropriate information pertaining to security of their pipelines and related facilities. Communications messages could include:

- General information about the pipeline or aboveground facility security measures
- Increased public awareness about security
- Communications to pipeline and facility neighbors to:

- Become familiar with the pipelines in their area (identification via pipeline marker signs)
- Become familiar with the pipeline facilities in their area (identification via fence signs at gated entrances)
- Record the operator name, contact information and any pipeline information from nearby pipeline marker signs or facility signs and keep in a permanent location near the telephone
- Be observant for any unusual or suspicious activities and unauthorized excavations taking place within or near the pipeline right-of-way or pipeline facility. Report such activities to their local law enforcement and the pipeline operator.

Pipeline neighbors are the operator's first line of defense against unauthorized excavation and other such activity in the right-of-way, and they can help by contacting the operator or the proper local authorities of suspicious activities if they have contact information available.

C.12 Facility Purpose

Communication with the affected public, emergency and public officials in proximity of major facilities (such as storage facilities, compressor or pump stations) should include an understanding of the nature of the facility. Operators should include in their communications general information about the facility and the product(s) stored or transported through the facility. Liaison with emergency officials should also include an understanding of emergency contact information for the specific facility.

APPENDIX D—DETAILED GUIDELINES FOR MESSAGE DELIVERY METHODS AND/OR MEDIA

Section 5 describes the delivery methods and tools available to pipeline operators to foster effective communication programs with the stakeholder audiences previously described. This Appendix expands on those guidelines by providing further explanation or examples of delivery methods and/or media. This section does not imply that all methods are effective in all situations. The content of the communication efforts should be tailored to the needs of the audience and the intent of the communication. Refer to Section 4 for a detailed description of the message content that the following materials or delivery methods should contain for each intended audience.

D.1 Print Materials

The use of print materials is an effective means of communicating with intended audiences. Because of the wide variety of print materials, operators should carefully select the type, language and formatting based on the audiences and the message to be delivered. Generally, an operator will use more than one form of print materials in its Public Awareness Program. While not all inclusive, several types are discussed here.

D.1.1 TARGETED DISTRIBUTION OF PRINT MATERIALS

This is the most common message delivery mechanism currently used by the pipeline industry. Print materials can convey important information about the company, the industry, pipeline safety, or a proposed project or maintenance activity and should provide contact information where the recipient can obtain further information. Print materials also afford an effective opportunity to communicate content in a graphical or pictorial way. However, note that targeted distribution of print materials alone should not be considered effective communication with local emergency response personnel.

Consideration should be given to joining with other pipeline companies in a local, regional or national setting (including both the local distribution company and transmission pipelines) to produce common message materials that can be either jointly sponsored, (e.g., include all sponsors company names/logos) or used as a “shell” and then customized to each company’s individual needs, to help ensure that a consistent message is being delivered. This approach can also effectively reduce the cost to individual operators.

Print materials can be mailed to residents or communities along the pipeline system or handed out at local community fairs, open houses, or other public forums. Operators can hire

facilitators to organize mass mailings, using nine-digit zip codes or geo-spatial address databases; to designated residents in the community located along the pipeline, such as within an appropriate distance either side of the pipeline centerline. In this case it is often advisable to get information from the postal service or service provider on size, folding and closure requirements to minimize the postage costs for mass mailings. There are services that can handle the printing of materials, mailing address identification, mailing and documentation for the operator as a package.

D.1.2 LETTERS

Research has indicated that letters mailed to residents along a pipeline system are an effective tool for the operator to use to communicate specific information, such as what to do in the event of a leak, identification of suspicious activity or notification of planned maintenance activities within the right-of-way.

Notification letters are usually effective where there is a high likelihood for third-party damage such as in agricultural areas, new developments and where other types of ground-disturbing activities may take place. Similar letters may also be sent to contractors, excavators and equipment rental companies informing them of the requirement to use One-Call Systems and providing other important safety information for their workers and the public.

Letters, along with other print materials, should provide information about where the recipient can obtain further information (such as website address, e-mail address, local phone numbers and one-call numbers).

D.1.3 PIPELINE MAPS

Pipeline maps can be presented as printed material and are an important component of an operator’s Public Awareness Program. The operator should consider whether maps should be part of the communications to appropriate local stakeholder(s), and what type of maps should be used to accomplish the objective. See Appendix C.6.2 for further explanation of types and availability of maps.

D.1.4 RESPONSE CARDS

Often referred to as either bounce back cards or business reply cards, these preprinted, preaddressed, postage paid response cards are often mailed to the affected public as an integral part of, or as an attachment to, other print materials. When delivering public awareness information to nearby resi-

dents, public or emergency officials, the inclusion of response cards can be used in a variety of ways:

- To maintain/update current mailing lists. Response cards permit the recipients to notify the operator of any changes in address
- To provide a convenient venue for recipients to provide comments, request additional information, raise concerns or ask questions
- To help evaluate the effectiveness of the operator's Public Awareness Program.

D.1.5 BILL STUFFERS

Bill stuffers are printed materials frequently used by local distribution companies (LDCs) in conjunction with invoice mailings to their customers. Due to the nature of their customers, these are not an appropriate option for transmission and gathering pipelines. LDCs using bill stuffers can increase the effectiveness of their programs by communicating to their active customers frequently through the repeated use of bill stuffers. For those LDCs that are combined with other energy utilities such as electric or water systems, bill stuffers regarding pipeline safety and underground damage prevention can be delivered to virtually all surroundings residents, even when some may not be natural gas customers.

D.2 Personal Contact

Personal contact describes face-to-face contact between the operator and the intended stakeholder audience. This method is usually a highly effective form of communication, and it allows for two-way discussion. This may be done on an individual basis or in a group setting. Some examples of communications through personal contact are described below:

D.2.1 DOOR-TO-DOOR CONTACT ALONG PIPELINE RIGHT-OF-WAY

This method is often used to make contact with residents along the pipeline right-of-way to relay pipeline awareness information or information on upcoming pipeline maintenance. This method can help to build stakeholder trust, which is an integral part of communication and an enhancement to the long-term Public Awareness Program. Operator representatives conducting door-to-door contact should be knowledgeable and courteous, be prepared for these types of communications and be able to discuss and respond to questions relating to the communication materials provided so that contact is meaningful and positive. They should provide the landowner/resident with basic pipeline safety information and a means for future contact.

If pipeline safety is to be discussed in this forum, the operator representative should be generally knowledgeable about the company's pipeline integrity program and emergency response procedures. In addition to the general information

described in Section 4, the following additional information should also be considered:

- a. Description of facilities on or near the property (i.e., pipelines, meter/regulator stations, compressor/pump stations, wellheads, treating facilities, tankage, line markers, cathodic protection, communication, etc.)
- b. Description of easement and property owner's rights and limitations within the easement
- c. Name and phone number of local contact within company for further information and the operator's emergency notification number to report emergencies or suspicious activity
- d. Information on damage prevention and local "Call Before You Dig" programs
- e. What to do in case of emergency (fire, leak, noise, suspicious person)
- f. Informational items (i.e., calendar, magnetic card, pens, hats, etc.) to retain important telephone numbers
- g. As appropriate, additional local information such as upcoming maintenance, projects, events and/or company community involvement such as United Way, other charities, environmental projects, etc.

D.2.2 TELEPHONE CALLS

When the intended audience is small in number, the operator may find it effective to communicate by telephone. This personal form of contact allows for two-way discussion. The operator should decide which elements of their Public Awareness Program are suitable for conducting via telephone calls.

D.2.3 GROUP MEETINGS

Group meetings can be an effective way to convey the messages to selected audiences. Meetings may be between the operator (or group of operators) and an individual stakeholder audience or between the operator (or group of operators) and a number of the stakeholder audience groups at one time.

For example, the operator could conduct individual meetings with emergency response officials, combined industry meetings with emergency response officials, and participation by emergency response officials and personnel in the operator's emergency response tabletop drills and deployment exercises. Meetings are particularly effective in conducting liaison activities with the emergency official stakeholder group.

Another example is group meetings conducted by the operator in classrooms and with educators at local schools. Informational materials can be presented to school administrators and students and can contain important public awareness messages for students to take home to their parents. This method of personal contact can readily reach a large number of people with the operator's public awareness messages and reinforce positive messages about the operator and/or the pipeline industry.

Additional group meetings could include those with state One-Call System events, local excavators, contractors, land developers, and municipalities.

D.2.4 OPEN HOUSES

Operators often hold open houses to provide an informal setting to introduce an upcoming project, provide a “get to know your neighbor” atmosphere or to discuss an upcoming maintenance activity such as pipeline segment replacement. Tours of company facilities, question and answer sessions, videos, or presentations about pipeline safety and reliability do well in an open house environment. Even without formal presentations, allowing the public to see the facility can also be very effective. Often this type of forum would include refreshments and handouts (e.g. print material, trinkets, etc.) that attendees can take with them. Targeted or mass mailings can be used to announce planned open houses and can, in themselves, communicate important information.

D.2.5 COMMUNITY EVENTS

Community sponsored events, fairs, charity events, or civic events may provide appropriate opportunities where public awareness messages can be communicated to the event participants. Companies can participate with a booth or as a sponsor of the event.

These forums are generally used to remind the community of the operator’s presence, show support for community concerns, and heighten public awareness about the benefits of pipeline transportation and about pipeline safety. Examples of community events include:

- County and state fairs
- Festivals and shows
- Job fairs
- Local association events
- Trade shows (Energy Fair)
- Chamber of Commerce events.

Operators should plan in advance and secure a large number of handout materials; as such events often include a large number of attendees and can take place over several days.

D.2.6 CHARITABLE CONTRIBUTIONS BY PIPELINE OPERATORS

While contributions to charities and civic causes are not in themselves a public awareness effort, companies should consider appropriate opportunities where public awareness messages can be conveyed as part of or in publicity of the contribution. Examples include:

- Contribution of gas detection equipment to the local volunteer fire department
- Donation of funds to acquire or improve nature preserves or green space
- Sponsorship to the community arts and theatre

- Support of scholarships (especially when to degree programs relevant to the company or industry)
- Sponsorship of emergency responders to fire training school.

D.3 Electronic Communications Methods

D.3.1 VIDEOS AND CDs

There are a variety of approaches companies may use to supplement their delivery tools with videos. While a supplement to the baseline components of an effective Public Awareness Programs, videos may be quite useful with some stakeholders or audiences in some situations. Videos can show activities such as construction, natural gas or petroleum consumers, pipeline routes, preventive maintenance activities, simulated or actual spills and emergency response exercises or actual response that printed materials often cannot. Companies may seek industry specific videos from trade organizations or develop their own customized version. Such videos can be used for landowner contacts, emergency official meetings, or the variety of community or group meetings described elsewhere in this section. Companies could also consider adding such videos to their company websites.

D.3.2 E-MAIL

Electronic mail (“e-mail”) can be a means of sending public awareness information to a variety of stakeholders. The content and approach is similar to letters or brochures, but the information is sent electronically rather than delivered by mail, by person or in meetings.

E-mail contact information can be provided on company handouts, magazine advertisements, websites and other written communications. This provides an effective mechanism for the public to request specific information or to be placed on distributions lists for specific updates.

An advantage of e-mail is the ease of requesting and receiving return information from the recipient, similar to contact information, survey or feedback described in bounce-back cards explained above. Note that it is important for the operator to designate a response contact within the organization to handle follow-up responses to e-mail queries in a timely manner.

D.4 Mass Media Communications

D.4.1 PUBLIC SERVICE ANNOUNCEMENTS (PSAs)

Radio and television stations occasionally make airtime available for public service announcements. There is great competition from various public interest causes for the small amount of time available because the broadcast media is no longer required by law to donate free airtime for PSAs. Given the popularity of radio and television and the large areas cov-

ered by both, public service announcements can be an effective means for reaching a large sector of the public. Pipeline operators (or groups of pipeline operators) could consider contacting local stations along the pipeline route to encourage their use of the PSAs. The use of cable TV public access channels may also be an option.

D.4.2 NEWSPAPERS AND MAGAZINES

Newspaper and magazine articles don't have to be limited to the reactive coverage following an emergency or controversy. Pipeline operators can encourage reporters to write constructive stories about pipeline issues in various topics of relevance, such as local projects, excavation safety, or the presence of pipelines as part of the energy infrastructure. Even if the reporter is covering an emergency or controversial issue, pipeline operators can leverage the opportunity to reinforce key safety information messages such as damage prevention and the need to be aware of pipelines in the community. Trade magazines such as those for excavators or farmers often welcome guest articles or submission or assistance in writing a positive, safety-minded story for their readers. Local weekly newspapers and "metro" section inserts will sometimes include a news release verbatim at no cost to the sender.

D.4.3 PAID ADVERTISING

The use of paid advertising media such as television ads, radio spots, newspapers ads, and billboards can be an effective means of communication with an entire community. This type of advertising can be very expensive, but can be made more cost effective by joining with other pipelines, including the local utilities, to deliver a consistent message. One example is placement of a public awareness advertisement on a phone book cover, thus achieving repetitive viewing by the audience for a whole year. Another example is advertising in local shopping guides.

D.4.4 COMMUNITY AND NEIGHBORHOOD NEWSLETTERS

Information provided should be similar to that made available for newspapers and magazines. Posting of pipeline safety or other information to community and neighborhood newsletters can be done in conjunction with outreach to those communities and/or neighborhoods and is usually done for free. Operators can also develop their own newsletters tailored to specific communities. These newsletters can be used to highlight the operator's involvement in that community, provide the operator's public awareness messages, and to address any pipeline concerns that community may have.

This method can be particularly effective in reaching audiences near the pipeline, namely neighborhoods and subdivisions through which the pipeline traverses.

D.5 Specialty Advertising Materials

Company specialty advertising can be a unique and effective method to introduce a company or maintain an existing presence in a community. These tools also provide ways of delivering pipeline safety messages, project information, important phone numbers and other contact information. Many such materials or items exist, including refrigerator magnets, calendars, day planners, thermometers, key chains, flashlights, hats, jackets, shirts, clocks, wallet cards, and other such items containing a short message (i.e. "Call Before You Dig"), the company logo and/or contact information. The main benefit of this type of advertising is that it tends to have a longer retention life than printed materials because it is otherwise useful to the recipient. Because of the limited amount of information that can be printed on these items, they should be used as a companion to additional printed materials or other delivery methods.

D.6 Informational Items

Operators can develop (or participate in industry associations or along with other companies) informational materials for groups or schools that heighten pipeline awareness. Operators (and their industry associations) may also sponsor or develop training materials for emergency response agencies that are designed to increase knowledge and skills in responding to pipeline emergencies. Alternatively, local emergency officials will hold training as part of their own continuing education, and attendance by pipeline personnel at these sessions is often welcome and an ideal setting for relaying public awareness information about pipelines.

D.7 Pipeline Marker Signs

The primary purposes of above ground transmission pipeline marker signs are to:

- Mark the approximate location of a pipeline
- Provide public awareness that a buried pipeline or facility exists nearby
- Provide a warning message to excavators about the presence of a pipeline or pipelines
- Provide pipeline operator contact information in the event of a pipeline emergency
- Facilitate aerial or ground surveillance of the pipeline right-of-way by providing aboveground reference points.

Refer to Section 4 for additional information on marker sign types and information content.

Below ground markers are also effective warnings. While some may not consider this part of a proactive public awareness communication program, buried warning tape or mesh can be an effective reminder to excavators of the presence of underground utilities and have proven effective in preventing damage to pipelines and other buried utilities.

D.8 One-Call Center Outreach

Most state One-Call Centers provide community outreach or implement public awareness activities about the one-call requirements and the Dig Safely awareness messages, as discussed in Section 4. Pipeline operators should encourage One-Call Centers to provide those public awareness communications and can account for such Public Awareness Programs within their own Public Awareness Program. Some One-Call Centers focus on hosting awareness meetings with excavators to further promote the Dig Safely and One-Call Messages. It is the operator's responsibility to request documentation for these outreach activities.

In order to enhance Dig Safely and one-call public awareness outreach by One-Call Centers, operators are required by 49 *CFR* Parts 192 and 195 to become members of one-call organizations in areas where they operate pipelines. Since all underground facility members share One-Call Center public awareness outreach costs, the costs to an individual operator

are usually comparatively low, and can demonstrate effectiveness by increased use of the One-Call Notification system.

D.9 Operator Websites

Pipeline operators with websites can enhance their communications to the public through the use of a company website on the Internet. Since corporate websites may vary in serving the business needs of the company (e.g. investor relations, marketing, affiliate needs), the guidance in Appendix C.8 describes features of the components of a website for a company's pipeline subsidiary or operations that should fit into any corporate structure and overall website design. Many pipeline operators may choose to place additional or more detailed information on their websites to supplement their public awareness and informational efforts.

An operator's website will supplement the other various direct outreach delivery tools discussed in this RP.

APPENDIX E—ADDITIONAL GUIDELINES FOR UNDERTAKING EVALUATIONS

This appendix provides additional explanation for several methods described in Section 8 for conducting program evaluations and provides a sample survey.

E.1 Focus Groups (Interview Panels)

A focus group is a group of people representative of one or more target audiences who are gathered to provide feedback about the materials or other aspects of a planned Public Awareness Program or to comment on an existing one.

Typically, a focus group has about 6 to 12 participants. While focus groups can be professionally facilitated, feedback about public awareness materials can be gained by an informal discussion run by individuals connected with the public education program. Often participants will be asked to

review draft materials and to comment on what they understood from the materials and whether the materials would draw appeal when received by mail. Focus groups can also be used to provide input on the relative effectiveness of various means of delivery.

Focus group participants might be operator employees who are not familiar with the Public Awareness Program, citizens living along a stretch of pipeline or representatives of homeowner associations or business people along the right-of-way. Target stakeholder audiences should not be mixed. The participants usually are not chosen at random but rather are selected to be reasonably representative of their focus group and capable of articulating their reactions to the materials.

E.2 Sample Assessment of Program Implementation

Table E-1—Sample Audit of Program Implementation

<p>I Program Development and Documentation: Has the Public Awareness Program been developed and written to address the objectives, elements and baseline schedule as described in Section 2 and the remainder of this RP?</p> <ol style="list-style-type: none"> 1. Does the operator have a written Public Awareness Program? 2. Have all of the elements described in Section 2 of this RP been incorporated into the written program? 3. Does the written program address all of the objectives of this RP as defined in Section 2.1? 4. Does the documented program address regulatory requirements identified in Section 2.2 of this RP and other regulatory requirements that the operator must comply with? 5. Does the operator have a plan that includes a schedule for implementing the program? 6. Does the program include requirements for updating responsibilities as organizational changes are made?
<p>II Program Implementation: Has the public awareness plan been implemented and documented according to the written plan?</p> <ol style="list-style-type: none"> 1. Is the program updated and current with any significant organizational or major new pipeline system changes that may have been made? 2. Are personnel assigned responsibilities in the written program aware of their responsibilities and have management support (budget and resources) for carrying out their responsibilities on the program? 3. Has the program implementation been properly and adequately documented? 4. Have all required elements of the program plan been implemented in accordance with the written plan and schedule? 5. Does the operator have documentation of the results of evaluating the program for effectiveness? 6. Are the results of the evaluation of program effectiveness being used in a structured manner to improve the program or determine if supplemental actions (e.g. revised messages, additional delivery methods, increased frequency) in some locations?

E.3 Supplemental Information to Operators Conducting Surveys to Evaluate Effectiveness

E.3.1 Type of Survey—Surveys may be conducted in person, over the phone, or via mail questionnaires. Conducting them in person is more labor intensive and costly but yields the best result and the largest return. Mail surveys are least expensive but typically have only 10-20 percent of the forms returned, which raises questions about whether the results are representative. Incentives for completing mail surveys may improve participation. Telephone surveys are a good compromise for the modest size samples needed to draw broad conclusions, but any of the methodologies can be made to work.

E.3.2 Sample Size—Typically a survey is designed to reach a random number of the targeted stakeholder audience. A variation on the random sample when conducting surveys in person is a “cluster sample” in which a block may be chosen at random and then a cluster of several households on the block visited at the same time. That is a relatively efficient way to increase sample sizes and not sacrifice much in statistical validity. The telephone number for affected residents is typically not readily accessible to the operator, although a random survey in a designated zip code or geographic area may include questions on whether the respondent lives or works along the right-of-way (to ensure a sufficient number of the affected public is included in the survey). For conducting a survey in person, the operator can work with a random selection of homes or businesses drawn from aerial maps or simply by selecting segments at random to be visited near the right-of-way. Mail surveys might be sent to all in a census tract, all in a zip code, or sub-zip code area. Third-party experts in conducting surveys can readily assist, at least for the first time a survey is attempted.

E.3.3 Statistical Confidence—There is typically concern about being statistically reliable. Often this leads to needlessly expensive surveys when one really only needs to know the approximate percentage of the target group that has been reached and is knowledgeable.

In deciding sample size, one can keep in mind a simplification of a lot of statistical rules and tables:

The statistical error associated with a random survey is approximated by $1/\sqrt{n}$, where n is the size of the sample. A sample of 100 gives an accuracy of approximately $\pm 1/\sqrt{100}$, or about 10 percent.

There are a number of detailed assumptions behind that approximation, which is more valid the larger the total population to be surveyed. For smaller populations, the sampling error is actually even smaller than that approximation. Very modest-size surveys can be used for evaluating pipeline safety for public awareness and still have statistical validity to

support broad conclusions that, in turn, drive changes (as necessary) or support continuation (when supported) to the Public Awareness Program.

E.3.4 Content—Different sets of questions are needed for different audiences. There obviously would be a different set of questions asked of households along a pipeline versus those asked of excavators. The survey questionnaire should be clear, brief and pre-tested to increase the participation and minimize the cost. Operators should try to keep their questions the same over time so that trends can be evaluated. The questions can be yes/no, multiple choice, or open-ended. It is easier to analyze data from multiple choice or yes/no questions than open-ended questions; the latter require someone to read and interpret them, and then complete computer-readable tallies or do a tally by hand. A combination of both open-end and multiple-choice questions can be used. A survey can focus on only one program element or several elements and can measure the following with one or more of the selected stakeholder audiences:

- **Outreach:** Surveys can determine whether the audience received the public awareness communication.
- **Knowledge:** Surveys can also inquire about what the person would do hypothetically in certain situations, such as “If you observed a suspected leak in a pipeline, what would you do?”
- **Behavior:** In addition to knowledge and attitudes, surveys can be designed to inquire of actual behaviors; e.g., “Have you ever called to inquire about the location of a pipeline,” “Have you ever been involved in any way with a pipeline break or spill,” etc.

As a supplement to the baseline survey, the operator or operators working in collaboration or with trade associations may also include information about general attitudes about pipelines and knowledge of their role in delivering energy.

Some thought is needed as to whether it is better to get open-ended responses that do not prompt the respondent, to avoid bias. A short example: One might be tempted to ask, “What number would you call if you saw a break in a pipeline,” but that question already assumes somebody would look up a number, which may be what you are trying to determine. A less biased question would be “what would you do if you saw a break in a pipeline?”

E.3.5 Implementation—An operator can:

- Develop and conduct a survey on its own system using internal or external expertise
- Select a survey format designed by external parties or an industry association
- Adapt surveys designed by others and conduct on its own systems, or
- Join with others in a regional survey.

E.4 Sample Survey

E.4.1 Survey Questions—The content of the questions on the survey should reflect the goals of the public education program. The wording of questions is critical.

Developing appropriate wording is more difficult than it may appear to be on the surface. It is easy to inadvertently build in biases or confuse the person being interviewed. The questionnaires should be tested before use. A focus group or small sample can be used for that purpose. If the wording is changed, the questions should be retested.

Preferably, the same wording would be used for a group of operators if not all of the industry, to achieve comparability and be able to compare statistics for the industry or a region. Individual operators should try to keep their questions the same over time so that trends can be evaluated.

Where possible, it is preferable to use multiple-choice questions rather than open-ended questions, because the former are easier to analyze objectively. A combination of both open-end and multiple-choice questions can be used. Negative answers or problems raised by respondents preferably should be followed up by a diagnostic question to understand the respondent’s point of view better, and to get insight for making improvements.

In the tables below are two sample sets of survey questions—one for the general public near pipelines, the other for

excavators. These lists of questions can be used as menus from which to choose if there is time only for a few questions. The asterisked questions are the most important.

The questions may refer to the respondent’s experience in the past six months, year, or two years; generally one does not ask about information older than one year because of memory problems, except for dramatic events likely to be remembered.

E.4.2 Introduction—In administering a survey, there should be a brief introduction to set the stage. For example:

“Our company [or insert company name association] believes it is important to get feedback from people (excavators) such as you about pipeline safety. We would like to ask you a few questions and would greatly appreciate your candid answers. The information on your particular response will be kept confidential. Let me start by asking”

E.4.3 Venues—Basically the same questions can be asked during a formal survey, whether undertaken by mail, telephone, or in person. They also can be used during customer contacts or as part of contacts with appropriate personnel from excavators.

Tables

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E-5.1 Measuring Effectiveness of Pipeline Public Awareness Programs for Local Distribution Companies 57

E-5.2 Measuring Effectiveness of Pipeline Public Awareness Programs for Local Distribution Companies 59

Table E-2—Sample Survey Questions for Affected Public

Attribute Measured	Sample Questions (Asterisk * marks most important questions.)
Outreach	<p>*1. In the last year [or 2 years], have you seen or heard any information from [our company] relating to pipeline safety? <i>[Yes or No]</i></p> <p>If yes:</p> <p>1a. What was the source of the information (check all that apply):</p> <ul style="list-style-type: none"> a. Written material (brochure, flyer, handout) b. Radio? c. TV? d. Newspaper ad or article? e. Face-to-face meeting? f. Posted information (e.g., on or near pipeline) g. Other: _____ <p>1b. About how many times did you see information on pipeline safety in the last year? _____</p>
Outreach	<p>2. Have you or has or anyone in your household ever tried to obtain information about pipeline safety in the last 12 months? <i>[Yes or No]</i> _____</p> <p>2a. If yes, where did you try? Check all that apply:</p> <ul style="list-style-type: none"> a. Internet b. Call c. Letter d. Visit e. Other: _____
Knowledge	<p>*3. Do you live close to a petroleum or gas pipeline? <i>[Yes, No, do not know]</i></p> <p>3a. If yes, where is it (or how close are you to it)? _____</p>
Knowledge	<p>*4. What would you do in the event you were first to see damage to a pipeline? <i>[Can check more than one]</i></p> <ul style="list-style-type: none"> a. Call 911 b. Call pipeline operator c. Flee area d. Nothing (not my responsibility) e. Other: _____
Knowledge	<p>5. What would you do if you saw someone intentionally trying to damage a pipeline? <i>[Can check more than one]</i></p> <ul style="list-style-type: none"> a. Call 911 b. Call pipeline operator c. Flee area d. Nothing (not my responsibility) e. Other: _____
Behavior	<p>*6. Have you ever called a pipeline operator, 911, or anyone else to report suspicious or worrisome activity near a pipeline? <i>[Yes or No]</i></p> <p>6a. If yes, what did you report:</p> <ul style="list-style-type: none"> a. Break b. Product release c. Digging d. Other: _____

Table E-2—Sample Survey Questions for Affected Public (Continued)

Attribute Measured	Sample Questions (Asterisk * marks most important questions.)
Behavior	*7. Have you or has anyone in your household [or company if a business] ever encountered a damaged pipeline or product released from a pipeline? <i>[Yes or No]</i> If yes, what did you do? _____ _____ _____
Behavior	8. Have you ever passed information about pipeline safety to someone else? <i>[Yes or No]</i> If yes, what information and to whom: _____ _____ _____
Outcomes	9. Has anyone in your household or have nearby neighbors ever had any injuries or damage associated with a pipeline break or spill? <i>[Yes or No]</i> 9a. If yes, describe event. _____ _____ _____
Attitude	10. Do you agree or disagree that your local pipeline operator has been doing a good job of informing people like you about pipeline safety? a. Strongly agree b. Agree c. Disagree d. Strongly disagree If you disagree, why: _____ _____ _____

Table E-3—Sample Survey Questions for Excavators

The questions below could be worded for a specific operator or for any operator; some excavators may deal with more than one pipeline.

