

SAFETY – AGING NJ PIPELINES, COMPRESSOR STATION ADJACENT TO TRAP ROCK QUARRY BLASTING, WILLIAMS/TRANSCO’S SAFETY RECORD

- 1. There was no safety analysis of increased velocity of natural gas through lines A and C from CS206 to the Rockaway Transfer Point.** In the DEIS, FERC states “Public concerns for safety [...] are out of scope” for FERC’s review of the NESE project, since MAOP will continue to be 800 pounds per square inch.
 - MAOP is only one aspect of risk on the two main natural gas lines A and C.
 - The DEIS fails to account for risks associated with the increased velocity of natural gas added to Mainlines A and C.
 - A majority of the Mainlines A and C are 50+ year old, installed in 1950 and 1969 respectively.
(DEIS, pages ES-5 and 2-2)
- 2. There was no modeling of the impact of year-after-year blasting at Trap Rock Quarry on the proposed Compressor Station 206 along with all associated buildings and pipelines at the site.**
 - There was no analysis or consideration given to cumulative or compounded impacts of blasting over time.
 - Trap Rock Quarry anticipates continuing its mining operations on the property until the year 2040 where the face of the quarry is 2,100-feet from the compressor station building. (DEIS, page ES-4)
 - FERC’s request for the final foundation design of the compressor station to be submitted prior to construction (DEIS, page 4-316) does not address these concerns.

SAFETY CONCERNS

- The velocity of gas in Mainlines A & C is not provided in any documents, and this is a concern because increased heat from increased velocity can hasten corrosion.
 - Since the prevailing winds are toward Princeton Manor, in the case of a fire at Compressor Station 206’s site that spreads to the trees, the 55+ year old community residents could only evacuate toward the fire (toward Route 27) since they only have one exit road.
 - Williams/Transco and their contractors do not have a good record for adhering to company procedures, only using methods that were approved, or completing required inspections that should help to minimize potential for accidents.
- (1) Williams/Transco wants to build a natural gas-powered compressor station next to Trap Rock Quarry where blasting with dynamite is expected to continue until 2040.
- CONCERNS:**
- FERC has not seen or reviewed the final plan for the foundation for the compressor station building to account for the possibility of increased intensity in blasting at Trap Rock.
 - Though requested, there was no analysis of the year-after-year impact of repeated Quarry blasting on the buildings at the compressor station site.
 - The compressor station would only be manned on weekdays during regular business hours, and saying that their personnel are trained to deal with fires on site does not provide protective support at night or on the weekends.
 - Methane leaks from pipelines and compressor stations, and this flammable gas could catch fire if there’s an accident and an ignition source (like a spark from the equipment used at Trap Rock Quarry).
 - Actual methane leakage from pipelines & compressor stations is much higher than reported.
- (2) The compressor station would maintain pressure in the extended pipelines for the increased volume of gas, but there’s no reporting of the travel speed (velocity) of the gas through the lines.
- CONCERNS:**
- Increased velocity (speed) has been associated with more rapid pipeline corrosion that leads to unanticipated cracks & pipeline explosions.
 - The pipelines were installed in the 1950’s and 1960’s. Pipeline coatings and welding areas deteriorate over time. Only the pipeline parts near Trap Rock Quarry have been moved and upgraded in the 1980’s as far as we know.

- (3) In the case of a fire or explosion that spreads to the surrounding trees, **CONCERNS =**
- Currently, fire hydrants along Route 518 are below ground level and not operational, and there is a plan to make them operational once the water supply pipeline on Route 27 is upgraded. Fire-fighting capacity, however, has yet to be determined from this water supply improvement once it is completed.
 - Though there are plans to upgrade the water pipes in the area along Route 27, this hasn't been done yet, and current water pressure could not sustain fire-fighting activities.
 - Access to the compressor station site is only from a 2-lane country road (Route 518).
 - If there was a need to evacuate Princeton Manor due to a fire, their only exit is onto Route 27 (in the direction of the compressor station).
- (4) Construction in the Raritan Bay puts marine mammals (whales, seals & dolphins) at risk of being struck by a vessel or caught in moorings.
- (5) **Safety is not an aspect of the process that FERC reviews at all.**
- FERC does not regulate federal safety standards used in the transportation of natural gas. Rather, FERC requires that Williams/Transco certify that it would design, install, inspect, test, construct, operate, replace, and maintain the facility in accordance with federal safety standards and plans for maintenance and inspection. FERC accepts this certification and does not impose additional safety standards other than Dept. of Transportation (DOT) standards. The DOT has the exclusive safety authority for standards used in the transportation of natural gas.
 - PHMSA's participation in reviewing the application and subsequent documents is not evident.
 - Pipelines constructed in the 2000's have been failing at rates higher than those installed in the 1940's. (*see reference below*)

