

Community Response following Clinton Township meeting held September 21, 2011

We appreciate and understand your interest in our pipeline operations from both an historical and ongoing perspective. Natural gas pipelines transport 25 percent of the energy consumed in the United States. There are more than 200 pipeline systems and more than 300,000 miles of pipeline in the United States.

This response attempts to address concerns that were communicated to Transco as part of the public input phase of our proposed Northeast Supply Link Project but that fall outside the requisite information included in our environmental resource reports that will be filed with the Federal Energy Regulatory Commission (FERC) as part of our Natural Gas Act Section 7(c) certificate application for the project.

To augment this response we've listed websites and publications that provide a myriad of information about the natural gas industry, pipeline operations and the regulatory process. We hope these suggested readings will increase your awareness and knowledge about our company and our industry.

Pipeline Hazardous Materials Safety Administration (PHMSA): <http://www.phmsa.dot.gov/>
PHMSA--pipeline safety awareness: <http://opsweb.phmsa.dot.gov/pipelineforum/>
The Interstate Natural Gas Association of America (INGAA): <http://www.ingaa.org/about.aspx>
Federal Energy Regulatory Commission: www.ferc.gov

Definitions and terminology

Understanding the regulations under which natural gas pipelines operate is integral to understanding the ongoing operations of the Transco pipeline system. Several technical terms are used in this response. Some are defined in the text and some are linked to websites such as the electronic Code of Federal Regulations (CFR). <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=bcc7b07dbc0aaec2ff3e7d84a5041cc2;rgn=div5;view=text;node=49%3A3.1.1.1.8;idno=49;cc=ecfr#49:3.1.1.1.8.1.9.3>

The regulations for the natural gas industry can be found under:

Title 49: Transportation

Part 192—Transportation of Natural and Other gas by Pipeline: Minimum Federal Safety Standards

- **The definition of pipeline class locations can be found under Subpart A--General**
 - <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=bcc7b07dbc0aaec2ff3e7d84a5041cc2;rgn=div5;view=text;node=49%3A3.1.1.1.8;idno=49;cc=ecfr#49:3.1.1.1.8.1.9.3>
- **The definition of high consequence area (HCA) can be found under Subpart O—Gas Transmission Pipeline Integrity Management**
 - <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=297aa0052b48ead2a9c1e0f38e5aa80&rgn=div6&view=text&node=49:3.1.1.1.8.15&idno=49>

PHMSA definition of 'incident'

1. An event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the

following consequences:

- a. A death, or personal injury necessitating in-patient hospitalization;
 - b. Estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost;
 - c. Unintentional estimated gas loss of three million cubic feet or more.
2. An event that results in an emergency shutdown of an LNG facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.
 3. An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.

PHMSA definition of 'property damage'

Prior to November of 2010, the term property damage as defined by PHMSA included both the cost of pipeline repairs and the value of lost natural gas following a pipeline leak. In most cases these costs represent the majority of property damages. The regulation was amended in November, 2010 to exclude the value of lost natural gas.

The Transco pipeline system

The 10,000-mile Transco system originates in South Texas and terminates in New York City. Transco delivers approximately 8 percent of the natural gas consumed in the United States. The Transco system is comprised of 3, 4 or 5 parallel (looped) pipelines generally laid in a common right of way. Approximately 1,303 miles of pipe (14.48 percent of the Transco system) are located in class 3 area and 3.74 miles of pipe (.04 percent of the Transco system) are located in class 4 areas.

Transco's Pipeline Integrity Management Program

Integrity Management covers the life cycle of the pipeline. Design, manufacturing, construction and commissioning standards provide integrity on the front end of the life cycle. Operations and Maintenance (O&M) policies, procedures, and Integrity Management Plans are used to manage the integrity of the assets throughout the life of the pipeline.

Although the pipeline safety regulations focus on high consequence and/or high risk areas, Transco's pipeline integrity plan covers rigorous inspections for our entire pipeline system. We have customized our plans to include state of the art technology, a variety of tools and methodologies and ongoing analysis—all of which work in conjunction to reduce risk and increase prevention.

Transco has professional integrity management staff, including engineers, certified specialists, and technicians, that are dedicated full time to fulfilling the requirements of our Integrity Management Plan and procedures.

To date, Transco has "smart pigged" approximately 70% of its pipeline system.

The Pipeline Safety Act of 2002 requires pipeline operators to identify their pipeline segments that are classified as HCAs and to perform baseline assessments by December 2012. Operators must also evaluate the results, make necessary repairs, and apply prevention and mitigation measures. Segments classified as HCAs must be reassessed every 7 years.