- | | |
|---------------------------------|--|
| Outreach | <p>*1. In the last 12 months, have you been contacted or received written information from [local pipeline operator] regarding pipeline safety? <i>[Yes or No]</i></p> <p>If yes, what was the source:</p> <ul style="list-style-type: none"> a. Telephone call b. Mail c. Visit or in-person meeting d. E-mail e. Sign or billboard f. Other: _____ |
| Outreach | <p>2. Have you received information from any other sources about pipeline safety?
<i>[Yes or no]</i></p> <p>2a. If yes, which? _____</p> |
| Behavior | <p>3. Have you contacted [pipeline operator name] in the past year to inquire about the location of pipelines? <i>[Yes or no]</i></p> <p>3a. If yes, about how many times? _____</p> <p>3b. If yes, how did you make the contact:</p> <ul style="list-style-type: none"> a. Telephone b. E-mail c. Letter d. In-person e. Other: _____ |
| Behavior | <p>*4. How often would you say your operator checks whether a pipeline exists before digging in a new spot?</p> <ul style="list-style-type: none"> a. Always b. Usually c. Sometimes d. Rarely or Never e. Don't know. <p>4a. If not always: why not?</p> <ul style="list-style-type: none"> a. Didn't know where to get information b. Not necessary c. Didn't think about it d. Takes too much time e. Think we can tell where pipeline is on our own f. Other: _____ |
| Outreach | <p>5. How do you make sure that all the right people in the company get the information on whom to call before digging? That is, how do you disseminate the information?</p> <ul style="list-style-type: none"> a. Post it b. Discuss in meetings c. E-mail d. Calls e. Put in company's written procedures f. Put in company newsletter g. Other: _____ |
| Outreach (Audience Size) | <p>6. About how many people in your company actually determine where to dig?
_____</p> |

Table E-3—Sample Survey Questions for Excavators (Continued)

- 6a. What jobs do they have (e.g., excavator equipment operator; executive; operations boss; etc.):

- Outreach** 6b. How many of them probably have information on where to call before digging?
a. All
b. Most
c. Some
d. Few or None
- Outcome** *7. Has your company ever unexpectedly encountered a pipeline while digging? [*Yes or No*]
7a. If yes, how often has this occurred? _____
Explain whether pipeline location was unknown and why. _____

- 7b. If yes, how many were “close calls”? _____
- 7c. How many resulted in damage: _____

Table E-4.1—Measuring Effectiveness of Pipeline Public Awareness Programs for Transmission or Liquid or Gathering Pipelines

Local Public Officials

The following are sample survey questions on pipeline safety for local government/public officials. They can be used when meeting one on one with such officials or when doing a more systematic survey in connection with evaluating Public Awareness Programs for pipeline safety.

Introduction if survey is in person:

I am _____ representing _____

I would like to ask you a few questions regarding pipeline safety.

Knowledge

1. Do you have an oil or gas pipeline running through your community? _____(Y/N)
If not yes, tell them. [Reviewers: Should we also ask if they know where it is?]

2. Do you know the name of your local pipeline operator? _____ (Y/N)

2a. If yes, who? _____

[This may be given away by the introductory line.]

Outreach

3. Have you heard or seen a message regarding pipeline safety in the last 12 months?
_____ (Y/N)

3a. If yes, about how many? _____

4. Before today, about when was your last contact with someone from the pipeline industry related to pipeline safety? _____ (If known, fill in approximate date or number of weeks, months, or years ago.)

Knowledge (again)

5. Do you have the number to call in the pipeline company if there is an incident or you need more information? _____(Y/N)

6. Have you heard of the Office of Pipeline Safety in the U. S. Department of Transportation?
_____ (Y/N)

7. Do you know what precautions an excavator should take prior to digging, to avoid accidentally hitting a pipeline? _____ (Y/N)

7a. If yes, what are they? _____

8. Are you familiar with the one-call line? _____ (Y/N)
(If no, they should be informed about it.)

9. How would you rate the adequacy of information you have about pipeline safety (e.g., how to recognize a leak, what to do when there is a leak, what first responders should do, etc.)?

a. About right? _____

b. Too much? _____

c. Not enough? _____

[This question is essentially a self-assessment of knowledge for a measure such as “percent of local officials who felt they needed more information about pipeline safety.”]

Behavior

10. Does your community have an emergency response plan to deal with a pipeline break (regardless of whether intentional or accidental)? _____(Y/N)

Outcome

11. Are you aware of any pipeline breaks that occurred in your community in the last 10 years?
_____ (Y/N)

11a. If yes, how many? _____

Table E-4.1—Measuring Effectiveness of Pipeline Public Awareness Programs for Transmission or Liquid or Gathering Pipelines (Continued)

- 11b. What were they? _____
 [The interviewer should be prepared to tell the local official the correct answer.]
12. Have any of your local citizens or businesses expressed concern in the last 12 months about any issue regarding pipeline safety? _____ (Y/N)
- 12a. If yes, what was it? _____
13. Overall, do you feel the pipeline industry has an adequate public safety awareness program?
- a. Definitely yes _____
 - b. Pretty much so _____
 - c. Not sure _____
 - d. Don't know _____
 - e. Probably not _____
 - f. Definitely not _____

[This is an overall perception of their awareness program. The operator could use for measures such as “percent of local governments who rated the overall program as definitely or probably adequate.”]

Table E-4.2—Measuring Effectiveness of Pipeline Public Awareness Programs for Transmission or Liquid or Gathering Pipelines

Emergency Officials

These questions are primarily for local first responders (e.g., fire, police, EMS officials), but could also be used for utility responders, and other emergency officials.

Knowledge

1. Do you know where the nearest oil or gas pipeline is in or near your community?
_____ (Y/N) [If not, tell them after the interview.]
2. Do you know the name of your local pipeline operator? _____ (Y/N)
15a. If yes, who? _____
3. Do you know who to call in the pipeline company if there is an incident, or if you need more information? _____ (Y/N)

Outreach

4. Have you seen, heard, or received any information regarding pipeline safety in any media in the last year? _____ (Y/N)
17a. If yes, do you recall what? _____
5. Have you or anyone else in your department to your knowledge met with any representatives of the pipeline company to discuss pipeline safety within the last 12 months, prior to today?
_____ (Y/N)
18a. If yes, when? _____
18b. With whom? _____

Behavior

6. Do you have a response plan or SOPs for responding to a pipeline incident, such as a break?
_____ (Y/N)
7. Have you done any practical training to deal with a break? _____ (Y/N)

Outcome

8. Do you know if there were any pipeline incidents within the last ten years in your community?
_____ (Y/N)
8a. If yes, about when? _____
8b. What was the incident? _____
8c. Did the department respond? _____ (Y/N)
8d. If yes, Do you feel the department dealt with the incident in a satisfactory manner?
[Self-assessment, if knowledgeable about the incident.]

Table E-5.1—Measuring Effectiveness of Pipeline Public Awareness Programs for Local Distribution Companies

Local Public Officials

The following are sample survey questions on pipeline safety for local government/public officials. They can be used when meeting one on one with such officials or when doing a more systematic survey in connection with evaluating Public Awareness Programs for pipeline safety.

Introduction if survey is in person:

I am _____ representing _____

I would like to ask you a few questions regarding pipeline safety.

Knowledge

1. Do you have natural gas pipelines running through your community? ____ (Y/N)
2. Do you know the name of your local natural gas company? _____ (Y/N)
 - 2a. If yes, who? _____
[This may be given away by the introductory line.]

Outreach

3. Have you heard or seen a message regarding natural gas safety in the last 12 months?
_____ (Y/N)
 - 3a. If yes, about how many? _____
4. Before today, about when was your last contact with someone from the natural gas industry related to pipeline safety? _____ (If known, fill in approximate date or number of weeks, months, or years ago.)

Knowledge (again)

5. Do you have the number to call the natural gas company if there is an incident or you need more information? _____ (Y/N)
6. Do you know who regulates the natural gas company in this community? _____ (Y/N) (If no, they should be informed about it.)
7. Do you know what precautions an excavator should take prior to digging, to avoid accidentally hitting a natural gas pipeline? _____ (Y/N)
 - 7a. If yes, what are they? _____
8. Are you familiar with the one-call line? _____ (Y/N) (If no, they should be informed about it.)
9. How would you rate the adequacy of information you have about natural gas safety (e.g., how to recognize a leak, what to do when there is a leak, what first responders should do, etc.)?
 - a. About right? _____
 - b. Too much? _____
 - c. Not enough? _____

[This question is essentially a self-assessment of knowledge for a measure such as “percent of local officials who felt they needed more information about pipeline safety.”]

Behavior

10. Does your community have an emergency response plan to deal with a natural gas leak (regardless of whether intentional or accidental)? _____ (Y/N)

Table E-5.1—Measuring Effectiveness of Pipeline Public Awareness Programs for Local Distribution Companies
(Continued)

Outcome

- 11. Are you aware of any pipeline leaks that occurred in your community in the last 2 years?
_____ (Y/N)
 - 11a. If yes, how many? _____
 - 11b. What were they? _____
[The interviewer should be prepared to tell the local official the correct answer.]
- 12. Have any of your local citizens or businesses expressed concern in the last 12 months about any issue regarding natural gas safety? _____ (Y/N)
 - 12a. If yes, what was it? _____
- 13. Overall, do you feel the natural gas industry has an adequate public safety awareness program?
 - a. Definitely yes _____
 - b. Pretty much so _____
 - c. Not sure _____
 - d. Don't know _____
 - e. Probably not _____
 - f. Definitely not _____

[This is an overall perception of their awareness program. Could use for measures such as “percent of local governments who rated the overall program as definitely or probably adequate.”]

Table E-5.2—Measuring Effectiveness of Pipeline Public Awareness Programs for Local Distribution Companies

First Responders/Emergency Officials

These questions are primarily for local first responders (e.g., fire, police, EMS officials), but could also be used for utility responders, and other emergency officials.

- Knowledge**
1. Do you have natural gas pipelines running through your community?? _____(Y/N)
[If not, tell them after the interview.]
 2. Do you know the name of your local natural gas company? _____ (Y/N)
15a. If yes, who? _____
 3. Do you know how to contact the local natural gas company if there is an incident, or if you need more information? _____(Y/N)
- Outreach**
4. Have you seen, heard, or received any information regarding natural gas safety in any media in the last year? _____ (Y/N)
17a. If yes, do you recall what? _____
 5. Have you or anyone else in your department to your knowledge met with any representatives of the natural gas company to discuss pipeline safety within the last 12 months, prior to today? _____(Y/N)
18a. If yes, when? _____
18b. With whom? _____
- Behavior**
6. Do you have a response plan or SOPs for responding to a natural gas incident, such as a leak? _____ (Y/N)
 7. Have you done any practical training to deal with a leak? _____(Y/N)
 8. Do you feel reasonably well prepared to deal with a natural gas leak, should one occur in your community? _____(Y/N) If not, in what areas are there deficiencies?
(Check all that apply.)
a. Training _____
b. Special Equipment _____
c. Knowledge about leaks _____
d. Inherent dangers _____
e. Other: (Write in.) _____
 9. If you heard a report of a natural gas leak right now, what actions would you or your department take? [Write in the steps; someone should grade the responses to get a sense of whether there has been adequate training or preparation, or if the respondent just mentioned general procedures applicable to any kind of incident.]

- Outcome**
10. Do you know if there were any natural gas leaks within the last two years in your community? _____ (Y/N)
10a. If yes, about when? _____
10b. What was the incident? _____
10c. Did the department respond? _____(Y/N)
10d. If yes, Do you feel the department dealt with the incident in a satisfactory manner?
[Self-assessment, if knowledgeable about the incident.] _____

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SPLP Exhibit No. JP-2
HLA.17 Public Awareness Plan

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SPLP
JP-2



Standard Operating Procedures

Applicable to Hazardous Liquids Pipelines and Related Facilities

Code Reference :	Procedure No.: HLA.17	
49 CFR 195.440 ; RRC 8.235, 8.310, 8.315	<i>Effective Date:</i> 08/01/19	Page 1 of 26

1.0 Purpose

The objectives of the Public Awareness Plan are to:

- Raise the awareness of the affected public and key stakeholders to the presence of buried hazardous liquids pipelines and associated facilities in the communities where the company operates hazardous liquids pipelines and related facilities.
- Better educate those who live or work near the company’s pipelines on recognizing and reacting to a hazardous liquids release or emergency and how to respond if they detect possible odors.
- Help excavators understand the steps they can take to prevent damage from outside forces and to help them respond safely and promptly should their actions cause damage to the company’s pipelines.
- Better educate the public, emergency officials, local officials, municipalities, school districts and other key groups about the company’s emergency response and key safety procedures in the unlikely event of an operating problem or emergency.
- Allow emergency response agencies that might respond to an emergency incident on one of the company’s pipelines or facilities to better understand the safe and proper actions to take in response to a release or pipeline emergency.
- Educate the public on the company’s ongoing pipeline integrity management activities.

Energy Transfer fully supports the goals and objectives set forth in the first edition of *American Petroleum Institute’s Recommended Practice 1162 (RP 1162)*. As an organization, we are committed to provide safe, reliable transportation of hazardous liquids and pipeline safety information to people living and working near the company’s pipelines. We allocate resources and funding as necessary to support our public awareness activities. Management’s expectation is that each of our employees is committed to fulfilling our public awareness responsibilities as described in this plan. *(See Appendix B for Management Commitment to Public Awareness)*.

2.0 Scope

The Public Awareness Plan provides a framework that guides the company’s goal of continuous improvement in communications with a variety of key audiences in the communities where the company operates pipelines. The steps detailed in this document are designed to accomplish this goal and meet the requirements of applicable federal, state, and local regulations.

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3.0 Applicability The Public Awareness Plan applies to all of the company’s hazardous liquids transmission pipelines and related pipeline facilities.

The following Operations groups and individuals within the company are impacted:

- Executive Vice President Operations
- Division Vice Presidents
- Area Directors
- Operations Managers
- Operations Personnel, Asset Management Teams or Work Crews
- Vice President Technical Services
- Director, Technical Services Support
- Integrity Management Representatives
- GIS and Engineering Records Representatives
- Public Awareness Manager
- Manager, One Call / Damage Prevention
- Supervisor, Damage Prevention
- Director, Right-of-Way
- Right-of-Way Representatives

4.0 Frequency The Public Awareness Plan shall be reviewed annually and updated as required at intervals not to exceed fifteen months, but at least once every calendar year.

The company is committed to communicating with targeted stakeholders based on the following frequency table as stated in RP 1162. Procedure-specific frequencies are identified below.

Audience Type	Frequency
Affected public	Every 2 years
Emergency officials	Annually
Public officials	Every 3 years
Excavators/contractors	Annually

5.0 Governance The following table describes the responsibility, accountability, and authority for the Public Awareness Plan.

Function	Responsibility	Accountability	Authority
Maintain	Public Awareness Manager or Designee	Public Awareness Manager	Director – Technical Services Support

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The responsibility, accountability and authority for specific activities required by the Public Awareness Plan are detailed in *SOP HLI.40 Public Awareness Plan – Communication with the API RP1162-defined Stakeholders*

The responsibilities of management are defined in *Sections 5.1* through *5.4*.

**5.1
Vice President
Technical
Services**

The responsibilities of the Vice President – Technical Services in relation to the Public Awareness Plan include:

- Allocate funds to complete Public Awareness Plan tasks as required.
- Provide resources to complete Public Awareness Plan tasks as required.

**5.2
Director,
Technical
Services
Support**

The responsibilities of the Director, Technical Services Support in relation to the Public Awareness Plan include:

- Oversee the implementation of the Public Awareness Plan.
- Direct the activities of the Public Awareness Manager.
- Approve the Public Awareness Plan and related SOPs.
- Approve changes to the Public Awareness Plan and related SOP's as required by *SOP [HLA.03 Management of Change](#)*.

**5.3
Public
Awareness
Manager**

The responsibilities of the Public Awareness Manager include:

- Verify that all contact information for the affected public, public officials, emergency officials, and excavators is correctly entered into the Public Awareness Database, as detailed in *SOP [HLI.40 Public Awareness Plan—Communication with API RP1162-defined stakeholders](#)* with the API RP1162-defined Stakeholders.
 - Develop relationships with other companies, associations or organizations to reduce redundancies and optimize common efforts.
 - Coordinate the review of the messages, methods and media used to deliver the communications to the intended stakeholders, as detailed in *SOP [HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders](#)*.
 - Document feedback received from stakeholder audiences and coordinate responses as needed.
 - Coordinate the periodic review of the effectiveness of the Public Awareness Plan and recommend changes to the plan.
 - Maintain the company's Public Awareness Plan so that it meets all regulatory requirements.
-

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**5.4
Area
Management**

The responsibilities of the Area Management include:

- Communicate with Stakeholder groups as required in [SOP HLI.40 Public Awareness Plan-Communication with API RP1162-defined stakeholders.](#)
- Document communications with Stakeholder groups and maintain current status for contacts in the Public Awareness Database.

**6.0
Terms and
Definitions**

Terms associated with this SOP and their definitions follow in the table below. For general terms, refer to [SOP HLA.01 Glossary and Terms.](#)

Terms	Definitions
Baseline Messages	The minimum standard program recommendations set forth in RP 1162.
Call Centers	Also known as “One-Call Centers,” this term refers to the clearinghouse for excavation notifications that are planned near pipelines and other underground utilities. One-Call Centers around the country handle between 15 and 20 million calls a year from excavators and direct those calls to the affected pipeline operators to help ensure that underground utilities are located and properly marked. The company is a member of all One-Call Centers in the states in which it operates.
Central Storage Location	A storage area on the company’s data servers that holds the Public Awareness related records, such as master mail pieces and communication information.
Dig Safely	A nationally recognized campaign to reduce underground facility damage through damage prevention education. Used by pipeline companies, one-call centers and other groups throughout the country, the program was developed through the joint efforts of the Office of Pipeline Safety and various damage prevention organizations. Dig Safely is a centerpiece of the Common Ground Alliance (CGA).
Excavation Damage	Sometimes referred to as “third-party damage,” this type of damage often occurs when required One-Call notifications are not made prior to beginning excavation, digging or plowing activities. When the location of underground facilities is not properly determined, the excavator may inadvertently — and sometimes unknowingly — damage the pipeline and its protective coating.
Media	For purposes of this Plan, “media” refers to the vehicle (print, video, advertising, etc.) utilized to communicate to the targeted stakeholders.
Pipeline Facilities	Facilities used in the course of transportation of hazardous liquids and defined in 195.2.

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Terms	Definitions
Public Awareness Database	The master database that holds the individual electronic records of the Public Awareness Plan and related communications information.
Rights-of-Way (ROW)	Long, continuous stretches of land on which an operator has the rights to construct, operate and/or maintain a pipeline. The operator may own ROW outright, or an easement may be acquired for specific use of the ROW.
RP 1162	Recommended Practice 1162, adopted from standards developed by the American Petroleum Institute (API) that calls for pipeline operators to develop and maintain a public awareness program with specific guidelines on audiences, messages, and frequency of message.
Stakeholder	Also known as “target audience,” this term encompasses the various groups or constituencies that the company communicates with as part of this Plan. Examples of stakeholders include the affected public, emergency officials, public officials, excavators, etc.
Supplemental Messages	The concept developed in RP 1162 for assessing particular situations where it is appropriate to enhance or supplement the baseline messages.
Outreach	Efforts to determine if the public awareness communications reach the intended stakeholder groups.
Level of knowledge	Efforts to determine if the intended stakeholder groups understand the key messages from the public awareness communications.
Changes in behavior	Efforts to determine if the intended stakeholder groups learn the appropriate damage prevention behaviors from the public awareness communications.
Bottom-line results	Efforts to determine if the public awareness communications are effective in preventing damage to the pipelines.

**7.0
Public
Awareness Plan**

The Public Awareness Plan contains the following sections:

- Targeting Audiences for Public Awareness Education: Describes the methodology for identifying target audiences (or stakeholders) for public awareness communications.
- Procedure Used to Populate Stakeholder Groups: Describes how to determine Stakeholder Group members.
- Content of Message: Describes the content of public awareness communications to each stakeholder group.
- Communications Actions: Describes the vehicles/materials used to communicate with each stakeholder group.
- Supplemental Plan Enhancement and Materials: Describes what factors to

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consider when evaluating the need for supplemental plan enhancement, and the primary forms of enhancement employed when needed.

- Plan Assessment and Evaluation: Describes the process of assessment for effectiveness in communicating with the various stakeholder groups of the Public Awareness Plan.
- Documentation Requirements: Describes the administration of the Public Awareness Plan and procedures for updating the Public Awareness Plan.

**7.1
Targeting
Audiences for
Public
Awareness
Education**

The company evaluates the various stakeholders groups for the Public Awareness Plan in an effort to ensure that the chosen communications vehicles are appropriate for each targeted audience. For purposes of this plan, and based on the company’s operations and the requirements of RP 1162, the following core groups have been identified as stakeholders:

- The Affected Public in areas where the company operates are defined as the following:
 - Residents living near the pipelines
 - Individuals working near the pipelines
 - Places of congregation such as businesses, schools, hospitals, prisons, etc.
 - Residents near liquid or natural gas storage and other operational facilities along transmission lines
- Emergency Response Officials in areas where the company operates are defined as the following:
 - Fire departments and other state & local emergency management personnel
 - Law enforcement agencies (city, county and state police)
 - Emergency medical personnel
 - Hazardous materials response teams
 - 911 operators and emergency dispatch centers
- Public Officials in areas where the company operates are defined as the following:
 - Mayors
 - City, town or county managers or commissioners
 - Planning boards or committees
 - Zoning boards or committees
 - Licensing departments
 - Permitting bodies
 - Building code inspection or code enforcement departments

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- Excavators in areas where the company operates are defined as the following:
 - Construction companies
 - Excavation equipment rental companies
 - Public works officials
 - Highway departments or other road construction or maintenance bodies
 - Landscaping firms
 - Fence building companies
 - Timber companies
 - Well drilling operations
 - Home builders
 - Land developers
 - One-Call centers

**7.2
Procedure Used
to Populate the
Stakeholder
Groups**

The company uses a combination of internal and external sources to create the lists for each of the four stakeholder groups. The company has maintained an ongoing Public Awareness Liaison Program that has identified the stakeholder groups using the guidelines in *Section 7.1*. As a result, the company already has various lists for the four stakeholder groups as well as the methodology to maintain and update those lists. Under the Public Awareness Plan, those records are collected and maintained in one Public Awareness Database.

A majority of the records are obtained from outside mail list vendors with specialized skills, processes, and data collection and cleansing tools that ensure the highest quality data is provided to the company for each stakeholder group. These records are obtained along a pipeline corridor specific to the company’s pipelines.

Additional records for excavators may be obtained from the company’s One Call database used for one call data consolidation.

The remaining records may be gathered from the various sources at the local level. Under this Plan, those records are incorporated into the Public Awareness Database and updated as new information is available.

Outside vendors providing lists for public awareness communication shall be evaluated as necessary, when significant changes occur in their data sources or data evaluation methods. Many vendors use a large variety of sources and tools to compile the best possible stakeholder lists.

As the communications with the various stakeholder groups are performed, the lists used to establish the recipient of the communications are evaluated to determine if any enhancements are necessary for adequate coverage of each stakeholder group.

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Communications will be provided to stakeholders to within a minimum coverage area distance of 660 feet on each side of the pipeline. Areas of consequence and appropriate factors will be considered. Where specific circumstances suggest a wider coverage area for a certain pipeline location, the coverage area could be expanded accordingly to fit a particular pipeline and location.

7.2.1 Internal Identification Sources

Internal methods that may be used to identify updates to the appropriate stakeholder audiences include:

- Operations personnel
- Right-of-Way (ROW) records and contacts
- Existing emergency response plans
- Mock emergency exercises
- Personnel that routinely work with governmental and regulatory bodies
- Past rehabilitation and maintenance notifications and records

7.2.2 External Identification Sources

External sources that may be used to identify updates to the appropriate stakeholder audiences include:

- Nine digit zip codes
- Geo-spatial databases
- One-Call organizations
- Identified local emergency officials
- Information provided by the public
- Local Emergency Planning Committee (LEPC) databases
- State and emergency management agencies
- Outside vendor with capability for providing information on excavators
- Contractor licensing boards
- Excavation equipment rental companies
- Utility coordinating committees
- Standard Industrial Codes (SIC)

7.2.3 Identification Sources for the Affected Public

Sources that may be used to identify updates to the affected public stakeholder group include:

- Affected public along pipeline ROW
- Nine digit zip code
- Geo-spatial database
- Customer database
- HCAs in accordance with federal regulations
- Information provided by the public

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7.2.4 Identification Sources for Local Public Officials Sources that may be used to identify updates to the local public officials stakeholder group include:

- Personnel who routinely work with governmental and regulatory bodies
- One-Call organizations
- Field operations personnel

7.2.5 Identification Sources for Emergency Officials Sources that may be used to identify updates to the emergency officials stakeholder group include:

- Discussions with identified local emergency officials
- Existing emergency response plans
- Mock emergency exercises
- Public Officials Emergency Responder website
- Local Emergency Planning Committee (LEPC) databases
- State and emergency management agencies

7.2.6 Identification Sources for Excavators Sources that may be used to identify updates to the excavators stakeholder group include:

- One-Call system databases
- Outside vendor with capability for providing information on excavators
- Contractor licensing boards
- Excavation equipment rental companies
- Utility coordinating committees
- Standard Industrial Codes (SIC)

7.3 Content of Message The content of the messages to each respective stakeholder group is evaluated and fine-tuned based on changing circumstances and need. The message to all stakeholders includes:

- Pipeline purpose and reliability
- Hazards or risks associated with pipeline operations
- Measures that the company takes to prevent negative impacts to public safety, property and the environment
- Use of a One-Call notification system prior to excavation and other damage prevention activities
- Steps that should be taken for public safety in the event of a pipeline release or incident at a facility
- Physical indications that a release or incident may have occurred
- Procedures to report a release or incident

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- 7.3.1** The message to the Affected Public includes:
- Content of Message to the Affected Public**
- Pipeline purpose and reliability
 - Awareness of hazards and prevention measures undertaken
 - Leak recognition and response
 - Damage prevention awareness
 - One-call requirements
 - Pipeline location information
 - How to get additional information
 - Availability of list of pipeline operators through NPMS
-

- 7.3.2** The message to Emergency Response Officials includes:
- Content of Message to Emergency Response Official**
- Pipeline purpose and reliability
 - Awareness of hazards and prevention measures undertaken
 - Leak recognition and response
 - Emergency preparedness communications
 - Potential hazards
 - Pipeline location information
 - Availability of NPMS
-

- 7.3.3** The message to Local Public Officials includes:
- Content of Message to Local Public Officials**
- Pipeline purpose and reliability
 - Awareness of hazards and prevention measures undertaken
 - Leak recognition and response
 - Emergency preparedness communications
 - One-call requirements
 - Pipeline location information
 - How to get additional information
 - Availability of NPMS
-

- 7.3.4** The message to excavators includes:
- Content of Message to Excavators**
- Pipeline purpose and reliability
 - Awareness of hazards and prevention measures undertaken
 - Leak recognition and response
 - Damage prevention awareness
 - One-call requirements
 - Leak recognition and response
 - How to get additional information
-

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7.4 Communication Actions The Public Awareness Plan utilizes communication materials produced both by the company and by other parties. All the materials are evaluated for clarity, thoroughness, and applicability by the Public Awareness Manager.

The primary language used in communications materials for the Public Awareness Plan is English. Materials in other languages are made available based on community need.

