

Britten Ex RB-26
c-2018-3006116
10/23/19 West Chester
TX

Downingtown School District– Mariner East 2 Outreach:

Question: How much, or what percentage, of the NGLs transported in the Mariner East 2 will be used domestically?

Answer:

- In order to operate as a public utility, the company transports and serves public needs for its fair compensation. The Mariner East 2 pipelines are transmission pipelines that transport natural gas liquids from the producers to storage facilities at various locations including the Marcus Hook Industrial Complex. While we do not control what shippers do with the product after they receive them, domestic and regional demand of the NGLs are and have been large motivators to pursue the project in the first place.
- Mariner East pipelines transport propane, butane and ethane. Propane is used for home and industrial heating, crop drying, cooking and transportation. It can be used as a peaking fuel in electric power utilities. It's also a key material for plastics. Over 95% of propane consumed in the US is produced in North America, and today, approximately 200 trucks leave the Marcus Hook Industrial Complex per day with propane for domestic/local use.
- Butane is used as a component of gasoline, as a fuel in industrial applications, a refrigerant, and it has many other chemical applications.
- Although at this time, ethane use in United States is largely for processing into ethylene and other petrochemical feedstock that creates textiles, plastics, detergent and coatings, we also have a number of trucks delivering ethane locally for use as a refrigerant. Ethane being transported in the Mariner lines is being considered for use in domestic and international power generation.
- Increased access to these economical supplies of NGLs has and will continue to attract manufacturers into the Mid-Atlantic region. For example, the CPV Fairview Energy Center in Cambria County will receive NGLs from the Mariner East 2 pipeline which will be used to generate enough electricity to power over 1 million homes and businesses.

Question: Where is the operations control center for the Mariner East 2? Does Sinking Springs still have the ability to control the pipeline?

Answer:

- We have unified control of the Sunoco Pipeline assets to the Operations Control Center in Texas that provides 24/7 monitoring of all our pipeline assets. Any pipeline can be shut down remotely by a control operator, or field personnel can be deployed to manually shut down the pipeline.
- We use Advanced Supervisory Control and Data Acquisition ("SCADA") systems to constantly monitor sensing devices placed along the pipeline to track pressure, temperature, density, and flow.
- We also use a subsystem of SCADA, known as the Computational Pipeline Monitoring System ("CPM"), which analyzes deviations in the flow of liquids, thus improving the operator's ability to identify abnormal operating conditions.
- We have an emergency shutdown system in addition to remote control operations with local automated control operations and manual overrides and operations in place.

Question: What is the specific pressure used to test the pipeline as it passes through the Downingtown Area School District?

Answer:

- Prior to being placed into service, regulation requires that the line must be hydrostatically pressure tested for 4 hours at 125% of the Maximum Operation Pressure (MOP), and an additional 4 hours at 110% or more of MOP.
- Mariner East 2 was hydrostatically pressure tested for at least 8 hours to a pressure equal to 125% MOP. This additional time at 125% of MOP confirms there are no leaks, deleterious material or construction flaws.
- MOP is 1480 PSI when it leaves the pump station and reduces as it reaches the Twin Oaks facility due to topography changes and friction loss. The nearest pump station from Downingtown is in Middletown, Dauphin County; therefore, by the time product reaches Uwchlan Township, the operating pressure is much lower.

Question: What redundant systems does ETP employ to identify leaks that are smaller than the SCADA system picks up?

Answer:

- This question seeks confidential security information that is highly protected under the Pennsylvania Public Utility Confidential Security Information Disclosure Act (35 P.S. 2141.1 et seq.). Energy Transfer cannot provide this information without first entering into a non-disclosure agreement to ensure that Energy Transfer is not releasing publicly information that could be used to jeopardize its pipelines. Please contact Energy Transfer's counsel for more information regarding a non-disclosure agreement.

Question: How does ETP decide where to place valves? Do they place valve sights closer together near schools or highly populated areas?

Answer:

- We follow all applicable rules and industry best-practices regarding valve placement and automation, including using automated valves in sensitive areas (including schools) and placing them at strategic distances—for which we performed extensive hydraulic modeling to ensure their correct placement. Types of valves differ, automated and remote-accessibility built in.

Question: Where are the manual-only valves located?

Answer:

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Question: Where are the closest valves located in the Downingtown School District and to the east and west of the district? CNS – This is also security sensitive information.

Answer:

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Question: How much NGLs is between valve sites in the Downingtown School District area?

Answer:

- Pipe volumes vary based on shipper nomination of throughput.