Transco has 1,200 miles of pipe that are classified as HCA. By the end of 2012, Transco will not only have completed baseline assessments of all HCA segments but also will have assessed approximately 95% of its segments that have any level of population associated with them.

Decisions about where and when to conduct inline inspection (ILI) assessments are based on threat assessments and risk analysis of pipeline segments that have the necessary facilities to launch and receive the smart pig tools. Transco has a multi-year plan to assess all inspectable lines. Some segments are longer than others and some can be combined into a single, longer run by modifying the location of launchers and receivers.

Transco's policy of inline inspections covers the entire segment from launcher to receiver. Inline inspection length is a function of data (the longer the section the more data), battery life of the equipment, gas flow and speed control, and personnel considerations. Launchers and receivers are installed to optimize the length of the run. Threats are identified and risk is analyzed on each segment to determine prioritization of the inspections.

Threats to pipelines are discussed in CFR 192 Subpart O:

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=bcc7b07dbc0aaec2ff3e7d84a5041cc2;rgn=div5;view=text;node=49%3A3.1.1.1.8;idno=49;cc=ecfr#49:3.1.1.1.8.15.9.9>

Cathodic protection

Pipeline corrosion is prevented by having effective coatings and cathodic protection (CP). Transco conforms to and typically exceeds all CFR Part 192, Subpart I requirements for corrosion control.

Properly installed pipeline coatings have remained stable and effective from the day of application and have provided effective corrosion protection for much of the vintage pipelines in the United States. Coatings may become less protective over time if they are damaged by mechanical force (rocks, tree roots, etc.) or if they were not applied correctly. To maintain protection from corrosion on the pipeline, CP systems are designed, installed, and maintained. CP requirements can change from year to year and regular periodic monitoring of the pipeline is used to determine whether line segments are effectively protected. When CP can no longer provide adequate protection, pipeline segments are excavated and recoated.

Rectifier voltage and amperage for cathodic protection rectifiers are checked every two months. Transco is in the process of installing remote rectifier monitoring on each of its rectifiers which will provide daily remote monitoring in the future. That program is over 25% complete and is targeted for completion at the end of 2012. Transco strives to meet or exceed federal and National Association of Corrosion Engineers (NACE) guidelines and recommendations in all areas of the pipeline.

The rectifier outage example in 2006 which resulted in a fine from our regulators is well documented. These units caught fire and burned while in service. They were removed from service until the root cause of the fires was found and repaired. During the outage, current from adjacent rectifier units adequately protected the pipeline. Transco has also instituted a new O&M procedure that documents outages exceeding one inspection cycle.

The entire Transco system is subject to inspection by PHMSA, our internal auditors, and our own internal corrosion control experts. We maintain over 20 NACE certified Engineers and Specialists on staff and are constantly evaluating, testing, repairing and enhancing our corrosion control systems.

Smart pig technology

PHMSA requires that pipeline integrity assessments be completed by using one of the following methods: 1). Internal inspection device called a ‘smart pig’, 2). hydrostatic testing, 3). direct assessment (uncovering the pipe and visually inspecting sections of pipe selected based on various electronic measurements and other characteristics), or 4). “other alternative methods that the Secretary of Transportation determines would provide an equal or greater level of safety.”

Transco uses smart pigs as the primary tool to assess the integrity of our pipelines because of their accuracy, efficiency and versatility. Transco contracts with outside vendors for the use of their smart pig tools. Smart pig technology continues to improve through enhanced resolution, increased reliability and longer battery life. Each tool has an advertised accuracy specification and Transco has written criteria for its minimum acceptable standards for smart pig tools used in its integrity management program. These criteria are in accordance with industry specifications and standards found in API 1163, NACE 0102 and ASNT ILI-PQ.

Inline inspection tools do not directly measure wall thickness. They predict metal loss as a percentage of the wall thickness. When anomalies are excavated and inspected, physical measurements of the pipe wall thickness are made by qualified technicians and calculations are made to ensure that the strength of the pipeline is commensurate with the safe operating pressure of the pipeline.

Smart pig results on existing lines in the Clinton, Union and Franklin Township areas

The 2009 Leidy A 505 to Delaware River run resulted in 6 digs, only 1 of which was located within the Stanton Loop area. It was a dent on a girth weld on the bottom of the pipe, and was NOT corrosion. The dent and associated pipe was cut out and replaced with new pipe.

The 2006 Leidy B 505 to 515 run resulted in 19 digs, with 2 digs located within the Stanton Loop area. Dig 4 was corrosion based, but only required recoat. Dig 5 was a dent on the bottom of the pipe which was cut out and replaced with new pipe.