-
- 7.4.1 Communication Actions for the Affected Public**
- Communication actions for the affected public are detailed in [SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders.](#)
 - Vehicles/materials for communications with the Affected Public may include:
 - Personal contact
 - Targeted distribution of print materials:
 - Brochures
 - Pamphlets
 - Letters
 - Pipeline markers
 - Community meetings, open houses, etc. (supplemental as needed)

-
- 7.4.2 Communication Actions for Emergency Officials**
- Communication actions for emergency officials are detailed in *SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders.*
- Vehicles/materials for communications with Emergency Officials may include:
- Scheduled meetings with county or multiple county officials
 - Personal contact
 - Group meetings
 - Targeted distribution of print materials
 - Telephone calls
 - E-mail
 - Pipeline Markers
 - Emergency exercises (supplemental as needed)
 - Facility tours or open houses (supplemental as needed)
 - National Association of State Fire Marshals/OPS emergency response training program

-
- 7.4.3 Communication Actions for Public Officials**
- Communication actions for public officials are detailed in [SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders.](#)
 - Vehicles/materials for communications with Public Officials may include:
 - Targeted distribution of print materials:
 - Brochures
 - Pamphlets

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- Letters
- Telephone calls (supplemental as needed)
- Group meetings (supplemental as needed)
- Personal contact (supplemental as needed)
- E-mail (supplemental as needed)

7.4.4 Communication Actions for Excavators

- Communication actions for excavators are detailed in [SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders](#).
- Vehicles/materials for communications with excavators may include:
- Targeted distribution of print materials:
 - Brochures
 - Pamphlets
 - Letters
- One-Call Center outreach
- Pipeline markers
- Group meetings (supplemental as needed)
- Personal contact (supplemental as needed)
- E-mail (supplemental as needed)

7.4.5 Public Awareness Communications Summaries

Public awareness communications procedures with the affected public, emergency officials, public officials and excavators are detailed in [SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders](#).

The following tables summarize Public Awareness Communications.

Code Reference :	Procedure No.: HLA.17	
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Table 1 Public Awareness Stakeholder Communications			
Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
Residents located along pipeline ROW and Places of Congregation	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage prevention Awareness • One-call requirements • Leak recognition and response • Pipeline location information • How to get additional information • Availability of list of pipeline operators through NPMS 	Baseline Frequency: 2 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials and Pipeline Markers
	Supplemental Message: <ul style="list-style-type: none"> • Information and/or overview of operator’s Integrity Management Plan • ROW encroachment prevention • Any planned major maintenance/construction activity 	Supplemental Frequency: Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	Supplemental Activity: <ul style="list-style-type: none"> • Print materials • Personal contact • Telephone calls • Group meetings • Open houses
Residents near storage or other major operational facilities	Supplemental Message: <ul style="list-style-type: none"> • Information and/or overview of operator’s Integrity Management Plan • Special incident response notification and/or evacuation measures <i>if</i> appropriate to product or facility • Facility purpose 	Supplemental Frequency: Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	Supplemental Activity: <ul style="list-style-type: none"> • Print materials • Personal contact • Telephone calls • Group meetings • Open houses

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Table 1 Public Awareness Stakeholder Communications

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
Emergency Officials	Baseline Messages: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Personal contact OR <ul style="list-style-type: none"> • Targeted distribution of print materials OR <ul style="list-style-type: none"> • Group meetings OR <ul style="list-style-type: none"> • Telephone calls with targeted distribution of print materials
	Supplemental Message: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Emergency tabletop, deployment exercises • Facility tour • Open house

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Table 1 Public Awareness Stakeholder Communications			
Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
Local Public Officials	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency Preparedness Communications • One-call requirements • Pipeline location information and availability of NPMS • How to get additional information 	Baseline Frequency: 3 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials
	Supplemental Message: <ul style="list-style-type: none"> • If applicable, provide information about designation of HCA (or other factors unique to segment) and summary of integrity measures undertaken • ROW encroachment prevention • Maintenance construction activity 	Supplemental Frequency: <ul style="list-style-type: none"> • If in HCA, then annual contact to appropriate public safety officials • Otherwise, as appropriate to level of activity or upon request 	Supplemental Activity: <ul style="list-style-type: none"> • Personal contact • Telephone calls • Videos and CDs

Code Reference : 49 CFR 195.440; RRC 8.235, 8.310, 8.315	Procedure No.: HLA.17	Effective Date: 08/01/19	Page 16 of 26
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Table 1 Public Awareness Stakeholder Communications

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
Excavators / Contractor	Baseline Messages: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Targeted distribution of print materials • One-call center outreach • Pipeline markers
	Supplemental Messages: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Personal contact • Group meetings
Land Developers	Supplemental Messages: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Frequency as determined by specifics of the pipeline segment or environment 	Supplemental Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Pipeline markers • Personal contact • Group meetings • Telephone calls

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Table 1 Public Awareness Stakeholder Communications			
Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
One-Call Centers	Baseline Messages: <ul style="list-style-type: none"> • Pipeline location information • Other requirements of the applicable One-Call Center 	Baseline Frequency: <ul style="list-style-type: none"> • Requirements of the applicable One-Call Center 	Baseline Activity: <ul style="list-style-type: none"> • Membership in appropriate One-Call Center • Requirements of the applicable One-Call Center • Maps (as required)
	Supplemental Messages: <ul style="list-style-type: none"> • One-Call System performance • Accurate line location information • One-Call System improvements 	Supplemental Frequency: As changes in pipeline routes or contact information occur or as required by state requirements	Supplemental Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Personal contact • Telephone calls

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**7.5
Supplemental
Plan
Enhancement
and Materials**

Special conditions, changing circumstances and other factors may necessitate additional communications or increased frequency of communications to stakeholders. Responsibility for determining whether such measures are necessary lies with the Public Awareness Manager. Required changes to the Public Awareness Plan are implemented according to the processes described in the [SOP HLA.03 Management of Change](#).

The need for supplemental plan enhancement or the development of new or additional communications materials will be evaluated on an on-going basis and annually during the self-assessment of implementation, following factors are considered:

- Results from previous Public Awareness Plan evaluations
- Potential hazards
- High Consequence Areas
- Population density
- Increased land development activity
- Increased land farming activity
- Elevated incidents of damage from outside forces
- Known environmental considerations
- Pipeline history in the area
- Specific local considerations or heightened public sensitivity
- Regulatory requirements
- Issues not mentioned above that reveal the need for supplemental messages

If supplemental plan enhancement is warranted, then the following primary forms of enhancement are considered:

- Increased frequency of communications or communications at a shorter interval than the baseline requirement
- Additional message content or delivery/media efforts beyond those identified in the baseline plan
- Extending or broadening the coverage area beyond the parameters of the baseline plan

All supplemental enhancements to the Plan are identified and documented in Public Awareness Database.

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7.6 Plan Assessment and Evaluation Guidelines established for evaluating the effectiveness of the Public Awareness Plan are described below.

The company is guided by the following:

- Is the information reaching the intended stakeholder audience?
- Do these audiences understand the messages?
- Are the messages provided frequently enough to achieve the desired result?
- Do the materials motivate recipients to respond appropriately in alignment with the information provided?
- Is the company's public awareness initiative resulting in improved understanding of safe pipeline practices?

7.6.1 Assessment and Evaluation Techniques The company conducts the effectiveness of the Public Awareness Plan, using a variety of techniques including internal audits, surveys, focus groups, feedback from stakeholders and statistical data tracking. They should be conducted as described in the table below.

Approach	Technique	Frequency
Self-assessment of implementation	Review <ul style="list-style-type: none"> • Internal review • Regulatory Inspection 	Initial review within 18 months of implementation. Annually thereafter, not to exceed 18 months. Regulatory inspection as scheduled.
Pre-test effectiveness of materials	Focus groups with internal (company) participants	Upon initial implementation or major re-design of materials, or development of new messages
Effectiveness of implementation <ul style="list-style-type: none"> • Outreach • Level of knowledge • Changes in behaviors • Bottom-line results 	1. Surveys that assess outreach efforts, audience knowledge & changes in behaviors <ul style="list-style-type: none"> • Operator designed • Third-party designed • Industry Association designed 2. Assess notifications & incidents to determine anecdotal changes in behavior 3. Documented records and industry comparison of	No more than four years apart, or upon a major re-design of the plan

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Approach	Technique	Frequency
	incidents to evaluate bottom-line results	
Implement changes to the Public Awareness Plan as assessment methods suggest	<i>SOP HLA.03 Management of Change</i>	As required by findings of evaluations

7.6.2 Self-Assessment of Implementation

Using the questions listed in [A.17A Annual Self-Assessment Public Awareness Program](#), the Public Awareness Manager completes the following steps annually to perform the assessment of implementation..

Step	Task
1	REVIEW the questions listed in A.17A Annual Self-Assessment Public Awareness Program .
2	PERFORM audit.
3	DOCUMENT audit findings.
4	REPORT audit findings.
5	EVALUATE audit report and PROPOSE changes as needed.

7.6.3 Pre-test Effectiveness of Materials

Communication materials are pre-tested with an internal focus group. Focus group participants are selected to reasonably represent the stakeholder groups identified in [SOP HLA.17 Public Awareness Plan](#), and are capable of articulating their reactions to the materials. Focus groups are typically comprised of 2-10 participants. The Public Awareness Manager is responsible for the following steps for the focus group process:

Step	Task
1	ESTABLISH focus group.
2	DESCRIBE the focus group objectives.
3	REVIEW materials with focus group.
4	DOCUMENT focus group feedback.
5	REPORT focus group findings
6	EVALUATE focus group findings and PROPOSE changes to the communications materials.

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**7.6.4
Evaluate
effectiveness of
implementation**

The company evaluates the effectiveness of the implementation of the Public Awareness Plan using the following measures:

- Outreach: Are the messages reaching the intended stakeholders?
- Level of knowledge: Are the messages being understood by the stakeholders?
- Changes in behavior: Have the stakeholders learned the appropriate damage prevention behaviors?
- Bottom-line results: Are the messages having an impact on the number of damages and the consequences of the damages?

The evaluation of each of these measures is accomplished according to the following table:

Table 2: Evaluation of Implementation Measure

Measure	Primary Survey Material	Primary Survey Method	Supplemental Methods
Outreach	Written	Mail	Telephone Internet Email In-person Meeting Feedback
Level of Knowledge	Written	Mail	Telephone Internet Email In-person Meeting Feedback
Changes in Behavior	Written	Mail	Telephone Internet Email In-person Meeting Feedback
Bottom-line Results	Statistical Data Tracking	Spreadsheet Tracking Model	Review of outside One-Call or other damage prevention group similar analysis



NOTE: The primary method of survey is mailing to a random sample of each stakeholder group. If the minimum number of completed surveys is not received, additional surveys are obtained by mail, telephone, internet, email, or in person using the current survey forms. The method and implementation are determined by the Public Awareness Manager.

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Stakeholder Group	Minimum Number of Completed Surveys
Affected Public	150
Emergency Officials	50
Public Officials	50
Excavators	150



NOTE: The Public Awareness Manager can perform additional surveys or other evaluation methods as necessary to obtain supplemental data or more targeted results to best meet the overall plan objectives.

7.6.5 Evaluation and Survey Results

The results of the surveys are used to evaluate Outreach, Level of Knowledge, and Changes in Behavior following the completion of the data gathering.

The Public Awareness Manager reviews the results and determines if any further action is required. If further action is required, please refer to the appropriate stakeholder SOP in the sections titled Determine the Message for the (Stakeholder Group), or Determine Supplemental Messages, Frequencies and Activities.

Further evaluation of Outreach, Level of Knowledge, and Changes in Behavior can be done by evaluating meeting feedback forms from meetings performed by company employees or outside vendors such as One-Call systems or damage prevention companies. This additional evaluation is conducted when necessary, as determined by the Public Awareness Manager.

The evaluation of the survey results follows the procedure listed below.

Step	Activity
1	ESTABLISH evaluation criteria (for the initial evaluation, the threshold of acceptable responses should be 60%, by each of the main measures)
2	STORE data by stakeholder group in central storage location.
3	CREATE and UPDATE an electronic spreadsheet (tabulated by knowledge, outreach, and behavior for each of the four stakeholder groups) that is populated with survey answers and PROVIDES statistics of answer percentages (such as yes, no, other) for each question.
4	CHECK the spreadsheet results for deficiencies against the established criteria. If less than the established percentage of answers is “correct”, that area of communication should be evaluated for improvement.
5	DETERMINE further action, based on the evaluation, if any.

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- 7.6.6 Evaluation of Bottom-Line Results**
- The company uses statistical data tracking to evaluate changes in bottom-line results, as well as other supplemental data that may be useful in evaluating the effectiveness of the Public Awareness Plan. The initial data tracking consists of:
- The number of calls received in response to materials.
 - The incidence of damage from excavation to our facilities. This includes not just “reportable incidents” but all damage events.
 - The number of “near hit” instances.
 - Requests for line locations.
 - Periodically reviewing similar analysis and effectiveness evaluations performed by applicable One-Call systems, industry groups, or other outside damage prevention groups.
 - Analyzing and reviewing feedback following meetings with various identified stakeholders (public officials, emergency officials, etc).

The evaluation of bottom-line results follows the process listed below.

Step	Activity
1	DEVELOP and MAINTAIN a spreadsheet tracking model.
2	COMPILE monthly data from the various sources for: <ul style="list-style-type: none"> • Calls received in response to materials • Excavation damages • Near hits • Line locate requests
3	COMPARE the data to the trends for each data set.
4	EVALUATE the impact of clear changes in the trends for further action.



NOTE: The Public Awareness Manager and Manager of One Call/Damage Prevention should review the similar analysis of at least one outside group or One-Call system each year and determine what can be used to supplement the Public Awareness Plan.

- 7.6.7 Implement Public Awareness Plan Changes**
- The implementation of any changes in the Public Awareness Plan or related SOPs is made under [SOP HLA.03 Management of Change](#).
- The implementation of any other minor changes is made by the Public Awareness Manager, as necessary.

- 8.0 Documentation Requirements**
- Record data in electronic database, utilize the following form(s) as applicable:
- [I.40.A Public Awareness Contact Data Form](#)
 - [A.17.A Annual Self-Assessment Public Awareness Program](#)

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The Public Awareness Plan is administered and maintained through proper record maintenance and the periodic review and update of the communication materials for the targeted stakeholder audiences.

The Public Awareness Plan is overseen by the Senior Manager, Operations Services. Day-to-day responsibility for implementing and administering the Public Awareness Plan resides with the Public Awareness Manager. The company is guided by the following objectives to ensure that:

- Stakeholder audiences are properly identified
- Messages appropriate to each stakeholder are identified
- Appropriate media and communication vehicles are selected to reach each stakeholder audience
- Messages are delivered as specified in the Plan
- The effectiveness of the Plan is periodically evaluated
- The Plan is modified to reflect changing situations or in response to stakeholder feedback or recommendations resulting from periodic effectiveness evaluations



NOTE: While RP1162 is not intended to focus on communications that occur immediately after a pipeline-related emergency, in some situations, it may be necessary to conduct lesson learned activities following a pipeline release or emergency. Those activities could include researching the effectiveness of previous communication messages, methods, frequency and reach.

8.1 Recordkeeping Requirements

The responsibility for maintaining appropriate records and materials resides with the Public Awareness Manager.

Records and other documentation that reflect communications to stakeholder audiences are retained for a minimum of five years within the Public Awareness database and central storage location in electronic format. Records that cannot be readily converted to electronic format are kept by the Public Awareness Manager with copies existing in the source location as necessary.

Documented activities that are retained include:

- Samples of the materials used to communicate messages
- Copies of any survey results, focus groups or interviews conducted
- Routine assessments of plan implementation
- Copies of evaluations of effectiveness efforts
- Copies of any independent evaluations made
- Determinations made concerning any supplemental enhancements
- Recommendations for improvements to the Plan

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8.2 Plan Updating Procedures Based on changing circumstances and/or the results of Plan evaluations, the Plan, and associated Public Awareness SOPs are updated according to [SOP HLA.03 Management of Change](#).

The following standards are applied to the administration and maintenance of this Plan in order to implement continuous improvement:

- The Public Awareness Plan shall be reviewed annually at intervals not to exceed fifteen months, but at least once every calendar year and updated as required to reflect stakeholder feedback, effectiveness evaluations, regulatory requirements, or changes in operating status.
- Responsibility for coordinating the periodic review of the Plan lies with the Public Awareness Manager.
- The annual review is documented on the applicable form(s) for *Public Awareness Plan Annual Review* and stored in the central storage location for all public awareness information.
- Recommendations for altering, editing or revising the Plan and the associated public awareness procedures can be made by any Operations employee, as detailed in the [SOP HLA.03 Management of Change](#).
- The Vice President of Technical Services approves necessary changes and any expenditure for development of new initiatives or materials, as detailed in [SOP HLA.03 Management of Change](#).
- Revised sections, pages, or procedures are re-issued in accordance with [SOP HLA.03 Management of Change](#).

9.0 References

[HLA.01 Glossary and Terms](#)
[HLA.03 Management of Change](#)
[HLI.30 Third Party Damage](#)
[HLI.40 Public Awareness Plan—Communication with API RP1162-defined Stakeholders](#)
Public Awareness White Paper

Appendix A: OQ Task Requirements

There are no Operator Qualification (OQ) task requirements for this SOP.

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**Appendix B:
Management
Commitment to
Public Awareness**

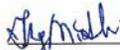
Management Commitment to Public Awareness

Energy Transfer and its management are committed to operating a safe and reliable pipeline system. The Company is also committed to providing educational material to key stakeholders in order to develop stronger relationships with the communities in which it operates. Providing materials with messages about the role of pipelines, safety, damage prevention, and emergency response will improve the safety and security of the pipelines the company operates and the communities in which they traverse.

The Public Awareness Program is consistent with, and reinforces, the practices and policies of the Company. Energy Transfer Management, employees and contractors are committed to supporting public awareness efforts. Further, Management will provide adequate financial and employee resources in order to promote pipeline public awareness that will result in positive outcomes, while also achieving regulatory compliance and meeting industry standards.



Eric J. Amundsen
Senior Vice President, Operations



Gregory G. McIlwain
Senior Vice President, Operations

SPLP Exhibit No. JP-3
HLI.40 Public Awareness Plan-
Communication with API RP 1162
Stakeholders

C-2018-3006116
10/6/20 JK

SPLP
JP-3



ENERGY TRANSFER

***Public Awareness Plan—
 Communication with API
 RP1162- defined
 Stakeholders***

Standard Operating Procedures

Applicable to Hazardous Liquids Pipelines and Related Facilities

Code Reference :	Procedure No.: HLI.40	
49 CFR: 195.440; RRC 8.235, 8.310, 8.315	Effective Date: <i>04/01/18</i>	Page 1 of 8

1.0 Purpose API RP 1162 requires pipeline operators to communicate with specific stakeholders. This Standard Operating Procedure (SOP) establishes the guidelines for the communication with the following four audience groups – Affected Public, Emergency Officials, Public Officials and Excavators – under the Public Awareness Plan.

2.0 Scope This SOP describes the requirements of the Public Awareness Plan to communicate with the API RP1162 defined stakeholders on a regular frequency and records the results of these communications.

3.0 Applicability This SOP applies to all pipelines under the requirements of the company’s Public Awareness Plan.

4.0 Frequency As specified in SOP [HLA.17 Public Awareness Plan](#), the baseline frequency for communicating and documenting communication with each stakeholder audience is defined below.

- Affected Public are every 2 years
- Emergency Officials are annually
- Public Officials are every 3 years
- Excavators are annually

Supplemental frequency for a specified area, pipeline, or other designation, determined under the Public Awareness Plan and this SOP: Documented by the Public Awareness Manager.

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 Communication with API
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5.0 Governance The following table identifies the responsibility, accountability, and authority for communication with the API RP1162-defined stakeholder audiences.

Function	Responsibility	Accountability	Authority
Communicate messages about pipeline safety and interact with Affected Public, Emergency Officials, Public Officials and Excavators	Area Management / Operations Personnel	Public Awareness Manager	Senior Manager, Operations Services
Determine the Message	Public Awareness Manager	Public Awareness Manager	Senior Manager, Operations Services
Distribute communication messages via targeted mail	Public Awareness Manager	Public Awareness Manager	Senior Manager, Operations Services
Determine Supplemental Messages, Frequencies, and Activities	Public Awareness Manager	Public Awareness Manager	Senior Manager, Operations Services
Develop and Maintain the Public Awareness Database	Public Awareness Manager	Public Awareness Manager	Senior Manager, Operations Services

6.0 Terms and Definitions

Terms associated with this SOP and their definitions follow in the table below. For general terms, refer to SOP [HLA.01 Glossary and Terms](#).

Terms	Definitions
Affected Public	The Affected Public includes people who occupy structures on land on which the pipeline is buried. A partial list includes homeowners, homeowners associations, farmers, tenants, landowners, businesses, and industrial facilities.
Emergency Officials	State and local law enforcement departments, emergency medical services, fire departments, 911 operators/emergency dispatch centers or others that can benefit from communication of pipeline safety, incident response and

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	related public awareness messages, and interaction.
Public Officials	Mayors, city, town, or county managers, planning boards or committees that serve the public in a capacity that can benefit from communication of planning or pipeline safety and related public awareness messages.
Excavator	Anyone who may dig in the vicinity of pipelines with manual or mechanized equipment with the potential to cause damage or create an incident on the pipeline or related facilities. For the purpose of this SOP, residents are not considered excavators, since public awareness communications with residents occurs under SOP HLA.17 Public Awareness Plan.

**7.0
 Public Awareness
 Plan—
 Communication
 with API RP112-
 defined
 Stakeholders**

This procedure contains the following sections:

- Communicate Message and Interact with Affected Public
- Communicate Message and Interact with Emergency Officials
- Communicate Message and Interact with Public Officials
- Communicate Message and Interact with Excavators
- Targeted Distribution of Print Materials to API RP-1162 defined Stakeholders
- Determine the Message for the Affected Public
- Develop and Maintain the Public Awareness Database
- Determine Supplemental Messages, Frequencies and Activities
- Documentation Requirements



NOTE: Persons occupying property within 660 feet of the centerline will be included.

**7.1
 Communicate
 Message and
 Interact with
 the Affected
 Public**

Area Management is responsible for maintaining contact and communications with the Affected Public in their areas. Communications focused on pipeline safety with a particular stakeholder that occur during the normal course of business are considered per occurrence contact. Area Management is responsible for documenting the per occurrence contact within the public awareness database.

The Public Awareness Manager is responsible communicating with the Affected Public on a recurring basis via targeted distribution of print materials.

The Public Awareness Manager is responsible for documenting targeted distribution of print materials within the public awareness database.

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 Communication with API
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**7.2
 Communicate
 Message and
 Interact with
 Emergency
 Officials**

Area Management is responsible for maintaining contact and communications with Emergency Officials in their areas. Area Management may communicate and interact with emergency officials through formal and informal interactions. Communications focused on pipeline safety with a particular stakeholder that occur during the normal course of business are considered per occurrence contact. Area Management will also communicate and interact with emergency officials via a formalized group meeting hosted by an association/third party.

Area Management is responsible for documenting the per occurrence contact within the public awareness database. The Public Awareness Manager is responsible for documenting the group meetings with emergency officials within the public awareness database.

Area Management can perform the communication with company employees, with a contractor, a third party (such as an area damage prevention group), or a combination. The use of a contractor or a third party should include the evaluation of the contractor’s programs to verify that they meet the requirements of the first edition of American Petroleum Institute’s Recommended Practice 1162 (RP-1162) and the company. The general guideline for conducting Emergency Official meetings is listed below.

Step	Activity
1	PREPARE meeting materials.
2	INCLUDE an overview of normal operations and emergency procedures.
3	FOCUS discussions on mutual concerns related to emergency response and pipeline safety.
4	EXCHANGE emergency contact lists.
5	ACQUAINT the Emergency Officials with company facilities and ability to respond to emergency situations.
6	REVIEW local area emergency plan.
7	DETERMINE their ability to provide emergency assistance.
8	DISCUSS mutual assistance for leaks, ruptures, fires, or other emergency situations.
9	SEND meeting materials to those that cannot attend the meeting.
10	FOLLOW-UP on requests for additional information or training.
11	PLAN for and CONDUCT emergency simulations as required.
12	DOCUMENT attendees so they can be added to the Public Awareness Database.
13	DOCUMENT communication in public awareness database.

**Public Awareness Plan—
 Communication with API
 RP1162-defined
 Stakeholders**

Code Reference : 49 CFR: 195.440; RRC 8.235, 8.310, 8.315	Procedure No.: HLI.40 <i>Effective Date:</i> 04/01/18	Page 5 of 8
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**7.3
 Communicate
 Message and
 Interact with
 Public Officials**

Area Management is responsible for maintaining contact and communications with Public Officials in their areas and for documenting the contact and communication.

The Public Awareness Manager is responsible for maintaining a current schedule of mailings to Public Officials. The schedule makes efficient use of company resources while maintaining the frequency necessary for effective communication.

The following steps detail the process for the mass mailings to Public Officials.

Step	Task	Done By
1	NOTIFY Director, GIS / Engineering Records of readiness to mail to Public Officials.	Public Awareness Manager
2	SEND centerline shape files of pipeline assets and facilities to mail vendor.	GIS Analyst
3	WORK with vendor to ACQUIRE data to IDENTIFY addresses. APPLY mailing buffer, CLASSIFY addresses and CONDUCT mailing.	Public Awareness Manager
4	RECEIVE documentation and proof of mailing from USPS. REVIEW mail receipts.	Public Awareness Manager
5	RECEIVE returned mail, DOCUMENT and SEND addresses to vendor for further analysis to ascertain why an address was undeliverable.	Public Awareness Manager
6	RETRIEVE documentation from vendor and LOAD documentation of mailing into company's the Public Awareness Database.	Public Awareness Manager

**7.4
 Communicate
 Message and
 Interact with
 Excavators**

Area Management is responsible for maintaining contact and communications with Excavators in their areas. Area Management may communicate and interact with emergency officials through formal and informal interactions. Communications focused on pipeline safety with a particular stakeholder that occur during the normal course of business are considered per occurrence contact. Area Management will also communicate and interact with emergency officials via a formalized group meeting hosted by an association/third party.

Area Management is responsible for documenting the per occurrence contact within the public awareness database. The Public Awareness Manager is responsible for documenting the group meetings with emergency officials within the public awareness database.

Area Management can perform the communication with company employees, with a contractor, a third party (such as an area damage prevention group or a state one call center) or a combination. The use of a contractor or a third party should include the

**Public Awareness Plan—
 Communication with API
 RP1162-defined
 Stakeholders**

Code Reference : 49 CFR: 195.440; RRC 8.235, 8.310, 8.315	Procedure No.: HLI.40 <i>Effective Date:</i> 04/01/18	Page 6 of 8
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evaluation of the contractor’s programs to verify that they meet the requirements of RP-1162 and the company. The general guideline for conducting excavator meetings is listed below.

Step	Activity
1	PREPARE meeting materials.
2	DESCRIBE the company’s Damage Prevention Program per SOP HLI.30 Third Party Damage.
3	DISCUSS the company’s use of One-Call Notification System.
4	EXPLAIN the requirements for notification prior to any excavation regardless of the presence of established markers.
5	EXPLAIN the requirements for a company representative to locate the pipeline before any excavation begins.
6	DESCRIBE the potential consequences of damages and incidents.
7	PROVIDE information on reporting damages and incidents.
8	SEND meeting materials to those that don’t attend the meeting.
9	FOLLOW-UP on requests for additional information.
10	DOCUMENT attendees so they can be added to the Public Awareness Database.
11	DOCUMENT communication in the Public Awareness Database.

**7.5
 Determine the
 Message for
 Targeted
 Distribution of
 Print Materials**

The Public Awareness Manager is responsible for determining the message content of print materials. Baseline messages, by audience and type of pipeline system, should be determined using API RP 1162. Updates to the initial baseline message follow the process identified below and include supplemental content or contact frequencies as necessary.

**7.6
 Targeted
 Distribution of
 Print Materials
 to API RP-1162
 defined
 Stakeholders**

The Public Awareness Manager is responsible for maintaining a current schedule of mailings to API RP1162-defined stakeholders. The schedule makes efficient use of company resources while maintaining the frequency necessary for effective communication. The Public Awareness Manager can develop a sub-process for smaller mail outs. The following steps detail the process for the targeted distribution of print materials.