Question: Can ETP provide their Mapping and Response System (MARS) maps?

Answer:

- Some of the information (maps, contracts with response companies, etc.) contained in the Facility Response Plans is considered Security Sensitive Information by PHMSA and is also Public Utility Security Sensitive Information under Pennsylvania law (35 P.S. §§ 2141.1 et seq.). As such, the request for Emergency Response materials must be filed with PHMSA and a redacted version can be requested from them directly. We are helping facilitate this request from Chester County Emergency Management Services.

Question: What specifically does the in-line inspection tool (pigs) look for while they are being used (cracks, pipe density, rust, etc.)? What specific technology do they use to identify these items?

Answer:

- Prior to putting a pipeline in service, we run a caliper pig tool that checks for dents and anomalies in the pipeline. The tool identifies geometric anomalies with accurate location and clock position information using a set of mechanical fingers or arms that ride against the internal surface of the pipe.
- Once a line is in service we review the suite of available ILI tools and will often run a combination of tools to look for deformation, metal loss, or cracks. We save all data and compare past runs, potential threats, and ever emerging technology to determine which combination of tools we will use on each subsequent run.

Question: Can ETP develop age appropriate pipeline safety material (i.e. a safety brochure/talking points designed for elementary kids)?

Answer:

- We are a member of Pennsylvania 811 which has age appropriate materials for kids education: <http://call811.com/get-involved/811-kids> and <http://commongroundalliance.com//damage-prevention/toolkits/811-videos-psas-and-supporting-tools>

Question: Why doesn't ETP follow the American Petroleum Institute's Recommended Best Practice 1162 (Public Awareness Guidelines)?

Answer:

- We do. Under the requirements of 195.440 all pipeline operators must develop and implement a written continuing public education program that follows the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162, which we have done and communicated with emergency response professionals along the line. We use the same wording as PHMSA in our public awareness mailers that go to all parties along the route, explaining how to identify and react to a pipeline emergency. We also follow the API RP 1174 "Recommended Practice for Onshore Hazardous Liquid Pipeline Emergency Preparedness and Response."

Question: What is the future plan of the Twin Oaks 8-inch line? If they are going to repurpose the line, where does it run and does it run near any schools?

Answer:

- The 8" Twin Oaks- Montello is also known as Mariner East 1. This pipeline was converted in 2014 and is currently in NGL service and located approximately 900 ft away from Lionville Middle School.

Question: Can ETP provide monitors and sensors for the schools?

Answer:

- Schools can purchase their own LEL devices. We can provide information regarding the devices, but they are only reliable when maintained by qualified technicians. If not properly maintained, they can cause nuisance alarms which defeat the intended purpose. The equipment requires very technical routine maintenance by specially trained personnel. A hand held LEL device is often advisable for a school, which frequently has petroleum products (i.e. natural gas) piped directly into the school for heat or other purposes.

Question: Can ETP install an alarm on the valve near the cross walk to let people know if there is a leak?

Answer:

- This is not something we currently have plans to do. There are monitors at our valve sites to alert our control system immediately if there is an issue. Putting an alarm at a valve could cause inappropriate response prior to our team and first responders being able to investigate whether there is an actual leak and coordinate the safest response nearest the actual location of a leak.

Question: How long will it take for ETP to respond to an incident in the Downingtown School District area?

Answer:

- This question seeks confidential security information that is highly protected under the Pennsylvania Public Utility Confidential Security Information Disclosure Act (35 P.S. 2141.1 et seq.). Energy Transfer cannot provide this information without first entering into a non-disclosure agreement to ensure that Energy Transfer is not releasing publicly information that could be used to jeopardize its pipelines. Please contact Energy Transfer's counsel for more information regarding a non-disclosure agreement.
- *Information previously supplied to Jim Scanlon:* Energy Transfer will follow our emergency response SOPs in the event of an emergency- and note that these SOPs have been sent to Bill Turner, Deputy Director for Emergency Management of Chester County Department of Emergency Services. In the event of any indication of a release- we will first confirm the release and magnitude of the release, determining if the event meets a threshold requiring notification to emergency response personnel. In the event of a pipeline facility emergency meeting the above requirements for notification, we will immediately report to the local emergency response agency, including the location and as much information as possible. The local emergency response agency would then be responsible for taking steps to notify the public.

Question: Can ETP provide their risk assessment to the school district for the segments that run through the district area, as outlined in 49 CFR 195.452 (Pipeline integrity management in high consequence areas)?

