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May 27, 2015

VIA COURIER AND EMAIL

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
Suite 2700
Toronto, ON
M4P 1E4

Re: Enbridge Gas Distribution Inc. ("Enbridge")
EB-2011-0270 – Regional Municipality of York – Pipeline Replacement Project
Conditions of Approval – Interim Monitoring Report

On October 11, 2011 the Ontario Energy Board issued its Decision and Order for the above noted proceeding, which included Conditions of Approval for the project. As part of the Conditions of Approval, Enbridge is required filed an interim monitoring report for the Project six months after the in-service date which would have been January 30, 2015.

In the Board's Vary Order dated September 23, 2014, the Board granted Enbridge's request for an extension to May 29, 2015

Attached is the interim monitoring report for the Board's review.

If you have any questions, please contact the undersigned.

Yours truly,

(Original Signed)

Lorraine Chiasson
Regulatory Coordinator

cc: Zora Crnojacki, OPCC Chair
Pascale Duguay, Manger, Natural Gas Applications, Ontario Energy Board (via courier and email)

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**ENBRIDGE GAS DISTRIBUTION INC.
POST-CONSTRUCTION
ENVIRONMENTAL MONITORING REPORT NO.1**

**Regional Municipality of York Pipeline Replacement Project
EB-2011-0270**

Prepared by
Enbridge Gas Distribution Inc.
May 4, 2015

1.0 Introduction

In October of 2011 the Ontario Energy Board (“OEB”) under docket number EB-2011-0270 granted Enbridge Gas Distribution Inc. (“Enbridge”) an exemption from a Leave to Construct on a section of natural gas pipeline. The project consisted of the replacement of 1200 metres of NPS 4 and 1200 metres of NPS 8 Extra High Pressure (XHP) steel pipeline with the installation of 1200 metres of NPS 12 XHP steel pipeline (12-inch outer diameter) in the Town of Markham and the Town of Whitchurch-Stouffville, within the Regional Municipality of York, Ontario (“Replacement Project”). The relocation was requested by the Regional Municipality of York (“Region”) as they were planning to upgrade the Ninth Line from two lanes to four lanes, and the two pipelines were in direct conflict with the Region’s proposed road widening.

Prior and subsequent to obtaining approval, Enbridge conducted the following studies to identify potential impacts resulting from construction and prepare mitigative measures to minimize environmental and socio-economic impacts.

<u>Report Title</u>	<u>Conducted by:</u>	<u>Date</u>
Proposed Relocation for Ninth Line, Markham and Whitchurch-Stouffville Environmental Screening Report	Enbridge Gas Distribution Inc.	July 2011
Geotechnical Investigation Proposed Pipeline Ninth Line, Between Markham Gate Station and Hoover Park Drive, Markham/Whitchurch-Stouffville, ON	Stantec Consulting Ltd.	April 2012

Construction of the Replacement Project began on November 19, 2012. The first part of the pipeline was energized on April 3, 2013¹ and the final section was energized on July 31, 2014. .

This report has been prepared in accordance with OEB EB-2011-0270 Board Staff Proposed Conditions of Approval as described below:

¹ The date that was originally reported to the OEB was April 4, 2013, but this date was incorrect. The correct date for the first hydrostatic test is April 3, 2013.

- 3.1 Both during and after construction, Enbridge shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Enbridge shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying each action.
- 3.2 The interim monitoring report shall confirm Enbridge adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 3.3 The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and any recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

This report is limited to items that have been identified prior to April 22, 2015. Items addressed after this date will be identified in the final Post-Construction Environmental Monitoring Report. This report will summarize actual construction procedures and identify any significant deviations from proposed construction activities.

2.0 Project Description

The replacement was initiated by the Region's road widening project along Ninth Line in

Markham and Whitchurch-Stouffville, Ontario. The reasons for replacing two smaller diameter pipes with one larger diameter pipe instead of a like-for-like replacement were explained in the application.² The Replacement Project is comprised of NPS 12 steel pipe and is located in Markham and Whitchurch-Stouffville, Ontario. It begins at the Enbridge Markham Gate Station on the east side of Ninth Line and immediately crosses beneath Ninth Line to the west side. The pipeline then proceeds north on Ninth Line, proceeds west on 19th Avenue and ties in to an existing pipeline on 19th Avenue. The pipeline is approximately 1.2 kilometers (km) in length. It is important to note that the intersection of 19th Avenue and Ninth Line have been entirely realigned due to the Region's road widening project. Appendix A shows the constructed pipeline within a regional context.

3.0 Environmental Inspection

In order to ensure that environmental commitments were honoured and that the best industry practices were used, a full time Chief Inspector was onsite. In general, the duties of the Chief Inspector included the following items:

- provide advice to the Project Manager, Construction Inspectors, and all construction personnel regarding compliance with environmental legislation, regulations and industry standards;
- provide advice regarding adherence to environmental specifications and commitments made in the previously mentioned documents and to regulatory agencies, including the OEB;
- provide advice on erosion protection measures to be taken in sensitive locations in vicinity of watercourse crossing;
- act as a liaison with environmental regulators, government agencies and interest groups;
- provide immediate advice regarding spill prevention and contingency; and,
- ensure appropriate waste disposal of any hazardous construction wastes.