Step	Task	Done By
1	NOTIFY Director, GIS / Engineering Records of readiness to mail to Public Officials.	Public Awareness Manager
2	SEND centerline shape files of pipeline assets and facilities to mail vendor.	GIS Analyst

**Public Awareness Plan—
 Communication with API
 RP1162-defined
 Stakeholders**

Code Reference : 49 CFR: 195.440; RRC 8.235, 8.310, 8.315	Procedure No.: HLI.40 <i>Effective Date:</i> 04/01/18	Page 7 of 8
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Step	Task	Done By
3	WORK with vendor to ACQUIRE data to IDENTIFY addresses. APPLY mailing buffer, classify addresses and CONDUCT mailing.	Public Awareness Manager
4	RECEIVE documentation and proof of mailing from USPS. REVIEW mail receipts.	Public Awareness Manager
5	RECEIVE returned mail, DOCUMENT and SEND addresses to vendor for further analysis to ascertain why an address was undeliverable.	Public Awareness Manager
6	RETRIEVE documentation from vendor and LOAD documentation of mailing into company's the Public Awareness Database.	Public Awareness Manager

**7.7
 Develop and
 Maintain the
 Public
 Awareness
 Database**

The Public Awareness Plan master database resides within a web-based application. All information that is available in electronic format or that can reasonably be converted to electronic format is stored in the Public Awareness Database. In addition to the master database, the remaining Public Awareness materials are stored in a common area on the data servers.

These following steps are completed on a regular basis to maintain a current status in the Public Awareness Database.

Step	Task
1	INCORPORATE Field Data into the Public Awareness Database, per contact occurrence.
2	VERIFY contact information is in the Public Awareness Database
3	COORDINATE the correction of any discrepancies.
4	VERIFY that messages are attached to the database records following the mail out.

**7.8
 Determine
 Supplemental
 Messages,
 Frequencies,
 and Activities**

Supplemental techniques such as increased message frequency, supplemental messages, or the deployment of different communication methods may be necessary for the development of effective public awareness communication with each stakeholder audience. Following the evaluation of the Public Awareness Plan effectiveness in SOP [HLA.17 Public Awareness Plan](#), the resulting recommendations regarding supplemental messages, frequencies and activities should be incorporated into the methods used for communicating with stakeholders.

***Public Awareness Plan—
 Communication with API
 RP1162-defined
 Stakeholders***

Code Reference : 49 CFR: 195.440; RRC 8.235, 8.310, 8.315	Procedure No.: HLI.40 <i>Effective Date:</i> 04/01/18	Page 8 of 8
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**8.0
 Documentation
 Requirements**

Record data in electronic database, utilize the following form(s) as applicable:

- [I.40.A – Public Awareness Contact Data Form](#)

Records and other documentation that reflect communications to stakeholder audiences are retained for a minimum of five years within the Public Awareness Database and central storage location in electronic format. Records that cannot be readily converted to electronic format are kept by the Public Awareness Manager with copies existing in the source location as necessary for a minimum of five years.

Documentation of the following is required under this SOP:

- Document contact (per occurrence) with RP1162-defined stakeholders in public awareness database. Utilize the applicable form(s) for Public Awareness Contact Data Form or data can be entered directly into public awareness database.
- Contact data for the in the Public Awareness Database.
- Documentation related to targeted distribution of print materials – schedules, brochures, postal certificates, mail lists -- in the Public Awareness Database.
- Documentation related to formalized meetings with stakeholders -- meeting sign-in sheets, invitations, contact lists in the Public Awareness Database.
- Supplemental activities in the Public Awareness Database.

**9.0
 References**

- [HLA.03 Management of Change](#)
[HLA.17 Public Awareness Plan](#)
[I.40.A Public Awareness Contact Data Form](#)

**Appendix A:
 OQ Task
 Requirements**

There are no Operator Qualification (OQ) task requirements for this SOP.

**SPLP Exhibit No. JP-4
Affected Public and Excavator Brochure
used in 2018 PAP mailing and 2019
supplemental mailing**

C-2018-3006116
10/6/20 JK

**SPLP
JP-4**



FACTS ABOUT PIPELINE SAFETY IN YOUR COMMUNITY

HECHOS ACERCA DE LAS TUBERÍAS SEGURO EN SU COMUNIDAD

Know

Infórmese

Recognize

Reconozca

Respond

Responda





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 approximately 86,000 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 38 states.

Approximately two-thirds of the natural gas and petroleum products we use every day are transported through underground pipelines – making them an essential part of the nation's infrastructure. Studies have confirmed that pipelines are the safest way to transport energy in the United States.

You are receiving this information because Energy Transfer, or one of its affiliates, may operate or maintain a pipeline in your community. We ask that you review the following important safety information, encourage you to share it with others and retain for future reference.

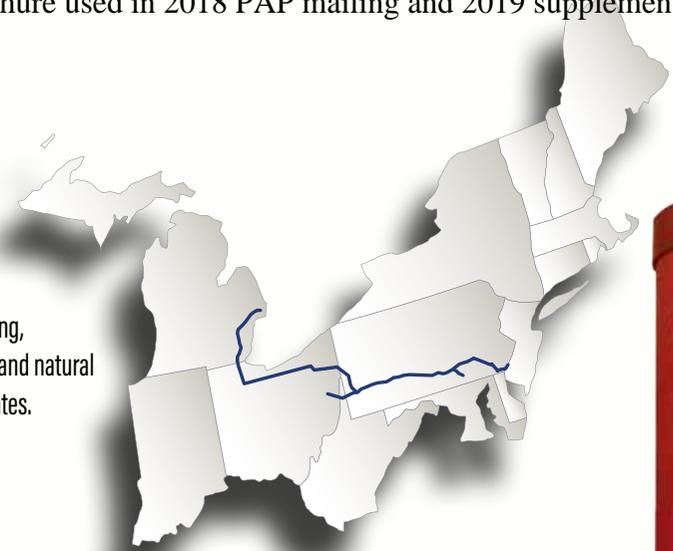


If you would like more information, please visit us at energytransfer.com or call our non-emergency number at 877-795-7271.



We are strongly committed to operating a safe, reliable pipeline system. As part of that commitment, we strive to enhance public safety and environmental protection through increased public awareness and knowledge.

Sunoco Pipeline operates a geographically diverse portfolio of energy assets including, pipelines, terminalling and marketing assets. Crude oil, refined products, natural gas and natural gas liquids are transported through a 12,000-mile pipeline system that traverses 21 states.



24-HOUR EMERGENCY NUMBER:
800-786-7440

PRODUCT: NATURAL GAS LIQUIDS



CONTACT

KNOW

RECOGNIZE

RESPOND


SUNOCO PIPELINE

An ENERGY TRANSFER Partnership

Estamos muy comprometidos a operar un sistema de tuberías seguro y confiable. Como parte de nuestro compromiso, nos esforzamos por mejorar la seguridad del público y la protección del medio ambiente a través de un aumento del conocimiento y concientización del público.

Sunoco Pipeline opera una cartera de activos energéticos en diversos puntos geográficos que incluyen tuberías, distribución y comercialización. Petróleo crudo, productos refinados, gas natural y líquidos de gas natural son transportados a través de un sistema de tuberías de 12,000 millas que cruza 21 estados.

**TELÉFONO DE EMERGENCIA
LAS 24 HORAS: 800-786-7440**

PRODUCTO: LÍQUIDOS DE GAS NATURAL



RESPONDA

RECONOZCA

INFÓRMESE

COMUNÍQUESE

National Pipeline Mapping System

Everyone can contribute to safety and security by knowing where pipelines are in their community and recognizing unauthorized activity. To find out who operates transmission pipelines in your area, visit the National Pipeline Mapping System at www.npms.phmsa.dot.gov.

Pipeline Safety

Our pipelines are regularly tested and maintained using cleaning devices, diagnostic tools and cathodic protection. We perform regular patrols, both on the ground and in the air, along our routes to ensure the security and integrity of our lines. For the safety of our system and for the people around it, we monitor pipeline operations 24 hours a day, 365 days a year.

Special Protective Measures

Certain pipelines are designated as being in "High Consequence Areas" (HCA) due to their location in high population or environmentally sensitive areas. In accordance with regulations, we have developed and implemented a written Integrity Management Program that addresses the risks on certain pipeline segments. Baseline and periodic assessments are conducted to identify and evaluate potential threats to our pipelines. Any significant defects discovered are remediated and the company monitors program effectiveness so that modifications can be recognized and implemented.

Along the Right-of-Way

Rights-of-way provide a permanent, limited access to privately owned property to enable us to operate, inspect, repair, maintain and protect our pipeline. Rights-of-way must be kept free of structures and other obstructions. Property owners should not dig, plant, place or build anything on the right-of-way without first calling 811 and having our personnel mark the pipeline, stake the easement and explain our property development guidelines to you.



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Sistema Nacional de Mapas de Tuberías

Todos pueden contribuir a la seguridad y protección sabiendo dónde se encuentran las tuberías en sus comunidades y reconociendo si hay actividad no autorizada. Para averiguar quién opera tuberías de transmisión en su zona, visite el Sistema Nacional de Mapas de Tuberías en www.npms.phmsa.dot.gov.

La seguridad de las tuberías

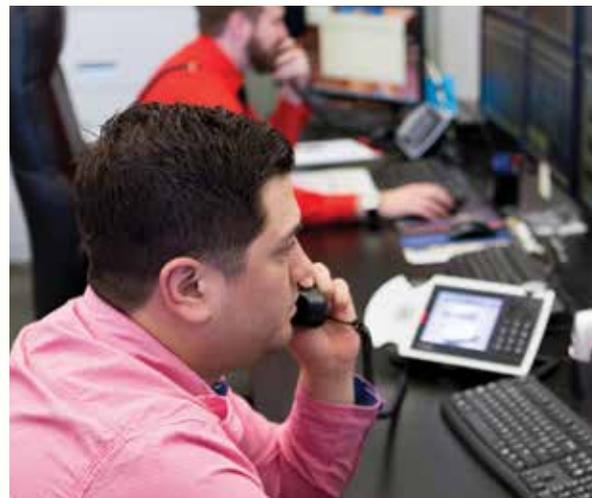
Realizamos pruebas y mantenimiento periódicos a nuestras tuberías usando dispositivos de limpieza, herramientas de diagnóstico y protección catódica. Patrullamos regularmente, tanto por tierra como por aire, nuestras rutas para garantizar la seguridad y la integridad de nuestras líneas. Para conservar la seguridad de nuestro sistema y de las personas a su alrededor, monitoreamos las operaciones de las tuberías las 24 horas del día, los 365 días del año.

Medidas especiales de protección

Ciertas tuberías son designadas como de "Áreas de altas consecuencias" (High Consequence Areas, HCA) debido a su ubicación en áreas de mucha población o con ecosistemas frágiles. En conformidad con las normas, hemos desarrollado e implementado por escrito un Programa de Gestión de Integridad que trata los riesgos de ciertos segmentos de tuberías. Se realizan evaluaciones iniciales y periódicas para identificar y analizar las amenazas potenciales a nuestras tuberías. Se corrigen todos los defectos significativos detectados y la compañía monitorea la eficacia del programa para que se puedan reconocer e implementar las modificaciones.

En el derecho de paso

El derecho de paso provee un acceso limitado y permanente a una propiedad privada para permitirnos operar, inspeccionar, reparar, mantener y proteger nuestra tubería. El derecho de paso se debe mantener libre de estructuras y otras obstrucciones. Los dueños de la propiedad no deben excavar, plantar, colocar o construir nada sobre el derecho de paso sin llamar primero al 811. Nuestro personal tiene que indicar la tubería, colocar estacas en el paso y explicarle a usted nuestras directivas para el desarrollo de la propiedad.



Pipelines are typically made of steel, covered with a protective coating and buried several feet underground. For your safety, markers are used to indicate the approximate location of pipelines. The markers contain the name of the pipeline operator and emergency contact information. Keep in mind that pipelines may not follow a straight line between markers nor do markers indicate the exact location and depth of the pipeline.

Leaks from pipelines are unusual, but we want you to know what to do in the unlikely event one occurs. The table below describes the types of products transported by our pipelines. Refer to the Contact page to find out which products may be transported in your area. You may be able to recognize a leak by the following signs:

	Natural Gas	Natural Gas Liquids (Butane, Ethane, Propane)	Petroleum (Crude Oil, Gasoline, Diesel, Jet Fuel, Kerosene)	Hydrogen Sulfide (H ₂ S)
By Sight 	<ul style="list-style-type: none"> Dust blowing from a hole in the ground. Continuous bubbling in wet or flooded areas. Dead or discolored vegetation in a green area. Flames, if a leak has ignited. 	<ul style="list-style-type: none"> Dust blowing from a hole in the ground. Continuous bubbling in wet or flooded areas. Dead or discolored vegetation in a green area. Flames, if a leak has ignited. Ice around a leak. Vapor cloud or mist. 	<ul style="list-style-type: none"> Pool of liquid on the ground. Rainbow sheen on the water. Continuous bubbling in wet or flooded areas. Ice around a leak. Vapor cloud or mist. Flames, if a leak has ignited. Dead or discolored vegetation in a green area. 	<ul style="list-style-type: none"> Dust blowing from a hole in the ground. Continuous bubbling in wet or flooded areas. Dead or discolored vegetation in a green area. Flames, if a leak has ignited.
By Sound 	<ul style="list-style-type: none"> Blowing or hissing sound. 	<ul style="list-style-type: none"> Blowing or hissing sound. 	<ul style="list-style-type: none"> Blowing or hissing sound. 	<ul style="list-style-type: none"> Blowing or hissing sound.
By Smell 	<ul style="list-style-type: none"> An unusual smell or gaseous odor. Odorless unless mercaptan, a chemical odorant, is added to give it a distinctive smell. 	<ul style="list-style-type: none"> An unusual smell or gaseous odor. Odorless unless mercaptan, a chemical odorant, is added to give it a distinctive smell. 	<ul style="list-style-type: none"> An unusual smell or gaseous odor. 	<ul style="list-style-type: none"> Foul sulfur odor, similar to rotten eggs. H₂S exposure may result in asphyxiation (suffocation) and prolonged exposure to low concentrations can deaden the sense of smell.

Las tuberías son típicamente de acero, tienen un revestimiento protector y se entierran a varios pies. Para su seguridad, la ubicación aproximada de las tuberías se indica con señales. Las señales contienen el nombre del operador de la tubería e información sobre a quién contactar en caso de emergencia. Recuerde que la tubería quizá no siga una línea recta entre una señal y otra o quizá las señales no indiquen la ubicación y la profundidad exactas de la tubería.

Las fugas de tuberías son poco comunes pero queremos que sepa qué hacer si se produce este evento poco probable. El cuadro de abajo describe los tipos de productos que nuestras tuberías transportan. Consulte la página de Contacto para averiguar cuáles productos pueden ser transportados en su zona. Es posible que reconozca una fuga por las siguientes señales:

	Gas Natural	Líquidos de Gas Natural (Butano, Etano, Propano)	Petróleo (Petróleo crudo, Gasolina, Diesel, Combustible pesado, Kerosén)	Sulfuro de Hidrógeno (H ₂ S)
Por la vista 	<ul style="list-style-type: none"> • Polvo que vuela de un orificio en la tierra. • Burbujeo continuo en áreas húmedas o inundadas. • Vegetación muerta o descolorida en un área verde. • Llamas, si la fuga se encendió. 	<ul style="list-style-type: none"> • Polvo que vuela de un orificio en la tierra. • Burbujeo continuo en áreas húmedas o inundadas. • Vegetación muerta o descolorida en un área verde. • Llamas, si la fuga se encendió. • Hielo alrededor de una fuga. • Una nube de vapor o neblina. 	<ul style="list-style-type: none"> • Charco de líquido en el suelo. • Mancha de brillo policromo en el agua. • Burbujeo continuo en áreas húmedas o inundadas. • Hielo alrededor de una fuga. • Una nube de vapor o neblina. • Llamas, si la fuga se encendió. • Vegetación muerta o descolorida en un área verde. 	<ul style="list-style-type: none"> • Polvo que vuela de un orificio en la tierra. • Burbujeo continuo en áreas húmedas o inundadas. • Vegetación muerta o descolorida en un área verde. • Llamas, si la fuga se encendió.
Por el sonido 	<ul style="list-style-type: none"> • Sonido de soplido o silbido. 	<ul style="list-style-type: none"> • Sonido de soplido o silbido. 	<ul style="list-style-type: none"> • Sonido de soplido o silbido. 	<ul style="list-style-type: none"> • Sonido de soplido o silbido.
Por el olfato 	<ul style="list-style-type: none"> • Un olor inusual u olor a gas. • Es inodoro a menos que se agregue mercaptano, un odorante químico, para darle un olor característico. 	<ul style="list-style-type: none"> • Un olor inusual u olor a gas. • Es inodoro a menos que se agregue mercaptano, un odorante químico, para darle un olor característico. 	<ul style="list-style-type: none"> • Un olor inusual u olor a gas. 	<ul style="list-style-type: none"> • Olor desagradable a azufre, similar a huevos podridos. • La exposición al H₂S puede causar asfixia (sofocación) y la exposición prolongada a bajas concentraciones puede reducir el sentido del olfato.



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

Don't ever assume you know where the underground utilities are located.

One of the greatest single challenges to safe pipeline operations is the accidental damage caused by excavation. In accordance with state and federal guidelines, a damage prevention program has been established to prevent damage to our pipelines from excavation activities, using non-mechanical or mechanical equipment or explosives to move earth, rock or other material below existing grade. Laws vary by state, but most require a call to 811 between 48 to 72 hours before you plan to dig. Your local One-Call Center will let you know if there are any buried utilities in the area, and the utility companies will be notified to identify and clearly mark the location of their lines at no cost to you.



ALWAYS CALL 811 BEFORE YOU DIG.



WAIT THE REQUIRED AMOUNT OF TIME.



RESPECT THE MARKS.



DIG WITH CARE.

If you should happen to strike the pipeline while working in the area, it is important that you phone us immediately. Even seemingly minor damage, such as a dent or chipped pipeline coating, could result in a future leak if not promptly repaired.

What should I do if I suspect a leak?

- Leave the area immediately on foot and warn others to stay away.
- Abandon any equipment being used in or near the area.
- Avoid any open flame or other sources of ignition.
- Call 911 or local law enforcement from a safe location.
- Notify the pipeline company immediately.
- Do not attempt to extinguish a pipeline fire.
- Do not attempt to operate pipeline valves.

Wait for the site to be marked. Marking could be either by paint, flags or stakes.

APWA Color Code

-  Proposed excavation
-  Temporary survey markings
-  Electric power lines, cables, conduit and lighting cables
-  Gas, oil, steam, petroleum or gaseous materials
-  Communication, alarm or signal lines, cables or conduit
-  Potable water
-  Reclaimed water, irrigation and slurry lines
-  Sewers and drain lines

CONTACT

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Affected Public and Excavator Brochure used in 2018 PAP mailing and 2019 supplemental mailing

Determina lo que está **bajo tierra.**

Llama antes de excavar.

Nunca suponga que sabe dónde están los servicios públicos subterráneos.

Uno de los retos más grandes a las operaciones seguras de las tuberías es el daño accidental causado por una excavación. De acuerdo con las pautas estatales y federales, se ha implementado un programa de prevención de daños para prevenir que nuestras tuberías sean dañadas durante actividades de excavaciones, donde se emplean equipos mecánicos y no mecánicos o explosivos para mover tierra, piedra o algún otro tipo de material debajo de la superficie actual. Las leyes varían de estado a estado, pero la mayoría de los estados requieren que haga una llamada al 811 de 48 a 72 horas antes de cuando piensa excavar. Su centro One-Call local le informará si hay algún servicio público enterrado en el área, y se notificará a las compañías de servicios públicos para que identifiquen y señalen claramente la ubicación de sus líneas sin costo para usted.



SIEMPRE LLAME 811 ANTES DE EXCAVAR.



ESPERE LA CANTIDAD DE TIEMPO EXIGIDA.



RESPETE LAS SEÑALES.



EXCAVE CON CUIDADO.

Si llegara a golpear la tubería mientras trabaja en el área, es importante que nos llame por teléfono inmediatamente. Incluso los daños que parecen mínimos, como una abolladura o el raspón del recubrimiento de la tubería, podrían causar una fuga en el futuro si no se reparan rápidamente.

SPLP Exh. No. JP-4,

¿Qué debe hacer si sospecha que hay una fuga?

- Retírese inmediatamente del área a pie e indique a otras personas que se mantengan alejadas.
- Abandone cualquier equipo que esté utilizando en el área o cerca de ella.
- Evite llamas abiertas u otras fuentes de ignición.
- Llame al 911 ó a la policía local desde un lugar seguro.
- Notifique inmediatamente a la compañía de la tubería.
- No intente extinguir un incendio de una tubería.
- No intente manipular las válvulas de la tubería.

Aguarde la marcación del sitio. Las marcas pueden ser con pintura, banderas o estacas.

Código de colores de APWA

- Excavación propuesta
- Señales temporales de relevos topograficos
- Líneas de energía eléctrica, cables, conductos y cables de iluminación
- Gas, aceite, vapor, petróleo o materiales gaseosos
- Comunicación, líneas de señales o de alarma, cables o conductos
- Agua potable
- Agua recuperada, líneas de irrigación
- Líneas de drenaje y alcantarillado

Energy Transfer se dedica principalmente al transporte, almacenamiento, colección, procesamiento, compresión y tratamiento de gas natural, y al transporte, fraccionamiento y almacenamiento de líquidos de gas natural (LGN). Energy Transfer, una compañía energética basada en Texas, fundada en 1995 como una pequeña compañía interestatal de tuberías de gas natural, es ahora una de las compañías de transporte de gas natural y líquidos de gas natural de mayor crecimiento en el país. Somos propietarios y operamos un diversificado portafolio de bienes energéticos, que incluyen aproximadamente 86,000 millas de tuberías de gas natural de corriente media, inter e intraestatales y tuberías de LGN.

Aproximadamente dos tercios del gas natural y de los productos del petróleo que usamos a diario se transportan a través de tuberías subterráneas, convirtiéndose en una parte esencial de la infraestructura del país. Los estudios han confirmado que las tuberías son la manera más segura para transportar energía en los Estados Unidos.

Usted está recibiendo esta información porque es posible que Energy Transfer, o uno de sus socios, opere o realice el mantenimiento de una tubería en su comunidad. Le pedimos que repase la siguiente información de seguridad importante, lo alentamos a que la comparta con otros y la conserve para consulta en el futuro.



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

Please share this important safety information with others - anyone who plans to dig.

Sírvase compartir esta importante información de seguridad con los demás o con cualquiera que tenga planeado hacer trabajos de excavación.



ENERGY TRANSFER

1300 Main Street
Houston, Texas 77002

PRST STD
U.S. Postage
PAID
Houston, TX
Permit NO. 2597

SPLP Exhibit No. JP-5
Emergency Responder and Public Official
Brochure used in 2019 mailing

C-2018-3006116
10/6/20 JK

SPLP
JP-5

Know, Recognize, Respond

**ARE YOU PREPARED TO RESPOND
TO A PIPELINE EMERGENCY?**

IMPORTANT INFORMATION ABOUT PIPELINE SAFETY IN YOUR COMMUNITY



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



Energy Transfer, 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 90,000 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 38 states.

Approximately two-thirds of the natural gas and petroleum products we use every day are transported through underground pipelines – making them an essential part of the nation's infrastructure. Studies have confirmed that pipelines are the safest way to transport energy in the United States.

You are receiving this information because Energy Transfer, or one of its affiliates, may operate or maintain a pipeline in your community. We ask that you review the following important safety information, encourage you to share it with others and retain for future reference.



If you would like more information, please visit us at energytransfer.com or call our non-emergency number at 877-795-7271.



We are strongly committed to operating a safe, reliable pipeline system. As part of that commitment, we strive to enhance public safety and environmental protection through increased public awareness and knowledge.

Sunoco Pipeline operates a geographically diverse portfolio of energy assets including, pipelines, terminalling and marketing assets. Crude oil, refined products, natural gas and natural gas liquids are transported through a 12,000-mile pipeline system that traverses 21 states.



**24-HOUR EMERGENCY NUMBER:
800-786-7440**

PRODUCT: NATURAL GAS LIQUIDS



CONTACT

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

Don't ever assume you know where the underground utilities are located.

One of the greatest single challenges to safe pipeline operations is the accidental damage caused by excavation. In accordance with state and federal guidelines, a damage prevention program has been established to prevent damage to our pipelines from excavation activities, using non-mechanical or mechanical equipment or explosives to move earth, rock or other material below existing grade. Laws vary by state, but most require a call to 811 between 48 to 72 hours before you plan to dig. Your local One-Call Center will let you know if there are any buried utilities in the area, and the utility companies will be notified to identify and clearly mark the location of their lines at no cost to you.



ALWAYS CALL 811 BEFORE YOU DIG.



WAIT THE REQUIRED AMOUNT OF TIME.



RESPECT THE MARKS.



DIG WITH CARE.

If you should happen to strike the pipeline while working in the area, it is important that you phone us immediately. Even seemingly minor damage, such as a dent or chipped pipeline coating, could result in a future leak if not promptly repaired.

National Pipeline Mapping System

Everyone can contribute to safety and security by knowing where pipelines are in their community and recognizing unauthorized activity. To find out who operates transmission pipelines in your area, visit the National Pipeline Mapping System at www.npms.phmsa.dot.gov. To download the mobile application to your iOS device free of charge, visit the App Store and search for “NPMS Public Viewer.” Pipeline Information Management and Mapping Application (PIMMA) is also available to assist government officials with displaying data in more detail.

Pipeline Safety

Our pipelines are regularly tested and maintained using cleaning devices, diagnostic tools and cathodic protection. We perform regular patrols, both on the ground and in the air, along our routes to ensure the security and integrity of our lines. For the safety of our system and for the people around it, we monitor pipeline operations 24 hours a day, 365 days a year.

Wait for the site to be marked. Marking could be either by paint, flags or stakes.

APWA Color Code

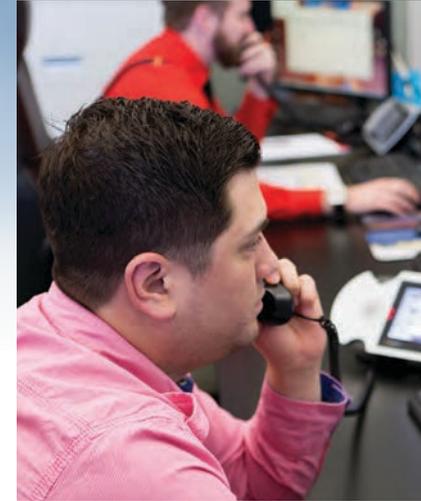
-  Proposed excavation
-  Temporary survey markings
-  Electric power lines, cables, conduit and lighting cables
-  Gas, oil, steam, petroleum or gaseous materials
-  Communication, alarm or signal lines, cables or conduit
-  Potable water
-  Reclaimed water, irrigation and slurry lines
-  Sewers and drain lines

Special Protective Measures

Certain pipelines are designated as being in “High Consequence Areas” (HCA) due to their location in high population or environmentally sensitive areas. In accordance with regulations, we have developed and implemented a written Integrity Management Program that addresses the risks on certain pipeline segments. Baseline and periodic assessments are conducted to identify and evaluate potential threats to our pipelines. Any significant defects discovered are remediated and the company monitors program effectiveness so that modifications can be recognized and implemented.

Along the Right-of-Way

Rights-of-way provide a permanent, limited access to privately owned property to enable us to operate, inspect, repair, maintain and protect our pipeline. Rights-of-way must be kept free of structures and other obstructions. Property owners should not dig, plant, place or build anything on the right-of-way without first calling 811 and having our personnel mark the pipeline, stake the easement and explain our property development guidelines to you.



