



Enbridge
5400 Westheimer Court
Houston, Texas 77056

September 10, 2019

Mr. Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration
840 Bear Tavern Road
Suite 300
West Trenton, NJ 08628

**RE: Algonquin Gas Transmission, L.L.C
Notice of Amendment
CPF 1-2019-1015M**

Dear Mr. Burrough,

From October 16 – October 20, 2017 and May 15 – 17, 2018 a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected Algonquin Gas Transmission, L.L.C's (AGT) procedures for the Mystic River HDD Project in Waltham, Massachusetts.

On August 12, 2019, PHMSA issued the above referenced Notice of Amendment (NOA) identifying one (1) apparent inadequacies in Enbridge's procedures. The following is a brief summary of PHMSA's finding and Algonquin's response.

PHMSA Finding

1. §192.303 Compliance with specifications or standards.

Algonquin's written specifications and standards for constructing each transmission line were inadequate. Specifically, Algonquin's construction standards for coating inspection failed to adequately address the requirements of §192.307 and §192.461(e) regarding pipe that was horizontally directionally drilled (HDD).

During the inspection, a PHMSA inspector requested procedures for assessing and remediating coating that may have been damaged as a result of installation via HDD. Algonquin provided Coating Design for HDD Installation (Guideline Number: DG-PC1.1 and Revision Date: 11/04/2014) (Design Guideline).

Section 192.307 stated “Each length of pipe and each other component must be visually inspected at the site of installation to ensure that it has not sustained any visually determinable damage that could impair its serviceability.” The Design Guideline did not address inspecting piping in the exit pit that was installed via HDD in order to determine if any damage occurred that could impair its serviceability, and also subsequent remediation requirements that may be necessary in the event damage was discovered.

Section 192.461(e) stated “If coated pipe is installed by boring, driving, or other similar method, precautions must be taken to minimize damage to the coating during installation.” The Design Guideline did not address inspecting the coating condition of piping in the exit pit that was installed via HDD, and subsequent remediation requirements for damaged coating.

Therefore, Algonquin’s construction standards failed to address inspecting and remediating, if necessary, the coating of piping in the exit pit that was installed via HDD to comply with §192.461(e). Also, the procedures did not address inspection of said pipe to determine if any damage occurred during the HDD installation that could impair its serviceability to meet §192.307, and subsequent remediation, if necessary.

AGT’s Response

AGT disagrees with PHMSA’s finding of violation in this matter. §192.303 does not explicitly state that operators must have a comprehensive written specifications or standards for inspecting and remediating the coating of piping in the exit pit that was installed via HDD. §192.303 simply states that “*each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.*” To comply with that directive, namely that the comprehensive written specifications or standards be consistent with this part, §192.307 simply requires in relevant part that “*each length of pipe...be visually inspected at the site of installation*” to look for damage that could impair serviceability. Likewise, §192.461 dictates that “*precautions be taken to minimize damage to the coating during installation*” for HDD installations. AGT is unaware of any PHMSA interpretation, Advisory Bulletin or other guidance that explicitly states that the operator must have specifications for inspecting and remediating the coating of piping specifically in the exit pit that has been installed via HDD, and documenting those inspections and remediations. Given this lack of explicit regulatory requirement or guidance from PHMSA, AGT contends it is up to the operator to determine the level of detail in procedures/specifications and the level of documentation required to demonstrate compliance with §192.303.

AGT's construction specification, DG-PC1.1 - *Coating Design for HDD*, provides guidelines that should be considered during installation of pipeline via HDD. The specification requires abrasion resistant overcoat (ARO) coating to be used on all HDD pipeline installations to help prevent damage to the protective FBE anti-corrosion coating, thus taking precaution to minimize damage to the coating during construction. ARO coating has been used as a pipeline coating for decades and has been proven to perform and demonstrate good results based on coating studies of actual HDD coating performance on numerous projects and industry ARO coating studies done as referenced in the specification. In addition, the specification states in Section 6B that *the coating on the lead end of the pipe in the HDD pullback section should incur the greatest amount of coating damage as it wears down the rough edges in the rock surfaces along the HDD path*. AGT followed its specification by applying 24 mils of ARO over the FBE anti-corrosion coating, as required by the Company ARO specification for dual layer FBE. Therefore, AGT contends that this design specification does in fact adequately address the requirements of §192.461(e).

Following the HDD, AGT visually inspected the first joint of the pullback section in accordance with Section 6D5 which states *pull the first joint of the pullback section on out of the borehole and remove it, if greater than 2% of the coating has been removed down to bear steel* as a consideration for HDDs in rock to control coating wear. The visual inspection determined that there was minimal coating wear that did not warrant further assessments. AGT provided the inspection report titled *Mystic River HDD Pullback Coating Inspection*, to the inspector. This inspection report would have documented any issues if they had been present, but the coating was in excellent condition and thus there was no evidence to document that any damage had occurred that could have impaired the serviceability of the pipeline in accordance with §192.307. Inspection reports are used to document when issues occur, but do not necessarily document the numerous events that occur where everything was fine and everything met the specifications. As part of AGT's construction practice to ensure there is no damage to the pipeline after construction, AGT also performed a caliper tool run and it was determined that there were no construction defects that would impair the serviceability of the pipeline.

While AGT contends its procedures were adequate at the time of the inspection, AGT has since developed a new inspection procedure, IP-PC1 - *Assessment of HDD Installations*. AGT developed this procedure in 2018 to document its practices that it has been using for many years for assessing the condition of pipe and coating on lead joints exiting after HDD installations. The procedure provides damage limits as criteria to be considered in assessing these installations to determine if further actions may be appropriate. A copy of IP-PC1 - *Assessment of HDD*

Installations and the associated inspection form TS-033, *Horizontal Directional Drill (HDD) Pullback Inspection Form* are attached for your review.

We trust that the IP-PC1 procedure adequately addresses the issue noted in the NOA, and AGT respectfully requests PHMSA to close this NOA.

Please call me at (713) 627-6388 if you need additional information to consider this request.

Sincerely,

A handwritten signature in blue ink that reads "Rick Kivela". The signature is written in a cursive style with a large initial "R".

Rick Kivela
Manager, Operational Compliance