



U.S. Department  
of Transportation

Pipeline and Hazardous Materials  
Safety Administration

1200 New Jersey Avenue SE  
Washington DC 20590

SEP 10 2019

Mr. Rick Smith  
Township Manager  
East Goshen Township  
1580 Paoli Pike  
West Chester, PA 19380

Dear Mr. Smith:

In an August 6, 2019, email to the Pipeline and Hazardous Materials Safety Administration (PHMSA), you requested an interpretation of 49 CFR Part 195. Specifically, you requested an interpretation of §195.250-Clearance between pipe and underground structures.

You stated that Energy Transfer has asked for a permit from the East Goshen Township to work “around the clock” during pull back operations. You stated that Energy Transfer plans to pull back dual pipes with 16-inch and 20-inch nominal diameters. You stated that it is your understanding that when the two pipes are pulled there will be less than 12 inches of clearance, as required by §195.250. You indicated that a question arose as to whether §195.250 would be applicable to Energy Transfer. Section 195.250 states:

**§195.250 Clearance between pipe and underground structures.** Any pipe installed underground must have at least 12 inches (305 millimeters) of clearance between the outside of the pipe and the extremity of any other underground structure, except that for drainage tile the minimum clearance may be less than 12 inches (305 millimeters) but not less than 2 inches (51 millimeters). However, where 12 inches (305 millimeters) of clearance is impracticable, the clearance may be reduced if adequate provisions are made for corrosion control.

Therefore, you asked for PHMSA’s responses to the following three questions. PHMSA’s response follows each of your questions.

**Question #1:** Would §195.250 be applicable to two pipelines that are installed by the same company?

**Response to #1:** Yes, the requirements of §195.250 are applicable. However, “...where 12 inches of clearance is impracticable...,” §195.250 permits clearance to be reduced “.....if adequate provisions are made for corrosion control.” Therefore, §195.250 does not necessarily restrict two pipelines from being installed with less than 12 inches of clearance between them. In this situation where the pipelines

The Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety provides written clarifications of the Regulations (49 CFR Parts 190-199) in the form of interpretation letters. These letters reflect the agency's current application of the regulations to the specific facts presented by the person requesting the clarification. Interpretations do not create legally-enforceable rights or obligations and are provided to help the public understand how to comply with the regulations.

will be close to each other, corrosion control must consider at a minimum the regulatory requirements specified in §195.575 pertaining to electrical isolation.

**Question #2:** Who determines if it is “impracticable” to reduce the clearance between the two pipelines?

**Response to #2:** The pipeline operator is responsible for complying with all applicable pipeline safety regulations. The operator is solely responsible for implementing design, construction, operation, and maintenance procedures that meet 49 CFR Part 195. Thus, the pipeline operator would be responsible for making that determination and for ensuring that adequate provisions are made for corrosion control if 12 inches of clearance was determined to be impracticable per §195.250. PHMSA or the State pipeline safety regulator validate and verify if operators are compliant with applicable pipeline safety regulations, including this provision.

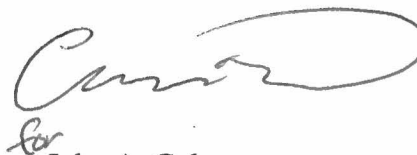
In addition to addressing corrosion control, another key design requirement that Energy Transfer should address in their dual “pull back” design and installation is how they are going to comply with §195.110 External loads, particularly those associated with localized stresses on the pipelines. Any pipe bundles and associated spacers must be designed to keep the pipelines separated as to minimize localized stresses between the two pipes, and facilitate design, operation, and maintenance of a proper corrosion control system that meets the requirements of 49 CFR Part 195, Subpart H.

**Question #3:** Who determines if the provisions for corrosion control are “adequate”?

**Response to #3:** The pipeline operator is responsible for complying with all applicable pipeline safety regulations, including corrosion control. The operator must install sufficient test leads to monitor and demonstrate the adequacy of the corrosion control system for each pipeline along the entire horizontal directional drilling (HDD) segment per §§195.567, 195.571 and 195.573. Furthermore, the pipelines should be protected against fault current and interference currents, per §§195.575 and 195.577, respectively. PHMSA or the State pipeline safety regulator will determine if the operator is compliant with applicable pipeline safety regulations, including this provision.

If we can be of further assistance, please contact Tewabe Asebe at 202-366-5523.