Answer:

- Safety and risk reduction are built into the federal regulations that pipeline operators have to follow, and we have performed the required safety analyses for our systems and shared information with our regulators and emergency services officials. It is not public information and is Public Utility Security Sensitive Information; however, third party organizations such as Accufacts and Delaware County have completed independent assessments of the Mariner East 2 pipelines.

Question: Can ETP relocate the valve away from the school?

Answer:

- We placed the valves at strategic distances, following applicable rules and industry best-practices regarding valve placement and automation, including using automated valves in sensitive areas (including schools). We performed extensive hydraulic modeling to ensure their correct placement.

Question: Can ETP develop a specific outreach or brochure for school bus drivers?

Answer:

- There is existing information available for bus drivers.. This is a great website, <https://pipelineawareness.org/> and here is a link to a bus driver brochure: <https://pipelineawareness.org/media/1123/schoolbusdriverbro211.pdf> .
 - <https://www.schoolpipelinesafety.org/>

Question: Can ETP provide an intrinsically safe land-line telephone for the school district?

Answer:

- Your existing land-lines are safe to use.

Question: Can ETP participate in the school district's exercise process?

Answer:

- Yes.

Question: What is the depth of each Energy Transfer pipeline that is within half mile of the district schools?

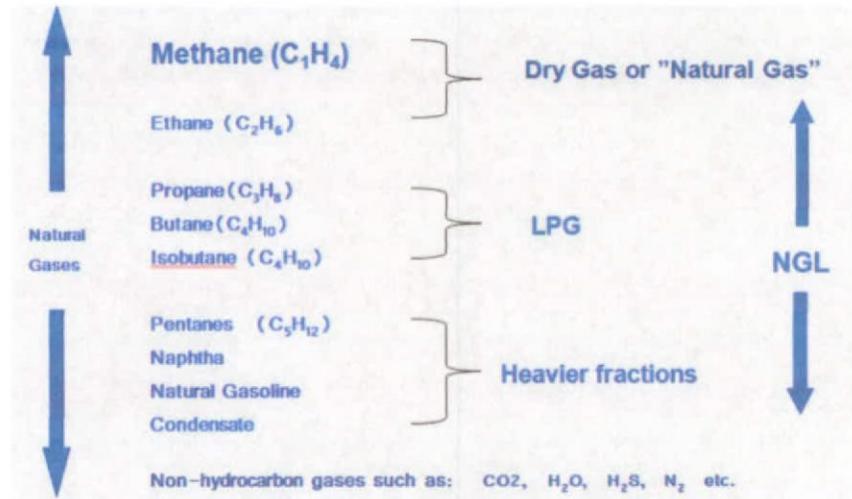
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Question: What is the difference between LPG and NGL?

Answer:

- LPG specifically refers to propane, butane, and isobutane. LPGs are types of natural gas liquids (NGLs) that are grouped together due to their density. NGL's are hydrocarbons condensed as a liquid from a vapor. Here is a graph from the EIA:



https://www.eia.gov/conference/ngl_virtual/eia-ngl_workshop-anne-keller.pdf

Question: What is the specific pressure difference to trigger a pipeline shut down?

Answer:

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- We have a sophisticated Computational Pipeline Monitoring (CPM) system that monitors pressures 24/7 every day and accounts for several operating parameters provided by SCADA including, but not limited to, pressure, temperature, product type, and flowrate.

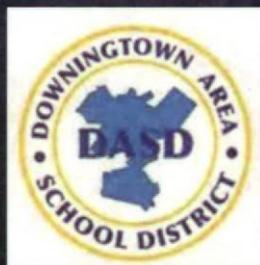
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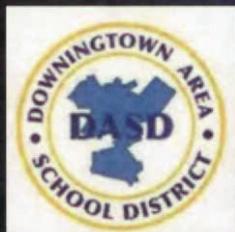
Downingtown Area School District

SAFETY SUMMIT

August 09, 2017



SAFETY SUMMIT



- Nationwide it is estimated that 1 in every 20 schools is within half a mile of a NG or Petroleum transmission pipeline or facility
- The NTSB says that pipelines are the safest and most reliable method for transporting energy products across the U.S.