CONCERNS:

The Potential Impact Radius (PIR) of 820-feet was reported by Williams/Transco for the area where they plan to construct suction/discharge and tie-in piping (southwest of the meditation trail and NJBV facilities). The PIR is often referred to as an "incineration zone" in which there is a 99% chance that people and buildings in it will not survive from a natural gas explosion/fire. However,

- The PIR determinations do not account for the presence of fuel or fire accelerants such as trees, topography or weather conditions.
- The PIR determinations do not take into account the velocity of the gas traveling through the pipelines or the condition of the pipelines.
- The PIR determinations do not consider other pipelines that are nearby which, in the case of the proposed NESE, would have two existing pipelines (Mainlines A & C) tied-into Compressor Station 206.
- The PIR determinations are only based on the diameter of the pipeline and the MAOP.
- Distance from Compressor Station building to New Jersey Buddhist Vihara (NJBV)'s Buddha statue = 2,530-feet
- Distance from Compressor Station building to closest point on NJBV's meditation trail = 1,225-feet
- Forested area between Compressor Station building and the NJBV's Buddha statue = about 1,700-feet
- Documentation of actual damage from pipeline explosions exceeded PIRs. For example,
 - The exploded 30"-diameter pipeline in Appomattox, VA (2008) had a PIR of 585-feet. However, scorched earth & destroyed buildings was found 958-feet away, and a minimum estimate of the radius of damage was 1,444-feet away.
 - The 30"-diameter pipeline that exploded in Salem County, PA (2016) had a PIR of 671-feet. However, high impact damage happened 800-feet away, and minor impacts happened 1,400-feet away, with other impacts happening 2,200-feet away.
- DOT's Pipeline & Hazardous Materials Safety Administration (PHMSA), the branch responsible for monitoring safety of transmission pipelines & compressor stations, is understaffed. Our regional office covers Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio (Office of Pipeline Safety), Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.

- Relying on Williams/Transco & their contracted workers to do what they say & follow their procedures is risky. Recently, they were caught using an unauthorized drilling method while constructing the Atlantic Sunrise pipeline in Pennsylvania. (*See short list of their record below, and go to www.scrap-NESE.org for longer list.*) Key points:
 - ◆ Since 2008, ten Williams/Transco pipelines and compressor stations have exploded and/or caught fire & five other Williams natural gas facilities have experienced explosions and/or fires.
 - ◆ Nine people have been killed in these incidents; 141 people have been injured in these incidents.
 - ◆ These explosions and fires have destroyed property and scorched acres of land.
 - ◆ These explosions and fires have released the potent greenhouse gas methane into the atmosphere, fracking condensate into creeks, and the carcinogen benzene into groundwater.
 - ◆ OSHA has fined Williams for failing to adequately protect workers sent in to excavate toxic soil from an accident site.
 - ◆ The US Pipeline and Hazardous Waste Safety Administration (PHMSA) has repeatedly fined Williams for violations of safety procedures, even in the absence of an accident.

Recent Williams Accidents and Safety Violations -

Accessed at: <https://350brooklyn.org/williams-safety-record/>

2008. A Williams Transco natural gas pipeline exploded in Appomattox, Virginia in September. Five people were hospitalized and two nearby homes were destroyed. In 2009, Transco was fined \$925,000 for failure to monitor corrosion, the source of the Appomattox pipeline explosion. *The Washington Post*, Oct. 30, 2010.