Transco’s Leidy lines in New Jersey

The installation dates for Transco’s Leidy lines are as follows:

Leidy Line A – 30”: 1959

Leidy Line B – 36”: 1986

Leidy Line C – 42”: 2001 & 2002

Total footage replaced since 2001 in New Jersey:

Leidy Line A - 324 linear feet

Leidy Line B - 14,444 linear feet

There are 4 high consequence areas (HCAs) between mileposts 9.0 and 11.0 on the Leidy lines: three on Mainline A and one on Mainline B.

Co-location of new lines with older lines

New pipelines are designed, manufactured and constructed according to company specifications, regulatory requirements, and industry best practices. Transco conducts pipe mill qualification and provides inspection at the pipe and coating mills to ensure that the adherence to the specs and standards. Manufacturing defects are mitigated through an effective inspection process. During construction, only certified and tested welders are used and all welds are x-rayed to detect and remove

any flaws due to field welding. Prior to commissioning, new pipelines are pressure tested to verify safety.

Installation of new pipelines near older lines does not reduce the life expectancy of the older lines. Construction safety practices ensure that the excavation, backfill spoil handling, and tie-in activities are performed to minimize any additional stress on existing pipelines. There is virtually no negative effect on existing CP systems because the new pipelines are coated with modern coatings. Each line in the Transco system is engineered independently for adequate cathodic protection. In addition to damage prevention, CP monitoring and other O&M activities, existing lines continue to receive regular inspections based on their risk profile.

Pipeline failures have not historically impacted adjacent lines. Pipelines are designed with safety factors intended to withstand outside forces. Spacing between lines, adequate support and cover all contribute to isolating lines from damage.

Pipelines that are out of service may be maintained by continuing cathodic protection and filling with inert gas. Re-commissioning a pipeline would include verifying the integrity of the line through inline inspection, pressure tests, and other activities as prescribed by PHMSA. Transco has the capability to trace pipeline components for its existing infrastructure.

Virginia earthquake on August 23, 2011

Our pipelines are designed and constructed in accordance with published codes and standards and take into consideration forces from potential events like earthquakes. The pipe is engineered to withstand a certain amount of land movement. In some locations that experience higher than normal levels of land movement, we install strain gauges to measure the amount of geological movement in an area so we can identify and mitigate greater than normal stress on the pipeline.

Unlike other materials, carbon steel is ductile, which means its linear design allows for a certain amount of "give" in the pipe which might be caused by geological movement.

Our pipeline is electronically monitored 24/7. This electronic system, called our SCADA system, didn't report any issues following the earthquake on August 23. Nevertheless, we dispatched crews to conduct fly-over and ground patrols to ensure there were no operational issues.

PHMSA Enforcement Actions since 2006 (*this timeframe was selected and researched based on specific comments submitted to FERC*)

Of the enforcement actions received since 2006, only two remain open. We have submitted the required documentation for these and are waiting for closure letters from PHMSA.

Consent Order and Agreement related to incident in Fairfax County, VA.

The Consent Order and Agreement included two monetary components: a \$190,385 fine and a \$600,000 Safety Products Program.

The \$190,385 fine was comprised of:

- \$90,385 fine for violation of 192.605(a)
- \$100,000 fine for violation of 192.605, 192.614 and 192.805(b)

The \$600,000 Safety Projects program included the development of

- \$300,000 for the purchase of GPS-enabled phones

- \$262,500 for the purchase of GPS-enabled pipeline locators

We currently have 157 users of the GPS phone program and are targeting having 250 users as of April 1, 2012. We have purchased 35 GPS pipeline locators and are using them on pipeline construction projects in Virginia.

The Consent Order and Agreement also mandated our participation in an Adopt-a-Community program. We chose to participate in the Virginia Utility Protection Service (VUPS, a non-profit organization created by Virginia's utilities to protect their underground facilities) through their E-911, Electronic Building Permit Program and the Encroachment Notification Program as well as the development and distribution of the 811 Damage Prevention DVD for schools. The DVD was completed and distributed to elementary and secondary schools as well as public libraries along our pipeline system. Transco also donated an additional \$75,000 for the development of electronic phone software under the direction VUPS.