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Product Characteristics

	Characteristics	Hazards
Natural Gas	<ul style="list-style-type: none"> • Lighter than air. • Dissipates rapidly into air. • Tasteless and colorless. • May contain hydrogen sulfide (H₂S). • Odorless unless mercaptan, a chemical odorant, is added to give it a distinctive smell. 	Natural gas is flammable and can ignite when it comes into contact with an ignition source. In confined spaces, exposure can cause dizziness or asphyxiation and may be toxic, if inhaled at high concentrations.
Natural Gas Liquids (Butane, Ethane, Propane)	<ul style="list-style-type: none"> • Initially heavier than air and will spread along ground and collect in low or confined areas. • Vapors may travel to source of ignition and flash back. • Tasteless and colorless. • Odorless in its natural state, however a faint smell may be present. 	NGL is flammable and can ignite when it comes into contact with an ignition source. Exposure can cause moderate irritation including headaches and dizziness. NGL can also contain H ₂ S.
Petroleum (Crude Oil, Gasoline, Diesel, Jet Fuel, Kerosene)	<ul style="list-style-type: none"> • Initially heavier than air and will spread along ground and collect in low or confined areas. • Vapors may travel to source of ignition and flash back. • An unusual smell or gaseous odor. 	Petroleum is flammable and can ignite when it comes into contact with an ignition source. Exposure can cause skin irritation, dizziness or asphyxiation and may be toxic, if inhaled at high concentrations. Fire may produce irritating and/or toxic gases. Requires use of positive pressure self-contained breathing apparatus (SCBA) or supplied air. Runoff may cause pollution or other hazards.
Hydrogen Sulfide (H ₂ S)	<ul style="list-style-type: none"> • Initially heavier than air and will spread along ground and collect in low or confined areas. • Colorless gas that is an irritant. • Foul sulfur odor, similar to rotten eggs. 	H ₂ S is flammable and can ignite when it comes into contact with an ignition source. Exposure can affect both oxygen utilization and the central nervous system of the human body. H ₂ S exposure may result in asphyxiation. The severity of health effects can vary depending on the level and duration of exposure however, prolonged exposure to low concentrations can deaden the sense of smell. Requires use of positive pressure SCBA or supplied air.

Pipelines are typically made of steel, covered with a protective coating and buried several feet underground. For your safety, markers are used to indicate the approximate location of pipelines. The markers contain the name of the pipeline operator, products transported and emergency contact information. Keep in mind that pipelines may not follow a straight line between markers, nor do markers indicate the exact location and depth of the pipeline.

Leaks from pipelines are unusual, but we want you to know what to do in the unlikely event one occurs. The table below describes the types of products transported by our pipelines. Refer to the Contact page to find out which products may be transported in your area. You may be able to recognize a leak by the following signs:

	Natural Gas	Natural Gas Liquids (Butane, Ethane, Propane)	Petroleum (Crude Oil, Gasoline, Diesel, Jet Fuel, Kerosene)	Hydrogen Sulfide (H ₂ S)
By Sight 	<ul style="list-style-type: none"> Dust blowing from a hole in the ground. Continuous bubbling in wet or flooded areas. Dead or discolored vegetation in a green area. Flames, if a leak has ignited. 	<ul style="list-style-type: none"> Dust blowing from a hole in the ground. Continuous bubbling in wet or flooded areas. Dead or discolored vegetation in a green area. Flames, if a leak has ignited. Ice around a leak. Vapor cloud or mist. 	<ul style="list-style-type: none"> Pool of liquid on the ground. Rainbow sheen on the water. Continuous bubbling in wet or flooded areas. Vapor cloud or mist. Flames, if a leak has ignited. Dead or discolored vegetation in a green area. 	<ul style="list-style-type: none"> Dust blowing from a hole in the ground. Continuous bubbling in wet or flooded areas. Dead or discolored vegetation in a green area. Flames, if a leak has ignited.
By Sound 	<ul style="list-style-type: none"> Blowing or hissing sound. 	<ul style="list-style-type: none"> Blowing or hissing sound. 	<ul style="list-style-type: none"> Blowing or hissing sound. 	<ul style="list-style-type: none"> Blowing or hissing sound.
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CONTACT THE PIPELINE COMPANY IMMEDIATELY, USING THE EMERGENCY CONTACT INFORMATION LOCATED ON THE PIPELINE MARKER.

Your Response:

Emergency Preparedness

When managing an emergency, protecting lives and the environment requires a concerted team effort. We strive to build partnerships with emergency responders and public officials in order to share resources, establish important lines of communication and provide education needed to safely respond to a pipeline related emergency. Our intent is to exchange information, evaluate potential emergency scenarios and discuss how to coordinate efforts. Emergency responders who are knowledgeable about the hazards and risks of pipeline operations are better able to act quickly to protect life, property and the environment. You will likely be the first on the scene of a pipeline incident – even before the pipeline company personnel.

Responding to an Emergency

- Approach the incident from upwind, uphill. Park vehicles a safe distance from the incident and turn off engines.
- Isolate the area. Restrict entry to trained emergency response and company personnel.
- Call 911 and the pipeline company immediately, using the emergency contact information located on the pipeline marker.
 - Eliminate ignition sources. Potential ignition sources include open flames, such as pilot lights or matches. Other sources include sparks from tools, doorbells, electric motors and switches, static electricity, vehicle engines, radios and cell phones.
 - Don't attempt to extinguish a pipeline fire with water or other chemicals. Doing so could prolong the emergency. Use water spray to protect surrounding exposure. Wet down exposed flammable areas in the vicinity and extinguish perimeter fires.
 - Don't attempt to operate valves or equipment. Shutting off the flow of product may actually create an even greater hazard. Rely on pipeline personnel – they are trained in the proper procedures.

Our Response:

Upon notification of a potential emergency, we will dispatch trained company personnel immediately. Response times will vary based on time of day, weather conditions, available personnel and incident location. While personnel are en route, please remain in contact with the pipeline company. We will provide information to local public safety officials to aid in their response to the emergency.

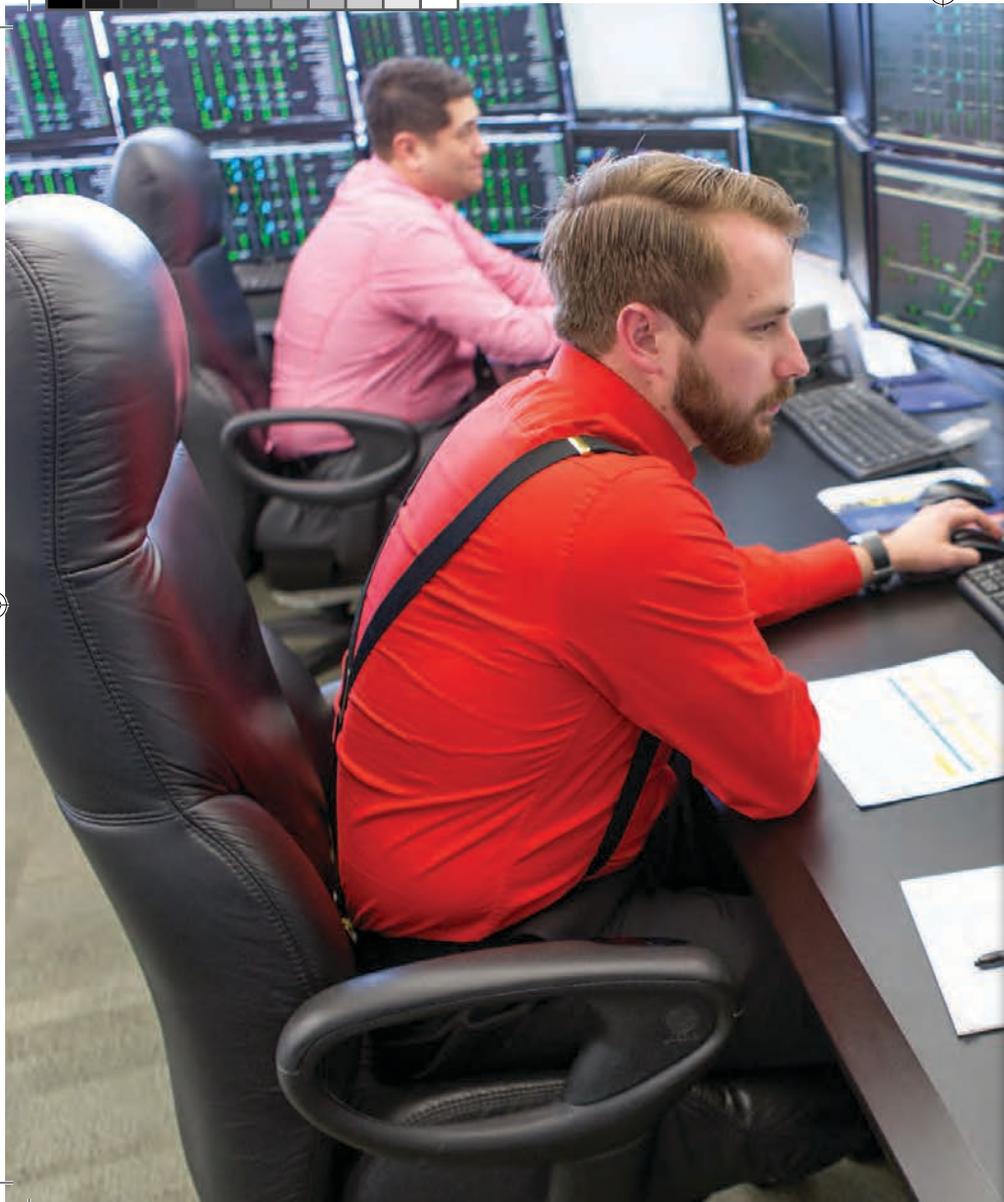
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Our Response:

Our control center will want to know:

- Caller's name / title / organization
- Caller's phone number(s) and phone number of person to call back (i.e. cell phone at site)
- Emergency information
- Location, include city and state
- What you see
- What you hear
- What you smell

Don't wait for an emergency to contact us. Please notify us anytime you have questions or would like more information concerning:

- Pipeline safety
- Emergency response plans
- Drills, table-top exercises, facility tours



DON'T ATTEMPT TO OPERATE VALVES OR EQUIPMENT. SHUTTING OFF THE FLOW OF PRODUCT MAY CREATE AN EVEN GREATER HAZARD.



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Houston, Texas 77002

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C-2018-3006116
10/6/20 JK

SPLP
JP-6



FACTS ABOUT PIPELINE SAFETY IN YOUR COMMUNITY

HECHOS ACERCA DE LAS TUBERÍAS SEGURO EN SU COMUNIDAD



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Infórmese, Reconozca, Responda



Energy Transfer, 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 90,000 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 38 states.

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Estamos muy comprometidos a operar un sistema de tuberías seguro y confiable. Como parte de nuestro compromiso, nos esforzamos por mejorar la seguridad del público y la protección del medio ambiente a través de un aumento del conocimiento y concientización del público.

Sunoco Pipeline opera una cartera de activos energéticos en diversos puntos geográficos que incluyen tuberías, distribución y comercialización. Petróleo crudo, productos refinados, gas natural y líquidos de gas natural son transportados a través de un sistema de tuberías de 12,000 millas que cruza 21 estados.

**TELÉFONO DE EMERGENCIA
LAS 24 HORAS: 800-786-7440**

PRODUCTO: LÍQUIDOS DE GAS NATURAL



National Pipeline Mapping System

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Sistema Nacional de Mapas de Tuberías

Todos pueden contribuir a la seguridad y protección sabiendo dónde se encuentran las tuberías en sus comunidades y reconociendo si hay actividad no autorizada. Para averiguar quién opera tuberías de transmisión en su zona, visite el Sistema Nacional de Mapas de Tuberías en www.npms.phmsa.dot.gov. Para descargar la aplicación móvil en su dispositivo iOS sin cargo alguno, visite el Apple Store y busque “NPMS Public Viewer.”

La seguridad de las tuberías

Realizamos pruebas y mantenimiento periódicos a nuestras tuberías usando dispositivos de limpieza, herramientas de diagnóstico y protección catódica. Patrullamos regularmente, tanto por tierra como por aire, nuestras rutas para garantizar la seguridad y la integridad de nuestras líneas. Para conservar la seguridad de nuestro sistema y de las personas a su alrededor, monitoreamos las operaciones de las tuberías las 24 horas del día, los 365 días del año.

Medidas especiales de protección

Ciertas tuberías son designadas como de “Áreas de altas consecuencias” (High Consequence Areas, HCA) debido a su ubicación en áreas de mucha población o con ecosistemas frágiles. En conformidad con las normas, hemos desarrollado e implementado por escrito un Programa de Gestión de Integridad que trata los riesgos de ciertos segmentos de tuberías. Se realizan evaluaciones iniciales y periódicas para identificar y analizar las amenazas potenciales a nuestras tuberías. Se corrigen todos los defectos significativos detectados y la compañía monitorea la eficacia del programa para que se puedan reconocer e implementar las modificaciones.

En el derecho de paso

El derecho de paso provee un acceso limitado y permanente a una propiedad privada para permitirnos operar, inspeccionar, reparar, mantener y proteger nuestra tubería. El derecho de paso se debe mantener libre de estructuras y otras obstrucciones. Los dueños de la propiedad no deben excavar, plantar, colocar o construir nada sobre el derecho de paso sin llamar primero al 811. Nuestro personal tiene que indicar la tubería, colocar estacas en el paso y explicarle a usted nuestras directivas para el desarrollo de la propiedad.



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By Smell 	<ul style="list-style-type: none"> Odorless unless mercaptan, a chemical odorant, is added to give it a distinctive smell. 	<ul style="list-style-type: none"> Odorless in its natural state, however a faint smell may be present. 	<ul style="list-style-type: none"> An unusual smell or gaseous odor. 	<ul style="list-style-type: none"> Foul sulfur odor, similar to rotten eggs. H₂S exposure may result in asphyxiation (suffocation) and prolonged exposure to low concentrations can deaden the sense of smell.

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Las tuberías son típicamente de acero, tienen un revestimiento protector y se entierran a varios pies. Para su seguridad, la ubicación aproximada de las tuberías se indica con señales. Las señales contienen el nombre del operador de la tubería, los productos transportados y la información de contacto en caso de emergencia. Recuerde que la tubería quizá no siga una línea recta entre una señal y otra o quizá las señales no indiquen la ubicación y la profundidad exactas de la tubería.

Las fugas de tuberías son poco comunes pero queremos que sepa qué hacer si se produce este evento poco probable. El cuadro de abajo describe los tipos de productos que nuestras tuberías transportan. Consulte la página de Contacto para averiguar cuáles productos pueden ser transportados en su zona. Es posible que reconozca una fuga por las siguientes señales:

	Gas Natural	Líquidos de Gas Natural (Butano, Etano, Propano)	Petróleo (Petróleo crudo, Gasolina, Diesel, Combustible pesado, Kerosén)	Sulfuro de Hidrógeno (H ₂ S)
Por la vista 	<ul style="list-style-type: none"> Polvo que vuela de un orificio en la tierra. Burbujeo continuo en áreas húmedas o inundadas. Vegetación muerta o descolorida en un área verde. Llamas, si la fuga se encendió. 	<ul style="list-style-type: none"> Polvo que vuela de un orificio en la tierra. Burbujeo continuo en áreas húmedas o inundadas. Vegetación muerta o descolorida en un área verde. Llamas, si la fuga se encendió. Hielo alrededor de una fuga. Una nube de vapor o neblina. 	<ul style="list-style-type: none"> Charco de líquido en el suelo. Mancha de brillo policromo en el agua. Burbujeo continuo en áreas húmedas o inundadas. Una nube de vapor o neblina. Llamas, si la fuga se encendió. Vegetación muerta o descolorida en un área verde. 	<ul style="list-style-type: none"> Polvo que vuela de un orificio en la tierra. Burbujeo continuo en áreas húmedas o inundadas. Vegetación muerta o descolorida en un área verde. Llamas, si la fuga se encendió.
Por el sonido 	<ul style="list-style-type: none"> Sonido de soplido o silbido. 	<ul style="list-style-type: none"> Sonido de soplido o silbido. 	<ul style="list-style-type: none"> Sonido de soplido o silbido. 	<ul style="list-style-type: none"> Sonido de soplido o silbido.
Por el olfato 	<ul style="list-style-type: none"> Es inodoro a menos que se agregue mercaptano, un odorante químico, para darle un olor característico. 	<ul style="list-style-type: none"> Es inodoro en su estado natural, sin embargo, puede haber un leve olor presente. 	<ul style="list-style-type: none"> Un olor inusual u olor a gas. 	<ul style="list-style-type: none"> Olor desagradable a azufre, similar a huevos podridos. La exposición al H₂S puede causar asfixia (sofocación) y la exposición prolongada a bajas concentraciones puede reducir el sentido del olfato.



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

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One of the greatest single challenges to safe pipeline operations is the accidental damage caused by excavation. In accordance with state and federal guidelines, a damage prevention program has been established to prevent damage to our pipelines from excavation activities, using non-mechanical or mechanical equipment or explosives to move earth, rock or other material below existing grade. Laws vary by state, but most require a call to 811 between 48 to 72 hours before you plan to dig. Your local One-Call Center will let you know if there are any buried utilities in the area, and the utility companies will be notified to identify and clearly mark the location of their lines at no cost to you.



ALWAYS CALL 811 BEFORE YOU DIG.



WAIT THE REQUIRED AMOUNT OF TIME.



RESPECT THE MARKS.



DIG WITH CARE.

If you should happen to strike the pipeline while working in the area, it is important that you phone us immediately. Even seemingly minor damage, such as a dent or chipped pipeline coating, could result in a future leak if not promptly repaired.

What should I do if I suspect a leak?

- Leave the area immediately, on foot, if possible, in an uphill, upwind direction. Follow direction of local emergency response agencies.
- Abandon any equipment being used in or near the area.
- Avoid any open flame or other sources of ignition.
- Warn others to stay away.
- From a safe location, call 911 or local emergency response agencies.
- Notify the pipeline company immediately.
- Do not attempt to extinguish a pipeline fire.
- Do not attempt to operate pipeline valves.

Wait for the site to be marked. Marking could be either by paint, flags or stakes.

APWA Color Code

-  Proposed excavation
-  Temporary survey markings
-  Electric power lines, cables, conduit and lighting cables
-  Gas, oil, steam, petroleum or gaseous materials
-  Communication, alarm or signal lines, cables or conduit
-  Potable water
-  Reclaimed water, irrigation and slurry lines
-  Sewers and drain lines

CONTACT

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Determina lo que está **bajo tierra.**
Llama antes de excavar.

Nunca suponga que sabe dónde están los servicios públicos subterráneos.

Uno de los retos más grandes a las operaciones seguras de las tuberías es el daño accidental causado por una excavación. De acuerdo con las pautas estatales y federales, se ha implementado un programa de prevención de daños para prevenir que nuestras tuberías sean dañadas durante actividades de excavaciones, donde se emplean equipos mecánicos y no mecánicos o explosivos para mover tierra, piedra o algún otro tipo de material debajo de la superficie actual. Las leyes varían de estado a estado, pero la mayoría de los estados requieren que haga una llamada al 811 de 48 a 72 horas antes de cuando piensa excavar. Su centro One-Call local le informará si hay algún servicio público enterrado en el área, y se notificará a las compañías de servicios públicos para que identifiquen y señalen claramente la ubicación de sus líneas sin costo para usted.



SIEMPRE LLAME 811 ANTES DE EXCAVAR.



ESPERE LA CANTIDAD DE TIEMPO EXIGIDA.



RESPETE LAS SEÑALES.



EXCAVE CON CUIDADO.

Si llegara a golpear la tubería mientras trabaja en el área, es importante que nos llame por teléfono inmediatamente. Incluso los daños que parecen mínimos, como una abolladura o el raspón del recubrimiento de la tubería, podrían causar una fuga en el futuro si no se reparan rápidamente.

RECONOZCA

INFÓRMESE

COMUNÍQUESE

¿Qué debe hacer si sospecha que hay una fuga?

- Retírese del área inmediatamente, en lo posible a pie, cuesta arriba y en contra del viento. Siga las instrucciones de las agencias de respuesta a emergencias locales.
- Abandone cualquier equipo que esté utilizando en el área o cerca de ella.
- Evite llamas abiertas u otras fuentes de ignición.
- Advierta a otras personas que se mantengan alejadas.
- Llame al 911 ó a las agencias de respuesta a emergencias locales desde un lugar seguro.
- Notifique inmediatamente a la compañía de la tubería.
- No intente extinguir un incendio de una tubería.
- No intente manipular las válvulas de la tubería.

Aguarde la marcación del sitio. Las marcas pueden ser con pintura, banderas o estacas.

Código de colores de APWA

-  Excavación propuesta
-  Señales temporales de relevos topográficos
-  Líneas de energía eléctrica, cables, conductos y cables de iluminación
-  Gas, aceite, vapor, petróleo o materiales gaseosos
-  Comunicación, líneas de señales o de alarma, cables o conductos
-  Agua potable
-  Agua recuperada, líneas de irrigación
-  Líneas de drenaje y alcantarillado

Energy Transfer, una compañía energética con sede en Texas, fundada en 1995 como una pequeña compañía interestatal de tuberías de gas natural, es ahora una de las sociedades de responsabilidad limitada más grandes y más diversificadas de los Estados Unidos. Ubicada en una posición estratégica en una de las principales zonas de producción de los EE. UU., la compañía posee y opera una cartera geográficamente diversa de activos de energía, que incluyen activos de transporte y almacenamiento intermedio, intraestatal e interestatal. Energy Transfer opera cerca de 90,000 millas de tuberías de gas natural, petróleo crudo, líquidos de gas natural y productos refinados, así como instalaciones relacionadas, que incluyen instalaciones de terminales, almacenamiento, fraccionamiento, mezcla y varios activos de adquisición y marketing en 38 estados.

Aproximadamente dos tercios del gas natural y de los productos del petróleo que usamos a diario se transportan a través de tuberías subterráneas, convirtiéndose en una parte esencial de la infraestructura del país. Los estudios han confirmado que las tuberías son la manera más segura para transportar energía en los Estados Unidos.

Usted está recibiendo esta información porque es posible que Energy Transfer, o uno de sus socios, opere o realice el mantenimiento de una tubería en su comunidad. Le pedimos que repase la siguiente información de seguridad importante, lo alentamos a que la comparta con otros y la conserve para consulta en el futuro.

**Please share this
important safety
information with others –
anyone who plans to dig.**

**Sírvase compartir esta importante
información de seguridad con los demás o
con cualquiera que tenga planeado hacer
trabajos de excavación.**

Si desea obtener más información, visítenos en energytransfer.com o llame a nuestro número que no es para emergencias al 877-795-7271.



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PUBLIC VERSION

**SPLP Exhibit No. JP-7
HLA.17 Public Awareness Plan
REVISED**

SPLP
JP-7



ENERGY TRANSFER

Public Awareness Plan

Standard Operating Procedures

Applicable to Hazardous Liquids Pipelines and Related Facilities

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**1.0
Purpose**

The objectives of the Public Awareness Plan are to:

- Raise the awareness of the affected public and key stakeholders to the presence of buried hazardous liquids pipelines and associated facilities in the communities where the company operates hazardous liquids pipelines and related facilities.
- Better educate those who live or work near the company’s pipelines on recognizing and reacting to a hazardous liquids release or emergency and how to respond if they detect possible odors.
- Help excavators understand the steps they can take to prevent damage from outside forces and to help them respond safely and promptly should their actions cause damage to the company’s pipelines.
- Better educate the public, emergency officials, local officials, municipalities, school districts and other key groups about the company’s emergency response and key safety procedures in the unlikely event of an operating problem or emergency.
- Allow emergency response agencies that might respond to an emergency incident on one of the company’s pipelines or facilities to better understand the safe and proper actions to take in response to a release or pipeline emergency.
- Educate the public on the company’s ongoing pipeline integrity management activities.

Energy Transfer fully supports the goals and objectives set forth in the first edition of *American Petroleum Institute’s Recommended Practice 1162 (RP 1162)*. As an organization, we are committed to provide safe, reliable transportation of hazardous liquids and pipeline safety information to people living and working near the company’s pipelines. We allocate resources and funding as necessary to support our public awareness activities. Management’s expectation is that each of our employees is committed to fulfilling our public awareness responsibilities as described in this plan. *(See Appendix B for Management Commitment to Public Awareness)*.

**2.0
Scope**

The Public Awareness Plan provides a framework that guides the company’s goal of continuous improvement in communications with a variety of key audiences in the communities where the company operates pipelines. The steps detailed in this document are designed to accomplish this goal and meet the requirements of applicable federal, state, and local regulations.

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3.0 Applicability The Public Awareness Plan applies to all of the company’s hazardous liquids transmission pipelines and related pipeline facilities.

The following Operations groups and individuals within the company are impacted:

- Executive Vice President Operations
- Division Vice Presidents
- Area Directors
- Operations Managers
- Operations Personnel, Asset Management Teams or Work Crews
- Vice President Technical Services
- Director, Technical Services Support
- Integrity Management Representatives
- GIS and Engineering Records Representatives
- Public Awareness Manager
- Manager, One Call / Damage Prevention
- Supervisor, Damage Prevention
- Director, Right-of-Way
- Right-of-Way Representatives

4.0 Frequency The Public Awareness Plan shall be reviewed annually and updated as required at intervals not to exceed fifteen months, but at least once every calendar year.

The company is committed to communicating with targeted stakeholders based on the following frequency table as stated in RP 1162. Procedure-specific frequencies are identified below.

Audience Type	Frequency
Affected public	Every 2 years
Emergency officials	Annually
Public officials	Every 3 years
Excavators/contractors	Annually

5.0 Governance The following table describes the responsibility, accountability, and authority for the Public Awareness Plan.

Function	Responsibility	Accountability	Authority
Maintain	Public Awareness Manager or Designee	Public Awareness Manager	Director – Technical Services Support

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The responsibility, accountability and authority for specific activities required by the Public Awareness Plan are detailed in *SOP HLI.40 Public Awareness Plan — Communication with the API RP1162-defined Stakeholders*
The responsibilities of management are defined in *Sections 5.1* through *5.4*.

**5.1
Vice President
Technical
Services**

The responsibilities of the Vice President – Technical Services in relation to the Public Awareness Plan include:

- Allocate funds to complete Public Awareness Plan tasks as required.
- Provide resources to complete Public Awareness Plan tasks as required.

**5.2
Director,
Technical
Services
Support**

The responsibilities of the Director, Technical Services Support in relation to the Public Awareness Plan include:

- Oversee the implementation of the Public Awareness Plan.
- Direct the activities of the Public Awareness Manager.
- Approve the Public Awareness Plan and related SOPs.
- Approve changes to the Public Awareness Plan and related SOP's as required by *SOP [HLA.03 Management of Change](#)*.

**5.3
Public
Awareness
Manager**

The responsibilities of the Public Awareness Manager include:

- Verify that all contact information for the affected public, public officials, emergency officials, and excavators is correctly entered into the Public Awareness Database, as detailed in *SOP [HLI.40 Public Awareness Plan—Communication with API RP1162-defined stakeholders](#)* with the API RP1162-defined Stakeholders.
- Develop relationships with other companies, associations or organizations to reduce redundancies and optimize common efforts.
- Coordinate the review of the messages, methods and media used to deliver the communications to the intended stakeholders, as detailed in *SOP [HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders](#)*.
- Document feedback received from stakeholder audiences and coordinate responses as needed.
- Coordinate the periodic review of the effectiveness of the Public Awareness Plan and recommend changes to the plan.
- Maintain the company's Public Awareness Plan so that it meets all regulatory requirements.

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**5.4
Area
Management**

The responsibilities of the Area Management include:

- Communicate with Stakeholder groups as required in [SOP HLI.40 Public Awareness Plan-Communication with API RP1162-defined stakeholders.](#)
- Document communications with Stakeholder groups and maintain current status for contacts in the Public Awareness Database.