<https://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Press%20Release%208.10.09.pdf>

2011. The Pipeline and Hazardous Materials Safety Administration levied a civil penalty of \$23,800 for failure to properly inspect and test compressor stations in Texas and Louisiana.

https://primis.phmsa.dot.gov/comm/reports/enforce/documents/420111001/420111001_Final%20Order_06242011_text.pdf

2011. The massive explosion of a Williams Transco pipeline Sweet Water, Alabama was attributed to pipeline corrosion. The blast was heard 30 miles away and ignited a fire that burned eight acres of pine forest.

https://primis.phmsa.dot.gov/comm/reports/enforce/documents/220111011H/220111011H_CAO_12062011_text.pdf

2012. An explosion led to a fire at a Williams-owned compressor station in Springville, Pennsylvania. *Times Tribune*, Scranton, March 30, 2012

2012. Williams/Transco paid a \$74,300 fine levied by the Pipeline and Hazardous Materials Safety Administration for safety and monitoring failures at its Carlstadt, New Jersey, LNG facility.

https://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Press%20Release%20Files/120123002_Final%20Order_10262012.pdf

2012. The PHMSA levied civil penalties \$50,000 for failure to follow adequately monitor and maintain its pipelines on Staten Island.

https://primis.phmsa.dot.gov/comm/reports/enforce/documents/120111015/120111015_Final%20Order_03052012_text.pdf

2012. Personnel at a Williams-owned compressor station in Windsor, New York, were venting methane gas during a lightning storm. This resulted in a “big fireball” and the release of the remaining gas into the atmosphere. *Natural Gas Watch*, July 30, 2012.

2013. Williams natural gas plant leaked benzene into groundwater near Parachute, Colorado. Benzene is a carcinogen; in some places, benzene level was 36,000 times greater than safe drinking level. *Denver Post*, March 28, 2013. Six months later, the leak was still active. *Denver Post*, July 13, 2013.

2013. A recently-installed 24-inch Williams natural gas pipe ruptured in Cameron, West Virginia.

<http://marcellusdrilling.com/2013/03/williams-methane-pipeline-ruptures-in-marshall-county-wv/>

2013. A fire broke out in a Williams compressor station in Brooklyn Township, PA. While Williams officials denied there was a fire, DEP officials said they found visual evidence that an explosion may have occurred. One ton of methane was released during the event. *Times Tribune* (Scranton) May 16, 2013

2013. An explosion at a Williams compressor station in Branchburg, New Jersey, injured thirteen people, two seriously. *Home News Tribune* (East Brunswick, NJ), June 1, 2013. The PHMSA investigations found Williams to have followed inadequate procedures in place for ensuring safety. The PHMSA levied civil penalties of \$167,000. https://primis.phmsa.dot.gov/comm/reports/enforce/documents/120141002/120141002_Final%20Order_10082014_text.pdf

2013. An explosion and fire at the Williams Olefins, Inc., plant in Geismar, Louisiana, killed two people and injured many more. A US Chemical Safety Board investigation concluded that safety management at the plant was deficient for years prior to the explosion. <http://www.csb.gov/williams-olefins-plant-explosion-and-fire-/>

2014. A fire at Williams compressor station in Windsor, NY. NYS Department of Public Service Incident Investigation Report: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7BEA77D8AC-37E5-41B8-B57C-4C7CDE8F941F%7D>

2014. Pipeline explosion and fire at a Williams LNG facility in Plymouth, WA. Five people were injured. [Thinkprogress.com](http://www.thinkprogress.com), March 31, 2014.

2014. A natural gas pipeline failed, leading to an explosion and fire at a Williams-owned facility in Moundsville, WV. *InterMountain.com*, April 24, 2014.

2014. Explosion and fire at a Williams natural gas processing facility and major national pipeline hub in Opal, Wyoming. Entire town evacuated. *Casper Star-Tribune*, Oct. 16, 2014.

2015. Explosion and fire at a natural gas plant owned by Williams in Gibson, Louisiana. Three workers were killed and two others were seriously injured. *Wall Street Journal*, 8 October, 2015.