Information regarding the pipeline incident in Appomattox, Virginia on September 14, 2008

Accidents like this are rare, but when they do happen, we do our best to learn from them to prevent them from happening in the future. This incident is well documented by PHMSA. The Corrective Action Order (CAO) and the Final Order can be found on the PHMSA website at phmsa.dot.gov. The COA case number CPF 120081004H and the Final Order case number is CPF 120091007. The following represents the basic facts of the incident:

- Mainline B ruptured on Sunday, September 14, 2008 at 7:45 a.m. near Appomattox, VA, approximately 3 miles from Transco's Station 170.
- Mainline B and Station 170 were isolated and shut down within 1 hour.
- Ignition was caused by overhead power lines bouncing against each other as a result of the turbulence from the blowing gas.
- The fire burned out within 2 hours (9:45 a.m.)
- Five people sustained injuries ranging from 2nd and 3rd degree burns to scratches from brush.
- Two homes were destroyed and three other homes were damaged.
- 100 other homes sustained minor structural damage or loss of power.
- The cause of the rupture was thinning of the pipe wall due to external corrosion.

Transco has updated its integrity procedures to identify the unusual corrosion that led to the Appomattox incident. Integrity procedures are in place to mitigate any corrosion and prevent potential ruptures. This includes a robust damage prevention program that prescribes monitoring excavations near pipelines to prevent pipe damage that may lead to corrosion, monitoring cathodic protection systems to prevent or minimize corrosion development on the pipeline, and developing inspection procedures to identify and mitigate any corrosion once identified on the pipelines.

One step the company is taking to improve its pipeline integrity program is the installation of remote rectifier monitoring on each of its rectifiers. This will allow daily remote monitoring in the future. This program is over 25% complete and is targeted for completion at the end of 2012.

Complete listing of OSHA reportable incidents for the past 15 years

As defined by OSHA, a reportable incident is defined as in incident that involved an employee death or in-patient hospitalization of three or more employees involved in an incident. Transco has not experienced any OSHA reportable incidents in the past 15 years.

As a result of OSHA inspections over the past 15 years, Transco has paid the following penalties:

Date	Location	Penalty	Website
1/7/09	North Carolina Station 150	\$3,800	http://www.osha.gov/pls/imis/establishment.inspection_detail?id=312873508
7/17/08	North Carolina Station 145	\$300	http://www.osha.gov/pls/imis/establishment.inspection_detail?id=312479876
12/12/06	Maryland Station 190	\$1,737	http://www.osha.gov/pls/imis/establishment.inspection_detail?id=310650478

Mainline A leak in Kleberg County, TX

- At 6:08 pm on Monday, April 26, 2010, Williams employees discovered a pin-hole sized leak on our 24-inch Mainline A in Kleberg County, Texas.
- The leak was isolated by 7:15 pm. The leak was repaired on April 28, 2010 by replacing a 30-foot section of pipe.
- The pipeline was placed back into service on April 29, 2010 at 11:00 am.
- No injuries resulted from the leak.
- The leak was caused by metal loss due to external corrosion.
- The corrosion was caused by a disbonding of protective coating due to condensate leaking into the surrounding soil. The condensate came from an abandoned 2-inch pipeline found in the ditch above Transco’s 24-inch Mainline A.
- A close interval survey was conducted in 2009 and showed adequate cathodic protection in this area.

Pipeline cover

Transco’s policy is to maintain a minimum cover depth of at least three feet for all new pipeline installations. There may be circumstances where additional cover is recommended as a mitigation measure in areas such as cultivated fields where very heavy or deep disc equipment is used, roads or water bodies; or as required for site specific permit approval (roads, railroads or navigable rivers). We monitor cover depths for known shallow pipe areas.

Generally, the cover depth does not vary with proximity to structures or population density. As mentioned, land-use activity may be evaluated for increased cover depth such as cultivated fields where very heavy or deep disc equipment is used. In most circumstances, cover depth is increased at roads, railroads or water bodies. Otherwise, three feet is the required cover depth for all other locations.

Property sales and comparisons of homes with a Transco easement

The following information is public sales information and is not intended to be a paired sales analysis. A professional real estate appraiser would be required to assess the impact on market value of homes with a Transco easement. The information below relates to homes located on Transco’s Main and Caldwell Lines in Somerset, Middlesex and Mercer Counties in New Jersey. This data pertains to existing infrastructure and compares property sales of houses with a pipeline easement to houses on the same street without a pipeline easement. Characteristics such as appearance, age, square footage, the number of bedrooms and bathrooms, or other factors that can affect sales price have not been considered.

7 Tamarack Drive, Neshanic Station, NJ (Somerset County). Adjacent to Transco's 36" Caldwell B line.

Address	Pipeline	Lot Size	Sale Date	Sale Price
7 Tamarack Dr.	Yes (within 50')	1.08	9/28/04	\$715,000
3 Tamarack Dr.	No	1.04	11/4/10	\$630,000
9 Tamarack Dr.	No	1.14	7/22/09	\$625,000
8 Tamarack Dr.	No	1.04	9/21/07	\$599,000
10 Tamarack Dr.	No	1.17	4/26/10	\$460,000
14 Tamarack Dr.	Yes (within 50')	1.19	8/29/01	\$459,000

8 Shepherd Way, Kendall Park, NJ (Middlesex County). Adjacent to Transco's 42" Mainline C. Transco's 30" Mainline A is near these properties but does not cross them.