**6.0
Terms and
Definitions**

Terms associated with this SOP and their definitions follow in the table below. For general terms, refer to [SOP HLA.01 Glossary and Terms.](#)

Terms	Definitions
Baseline Messages	The minimum standard program recommendations set forth in RP 1162.
Call Centers	Also known as “One-Call Centers,” this term refers to the clearinghouse for excavation notifications that are planned near pipelines and other underground utilities. One-Call Centers around the country handle between 15 and 20 million calls a year from excavators and direct those calls to the affected pipeline operators to help ensure that underground utilities are located and properly marked. The company is a member of all One-Call Centers in the states in which it operates.
Central Storage Location	A storage area on the company’s data servers that holds the Public Awareness related records, such as master mail pieces and communication information.
Dig Safely	A nationally recognized campaign to reduce underground facility damage through damage prevention education. Used by pipeline companies, one-call centers and other groups throughout the country, the program was developed through the joint efforts of the Office of Pipeline Safety and various damage prevention organizations. Dig Safely is a centerpiece of the Common Ground Alliance (CGA).
Excavation Damage	Sometimes referred to as “third-party damage,” this type of damage often occurs when required One-Call notifications are not made prior to beginning excavation, digging or plowing activities. When the location of underground facilities is not properly determined, the excavator may inadvertently — and sometimes unknowingly — damage the pipeline and its protective coating.
Media	For purposes of this Plan, “media” refers to the vehicle (print, video, advertising, etc.) utilized to communicate to the targeted stakeholders.
Pipeline Facilities	Facilities used in the course of transportation of hazardous liquids and defined in 195.2.

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Terms	Definitions
Public Awareness Database	The master database that holds the individual electronic records of the Public Awareness Plan and related communications information.
Rights-of-Way (ROW)	Long, continuous stretches of land on which an operator has the rights to construct, operate and/or maintain a pipeline. The operator may own ROW outright, or an easement may be acquired for specific use of the ROW.
RP 1162	Recommended Practice 1162, adopted from standards developed by the American Petroleum Institute (API) that calls for pipeline operators to develop and maintain a public awareness program with specific guidelines on audiences, messages, and frequency of message.
Stakeholder	Also known as “target audience,” this term encompasses the various groups or constituencies that the company communicates with as part of this Plan. Examples of stakeholders include the affected public, emergency officials, public officials, excavators, etc.
Supplemental Messages	The concept developed in RP 1162 for assessing particular situations where it is appropriate to enhance or supplement the baseline messages.
Outreach	Efforts to determine if the public awareness communications reach the intended stakeholder groups.
Level of knowledge	Efforts to determine if the intended stakeholder groups understand the key messages from the public awareness communications.
Changes in behavior	Efforts to determine if the intended stakeholder groups learn the appropriate damage prevention behaviors from the public awareness communications.
Bottom-line results	Efforts to determine if the public awareness communications are effective in preventing damage to the pipelines.

**7.0
Public
Awareness Plan**

The Public Awareness Plan contains the following sections:

- Targeting Audiences for Public Awareness Education: Describes the methodology for identifying target audiences (or stakeholders) for public awareness communications.
- Procedure Used to Populate Stakeholder Groups: Describes how to determine Stakeholder Group members.
- Content of Message: Describes the content of public awareness communications to each stakeholder group.
- Communications Actions: Describes the vehicles/materials used to communicate with each stakeholder group.
- Supplemental Plan Enhancement and Materials: Describes what factors to

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consider when evaluating the need for supplemental plan enhancement, and the primary forms of enhancement employed when needed.

- Plan Assessment and Evaluation: Describes the process of assessment for effectiveness in communicating with the various stakeholder groups of the Public Awareness Plan.
- Documentation Requirements: Describes the administration of the Public Awareness Plan and procedures for updating the Public Awareness Plan.

**7.1
 Targeting
 Audiences for
 Public
 Awareness
 Education**

The company evaluates the various stakeholders groups for the Public Awareness Plan in an effort to ensure that the chosen communications vehicles are appropriate for each targeted audience. For purposes of this plan, and based on the company’s operations and the requirements of RP 1162, the following core groups have been identified as stakeholders:

- The Affected Public in areas where the company operates are defined as the following:
 - Residents living near the pipelines
 - Individuals working near the pipelines
 - Places of congregation such as businesses, schools, hospitals, prisons, etc.
 - Residents near liquid or natural gas storage and other operational facilities along transmission lines
- Emergency Response Officials in areas where the company operates are defined as the following:
 - Fire departments and other state & local emergency management personnel
 - Law enforcement agencies (city, county and state police)
 - Emergency medical personnel
 - Hazardous materials response teams
 - 911 operators and emergency dispatch centers
- Public Officials in areas where the company operates are defined as the following:
 - Mayors
 - City, town or county managers or commissioners
 - Planning boards or committees
 - Zoning boards or committees
 - Licensing departments
 - Permitting bodies
 - Building code inspection or code enforcement departments

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- Excavators in areas where the company operates are defined as the following:
 - Construction companies
 - Excavation equipment rental companies
 - Public works officials
 - Highway departments or other road construction or maintenance bodies
 - Landscaping firms
 - Fence building companies
 - Timber companies
 - Well drilling operations
 - Home builders
 - Land developers
 - One-Call centers

**7.2
 Procedure Used
 to Populate the
 Stakeholder
 Groups**

The company uses a combination of internal and external sources to create the lists for each of the four stakeholder groups. The company has maintained an ongoing Public Awareness Liaison Program that has identified the stakeholder groups using the guidelines in *Section 7.1*. As a result, the company already has various lists for the four stakeholder groups as well as the methodology to maintain and update those lists. Under the Public Awareness Plan, those records are collected and maintained in one Public Awareness Database.

A majority of the records are obtained from outside mail list vendors with specialized skills, processes, and data collection and cleansing tools that ensure the highest quality data is provided to the company for each stakeholder group. These records are obtained along a pipeline corridor specific to the company’s pipelines.

Additional records for excavators may be obtained from the company’s One Call database used for one call data consolidation.

The remaining records may be gathered from the various sources at the local level. Under this Plan, those records are incorporated into the Public Awareness Database and updated as new information is available.

Outside vendors providing lists for public awareness communication shall be evaluated as necessary, when significant changes occur in their data sources or data evaluation methods. Many vendors use a large variety of sources and tools to compile the best possible stakeholder lists.

As the communications with the various stakeholder groups are performed, the lists used to establish the recipient of the communications are evaluated to determine if any enhancements are necessary for adequate coverage of each stakeholder group.

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The company’s communication coverage area for targeted mail distribution to notify Affected Public stakeholders is defined as outlined below.

Begin Highly Confidential & Confidential Security Information

End Highly Confidential & Confidential Security Information

Targeted mail distribution to Excavators is 15 miles total, 7.5 miles on either side of centerline.

Targeted mail distribution to Emergency Officials and Public Officials is asset county, plus 20-miles, 10-miles on either side of centerline.

**7.2.1
Internal
Identification
Sources**

Internal methods that may be used to identify updates to the appropriate stakeholder audiences include:

- Operations personnel
- Right-of-Way (ROW) records and contacts
- Existing emergency response plans
- Mock emergency exercises
- Personnel that routinely work with governmental and regulatory bodies
- Past rehabilitation and maintenance notifications and records

**7.2.2
External
Identification
Sources**

External sources that may be used to identify updates to the appropriate stakeholder audiences include:

- Nine digit zip codes
- Geo-spatial databases
- One-Call organizations
- Identified local emergency officials
- Information provided by the public
- Local Emergency Planning Committee (LEPC) databases
- State and emergency management agencies
- Outside vendor with capability for providing information on excavators
- Contractor licensing boards

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- Excavation equipment rental companies
- Utility coordinating committees
- Standard Industrial Codes (SIC)

7.2.3 Identification Sources for the Affected Public Sources that may be used to identify updates to the affected public stakeholder group include:

- Affected public along pipeline ROW
- Nine digit zip code
- Geo-spatial database
- Customer database
- HCAs in accordance with federal regulations
- Information provided by the public

7.2.4 Identification Sources for Local Public Officials Sources that may be used to identify updates to the local public officials stakeholder group include:

- Personnel who routinely work with governmental and regulatory bodies
- One-Call organizations
- Field operations personnel

7.2.5 Identification Sources for Emergency Officials Sources that may be used to identify updates to the emergency officials stakeholder group include:

- Discussions with identified local emergency officials
- Existing emergency response plans
- Mock emergency exercises
- Public Officials Emergency Responder website
- Local Emergency Planning Committee (LEPC) databases
- State and emergency management agencies

7.2.6 Identification Sources for Excavators Sources that may be used to identify updates to the excavators stakeholder group include:

- One-Call system databases
- Outside vendor with capability for providing information on excavators
- Contractor licensing boards
- Excavation equipment rental companies
- Utility coordinating committees
- Standard Industrial Codes (SIC)

7.3 Content of Message The content of the messages to each respective stakeholder group is evaluated and fine-tuned based on changing circumstances and need.
The message to all stakeholders includes:

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- Pipeline purpose and reliability
- Hazards or risks associated with pipeline operations
- Measures that the company takes to prevent negative impacts to public safety, property and the environment
- Use of a One-Call notification system prior to excavation and other damage prevention activities
- Steps that should be taken for public safety in the event of a pipeline release or incident at a facility
- Physical indications that a release or incident may have occurred
- Procedures to report a release or incident

7.3.1
Content of
Message to the
Affected Public

The message to the Affected Public includes:

- Pipeline purpose and reliability
- Awareness of hazards and prevention measures undertaken
- Leak recognition and response
- Damage prevention awareness
- One-call requirements
- Pipeline location information
- How to get additional information
- Availability of list of pipeline operators through NPMS

7.3.2
Content of
Message to
Emergency
Response
Official

The message to Emergency Response Officials includes:

- Pipeline purpose and reliability
- Awareness of hazards and prevention measures undertaken
- Leak recognition and response
- Emergency preparedness communications
- Potential hazards
- Pipeline location information
- Availability of NPMS

7.3.3
Content of
Message to
Local Public
Officials

The message to Local Public Officials includes:

- Pipeline purpose and reliability
- Awareness of hazards and prevention measures undertaken
- Leak recognition and response
- Emergency preparedness communications
- One-call requirements
- Pipeline location information
- How to get additional information
- Availability of NPMS

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- 7.3.4** The message to excavators includes:
- Content of**
- Message to**
- Excavators**
- Pipeline purpose and reliability
 - Awareness of hazards and prevention measures undertaken
 - Leak recognition and response
 - Damage prevention awareness
 - One-call requirements
 - Leak recognition and response
 - How to get additional information

7.4 The Public Awareness Plan utilizes communication materials produced both by the

Communication company and by other parties. All the materials are evaluated for clarity, thoroughness,

Actions and applicability by the Public Awareness Manager.

The primary language used in communications materials for the Public Awareness Plan is English. Materials in other languages are made available based on community need.

- 7.4.1** • Communication actions for the affected public are detailed in [SOP HLI.40](#)
- Communication** [Public Awareness Plan—Communication with the API RP1162-defined](#)
- Actions for the** [Stakeholders.](#)
- Affected Public**
- Vehicles/materials for communications with the Affected Public may include:
 - Personal contact
 - Targeted distribution of print materials:
 - Brochures
 - Pamphlets
 - Letters
 - Pipeline markers
 - Community meetings, open houses, etc. (supplemental as needed)

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- 7.4.2**
Communication
Actions for
Emergency
Officials
- Communication actions for emergency officials are detailed in *SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders*.
Vehicles/materials for communications with Emergency Officials may include:
- Scheduled meetings with county or multiple county officials
 - Personal contact
 - Group meetings
 - Targeted distribution of print materials
 - Telephone calls
 - E-mail
 - Pipeline Markers
 - Emergency exercises (supplemental as needed)
 - Facility tours or open houses (supplemental as needed)
 - National Association of State Fire Marshals/OPS emergency response training program
- 7.4.3**
Communication
Actions for
Public Officials
- Communication actions for public officials are detailed in [*SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders*](#).
 - Vehicles/materials for communications with Public Officials may include:
 - Targeted distribution of print materials:
 - Brochures
 - Pamphlets
 - Letters
 - Telephone calls (supplemental as needed)
 - Group meetings (supplemental as needed)
 - Personal contact (supplemental as needed)
 - E-mail (supplemental as needed)
- 7.4.4**
Communication
Actions for
Excavators
- Communication actions for excavators are detailed in [*SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders*](#).
 - Vehicles/materials for communications with excavators may include:
 - Targeted distribution of print materials:
 - Brochures
 - Pamphlets
 - Letters
 - One-Call Center outreach
 - Pipeline markers
 - Group meetings (supplemental as needed)
 - Personal contact (supplemental as needed)
 - E-mail (supplemental as needed)

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**7.4.5
Public
Awareness
Communications
Summaries**

Public awareness communications procedures with the affected public, emergency officials, public officials and excavators are detailed in [SOP HLI.40 Public Awareness Plan—Communication with the API RP1162-defined Stakeholders.](#)

The following tables summarize Public Awareness Communications.

Table 1 Public Awareness Stakeholder Communications			
Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
Residents located along pipeline ROW and Places of Congregation	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage prevention Awareness • One-call requirements • Leak recognition and response • Pipeline location information • How to get additional information • Availability of list of pipeline operators through NPMS 	Baseline Frequency: 2 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials and Pipeline Markers
	Supplemental Message: <ul style="list-style-type: none"> • Information and/or overview of operator’s Integrity Management Plan • ROW encroachment prevention • Any planned major maintenance/construction activity 	Supplemental Frequency: Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	Supplemental Activity: <ul style="list-style-type: none"> • Print materials • Personal contact • Telephone calls • Group meetings • Open houses

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Table 1 Public Awareness Stakeholder Communications

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
Residents near storage or other major operational facilities	Supplemental Message: <ul style="list-style-type: none"> Information and/or overview of operator’s Integrity Management Plan Special incident response notification and/or evacuation measures <i>if</i> appropriate to product or facility Facility purpose 	Supplemental Frequency: Additional frequency and supplemental efforts as determined by specifics of the pipeline segment or environment	Supplemental Activity: <ul style="list-style-type: none"> Print materials Personal montact Telephone calls Group meetings Open houses

Table 1 Public Awareness Stakeholder Communications

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
Emergency Officials	Baseline Messages: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Personal contact OR <ul style="list-style-type: none"> Targeted distribution of print materials OR <ul style="list-style-type: none"> Group meetings OR <ul style="list-style-type: none"> Telephone calls with targeted distribution of print materials
	Supplemental Message: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Emergency tabletop, deployment exercises Facility tour Open house

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Table 1 Public Awareness Stakeholder Communications

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
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Local Public Officials	Baseline Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Emergency Preparedness Communications • One-call requirements • Pipeline location information and availability of NPMS • How to get additional information 	Baseline Frequency: 3 years	Baseline Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials
	Supplemental Message: <ul style="list-style-type: none"> • If applicable, provide information about designation of HCA (or other factors unique to segment) and summary of integrity measures undertaken • ROW encroachment prevention • Maintenance construction activity 	Supplemental Frequency: <ul style="list-style-type: none"> • If in HCA, then annual contact to appropriate public safety officials • Otherwise, as appropriate to level of activity or upon request 	Supplemental Activity: <ul style="list-style-type: none"> • Personal contact • Telephone calls • Videos and CDs

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Table 1 Public Awareness Stakeholder Communications

Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
-----------------------------	---------------------	---------------------------	-------------------------------------

Excavators / Contractor	Baseline Messages: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Targeted distribution of print materials • One-call center outreach • Pipeline markers
	Supplemental Messages: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Personal contact • Group meetings
Land Developers	Supplemental Messages: <ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Damage prevention awareness • One-call requirements • Leak recognition and response 	Supplemental Frequency: <ul style="list-style-type: none"> • Frequency as determined by specifics of the pipeline segment or environment 	Supplemental Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Pipeline markers

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Table 1 Public Awareness Stakeholder Communications			
Stakeholder Audience	Message Type	Delivery Frequency	Delivery Method and/or Media
	<ul style="list-style-type: none"> • ROW Encroachment Prevention • Availability of list of pipeline operators through NPMS 		<ul style="list-style-type: none"> • Personal contact • Group meetings • Telephone calls
One-Call Centers	Baseline Messages: <ul style="list-style-type: none"> • Pipeline location information • Other requirements of the applicable One-Call Center 	Baseline Frequency: <ul style="list-style-type: none"> • Requirements of the applicable One-Call Center 	Baseline Activity: <ul style="list-style-type: none"> • Membership in appropriate One-Call Center • Requirements of the applicable One-Call Center • Maps (as required)
	Supplemental Messages: <ul style="list-style-type: none"> • One-Call System performance • Accurate line location information • One-Call System improvements 	Supplemental Frequency: As changes in pipeline routes or contact information occur or as required by state requirements	Supplemental Activity: <ul style="list-style-type: none"> • Targeted distribution of print materials • Personal contact • Telephone calls

Code Reference :	Procedure No.: HLA.17	
49 CFR 195.440; RRC 8.235, 8.310, 8.315	<i>Effective Date:</i> 06/15/20	Page 18 of 26

**7.5
 Supplemental
 Plan
 Enhancement
 and Materials**

Special conditions, changing circumstances and other factors may necessitate additional communications or increased frequency of communications to stakeholders. Responsibility for determining whether such measures are necessary lies with the Public Awareness Manager. Required changes to the Public Awareness Plan are implemented according to the processes described in the [SOP HLA.03 Management of Change](#).

The need for supplemental plan enhancement or the development of new or additional communications materials will be evaluated on an on-going basis and annually during the self-assessment of implementation, following factors are considered:

- Results from previous Public Awareness Plan evaluations
- Potential hazards
- High Consequence Areas
- Population density
- Increased land development activity
- Increased land farming activity
- Elevated incidents of damage from outside forces
- Known environmental considerations
- Pipeline history in the area
- Specific local considerations or heightened public sensitivity
- Regulatory requirements
- Issues not mentioned above that reveal the need for supplemental messages

If supplemental plan enhancement is warranted, then the following primary forms of enhancement are considered:

- Increased frequency of communications or communications at a shorter interval than the baseline requirement
- Additional message content or delivery/media efforts beyond those identified in the baseline plan
- Extending or broadening the coverage area beyond the parameters of the baseline plan

All supplemental enhancements to the Plan are identified and documented in Public Awareness Database.

Code Reference :	Procedure No.: HLA.17	
49 CFR 195.440; RRC 8.235, 8.310, 8.315	<i>Effective Date:</i> 06/15/20	Page 19 of 26

7.6 Plan Guidelines established for evaluating the effectiveness of the Public Awareness Plan are described below.

Assessment and Evaluation

The company is guided by the following:

- Is the information reaching the intended stakeholder audience?
- Do these audiences understand the messages?
- Are the messages provided frequently enough to achieve the desired result?
- Do the materials motivate recipients to respond appropriately in alignment with the information provided?
- Is the company’s public awareness initiative resulting in improved understanding of safe pipeline practices?

7.6.1 Assessment and Evaluation Techniques The company conducts the effectiveness of the Public Awareness Plan, using a variety of techniques including internal audits, surveys, focus groups, feedback from stakeholders and statistical data tracking. They should be conducted as described in the table below.

Approach	Technique	Frequency
Self-assessment of implementation	Review <ul style="list-style-type: none"> • Internal review • Regulatory Inspection 	Initial review within 18 months of implementation. Annually thereafter, not to exceed 18 months. Regulatory inspection as scheduled.
Pre-test effectiveness of materials	Focus groups with internal (company) participants	Upon initial implementation or major re-design of materials, or development of new messages
Effectiveness of implementation <ul style="list-style-type: none"> • Outreach • Level of knowledge • Changes in behaviors • Bottom-line results 	1. Surveys that assess outreach efforts, audience knowledge & changes in behaviors <ul style="list-style-type: none"> • Operator designed • Third-party designed • Industry Association designed 2. Assess notifications & incidents to determine anecdotal changes in behavior 3. Documented records and industry comparison of	No more than four years apart, or upon a major re-design of the plan

Code Reference : 49 CFR 195.440; RRC 8.235, 8.310, 8.315	Procedure No.: HLA.17
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Approach	Technique	Frequency
	incidents to evaluate bottom-line results	
Implement changes to the Public Awareness Plan as assessment methods suggest	<i>SOP HLA.03 Management of Change</i>	As required by findings of evaluations

**7.6.2
Self-Assessment
of
Implementation**

Using the questions listed in [A.17A Annual Self-Assessment Public Awareness Program](#), the Public Awareness Manager completes the following steps annually to perform the assessment of implementation..

Step	Task
1	REVIEW the questions listed in A.17A Annual Self-Assessment Public Awareness Program .
2	PERFORM audit.
3	DOCUMENT audit findings.
4	REPORT audit findings.
5	EVALUATE audit report and PROPOSE changes as needed.

**7.6.3
Pre-test
Effectiveness of
Materials**

Communication materials are pre-tested with an internal focus group. Focus group participants are selected to reasonably represent the stakeholder groups identified in [SOP HLA.17 Public Awareness Plan](#), and are capable of articulating their reactions to the materials. Focus groups are typically comprised of 2-10 participants. The Public Awareness Manager is responsible for the following steps for the focus group process:

Step	Task
1	ESTABLISH focus group.
2	DESCRIBE the focus group objectives.
3	REVIEW materials with focus group.
4	DOCUMENT focus group feedback.
5	REPORT focus group findings
6	EVALUATE focus group findings and PROPOSE changes to the communications materials.

Code Reference :	Procedure No.: HLA.17	
49 CFR 195.440; RRC 8.235, 8.310, 8.315	<i>Effective Date:</i> 06/15/20	Page 21 of 26

**7.6.4
Evaluate
effectiveness of
implementation**

The company evaluates the effectiveness of the implementation of the Public Awareness Plan using the following measures:

- Outreach: Are the messages reaching the intended stakeholders?
- Level of knowledge: Are the messages being understood by the stakeholders?
- Changes in behavior: Have the stakeholders learned the appropriate damage prevention behaviors?
- Bottom-line results: Are the messages having an impact on the number of damages and the consequences of the damages?

The evaluation of each of these measures is accomplished according to the following table:

Table 2: Evaluation of Implementation Measure

Measure	Primary Survey Material	Primary Survey Method	Supplemental Methods
Outreach	Written	Mail	Telephone Internet Email In-person Meeting Feedback
Level of Knowledge	Written	Mail	Telephone Internet Email In-person Meeting Feedback
Changes in Behavior	Written	Mail	Telephone Internet Email In-person Meeting Feedback
Bottom-line Results	Statistical Data Tracking	Spreadsheet Tracking Model	Review of outside One-Call or other damage prevention group similar analysis



NOTE: The primary method of survey is mailing to a random sample of each stakeholder group. If the minimum number of completed surveys is not received, additional surveys are obtained by mail, telephone, internet, email, or in person using the current survey forms. The method and implementation are determined by the Public Awareness Manager.

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Stakeholder Group	Minimum Number of Completed Surveys
Affected Public	150
Emergency Officials	50
Public Officials	50
Excavators	150



NOTE: The Public Awareness Manager can perform additional surveys or other evaluation methods as necessary to obtain supplemental data or more targeted results to best meet the overall plan objectives.

**7.6.5
Evaluation and
Survey Results**

The results of the surveys are used to evaluate Outreach, Level of Knowledge, and Changes in Behavior following the completion of the data gathering.

The Public Awareness Manager reviews the results and determines if any further action is required. If further action is required, please refer to the appropriate stakeholder SOP in the sections titled Determine the Message for the (Stakeholder Group), or Determine Supplemental Messages, Frequencies and Activities.

Further evaluation of Outreach, Level of Knowledge, and Changes in Behavior can be done by evaluating meeting feedback forms from meetings performed by company employees or outside vendors such as One-Call systems or damage prevention companies. This additional evaluation is conducted when necessary, as determined by the Public Awareness Manager.

The evaluation of the survey results follows the procedure listed below.

Step	Activity
1	ESTABLISH evaluation criteria (for the initial evaluation, the threshold of acceptable responses should be 60%, by each of the main measures)
2	STORE data by stakeholder group in central storage location.
3	CREATE and UPDATE an electronic spreadsheet (tabulated by knowledge, outreach, and behavior for each of the four stakeholder groups) that is populated with survey answers and PROVIDES statistics of answer percentages (such as yes, no, other) for each question.
4	CHECK the spreadsheet results for deficiencies against the established criteria. If less than the established percentage of answers is “correct”, that area of communication should be evaluated for improvement.
5	DETERMINE further action, based on the evaluation, if any.

Code Reference :	Procedure No.: HLA.17	
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**7.6.6
Evaluation of
Bottom-Line
Results**

The company uses statistical data tracking to evaluate changes in bottom-line results, as well as other supplemental data that may be useful in evaluating the effectiveness of the Public Awareness Plan. The initial data tracking consists of:

- The number of calls received in response to materials.
- The incidence of damage from excavation to our facilities. This includes not just “reportable incidents” but all damage events.
- The number of “near hit” instances.
- Requests for line locations.
- Periodically reviewing similar analysis and effectiveness evaluations performed by applicable One-Call systems, industry groups, or other outside damage prevention groups.
- Analyzing and reviewing feedback following meetings with various identified stakeholders (public officials, emergency officials, etc).

The evaluation of bottom-line results follows the process listed below.

Step	Activity
1	DEVELOP and MAINTAIN a spreadsheet tracking model.
2	COMPILE monthly data from the various sources for: <ul style="list-style-type: none"> • Calls received in response to materials • Excavation damages • Near hits • Line locate requests
3	COMPARE the data to the trends for each data set.
4	EVALUATE the impact of clear changes in the trends for further action.



NOTE: The Public Awareness Manager and Manager of One Call/Damage Prevention should review the similar analysis of at least one outside group or One-Call system each year and determine what can be used to supplement the Public Awareness Plan.

**7.6.7
Implement
Public
Awareness Plan
Changes**

The implementation of any changes in the Public Awareness Plan or related SOPs is made under [SOP HLA.03 Management of Change](#).

The implementation of any other minor changes is made by the Public Awareness Manager, as necessary.

**8.0
Documentation
Requirements**

Record data in electronic database, utilize the following form(s) as applicable:

[I.40.A Public Awareness Contact Data Form](#)

[A.17.A Annual Self-Assessment Public Awareness Program](#)

Code Reference :	Procedure No.: HLA.17	
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The Public Awareness Plan is administered and maintained through proper record maintenance and the periodic review and update of the communication materials for the targeted stakeholder audiences.

The Public Awareness Plan is overseen by the Senior Manager, Operations Services. Day-to-day responsibility for implementing and administering the Public Awareness Plan resides with the Public Awareness Manager. The company is guided by the following objectives to ensure that:

- Stakeholder audiences are properly identified
- Messages appropriate to each stakeholder are identified
- Appropriate media and communication vehicles are selected to reach each stakeholder audience
- Messages are delivered as specified in the Plan
- The effectiveness of the Plan is periodically evaluated
- The Plan is modified to reflect changing situations or in response to stakeholder feedback or recommendations resulting from periodic effectiveness evaluations



NOTE: While RP1162 is not intended to focus on communications that occur immediately after a pipeline-related emergency, in some situations, it may be necessary to conduct lesson learned activities following a pipeline release or emergency. Those activities could include researching the effectiveness of previous communication messages, methods, frequency and reach.

8.1 Recordkeeping Requirements

The responsibility for maintaining appropriate records and materials resides with the Public Awareness Manager.

Records and other documentation that reflect communications to stakeholder audiences are retained for a minimum of five years within the Public Awareness database and central storage location in electronic format. Records that cannot be readily converted to electronic format are kept by the Public Awareness Manager with copies existing in the source location as necessary.

Documented activities that are retained include:

- Samples of the materials used to communicate messages
- Copies of any survey results, focus groups or interviews conducted
- Routine assessments of plan implementation
- Copies of evaluations of effectiveness efforts
- Copies of any independent evaluations made
- Determinations made concerning any supplemental enhancements
- Recommendations for improvements to the Plan

Code Reference :	Procedure No.: HLA.17	
49 CFR 195.440; RRC 8.235, 8.310, 8.315	<i>Effective Date:</i> 06/15/20	Page 25 of 26

**8.2
Plan Updating
Procedures**

Based on changing circumstances and/or the results of Plan evaluations, the Plan, and associated Public Awareness SOPs are updated according to [SOP HLA.03 Management of Change](#).