PHMSA Pennsylvania Pipeline Incidents 1997-2016

Calendar Year	Number	Fatalities	Injuries
1997	10	0	1
1998	8	1	0
1999	14	1	22
2000	17	0	4
2001	13	0	0
2002	23	1	6
2003	21	4	9
2004	33	3	3
2005	17	1	4
2006	11	0	2
2007	12	0	3
2008	19	1	2
2009	12	0	0
2010	5	0	1
2011	11	6	7
2012	9	0	1
2013	15	0	0
2014	10	1	1
2015	20	1	1
2016	19	0	5
Grand Total	299	20	72

SAFETY SUMMIT

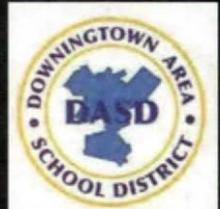


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www.PipelinePatrol.com

- Regulated by PUC and PHMSA
- Pipeline companies have control centers which monitor their operations for any potential problems 24-hours per day, 365 days per year.
- Additionally, operators routinely inspect their pipelines by using a variety of methods including
 - In-person examinations
 - Internal inspection devices
 - Aerial patrols
 - Cathodic protection, which helps protect pipelines from corrosion, is also used.





SAFETY SUMMIT

Pipeline markers will tell you:

- The words "Warning", "Caution", or "Danger"
- Name of pipeline operator
- Telephone number for operator
- Product transported
- Pipeline's general location

Pipeline markers will not tell you:

- The precise location of the pipeline
- Pipeline's depth
- Pipeline's size
- Number of pipelines in a ROW



SAFETY SUMMIT

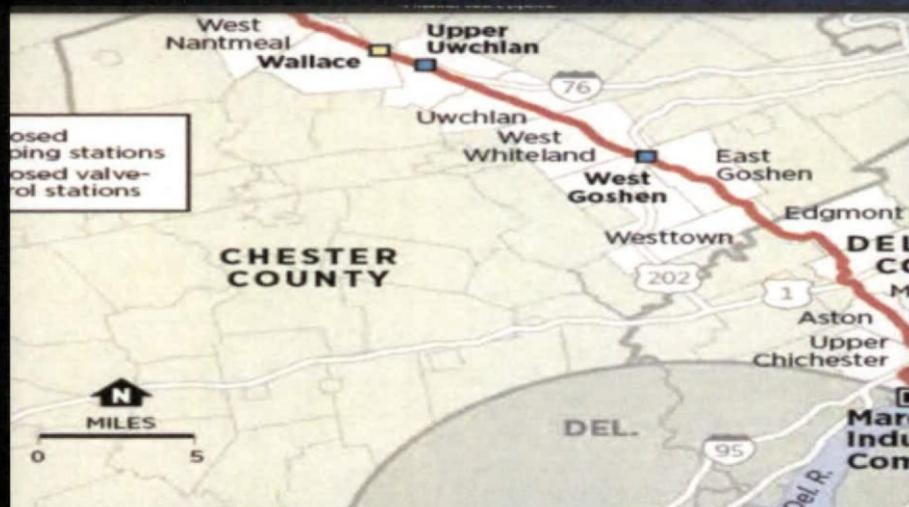
DO NOT!

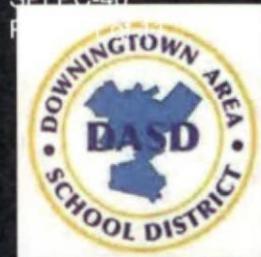
- Touch, breathe or make contact with leaking liquids;
- Start an engine of any kind
- Strike matches or create heat, sparks or a flame of any kind
- Use a telephone or cell phone until in a safe area (these can ignite airborne gases)
- Turn on or off any electrical switches (these also can ignite airborne gases)
- Drive into a leak or vapor cloud area
- Move downwind or downhill



DO!

- Make sure gas appliances are turned all the way OFF
- Get to a safe area and possibly leave the area
- Move upwind and uphill
- Telephone 911 from a safe location well away from the gas leak
- Explain the situation
- Warn others -- *if it is safe to do so* -- against entering the leak area and/or creating ignition sparks.





SAFETY SUMMIT

READYCHESCO.ORG:

<https://member.everbridge.net/index/453003085612335#/signup>

Allows you to sign up for notification via phone, text, and/or email in a variety of events and conditions including emergencies, severe weather, road closures, community news, etc. Customizable to receive notifications about what you want.



SMART911:

<https://www.smart911.com/smart911/registration/registrationLanding.action>

Allows you to create a safety profile for you and your household. List multiple people and their medical needs, home/work addresses, phone numbers, emergency contacts, preferred providers, vehicles, and animals. Customizable to share as much or as little as you want.

RAVE Facility:

Component of SMART911 that allows us to create a facility profile with details for first responders such as floor plans, access points and codes, AED locations, and other pertinent details.