Address	Pipeline	Lot Size	Sale Date	Sale Price
7 Shepherd Way	No	0.26	11/3/05	\$630,000
23 Shepherd Way	No	0.18	12/6/05	\$525,000
15 Shepherd Way	No	0.18	12/22/04	\$480,000
33 Shepherd Way	No	0.19	8/18/04	\$479,000
8 Shepherd Way	Yes (within 15')	0.19	8/18/04	\$455,000
3 Shepherd Way	No	0.19	6/14/02	\$377,500
9 Shepherd Way	No	0.23	6/17/02	\$376,000
18 Shepherd Way	No	0.26	10/18/02	\$363,036

3 Benjamin Trail, Pennington, NJ (Mercer County). Adjacent to Transco's 30" Mainline A, 36" Mainline B and 42" Mainline C.

Address	Pipeline	Lot Size	Sale Date	Sale Price
15 Benjamin Trail	No	1.84	7/9/08	\$860,000
3 Benjamin Trail	Yes (within 15')	1.84	12/18/07	\$790,000
6 Benjamin Trail	No	1.87	6/28/07	\$712,000
13 Benjamin Trail	No	2.31	9/26/08	\$705,000

The following public information refers to sales before and after the installation of the MLCW-D Loop in 2002 in Somerset County. This is public sales information and is not intended to be a paired sales analysis. A professional real estate appraiser would be required to assess the impact on market value of homes with a Transco easement.

Address	Pipeline	Lot Size	Sale Date	Sale Price Before	Sale Date	Sale Price After
660 Elliot Ct. Branchburg, NJ	w/in 40'	2.26	3/28/91	\$245,000	9/4/03	\$411,000
2 White Birch Ct. Branchburg, NJ	w/in 25'	1.31	7/20/00	\$277,000	12/27/10	\$400,000

These two homes are located near the beginning of the Stanton Loop/end of Market Link Lines in Hunterdon County. This data refers sales before and after the installation of an additional line in 2002.

Address	Pipeline	Lot Size	Sale Date	Sale Price Before	Sale Date	Sale Price After	Additional Sale
10 Bailey Farm Rd. Pittstown, NJ	w/in 30'	3.5	7/30/02*	\$579,900	1/16/06	\$797,500	
8 Bailey Farm Rd. Pittstown, NJ	w/in 60'	5.84	8/15/02**	\$645,000	11/12/04	\$760,000	\$825,000 (5/14/09)

**The 2002 sale occurred during or right after pipeline installation construction.*

*** The 2002 sale occurred during or right after construction. The easement was purchased from the previous owner (similar to several instances in the Stanton Loop).*

Property value studies

Listed below are several of the studies (with links to corresponding websites) that have been conducted to research the effect of pipelines on property values. Each of these studies reviewed existing market data and came to basically the same conclusion that there is no identifiable relationship to the proximity of a home to a pipeline and the home's sale price.

Diskin, Friedman, Peppas and Peppas (2011)

http://www.irwaonline.org/eweb/upload/web_jan_NaturalGas.pdf

PGP Valuation Inc. (2008)

http://www.palomargas.com/docs/resources/Pipeline_Impact_on_Property_Values.pdf

ECONorthwest (2008)

<http://www.oregonlng.com/pdfs3/appendices/RR-5/appendices/appendix5d.pdf>

The Impact of the Presence of a Natural Gas Pipeline on Residential Property Values (2008)

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1518065

Allen, Williford & Seale, Inc. (2001)

<http://www.ingaa.org/Foundation/Foundation-Reports/Studies/FoundationReports/207.aspx>

Property values following Transco's incident in Appomattox, VA

Transco's B Line ruptured on September 14, 2008 near Appomattox, VA, approximately three miles from our Station 170. Two homes were destroyed, three homes were heavily damaged. We purchased the homes that were destroyed as well as the three homes that were heavily damaged. We paid top of the market value and in some cases, relocation expenses. We repaired the damaged homes and sold them for less than we paid. Unfortunately, around the same time, the area's largest employer was laying off workers and ultimately closed their local factory. The article is correct in stating that we sold the houses for less than what we paid, but not necessarily below appraised value. Because real estate values are dependent on many factors, it is difficult to determine separate losses in property values based on these two overlapping major events in the area.