The following standards are applied to the administration and maintenance of this Plan in order to implement continuous improvement:

- The Public Awareness Plan shall be reviewed annually at intervals not to exceed fifteen months, but at least once every calendar year and updated as required to reflect stakeholder feedback, effectiveness evaluations, regulatory requirements, or changes in operating status.
- Responsibility for coordinating the periodic review of the Plan lies with the Public Awareness Manager.
- The annual review is documented on the applicable form(s) for *Public Awareness Plan Annual Review* and stored in the central storage location for all public awareness information.
- Recommendations for altering, editing or revising the Plan and the associated public awareness procedures can be made by any Operations employee, as detailed in the [SOP HLA.03 Management of Change](#).
- The Vice President of Technical Services approves necessary changes and any expenditure for development of new initiatives or materials, as detailed in [SOP HLA.03 Management of Change](#).
- Revised sections, pages, or procedures are re-issued in accordance with [SOP HLA.03 Management of Change](#).

**9.0
References**

[HLA.01 Glossary and Terms](#)
[HLA.03 Management of Change](#)
[HLI.30 Third Party Damage](#)
[HLI.40 Public Awareness Plan—Communication with API RP1162-defined Stakeholders](#)
 Public Awareness White Paper

**Appendix A:
OQ Task
Requirements**

There are no Operator Qualification (OQ) task requirements for this SOP.

Code Reference : 49 CFR 195.440; RRC 8.235, 8.310, 8.315	Procedure No.: HLA.17 <i>Effective Date:</i> 06/15/20	Page 26 of 26
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**Appendix B:
Management
Commitment to
Public Awareness**

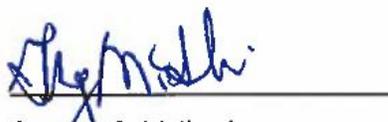
Management Commitment to Public Awareness

Energy Transfer and its management are committed to operating a safe and reliable pipeline system. The Company is also committed to providing educational material to key stakeholders in order to develop stronger relationships with the communities in which it operates. Providing materials with messages about the role of pipelines, safety, damage prevention, and emergency response will improve the safety and security of the pipelines the company operates and the communities in which they traverse.

The Public Awareness Program is consistent with, and reinforces, the practices and policies of the Company. Energy Transfer Management, employees and contractors are committed to supporting public awareness efforts. Further, Management will provide adequate financial and employee resources in order to promote pipeline public awareness that will result in positive outcomes, while also achieving regulatory compliance and meeting industry standards.



Eric J. Amundsen
Senior Vice President, Operations



Gregory G. McIlwain
Senior Vice President, Operations



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

DiBernardino Cross Exhibit 1 C-2018-3006116 10/6/20 JK
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840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
609.771.7800

**NOTICE OF PROBABLE VIOLATION
and
PROPOSED COMPLIANCE ORDER**

OVERNIGHT EXPRESS DELIVERY

May 17, 2019

Greg McIlwain
Senior VP, Operations
Sunoco Pipeline, L.P.
1300 Main Street
Houston, TX 77002

CPF 1-2019-5006

Dear Mr. McIlwain:

On August 1 - 2, October 9-11, October 15-19, and November 5-8 of 2018, a representative from the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), performed an inspection of Sunoco Pipeline, L.P.'s (Sunoco) GRE Flow Reversal / Repurposing Project on the Mariner East 2 pipeline system located in Pennsylvania. Sunoco is a subsidiary of Energy Transfer Operating, L.P. (ET).

As a result of the inspection, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violation(s) are:

1. § 195.106 Internal design pressure.

(b) The yield strength to be used in determining the internal design pressure under paragraph (a) of this section is the specified minimum yield strength. If the specified minimum yield strength is not known the yield strength to be used in the design formula is one of the following:

(1)

(i) The yield strength determined by performing all of the tensile tests of ANSI/API Spec 5L (incorporated by reference, see § 195.3) on randomly selected specimens with the following number of tests:

Pipe Size	No. of Tests
Less than 6 5/8 in (168 mm) nominal outside diameter	One test for each 200 lengths
6 5/8 in through 12 3/4 in (168 mm through 324 mm)	One test for each 100 lengths
Larger than 12 3/4 in (324 mm) nominal outside diameter.	One test for each 50 lengths

Sunoco failed to determine the design yield strength of pipe in accordance with § 195.106(b)(1)(i). Specifically, Sunoco failed to perform ANSI/API Spec 5L tensile tests on a sufficient number of randomly selected specimens of pipe from the Glen Riddle to Elverson segment (GRE Segment) of its 12-inch PTBR to MNTL pipeline to validate the design yield strength utilized for determining internal design pressure.

During review of Sunoco's flow reversal and repurposing project of the GRE Segment, PHMSA evaluated Sunoco's integrity management plan, including pipe material records, in light of a proposed change in transported product from refined petroleum products to highly volatile liquid (HVL) service. The reversal and repurposing project encompassed approximately 25 miles of existing, predominantly 1937 vintage 12-inch diameter pipe in Chester and Delaware counties of PA, and was pursued to mechanically complete serviceability of newly constructed portions of the 20-inch ME2 and 16-inch ME2X pipelines.

ME2 is poised to transport batched propane and butane from Scio, Ohio to Marcus Hook, PA. The proposed re-route and reversal tied new 20-inch diameter ME2 pipe to existing sections of 1937 vintage 12-inch pipeline at the Fairview valve station. It then followed the 12-inch pipeline until the Glen Riddle Junction valve station, where it tied into newly completed 16-inch diameter ME2X pipe and continued to Twin Oaks, where the ME2 pipeline continues as planned as a new dual 12-inch pipeline. The maximum operating pressure (MOP) of the 20-inch pipeline and the 16-inch pipeline is 1,480 psi. The MOP for the existing 12-inch GRE pipeline segment was identified by Sunoco to be 1,248 psi.

During the inspection, PHMSA requested and reviewed pertinent records associated with a 2016-2017 rehabilitation project of the 12-inch PTBR to MNTL pipeline. This project included in-line-inspection, pipe repair and/or replacements, and hydrostatic testing to support a new MOP of 1,248 psi. Prior to the rehabilitation project, the GRE Segment's MOP was limited to 950 psi based on historical operation.

PHMSA's review of integrity management records noted several discrepancies and/or omissions with respect to pipe material records, including validation of pipe grade or specified minimum yield strength for the 1937 vintage pipe that had undergone an MOP upgrade from 950 psi to 1248 psi in 2017. Sunoco attempted to validate material strength records by providing supporting documentation depicting that the only material grades for 12-inch diameter 0.375" wall thickness

pipe manufactured by National Tube during 1937 was API 5L Grade B. The documentation provided included a 1935 catalogue for pipe manufacturing at National Tube, a 1937 Keystone Pipeline letter to National Tube seeking an inventory credit, 1969 Atlantic Pipeline System information, and a 1937 letter depicting delivery receipts for pipe transported to local yards. However, the documentation did not incorporate material testing reports (MTRs), purchase orders or other material certification reports.

Pertinent to the aforementioned is PHMSA Advisory Bulletin ADB-2014-04, issued to alert operators of hazardous liquid and gas transmission pipelines of the potential significant impact flow reversals, product changes, and conversion to service may have on the integrity of a pipeline.

Per the advisory, the section for O&M and Integrity Management Requirements and Considerations summarizes that (emphasis added) “integrity depends on accurate records to make suitable decisions. **Operators should validate material and strength test records for all affected segments of pipe as reminded in an advisory bulletin (ADB-12-06) published on May 7, 2012; 77 FR 26822** titled: Pipeline Safety: Verification of Records. If the operator is missing records, they should create and implement a plan to obtain material documentation. **If mechanical and/or chemical properties (mill test reports) are missing, the plan should require destructive tests to confirm material properties of pipeline. Certain high risk pipelines merit a greater level of due diligence.** While a new hydrostatic pressure test with a spike test is an important part of confirming the integrity of a pipeline, it may not be advisable to perform flow reversals, product changes or conversion to service under the following conditions:

- Grandfathered pipelines that operate without a Part 192, Subpart J pressure test or where sufficient historical test or material strength records are not available.
- LF-ERW pipe, lap welded, unknown seam types and with seam factors less than 1.0 as defined in Sec. Sec. 192.113 and 195.106.
- Pipelines that have had a history of failures and leaks most especially those due to stress corrosion cracking, internal/ external corrosion, selective seam corrosion or manufacturing defects.
- Pipelines that operate above Part 192 design factors (above 72% SMYS).
- Product change from unrefined products to highly volatile liquids.”

Subsequent to the material verification concerns raised by PHMSA during inspection of the proposed flow reversal project in October of 2018, Sunoco ultimately pursued material testing of twelve pipe samples taken from previously removed sections of the 12-inch PTBR-MNTL pipeline. Three of these samples fell outside the limits of the GRE segment reversal project, and two were conducted on 1967/1968 vintage pipe. In addition, Sunoco conducted in-situ material property validation testing for one joint of pipe, which in-line inspection records noted was logged with a wall thickness of 0.432” and material grade (SMYS) of 24000 psi.

As a result, Sunoco conducted material validation which included tensile tests prescribed by ANSI/API Spec 5L or other acceptable method for a total of 7 locations within the 24.5 mile GRE segment affected by the reversal and new MOP. The testing predominantly targeted 1937 vintage, 12.750-inch diameter, 0.375-inch wall thickness pipe and was based upon availability of specimens rather than random selection. Therefore, the representative sampling failed to meet the requirements of § 195.106(b)(1)(i) with respect to the number of tests required.

2. § 195.440 Public awareness.

(c) The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.

Sunoco failed to follow recommended practice API RP 1162 (IBR, see § 195.3). Specifically, Sunoco failed to tailor its communications coverage area (buffer) to fit its particular pipeline, location, and potential impact consequences.

During review of Sunoco's flow reversal and repurposing project involving the 12-inch PTBR to MNTL pipeline segment, PHMSA evaluated Sunoco's Public Awareness Program (Public Awareness Plan HLA.17 and HLI.40 04012018) in light of a proposed change in transported product from refined petroleum products to highly volatile liquid (HVL) service (specifically natural gas liquids mainly comprised of propane and butane). As part of the inspection, PHMSA requested and reviewed pertinent risk assessments, including 3rd party consultant reports completed for the 12-inch reversal section and newly constructed portions of the ME2 project titled Hazard Assessment of the Proposed Mariner East 2 Pipeline (Stantec 03272017), Pipeline Flow Reversal Assessment (Dynamic Risk 10052018) and Mariner East 2 Pipeline Re-Route near Chester and Delaware, Pennsylvania - Butane Spill Assessment (Stantec Final 10152018).

During initial review of the Stantec 03272017 report covering the 20-inch diameter ME2 project, PHMSA noted that dispersion and thermal radiation consequence modelling results for accidental releases under Section 5.4 noted:

...the maximum distance to the LFL along the entire pipeline route was predicted to be Sunoco Redaction. The maximum predicted distances to thermal radiation consequences along the entire pipeline were: Sunoco Redaction

The report also negated the consequence of multiple releases based on the fact that the pipelines are buried and failure of one would require exposure of another, including ignition, to sufficiently heat and damage the adjacent line. Although PHMSA acknowledges the assessment, exception is taken for valve and pump station locations where multiple pipelines transporting various commodities exist aboveground. These locations undoubtedly incorporate a higher potential of risk and increased public impact in the event of multiple pipeline failures.

Further inspection noted that Sunoco's original Public Awareness Plan specified mailings to the affected public located 660 feet on either side of the proposed HVL transmission line, and Sunoco noted that this was to be applicable to the entire ME2 project including the re-purposing/reversal section.

During numerous meetings regarding the project held in August 2018, PHMSA conveyed concerns associated with Sunoco's current 660 foot buffer for the HVL service citing API RP 1162 requirements that clearly state, "The transmission operator should tailor its communications coverage area (buffer) to fit its particular pipeline, location, and potential impact consequences."

In addition, review of the subsequent Dynamic Risk 10052018 report noted that a separate consequence assessment was completed by ET and provided to Dynamic Risk. This analysis showed that any release from nearly any location along the reversal segment would be expected to impact high consequence areas as defined by § 195.450. The report further concluded that:

...due to significantly different consequences of a pipeline failure in NGL versus prior service, the prior emergency response plans and public awareness programs for the segment would be inappropriate for application to an NGL pipeline. Energy Transfer should ensure emergency response plans and public awareness programs are updated appropriately, including outreach to both internal and external stakeholders such as local first responders.

The Stantec 10152018 report, focused on consequence modelling of a butane spill for the re-route of a 29 mile section of the ME2 pipeline project between Wallace Township and Aston, Pennsylvania due to the potential risk for the formation of a butane evaporating pool in the vicinity of release.

The report concluded that (emphasis added) "spill modeling used the source characterization to predict the extents of spill areas at 100 foot increments along the re routed pipeline section. The spill model included evaporative and boiling effects based on the thermo-physical properties of butane and varying meteorology, including changes in wind speed and temperature. [REDACTED]

Sunoco Redaction

During follow up meetings held in October 2018, Sunoco conveyed that they had modified their Public Awareness Plan coverage area by extending it to a 1000' buffer on either side of the pipeline. Sunoco stated the basis for the increase was solely in response to PHMSA's concern and request conveyed during prior meetings. Due to the statement, PHMSA requested a formal response to support the 1000' communication coverage limit, which was provided in November 2018.

Sunoco's response, dated November 2, 2018, explained the basis for selection of a 1000' buffer and extent of communication with the Affected Public. The response stated, in part (emphasis added) "**After a discussion with representatives from the Pipeline and Hazardous Materials Safety Administration and the Pennsylvania Public Utilities Commission in August 2018, an internal company review was performed and a determination was made to increase the buffer beyond the required 660 feet to 1,000 feet for all company-operated NGL pipelines**

for the 2018 distribution of pipeline safety messages to the Affected Public. The increase to a 1,000 foot buffer is not just in high population areas, but in all areas along NGL pipelines, and exceeds the basic requirements of RP 1162 by more than 50 percent.” The response did not include any reference to the aforementioned Flow Reversal and/or Hazard Assessments.

Sunoco’s Public Awareness Program should clearly state their buffer(s) and how they were determined and/or rational for selection. Per § 195.440(c), an operator “must follow the general program recommendations of API RP 1162, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.”

PHMSA takes exception with the fact that no reference to the established risk assessments and/or vapor dispersion modelling reports were included.

The following sections of API RP 1162 state, in part (emphasis added):

3 Stakeholder Audiences

...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.

...

6.1 CONSIDERATIONS FOR SUPPLEMENTAL ENHANCEMENTS FOR THE BASELINE PROGRAM

...

6.3.1 The Affected Public

Consideration should be given to supplemental program enhancement where:

The **potential for concern about consequences of a pipeline emergency is heightened**. Consideration should be given to **widening the coverage area for:**

- **HVL pipelines in high population areas, extend the coverage area beyond the 1/8th mile minimum distance each side of the pipeline**
- Large diameter, high pressure, high volume pipelines where a pipeline **emergency would likely affect the public outside of the specified minimum coverage area extend the coverage area to a wider distance** as deemed prudent.

Therefore, Sunoco failed to follow the general program recommendations of AP RP 1162 prescribed by § 195.440(b) by neglecting to identify and educate the affected public whose safety could potentially be compromised in the event of an unintended release of product from the ME2 pipeline. Specifically, by not tailoring its communications coverage area (buffer) to areas of consequence recognized in pertinent risk assessment reports, and by not presenting reasonable

justification, Sunoco failed to tailor its buffer to the particular pipeline, location, and potential impact consequences as required by API RP 1162 (IBR, see § 195.3).

Proposed Compliance Order

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$213,268 per violation per day the violation persists, up to a maximum of \$2,132,679 for a related series of violations. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed \$209,002 per violation per day, with a maximum penalty not to exceed \$2,090,022. For violations occurring prior to November 2, 2015, the maximum penalty may not exceed \$200,000 per violation per day, with a maximum penalty not to exceed \$2,000,000 for a related series of violations.

We have reviewed the circumstances and supporting documents involved in this case, and have decided not to propose a civil penalty assessment at this time.

With respect to items 1 and 2, pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Sunoco Pipeline L.P. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. All material you submit in response to this enforcement action may be made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Following the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 190.211. If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. This period may be extended by written request for good cause.

Please submit all correspondence in this matter to Robert Burrough, Director, PHMSA Eastern Region, 840 Bear Tavern Road, Suite 300, West Trenton, New Jersey 08628. Please refer to **CPF 1-2019-5006** on each document you submit, and whenever possible provide a signed PDF copy in electronic format. Smaller files may be emailed to robert.burrough@dot.gov. Larger files should be sent on a USB flash drive accompanied by the original paper copy to the Eastern Region Office.

Additionally, if you choose to respond to this (or any other case), please ensure that any response letter pertains solely to one CPF case number.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert Burrough".

Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Sunoco Pipeline, L.P. a Compliance Order incorporating the following remedial requirements to ensure the compliance of Sunoco with the pipeline safety regulations:

1. With respect to Item Number 1 of the Notice pertaining to Sunoco's failure to meet the requirements of § 195.106(b)(1)(i) regarding the number of tests required to validate specified minimum yield strength for the Glen Riddle to Elverson (GRE) segment of its 12-inch PTBR-MNTL pipeline, Sunoco shall complete at a minimum, the following actions:
 - a. Evaluate the GRE segment to determine the appropriate representative sampling of pipe joints required under § 195.106(b)(1)(i), and complete tests per ANSI/API Spec 5L in order to, at a minimum, validate that the segment is comprised of Grade B pipe. The order is applicable to all pipe, regardless of vintage, where the specified minimum yield strength is unknown due to inadequate or missing records.
 - b. If the GRE pipeline segment affected by Item 1 of this order is in service at the time of receipt of this notice, actions shall immediately be taken to limit operation so that its original MOP of 950 psi or an MOP based on design pressure formula utilizing 24000 psi as the specified minimum yield strength, whichever is less, is not exceeded. The MOP limitation shall stand until such time the finding under 49 CFR 195 has been satisfactorily remediated.
 - c. Within 10 days of the issuance of the Final Order, provide a written plan addressing implementation of compliance order Item 1, and the process for any remedial action required by 49 CFR 195, including excavation and testing schedules, if warranted.
2. With respect to Item Number 2 of the Notice pertaining to Sunoco's failure to follow the general program recommendations of API RP 1162 prescribed by § 195.440(b) by neglecting to identify and educate the affected public whose safety could potentially be compromised in the event of an unintended release of product from the ME2 pipeline, Sunoco shall complete at a minimum, the following actions:
 - a. Modify its Public Awareness Plan (PAP) applicable to the new ME2 pipeline, including any temporary reversal and repurposed portions of the existing 12-inch PTBR to MNTL pipeline and any components of the new 16-inch ME2X pipeline which will be utilized to facilitate transportation of HVLs. Sunoco shall expand their communication coverage area for Stakeholder Audience Identification, as defined by API RP 1162, consistent with areas of potential impact for their pipeline facilities. Sunoco shall also update their PAP to reflect communication buffer area(s) and information on how buffer(s) were determined and/or rational for selection.
 - b. Should the modification be deemed unwarranted, Sunoco shall provide justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety, specifically, education of Stakeholder Audiences that were concluded to be susceptible to product dispersion and/or thermal radiation impact.

- c. PAP modifications and/or justifications required under Item 2 shall be submitted to the PHMSA Director of the Eastern Region for evaluation and approval.
3. All items under this order shall be completed within 60 days of the issuance of the Final Order.
4. All documentation demonstrating compliance with each of the items outlined in this Compliance Order must be submitted to Robert Burrough, Director, Eastern Region, PHMSA, 840 Bear Tavern Road, Suite 103, West Trenton, NJ 08628.
5. It is requested (not mandated) that Sunoco maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Robert Burrough, Director, Eastern Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

DiBernardino Cross Exhibit 2
C-2018-3006116
10/6/20 JK

1200 New Jersey Avenue, SE
Washington, DC 20590

June 26, 2020

VIA ELECTRONIC MAIL TO: kelcy.warren@energytransfer.com

Mr. Kelcy L. Warren
Chairman and Chief Executive Officer
Energy Transfer, LP
8111 Westchester Drive
Dallas, Texas 75225

Re: CPF No. 1-2019-5006

Dear Mr. Warren:

Enclosed please find the Final Order issued in the above-referenced case. It withdraws one of the allegations of violation, makes a finding of violation, and specifies actions that need to be taken by your subsidiary, Sunoco Pipeline, LP, to comply with the pipeline safety regulations. When the terms of the compliance order have been completed, as determined by the Director, Eastern Region, this enforcement action will be closed. Service of the Final Order by electronic mail is effective upon the date of transmission as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

ALAN KRAMER
MAYBERRY

Digitally signed by ALAN
KRAMER MAYBERRY
Date: 2020.06.26
11:54:27 -04'00'

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Enclosure

cc: Mr. Robert Burrough, Director, Eastern Region, Office of Pipeline Safety, PHMSA
Mr. Greg McIlwain, Senior Vice President – Operations, Energy Transfer Partners, LP,
gregory.mcilwain@energytransfer.com
Ms. Catherine D. Little, Esq., Troutman Sanders, LLP, catherine.little@troutman.com

CONFIRMATION OF RECEIPT REQUESTED

**U.S. DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, D.C. 20590**

)	
In the Matter of)	
)	
Sunoco Pipeline, LP,)	CPF No. 1-2019-5006
 a subsidiary of Energy Transfer, LP,)	
)	
Respondent.)	
)	

FINAL ORDER

On various dates from August through November, 2018, pursuant to 49 U.S.C. § 60117, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), conducted an on-site pipeline safety inspection of the facilities and records of Sunoco Pipeline, LP (Sunoco or Respondent) for the GRE Flow Reversal/Repurposing Project on the Mariner East 2 pipeline system located in Pennsylvania (the GRE Project). Sunoco Pipeline, LP operates approximately 5,851 miles of hazardous liquid pipelines and other assets in 11 states and is a subsidiary of Energy Transfer, LP.¹

As a result of the inspection, the Director, Eastern Region, OPS (Director), issued to Respondent, by letter dated May 17, 2019, a Notice of Probable Violation and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that Sunoco had committed two violations of 49 C.F.R. Part 195 and proposed ordering Respondent to take certain measures to correct the alleged violations.

Sunoco responded to the Notice by letter dated June 20, 2019 (Response). In its Response, Sunoco contested the allegations and requested a hearing. A hearing was subsequently held on November 7, 2019, in West Trenton, New Jersey before a PHMSA Presiding Official. At the hearing, Respondent was represented by counsel. Respondent provided additional written material prior to the hearing on October 28, 2019 (Pre-hearing submission), and following the hearing on December 28, 2019 (Post-hearing submission). The Director submitted a recommendation on January 21, 2020 (Recommendation).²

¹ Pipeline Safety Violation Report (Violation Report), (May 21, 2019) (on file with PHMSA), at 1; Energy Transfer website, available at <https://www.energytransfer.com/ownership-structure> (last accessed June 16, 2020).

² Respondent submitted a reply to the Director's recommendation on February 10, 2020, to which OPS submitted an objection on February 18, 2020. Because the record in this proceeding was closed by this time and no request to submit these items was made or granted, these submissions were disregarded.

FINDING OF VIOLATION

The Notice alleged that Respondent violated 49 C.F.R. Part 195, as follows:

Item 1: The Notice alleged that Respondent violated 49 C.F.R. § 195.106(b), which states:

§ 195.106 Internal design pressure.

(a) ...

(b) The yield strength to be used in determining the internal design pressure under paragraph (a) of this section is the specified minimum yield strength. If the specified minimum yield strength is not known, the yield strength to be used in the design formula is one of the following:

(1)(i) The yield strength determined by performing all of the tensile tests of ANSI/API Spec 5L (incorporated by reference, see §195.3) on randomly selected specimens with the following number of tests:

Pipe size	No. of tests
Less than 6 ⁵ / ₈ in (168 mm) nominal outside diameter.	One test for each 200 lengths.
6 ⁵ / ₈ in through 12 ³ / ₄ in (168 mm through 324 mm) nominal outside diameter.	One test for each 100 lengths.
Larger than 12 ³ / ₄ in (324 mm) nominal outside diameter.	One test for each 50 lengths.

The Notice alleged that Respondent violated 49 C.F.R. § 195.106(b) by failing to conduct sufficient random tensile tests to determine the internal design pressure of certain pipeline segments undergoing a change in maximum operating pressure (MOP) where the specified minimum yield strength (SMYS) was not known. Specifically, the Notice alleged that the SMYS was not known because the historical records Respondent used to establish that the 12-inch pipe was Grade B pipe having a SMYS of 35,000 should have been supplemented with additional historical records that validated these records.

In its Response and at the hearing, Sunoco strongly disagreed with OPS and stated that the allegation should be withdrawn. Respondent explained that the pipe grade and SMYS was known by Respondent from records it inherited from a predecessor company. These records included an August 1969 system map prepared by Atlantic Pipe Line Corporation; a December 1967 Atlantic Pipe Data Sheet; and a 1989 Line Testing Committee Report from Sun Pipe Line Company, a subsequent owner of the GRE Segment.³ All of these records indicated that the GRE Segment is Grade B seamless pipe.

OPS maintained that the records provided by Respondent were insufficiently validated for the pipe grade and SMYS to be considered “known” by Respondent and pointed out that the original 1937 manufacturing records did not include mill test reports. In the Notice, OPS quoted

³ Prehearing submission, Exhibits 6-8.

extensively from two advisory bulletins published by OPS concerning verification of records.⁴ Citing Advisory Bulletin ADB-2014-04, the Notice stated that operators should validate material and strength test records for all affected segments of pipe as reminded in Advisory Bulletin ADB-12-06 which stated, “If the operator is missing records, they should create and implement a plan to obtain material documentation. If mechanical and/or chemical properties (mill test reports) are missing, the plan should require destructive tests to confirm material properties of [the] pipeline. Certain high-risk pipelines merit a greater level of due diligence.”⁵

The issue to be determined in this case is whether the records produced by Respondent were sufficient to draw the conclusion that the pipe grade and SMYS were “known.” As Sunoco noted, the term “known” is not defined in the Part 195 regulations. In interpreting undefined regulatory terms, we look to the common dictionary definition. Merriam-Webster’s dictionary defines “known” to mean “generally recognized.”⁶ Respondent produced an August 1969 system map prepared by Atlantic Pipe Line Corporation; a December 1967 Atlantic Pipe Data Sheet; and a 1989 Line Testing Committee Report from Sun Pipe Line Company, a subsequent owner of the GRE Segment.⁷ All of these records indicated that the GRE Segment is Grade B seamless pipe. Sunoco provided copies of these records and OPS did not question their authenticity. In addition, Respondent’s Senior Manager of Pipeline Integrity testified at the hearing that the pipeline had been documented, maintained, and treated as Grade B pipe.⁸ Respondent maintained that the grade and SMYS of the pipeline in question was actually “known” in the context of 49 C.F.R. § 195.106(b).⁹

Having considered these arguments, the preponderance of the evidence shows that Respondent had adequately documented that the segment of pipe in question was Grade B with a SMYS of 35,000 psi. The Region’s justification for demanding that the operator perform additional, random tensile testing was neither necessary nor reasonable in light of the operator’s production of adequate documentation demonstrating its knowledge and confidence about the internal design pressure specifications for the pipeline segments at issue in this case. Based upon the foregoing, I hereby order that Item 1 of the Notice be withdrawn.

Item 2: The Notice alleged that Respondent violated 49 C.F.R. § 195.440(c), which states:

§ 195.440 Public awareness.

(a) ...

(c) The operator must follow the general program recommendations,

⁴ Notice, at 3.

⁵ 77 FR 26822 (May 7, 2012). Advisory bulletins are a form of guidance and are not enforceable.

⁶ See <https://www.merriam-webster.com/dictionary/known>.

⁷ Prehearing submission, Exhibits 6-8.

⁸ Hearing transcript, at 29.

⁹ It is also notable that when tensile testing was voluntarily conducted on the 12-inch piping, the results for the actual yield strength ended up being consistent with Respondent’s understanding from its records that the pipe was Grade B with specified 35,000 psi yield strength, and the MOP of the pipeline was never out of compliance with the Part 195 regulations.

including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.