Sincerely,



for  
John A. Gale  
Director, Office of Standards  
and Rulemaking

**From:** <mailto:rsmith@eastgoshen.org>  
**Sent:** Tuesday, August 06, 2019 3:21 PM  
**To:** [Ian.Woods@dot.gov](mailto:Ian.Woods@dot.gov)  
**Subject:** Energy Transfer

Mr. Woods

As you are aware Energy Transfer is in the process of installing the Mariner East Pipeline thru Chester County. This project consists of the construction of a 16-inch and 20-inch pipeline. East Goshen Township, which is located in Chester County, has a noise ordinance that imposes limits on when construction can place.

Energy Transfer has asked for a permit to work around the clock during pull back operations which the Board is currently considering. Energy Transfer notes in their request that some of the planned pull backs may be dual pipe pull backs. It is also our understanding that when the two pipes are pulled there will be less than the 12 inches' clearance required by §195.250 of the Federal Code. A question has arisen as to whether or not §195.250 would be applicable to Energy Transfer?

**§195.250 Clearance between pipe and underground structures.**

Any pipe installed underground must have at least 12 inches (305 millimeters) of clearance between the outside of the pipe and the extremity of any other underground structure, except that for drainage tile the minimum clearance may be less than 12 inches (305 millimeters) but not less than 2 inches (51 millimeters). However, where 12 inches (305 millimeters) of clearance is impracticable, the clearance may be reduced if adequate provisions are made for corrosion control.

Specifically, with regards to their intention to perform a dual pipe pull back with less than 12 inches of separation. I checked the PHMSA website and there are not any interpretations listed for this section of the Code.

Accordingly, please consider this email as a formal request for an interpretation of this section of the Code.

Question #1: Would §195.250 be applicable to two pipelines that are installed by the same company?

Question #2: Who determines if it is "impracticable" to reduce the clearance between the two pipeline?

Question #3: Who determines if the provisions for corrosion control are "adequate"?

If you need a formal request in the form of a letter let me know.

Thank you

Rick Smith  
East Goshen Township Manager  
610-692-7171



Rick Smith  
Township Manager  
East Goshen Township  
1580 Paoli Pike  
West Chester, PA 19380

July 19, 2019

Dear Rick,

In relation to the Mariner East 2 project within East Goshen Township, ETC would like to begin planning for our pipeline pullback activities in East Goshen for the five horizontal directional drills (HDDs) currently underway. For the pullback phase only, we are requesting a waiver from East Goshen Township's [Ordinance 156-5](#), Limitation on Hours of Construction Activities for the horizontal directional drills discussed below.

The pullback stage of the pipe installation consists of pulling the prefabricated pipe sections through the drilled borehole from the exit point back to the drill rig entry point.

To increase the chances for a successful installation, a continuous pullback operation is industry standard practice. A continuous pullback provides the highest likelihood for a success, and limits the factors that could lead to a pullback failure and possible requirement to re-drill. Due to limited workspace for pipeline pull section layout on the exit side, the pull section cannot be fabricated in one long continuous segment, but rather will require numerous mid-welds during pullback. Pullback operations are further complicated by the restrictive work hours under the township's ordinance. Any time pullback operations are stopped for extended periods, there is a risk that it will not be possible to get the pipe moving again due to unstable materials collecting around the wall of the pull section.

Since pullback activities for the drills detailed below will require East Goshen Township to grant waivers to the townships' noise ordinances, there are several factors that will determine the duration of the continuous pullback activities. Please note that the schedule and duration may change due to outside factors, including but not limited to the condition of the bore-hole or weather.

The details of the HDD segments that require continuous pullback are listed in order of anticipated pullback date:

**HDD 460** (16-inch and 20-inch pipelines)

- **Location:** Drill staged at Goshen Fire Company in West Goshen Township to the pipe work space at Wellington/ Giant Shopping Center on Boot Rd.
- **Description and length:** This segment is a candidate for dual pipe pull, which allows for both the 16-inch and 20-inch pipelines to be installed simultaneously. If for any reason we are unable to perform a dual pipe pull, the contractor will install the 16-inch only and then begin the HDD for the 20-inch pipeline at a later date. This HDD segment has 6 mid-welds for both the 16-inch and 20-inch sections with an approximate length of 3391 feet.
- **Approximate date for pullback:** Targeting early October 2019
- **Approximate pullback duration:** It is estimated that the duration for pullback with 24/7 continuous work hours will be 40-44 hours. Without continuous pullback, the process will take 5-6 days, barring loss of bore hole integrity or changes in weather conditions. In the case where we are unable to complete a successful pullback due to non-continuous pull and/or loss of the borehole, we must restart the HDD process all over again, which is estimated to take 174 days for the dual pull of the 16-inch and 20-inch pipelines for this section.