2015. The rupture of a Williams pipeline in Lycoming, Pennsylvania released approximately 96,379,000 cubic feet of methane. https://www.phmsa.dot.gov/staticfiles/PHMSA/PipelineFailureReports/150663_Transcontinental_Unityville_PA_June_9_2015.pdf

2015. The PHMSA levied a civil penalty of \$56,800 on Williams for failing to adequately inspect transmission pipeline valves in New Jersey and New York City. https://primis.phmsa.dot.gov/comm/reports/enforce/documents/120141009/120141009_Final%20Order_12292015_text.pdf

2016. A series of explosions and fires at Williams/Transco facility at Bayou Black, Louisiana left four people dead and two injured. After an investigation, the Pipeline and Hazardous Materials Safety Administration found it probable that Williams had violated federal pipeline safety regulations. PHMSA levied \$1.6m in civil penalties. https://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Pipeline/420161008_NOPV_PCP_PCO_07292016.pdf; <https://www.phmsa.dot.gov/pipeline/phmsa-proposes-1-6-m-in-civil-penalties-for-safety-violations-following-fatal-2015-louisiana-compressor-station-explosion>

2016. PHMSA notified Williams of safety violations at its Transco pipeline facilities in Alabama and Georgia. https://primis.phmsa.dot.gov/comm/reports/enforce/documents/220161002W/220161002W_Warning%20Letter_09022016.pdf

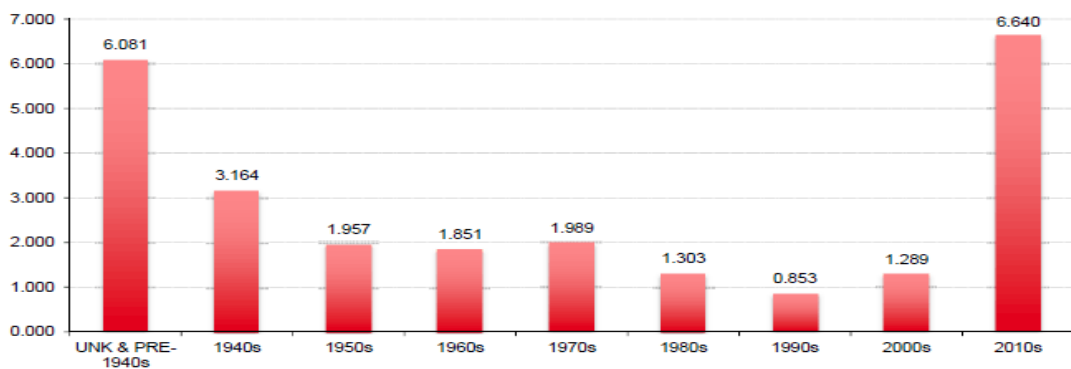
2016. PHMSA notified Williams that its procedures for replacing natural gas pipeline in Maryland violated pipeline safety standards. https://primis.phmsa.dot.gov/comm/reports/enforce/documents/120161008W/120161008W_Warning%20Letter_11022016.pdf

2016. A Williams facility in Clarke County, Mississippi, inadvertently released 3.2 million cubic feet of methane. It was cited for poor procedures by the PHMSA. https://primis.phmsa.dot.gov/comm/reports/enforce/documents/220171002/220171002_NOPV%20PCP%20PCO_05122017.pdf

2017. PHMSA notified Williams that it was in probable violation of Pipeline Safety Regulations in its Mississippi, Georgia, and South Carolina Transco facilities. https://primis.phmsa.dot.gov/comm/reports/enforce/documents/220171002/220171002_NOPV%20PCP%20PCO_05122017.pdf

Reference

Average number of annual incidents over 2005-2013 per 10,000 miles of onshore gas transmission pipe by decade of pipe installation



As of March 2015.
Sources: U.S. Pipeline and Hazardous Materials Safety Administration, Pipeline Safety Trust

From report by Kathy Kunkel & Tom Sanzillo, "Risks Associated with Natural Gas Pipeline Expansion in Appalachia" (April 2016) – Institute for Energy Economics and Financial Analysis, published first in S. Smith's "As U.S. rushes to build gas lines, failure rate of new pipes has spiked," SNL Financial, September 9, 2015. Accessed at: <https://www.snl.com/InteractiveX/Article.aspx?ccid=A-33791090-11060>