The Notice alleged that Respondent violated 49 C.F.R. § 195.440(c) by failing to follow the public awareness program requirements of API RP 1162.¹⁰ Specifically, the Notice alleged that Respondent failed to tailor its communications coverage area to fit its particular pipeline, location, and potential impact consequences.

Following the hearing, Sunoco stated that it was no longer contesting this allegation. Accordingly, after considering all of the evidence and the legal issues presented, I find that Respondent violated 49 C.F.R. § 195.440(c) by failing to follow the public awareness program requirements of API RP 1162.

This finding of violation will be considered a prior offense in any subsequent enforcement action taken against Respondent.

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to Items 1 and 2 in the Notice for alleged violations of 49 C.F.R. §§ 195.106(b), and 195.440(c), respectively. Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. With regard to the alleged violation of § 195.106(b) (Item 1), as discussed above, this allegation has been withdrawn. Therefore, the compliance terms proposed in the Notice for Item 1 are also withdrawn.

As for the remaining compliance terms regarding the violation of § 195.440(c) (Item 2), pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations:

1. With respect to the violation of § 195.440(c) (**Item 2**), within 60 days of receipt of this Final Order, Respondent must:
 - a. Modify its Public Awareness Plan (PAP) applicable to the new ME2 pipeline, including any temporary reversal and repurposed portions of the existing 12-inch PTBR to MNTL pipeline and any components of the new 16-inch ME2X pipeline which will be utilized to facilitate transportation of HVLs. Sunoco shall expand its communication coverage area for Stakeholder Audience Identification, as defined by API RP 1162, consistent with areas of potential impact for their pipeline facilities. Sunoco shall also update its PAP to reflect communication buffer area(s) and information on how buffer(s) were determined and/or rational for selection.

¹⁰ API RP 1162 is incorporated by reference in Part 195, see § 195.3.

- b. Should the modification be deemed unwarranted, Sunoco shall provide justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety, specifically, education of Stakeholder Audiences that were determined to be susceptible to product dispersion and/or thermal radiation impact.
- c. PAP modifications and/or justifications required under Item 2 shall be submitted to the PHMSA Director of the Eastern Region for evaluation and approval.
- d. Submit documentation demonstrating compliance with each of the items outlined in this Compliance Order to Robert Burrough, Director, Eastern Region, PHMSA, 840 Bear Tavern Road, Suite 103, West Trenton, New Jersey 08628.

It is requested (not mandated) that Respondent maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director. It is requested that these costs be reported in two categories: (1) total cost associated with preparation/revision of plans, procedures, studies and analyses; and (2) total cost associated with replacements, additions and other changes to pipeline infrastructure.

Failure to comply with this Order may result in the administrative assessment of civil penalties not to exceed \$200,000, as adjusted for inflation (49 C.F.R. § 190.223), for each violation for each day the violation continues or in referral to the Attorney General for appropriate relief in a district court of the United States.

Under 49 C.F.R. § 190.243, Respondent may submit a Petition for Reconsideration of this Final Order to the Associate Administrator, Office of Pipeline Safety, PHMSA, 1200 New Jersey Avenue, SE, East Building, 2nd Floor, Washington, DC 20590, with a copy sent to the Office of Chief Counsel, PHMSA, at the same address, no later than 20 days after receipt of service of this Final Order by Respondent. Any petition submitted must contain a statement of the issue(s) and meet all other requirements of 49 C.F.R. § 190.243. The terms of the order, including corrective action, remain in effect unless the Associate Administrator, upon request, grants a stay.

The terms and conditions of this Final Order are effective upon service in accordance with 49 C.F.R. § 190.5.

ALAN KRAMER
MAYBERRY

Digitally signed by ALAN
KRAMER MAYBERRY
Date: 2020.06.26 12:38:25
-04'00'

June 26, 2020

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Date Issued

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

MEGHAN FLYNN et al.	:	Docket Nos. C-2018-3006116 (consolidated)
	:	P-2018-3006117
MELISSA DIBERNARDINO	:	Docket No. C-2018-3005025 (consolidated)
REBECCA BRITTON	:	Docket No. C-2019-3006898 (consolidated)
LAURA OBENSKI	:	Docket No. C-2019-3006905 (consolidated)
ANDOVER HOMEOWNER'S ASSOCIATION, INC.	:	Docket No. C-2018-3003605 (consolidated)

v.

SUNOCO PIPELINE L.P.

**REBUTTAL TESTIMONY
OF JOSEPH McGINN
ON BEHALF OF SUNOCO PIPELINE, L.P.**

Date: June 15, 2020

C-2018-3006116 10/6/20 JK

SPLP N6

1 **Q: What is your full name and current occupation?**

2 A: My name is Joseph McGinn. From May 2019 to the present, I have been Vice President
3 of Public and Government Affairs for Energy Transfer Partners (formerly Sunoco Pipeline).
4 From 2017 to 2019, I was a principal in McGinn Public Strategies, LLC and from 2013 to April
5 2017 I was Senior Manager of Public Affairs and then Senior Director of Public and Government
6 Affairs for Energy Transfer and Sunoco Logistics Partners, L.P. (“SPLP”).

7

8 **Q: What did you do relating to ME2 in your capacity of Senior Manager and Senior**
9 **Director of Energy Transfer and SPLP?**

10 A: I led our public affairs activities under Sunoco Logistics until it merged with Energy
11 Transfer in 2017. This included our community affairs, media relations and local government
12 outreach. After the merger, I led our government affairs for the combined partnerships in
13 Pennsylvania and the general Mid-Atlantic region.

14

15 **Q: What did you relating to ME2 in your capacity as Principal for McGinn Public**
16 **Strategies, LLC?**

17 A: During this time, I was a consultant for Energy Transfer. I helped support their
18 government and public affairs outreach in Pennsylvania.

19

20 **Q: What did you do relating to ME2 in your capacity as Vice President of Public and**
21 **Government Affairs for Energy Transfer Partners.**

1 A: Since rejoining Energy Transfer in May 2019, I lead our public and government affairs
2 efforts in our East Coast and Midwest operational areas. This includes community relations,
3 local and state government outreach.

4

5 **Q: What is your educational background?**

6 A: I have a bachelor's degree from Columbia University and a Masters of Public
7 Administration from the University of Pennsylvania.

8

9 **Q: Did you serve on the Governor's Pipeline Task Force?**

10 A: Yes from 2015 to 2016.

11

12 **Q: Is your curriculum vitae attached as Exhibit SPLP-JM-1?**

13 A: Yes.

14

15 **Q: Are you familiar with the PHMSA regulations relating to public awareness plans
16 and programs for Hazardous Volatile Liquids ("HVL") pipelines?**

17 A: Yes.

18

19 **Q: Are you also familiar with PHMSA's guidance document, API RP-1162?**

20 A: Yes.

21

1 **Q: Does API RP-1162 make recommendations for baseline public awareness programs**
2 **for pipelines?**

3 A: Yes.

4

5 **Q: Does API RP-1162 also make recommendations for enhancements to public**
6 **awareness programs for certain circumstances, including HVL pipelines and pipelines**
7 **located in High Consequence Areas (“HCAs”)?**

8 A: Yes.

9

10 **Q: Have you done any outreach directly to the County and municipal emergency**
11 **management professionals?**

12 A: Yes, I routinely interact with both the Chester and Delaware County departments
13 responsible for emergency services. This outreach includes general updates on our operations
14 and construction activities throughout the counties.

15

16 **Q: Various witnesses have alleged that SPLP does not engage in enough**
17 **communication and notification to local and county public and emergency officials. Does**
18 **SPLP engage in outreach to these groups in addition to the API RP 1162 baseline**
19 **requirements?**

20 A: Yes. When an event that impacts a municipality or its residents occurs or is scheduled to
21 occur, SPLP engages in direct, personal communications (face-to-face, electronic, telephonic)
22 with the relevant local and County public and emergency officials. For example, SPLP recently

1 provided notification prior to placing portions of the 16-inch pipeline into service to the
2 following:

- 3 • West Whiteland Twp
- 4 • Middletown Twp
- 5 • West Goshen Twp
- 6 • East Goshen Twp
- 7 • Westtown Twp
- 8 • Edgmont Twp
- 9 • Thornbury Twp
- 10 • State Senator Killion
- 11 • State Representative Chris Quinn
- 12 • State Representative Carolyn Comitta
- 13 • State Representative Kristine Howard
- 14 • PADEP
- 15 • PUC
- 16 • Chester County Department of Emergency Services
- 17 • Delaware County Department of Emergency Services

18 SPLP keeps these entities apprised generally of the locations where major work will take
19 place in their municipality, including scheduled operations and maintenance work and
20 construction. SPLP also often has to obtain permits or other approvals for this work from the
21 local municipality and the municipality gains knowledge through the permitting review process
22 as well.

23 SPLP also participates in bi-weekly meetings with townships across Chester and
24 Delaware Counties; which include:

- 25 • East Goshen Twp
- 26 • West Whiteland Twp
- 27 • Uwchlan Twp
- 28 • Westtown Twp
- 29 • Thornbury Twp
- 30 • Edgmont Twp
- 31 • Middletown Twp

1 SPLP regularly attends and participates in Chester County Association of Township
2 Officials (CCATO) monthly meetings which includes township officials, state representative,
3 state senators, PUC, PADEP and others. At these meetings SPLP provides updates on our
4 projects and answers questions participants pose. Twenty-five members and guests of CCATO
5 attended the tour of the Eagle Pump Station in Upper Uwchlan Township, Chester County on
6 6/21/2019, including representatives from the Chester County Department of Emergency
7 Services, the Pennsylvania PUC, and several municipal officials from East Goshen Township,
8 Upper Uwchlan Township and West Whiteland Township.

9 SPLP also engages in outreach particularly when unplanned operational activities attract
10 public attention. For example, when the Boot Road flaring event occurred in West Goshen
11 Township in August of 2019, SPLP had a call with the Township to explain what had
12 happened. We engage in this direct contact so that these officials can follow-up with questions
13 or concerns directly with SPLP. If an incident required to be reported to the National Response
14 Center (NRC) occurs, when SPLP submits the report, which includes a description of the
15 incident and location, the report is automatically provided to the relevant County emergency
16 response organization(s).

17

18 **Q: Have you done anything else to enhance public awareness and assist municipalities**
19 **and emergency responders?**

20 A: Yes. Between 2016 and 2019 SPLP has provided first responder grants totaling
21 \$852,863.44. Of that \$625,394.15 went to recipients in Chester and Delaware Counties as
22 follows:

- 1 1. Grants to Chester County totaled \$172,794.60 for:
 - 2 a. West Whiteland Fire Company – hydraulic rescue tool.
 - 3 b. Ludwig’s Corner Fire Company – replacement of rescue vehicle.
 - 4 c. Chester County Department of Emergency Services – for split pipe flange
5 fire prop.
 - 6 d. Minquas Fire Company No. 2 EMS – towards a new ambulance.
 - 7 e. Lionville Fire Company – turnout gear, gas masks.
 - 8 f. West Whiteland Fire Company – ATV.
 - 9 g. Upper Uwchlan Township Police Department – ATV.
- 10 2. Grants to Delaware County totaled - \$452,599.55.
 - 11 a. Reliance Hook and Ladder Company – 10 sets of turnout gear, hose reel,
12 gas meters, thermal imaging cameras.
 - 13 b. Boothwyn Fire Co. No. 1 – 5 self-contained breathing apparatus and
14 facility upgrades.
 - 15 c. Aston Township Volunteer Fire Department – gas meters.
 - 16 d. Lower Chichester Volunteer Fire Department – utility terrain vehicle and
17 10 sets of turnout gear.
 - 18 e. Rocky Run Volunteer Fire Department – upgrades to firehouse.
 - 19 f. Delaware County Department of Emergency Services – RAE deployment
20 kit/ruggedized host.
 - 21 g. Ogden Volunteer Fire Department – 12 sets of PPE and hose.
 - 22 h. Upper Chichester Township Police Department – drone.
 - 23 i. Marcus Hook Trainer Fire Department – 3 defibrillators, 10 portable
24 radios, 10 sets of turnout gear.

25
26 **Q: Did SPLP provide or does it intend to provide any other support?**

27 A: Yes. As part of a negotiated easement agreement, SPLP provided funding to Middletown
28 Township for emergency response training in Oklahoma. In 2020, SPLP has sent out requests for
29 applications to municipalities to apply for grants to refresh their emergency response plans. And

1 recently, Timothy Boyce, the Director of Delaware County’s Department of Emergency Services
2 and a designated witness of Complainants and Complainant Aligned Intervenors in this matter,
3 reached out to SPLP for assistance in response to the Coronavirus crisis. Specifically, Delaware
4 County identified a need to have a portable shelter and its support equipment for local police
5 officers. SPLP provided the shelter, a Zumro Shelter Model 216, with lighting, stakes, ID panels
6 and a containment pool. Mr. Boyce stated in a letter that “I appreciate Energy Transfer’s
7 commitment to public safety over the years . . .” and extended his “gratitude to all your coworkers
8 who continue to serve during this crisis,” which is attached as Exhibit SPLP JM-2.

9

10 **Q: Are there other steps that SPLP has taken or is considering as part of its public**
11 **awareness plan?**

12 A: Yes. SPLP has a team, which I manage to provide outreach to local officials included first
13 responders. In addition, SPLP is evaluating additional social media (Facebook, Twitter and
14 Instagram and websites) outlets so that the general public can have multiple access pairing to
15 pipeline safety information as well as the possibility of radio advertising.

16

17 **Q: Have you agreed to provide County and municipalities with hazard assessment**
18 **information if they sign a non-disclosure agreement?**

19 A: Yes.

20

21 **Q: Why do they need to sign the non-disclosure agreement?**

1 A: It is highly confidential information protected from disclosure by federal and state laws
2 for security reasons.

3

4 **Q: Do you wish to offer anything else?**

5 A: I reserve the right to supplement my testimony based on the sur-rebuttal testimony by
6 Complainants and Complainant Aligned Intervenors.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

MEGHAN FLYNN et al.	:	Docket Nos. C-2018-3006116 (consolidated)
	:	P-2018-3006117
MELISSA DIBERNARDINO	:	Docket No. C-2018-3005025 (consolidated)
REBECCA BRITTON	:	Docket No. C-2019-3006898 (consolidated)
LAURA OBENSKI	:	Docket No. C-2019-3006905 (consolidated)
ANDOVER HOMEOWNER'S ASSOCIATION, INC.	:	Docket No. C-2018-3003605 (consolidated)
	:	
v.	:	
SUNOCO PIPELINE L.P.	:	

**REJOINDER TESTIMONY OUTLINE
OF JOSEPH McGINN
ON BEHALF OF SUNOCO PIPELINE, L.P.**

1. Witness Boyce, in his rebuttal testimony, p. 4-5, states that Mr. Noll's testimony does not address Sunoco's public awareness program or Sunoco's public awareness brochure/flyer.
 - A. Mr. Noll's testimony regarding emergency response training is part of Sunoco's public awareness program in accordance with RP-1162.
 - B. Mr. Boyce focuses on Mr. Noll's testimony only and ignores my testimony and the testimony of Mr. Perez regarding the many ways in which Sunoco has reached out to inform and educate members of the general public regarding the Mariner East Pipelines (see, e.g., my Rebuttal Testimony at pp. 3, 4, 5 and 7).
 - C. In addition, as set forth on p. 7 of my Rebuttal Testimony, Sunoco has for several years implemented a comprehensive social media and traditional media program to enhance public awareness. Sunoco continues plans to expand and enhance that program by creating a dedicated pipeline safety web page, Facebook page on pipeline safety and an Instagram account with pipeline safety information; purchasing additional pipeline safety informational advertising on local radio; and offering Delaware and Chester Counties, their municipalities and school districts, additional training for emergency response and emergency response planning. An example of the offer letter, which was sent to all municipalities and school districts in the Commonwealth where the Mariner East pipelines cross, is attached hereto as SPLP Exhibit JM-1-RJ.

Exhibit SPLP JM-1

C-2018-3006116
10/6/20 JK

SPLP
JM-1

Joe McGinn

3807 West Chester Pike ♦ Newtown Square, PA 19073 ♦ (215) 977-6237 ♦ joseph.mcgin@energytransfer.com

Skills Summary

- ♦ Communications
- ♦ Community Relations
- ♦ Constituent Services
- ♦ Crisis Communications
- ♦ Government Relations
- ♦ Human Resources
- ♦ Labor Relations
- ♦ Media Relations
- ♦ Public Policy
- ♦ Public Relations
- ♦ Recruiting
- ♦ Regulatory Affairs
- ♦ Social Media Development
- ♦ Speech Writing
- ♦ Talent Development

Employment History

ENERGY TRANSFER – Newtown Square, Pa.; Harrisburg, Pa.
Vice President of Public & Government Affairs, May 2019 to present

MCGINN PUBLIC STRATEGIES, LLC
Principal, September 2017 to May 2019

SUNOCO, INC., ENERGY TRANSFER PARTNERS& SUNOCO LOGISTICS PARTNERS, L.P. – Newtown Square, Pa.; Harrisburg, Pa.; Philadelphia, Pa.; Marcus Hook, Pa.; Westville, N.J.
Senior Director of Public & Government Affairs, April 2017 to September 2017

Senior Manager of Public Affairs, 2013 to April 2017

Manager of Public Affairs, 2012 to 2013

Communications/Community Relations Specialist, 2010 to 2012

Recruiting Analyst, 2009 to 2010

Educational Outreach Consultant, 2009

Public Affairs Representative, 2004 to 2009

UNITED STATES HOUSE OF REPRESENTATIVES – Washington, D.C.; Upper Darby, Pa.
District Representative, 2003 to 2004

Education

UNIVERSITY OF PENNSYLVANIA – PHILADELPHIA, PA
Master's of Public Administration, 2008

Certificate in Politics

Class of 2008 Executive Leadership Award Recipient

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK – NEW YORK, NY
Bachelor's Degree in English Literature, 2003

Concentration in History

Exhibit SPLP JM-2

SPLP
JM-2



Delaware County Emergency Services

360 North Middletown Road

Media, PA 19063

610-565-8700

Fax: 610-892-9583

Timothy A. Boyce, Director

Mr. Joseph McGinn
Vice President, Public Affairs
Energy Transfer
Newtown Square, PA

April 6, 2020

Ref: Request for support during Covid-19 crisis

Mr. McGinn,

In response to the Coronavirus crisis, Delaware County has had a significant increase in demand for services related to responding to hazardous and biological events within the County and Region. We have activated our Major Incident Response Team to respond to support our police, firefighters, medical providers and the public through advanced on-scene remediation and decontamination of hazards.

In standing up a new 24/7 response unit staffed by local police, we have identified the need to have a portable shelter for the officers to operate safely. We are asking if Energy Transfer could donate a shelter and it's support equipment that would be utilized throughout the region as a resource to protect the public. We have identified a Zumro Shelter Model 216 with lighting, stakes, ID panels and a containment pool (7819 Inflatable floor for model 216) as resource that would meet our immediate needs.

I appreciate Energy Transfer's commitment to public safety over the years and ask that you consider this request in these extraordinary times of crisis.

Thank you and please extend our gratitude to all your coworkers who continue to serve during this crisis.

Regards,

A handwritten signature in black ink that reads "Timothy A. Boyce". The signature is written in a cursive style with a large, sweeping initial 'T'.

Timothy A. Boyce

Director

Department of Emergency Services



Sept. 17, 2020

Timothy A. Boyce
Delaware County Emergency Services Department
201 West Front Street
Media, PA 19063

Re: Additional Emergency Response Training and Assistance in Emergency Response Planning - Mariner East Pipelines

Mr. Boyce:

As part of Sunoco Pipeline L.P.'s (SPLP) continuing public awareness program, we would like to invite your participation in additional training for emergency response and emergency response plan preparation relating to the Mariner East pipelines (collectively "Mariner East") in your area. As you are aware, SPLP has completed Mariner East Responder Outreach (MERO) training in counties across the Commonwealth with participation by County officials and emergency responders as well as by officials and emergency responders of the municipalities within the counties. SPLP is currently scheduling a new round of MERO training for County and municipal personnel which had been delayed due to COVID-19 but they are kicking off this week.

In addition, SPLP scheduled training and information sessions with representatives of the school districts within counties across Pennsylvania regarding emergency response and emergency response plan preparation. Finally, building on the significant grants awarded by Energy Transfer to counties across the Commonwealth for emergency response equipment and training from 2016 to 2019 (totaling over \$650,000), Energy Transfer continues to review applications for 2020 grants. Two rounds have already been awarded in 2020 and we plan to award a third round in the coming weeks.

As this demonstrates, SPLP has been committed to continuing emergency response training. In that tradition, SPLP invites you to participate in two future training opportunities (in addition to the next round of MERO training):

1. The MERO training has been presented by Greg Noll, a nationally recognized and decorated emergency response expert. Chester County has itself retained Mr. Noll to present table top exercises to train emergency responders regarding response to specific scenarios related to a hypothetical release from Mariner East. One such exercise involved responding to a release impacting the Wellington Senior Center.

SPLP and Mr. Noll recognize the value of these specific table top exercises. For that reason, SPLP is offering, at SPLP's expense, to retain Mr. Noll to conduct additional table top exercises addressing specific locations in counties across the Commonwealth.

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10/6/20 JK

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Sept. 17, 2020

Page 2

We suggest that Mr. Noll meet with those governmental entities and school districts to determine what table top scenarios will be most valuable. For example, a table top scenario could address a potential release near an elementary school, a residential neighborhood or a shopping area. Please let us know if you are interested in meeting to discuss what tabletop exercises are most appropriate and participating in those tabletop exercises that are selected.

2. Some Counties, municipalities and school districts have expressed the need for further direction in creating their respective emergency response plans. As you are aware, pursuant to Pennsylvania's Emergency Services Code, government entities and school districts, not SPLP, are responsible for creating those plans.

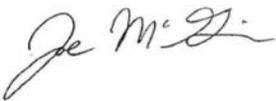
That said, SPLP remains committed to providing information to those entities so that they can complete their own plans. SPLP has met with such entities, answered questions, provided information and to the extent the required information contains confidential security information, agreed to enter into non-disclosure agreements under which the government entities or school districts could review that information. We have also initiated an application process to cover the costs for municipalities to develop plans through the end of this year.

SPLP is, by this letter, offering to take an additional step. SPLP will make Mr. Noll available for a group meeting with all interested government entities and school districts in counties across Pennsylvania to discuss "best in class" emergency response plan preparation components relative to hazardous materials incident response that Mr. Noll is aware of both in and outside of the Commonwealth. Again, please let me know if you are interested in attending this meeting.

As SPLP has reiterated, public awareness is a process. SPLP believes that the additional training and assistance it is offering furthers that process, along with SPLP's continued efforts to engage and educate the general public regarding Mariner East.

I look forward to hearing from you.

Sincerely,



Joseph McGinn
Vice President, Public Affairs &
Government Relations
joseph.mcginn@energytransfer.com

CC: Howard Lazarus, Executive Director

Exhibit SPLP-43
15 second Radio Ad for Papipelinesafety.com

C-2018-3006116
10/6/20 JK

SPLP-43

Exhibit SPLP-44
30 second Radio Ad for Papipelinesafety.com

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10/6/20 JK

SPLP-44

PA Pipeline Safety

Facts About Pipeline Safety In Your Community

Keeping America's pipelines running safely and efficiently is the number one priority for all pipeline operators.

Pennsylvania's 93,500+ miles of underground pipelines safely and efficiently deliver the affordable energy that enable our comforts of home and make our modern way of life possible.

Pipelines are also the most environmentally-friendly, efficient and reliable mode of transporting energy products. Studies by the U.S. Department of Transportation show that pipelines surpass both rail and truck in overall safety. From fueling our vehicles and heating our homes, to providing the raw materials that make thousands of items we use every day, pipelines connect us to the energy we rely on.

This PA Pipeline Safety website is designed to provide facts and resources about pipeline safety and emergency response in Pennsylvania's communities. Leaks from pipelines are unusual, but you should know what to do in the unlikely event one occurs.



SAFETY TRAINING

(Prevention.html)

Pipeline operators regularly hold training exercises with local first responders and federal authorities to simulate an incident and practice their joint response.

 [LEARN MORE \(PREVENTION.HTML\)](#)

> [Privacy Policy \(Privacy_Policy.html\)](#) | [Terms of Use \(Terms_of_Use.html\)](#)

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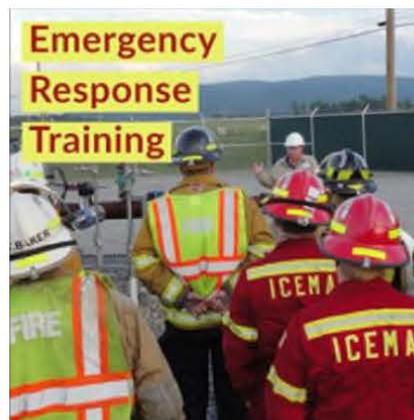
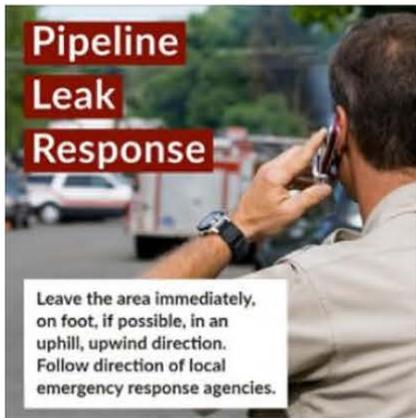
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PA Pipeline safety

papipelinesafety.com

POSTS

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C-2018-3006116
10/6/20 JK

SPLP-46



PA Pipeline Safety
@PApipelineSafety

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PA Pipeline Safety

1d ·

Always follow the direction of your local emergency response agencies. Leaks from #pipelines are rare, but you should know what to do in the unlikely event one occurs. Learn more: www.papipelinesafety.com

PIPELINE LEAK RESPONSE
Leaks from pipelines are rare, but you should know what to do in the unlikely event one occurs.

- Leave the area immediately, on foot, if possible, in an uphill, upward direction. Follow direction of local emergency response agencies.
- Abandon any equipment being used in or near the area. Warn others to stay away.
- Avoid any open flame or other sources of ignition.
- From a safe location, call 911 or local emergency response agencies.
- Do not attempt to operate pipeline valves.
- Do not attempt to extinguish a pipeline fire.
- Notify the pipeline company immediately.

Like Comment Share



PA Pipeline Safety

2d ·

September is National Preparedness Month. Visit the READY.gov website to learn how to prepare and respond to different types of emergency situations. #Safety #Prepare

NATIONAL PREPAREDNESS MONTH
2020 Disasters Don't Wait. MAKE YOUR PLAN TODAY.

Ready
September 1 ·

Like Page

It's National Preparedness Month! We are kicking off this month by talking about the importance of making a plan before a disaster happens. #DisastersWontWait!

No Rating Yet

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Pennsylvania's 46,000+ miles of underground utility pipelines safely and efficiently deliver the aff...

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Follow along with us this month as we share resources to help you prepare for disasters: <http://ow.ly/JsCW50BePlm>

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Photos

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- Do not attempt to operate pipeline valves.
- Do not attempt to extinguish a pipeline fire.
- Notify the pipeline company immediately.

PIPELINE SAFETY TRAINING
There are many resources available for emergency responders to study and train for all types of emergency incidents - house fire, flood, pipeline or other.

Coordinated Response Exercises, or CREs, are large tabletop drills that bring together first responders with multiple pipeline operators to pre-plan for emergency response.

[See All](#)

Posts

[See More](#)





Sept. 17, 2020

Michael Murphy
Chester County Department of Emergency Services
601 Westtown Road, Suite 012
Box 2747
West Chester, PA 19380

Re: Additional Emergency Response Training and Assistance in Emergency Response Planning - Mariner East Pipelines

Mr. Murphy:

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C-2018-3006116
10/6/20 JK

SPLP-48

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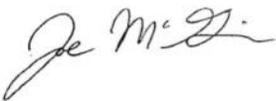
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I look forward to hearing from you.

Sincerely,



Joseph McGinn
Vice President, Public Affairs &
Government Relations
joseph.mcginn@energytransfer.com

CC: Robert J. Kagel, County Administrator
William Turner, Deputy Director for Emergency Management