**HDD 490** (16-inch and 20-inch pipelines)

- **Location:** Drill staged at New Kent Apartments to pipe work space at Goshen Executive
- **Description and Length:** This segment is a candidate for dual pipe pull, which allows for both the 16-inch and 20-inch pipelines to be installed simultaneously. If for any reason we are unable to perform a dual pipe pull, the contractor will install the 16-inch only and then begin the HDD for the 20-inch pipeline at a later date. This HDD segment has 5 mid-welds for both the 16-inch and 20-inch sections with an approximate length of 2970 feet.
- **Approximate date for pullback:** Targeting mid-December 2019
- **Timeline for pullback:** It is estimated that the duration for pullback with 24/7 continuous work will be 32-36 hours. Without continuous pullback, the process will take 4-5 days, barring loss of bore hole integrity or changes in weather conditions. In the case where we are unable to complete a successful pullback due to non-continuous pull and/or loss of the borehole, we must restart the HDD process all over again, which is estimated to take 157 days for the dual pull of the 16-inch and 20-inch pipelines for this section.

**HDD 521** (16-inch and 20-inch pipelines)

- **Location:** Drill staged at West Chester Pike/ St. Simon and Jude Parish in Westtown Township to the pipe work space at Bow Tree Dr.
- **Description and length:** This drill segment is a combination of HDD 520 and HDD 530. This segment is a candidate for dual pipe pull, which allows for both the 16-inch and 20-inch pipelines to be installed simultaneously. If for any reason we are unable to perform a dual pipe pull, the contractor will install the 16-inch only and then begin the HDD for the 20-inch pipeline at a later date. This HDD segment has 4 mid-welds for both the 16-inch and 20-inch sections with an approximate length of 6943 feet.
- **Approximate date for pullback:** Targeting December 2019
- **Approximate pullback duration:** It is estimated that the duration for pullback with 24/7 continuous work will be 33-37 hours. Without continuous pullback, the process will take 5 to 6 days, barring loss of bore hole integrity or changes in weather conditions. In the case where we are unable to complete a successful pullback due to non-continuous pull and/or loss of the borehole, we must restart the HDD process all over again, which is estimated to take 198 days for the dual pull of the 16-inch and 20-inch pipelines for this section.

**HDD 471** (20 -inch pipeline only; 16-inch pipeline has been installed)

- **Location:** Drill staged at Village Square Dr. to pipe work space at Goshen Executive
- **Description and Length:** This HDD segment is 3730 feet in length.
- **Approximate date for pullback:** Targeting mid-April 2020
- **Timeline for pullback:** This HDD segment is currently under review from the PA DEP. We will provide a timeline when DEP approval is received. This HDD segment is estimated to take 145 days to complete.

**HDD 461** (20 -inch pipeline only; 16-inch pipeline has been installed)

- **Location:** Drill staged at Village Square Dr. to pipe work space at Carriage Dr.
- **Description and length:** This HDD segment is 882 feet in length.
- **Approximate date for pullback:** June 2020
- **Timeline for pullback:** This HDD segment is estimated to take 42 days to complete.

**HDD 500** (20-inch pipeline only; 16-inch pipeline has been installed)

- **Location:** Drill staged at New Kent Apartments to pipe work space near Bow Tree Rd.
- **Description and length:** 2140 feet in length
- **Approximate date for pullback:** TBD
- **Timeline for pullback:** This HDD segment is currently under review from the PA DEP. We will provide a timeline when DEP approval is received. This HDD segment is estimated to take 94 days to complete.



In anticipation of continuous pullback activities, we will work with the township to identify, notify and offer temporary lodging to neighbors close to the entry and exit points where the work will take place for the duration of the overnight work. All Occupational Safety and Health Administration must be followed; however, we can take certain measures to mitigate noise. Additionally, lighting will be directed away from residences in all drill entry and exit locations during non-daylight work.

I have attached the letter written by Professor Samuel T. Ariaratnam, Ph.D., P. E., P.Eng., F.ASCE., an independent expert on horizontal directional drills, on the need for uninterrupted pullback activities during this critical stage of pipeline installation.

I thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ronald Cummings', written in a cursive style.

Ronald Cummings  
Project Manager, Energy Transfer  
3807 West Chester Pike  
Newtown Square, PA 19073





Rick Smith  
Township Manager  
East Goshen Township  
1580 Paoli Pike  
West Chester, PA 19380

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Project Manager, Energy Transfer  
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