An Enbridge Environmental Specialist also conducted routine inspections of the ongoing

² EB-2011-0270 Pre-filed evidence Exhibit A Tab 2 Schedule 1

construction to identify environmental issues which needed to be addressed and communicated these to the Project Manager.

4.0 Construction Effects and Mitigation Measures

Construction effects and mitigation measures which were implemented to minimize the potential effects from the construction of the Replacement Project are summarized in Table 1. All activities were conducted in adherence to the contract documentation and Enbridge Construction Policies and Procedures.

Table 1
Construction Effects and Mitigation Measures

Activity	Duration	Potential Effect	Mitigation Measures
Vegetation Cover	Throughout Construction (November 19, 2012- July 31, 2014)	Permanent removal of vegetation. Aesthetic degradation. Changes in surface drainage patterns affecting amount of water available. Changes to sunlight or wind exposure regimes.	All trees on the road allowance adjacent to roadways were identified prior to construction. Limits of work area marked to minimize encroachment into adjacent agricultural or vegetated areas. All construction completed within limits of new road allowance.
Topsoil Handling	Throughout Construction	Disruption of surface and subsurface soils. Soil mixing may result in loss of productivity.	Care was taken to minimize mixing of subsoils. Topsoil was replaced on surface during restoration.
Watercourse Crossing	Throughout Construction	Disruption of watercourse through siltation and sedimentation. Erosion of channel banks and loss of vegetation cover. Contamination of surface water. Interruption of subsurface drainage along pipeline trench.	A geotechnical assessment was completed to determine feasibility of HDD. Crossing of the Rouge River Tributary (under corrugated culvert) was completed by directional drill. Watercourse crossing permit was obtained from the Toronto and Region Conservation Authority. Sediment fencing installed to prevent sedimentation and siltation into watercourse.
Traffic Control	Throughout Construction	Exposure of construction crews to vehicular traffic.	Contractor ensured MTO Book 7 traffic control plan has been completed and has been set up in accordance with the prescribed Traffic Layout.

Table 1
Construction Effects and Mitigation Measures (continued)

Activity	Duration	Potential Effect	Mitigation Measures
Road Crossings	Throughout Construction	Restricted access to businesses and residences.	The two road crossings, Ninth Line and 19 th Avenue, were completed by directional drill. Warning signs and barricades set up to increase visibility and prevent public access.
Noise	Throughout Construction	Disturbances to sensitive receptors (i.e. residents, seniors' homes, schools).	Construction equipment conformed to guidelines for sound and emission levels. Work area had limited residential receptors.
Trenching and Excavation	Throughout Construction	Open trenches present a hazard to vehicular and pedestrian traffic. Restricts access. Sedimentation into roadside ditches.	Protective barricades (i.e., snow fence, sediment fence, jersey barriers, and straw bales) were erected around trenches and excavations during construction activities. Work area had limited residential receptors and pedestrian traffic.
Utility Crossings	Throughout Construction	Minimum distance separation from buried or above-ground services may not provide sufficient room within a road right-of-way (R.O.W.) for the installation of a gas pipeline; damage to utilities may inconvenience landowners.	In accordance with Enbridge Policies and Procedures, locates were obtained prior to any excavation work. Warning signs posted in vicinity of overhead power lines.
Railway Crossing	Throughout Construction	Railbed settlement could affect operations of the transit line.	A geotechnical assessment was completed to determine feasibility of HDD. Settlement monitoring has been completed and no settlement issues were identified.
Spills	Throughout Construction	Contamination of air, soil, surface water or ground water. Inconvenience to landowners and public	As required, contractor had spill containment kits at the project site. No reportable spills occurred during construction.
Hydrostatic Testing	March 21, 2013 and July 7, 2014	Uncontrolled discharge of water could cause erosion, sedimentation and contamination of surface water supplies.	A contractor was obtained to bring water to site using water trucks. Hydrostatic test water was removed offsite. No significant adverse environmental effects resulted from the hydrostatic testing and dewatering procedures.

Table 1
Construction Effects and Mitigation Measures (continued)

Activity	Duration	Potential Effect	Mitigation Measures
Pipe Energizing	April 3, 2013 and July 31, 2014	Inconvenience and/or negative health effects to nearby landowners and the public.	Energizing was completed in accordance with Enbridge Policies and Procedures. Work area had limited residential receptors.
Clean-Up	Throughout Construction	Restores the pipeline easement to pre-construction conditions.	Clean-up activities were conducted in accordance with the Enbridge Construction and Maintenance Manual. Remaining restoration of the road allowance along the route will be completed by York Region as per their road widening project.

5.0 Residual Issues

Overall, construction activities were carried out with a high level of respect for the environment.

Since the pipeline Right-Of-Way (R.O.W) is located within the road allowance, there may, in the future, be some degradation caused by vehicular traffic and littering that is not a result of construction.

5.1 Vegetation

There are numerous trees in the road allowance where the pipeline was installed. Portions of this road allowance were open cut. The trees were monitored and appear to be in good health. Enbridge will continue to periodically monitor these trees but it does not foresee future problems.

5.2 Restoration and Revegetation

Areas affected by Enbridge's work were immediately made safe and final restoration will be completed by the Region since their road widening work is still ongoing. The Region

still has to complete some final grading within the boulevards and ditches before final paving this summer.

6.0 Landowner Comments

No landowner comments were received during the duration of this project.

7.0 Summary

This Interim Post-Construction Environmental Monitoring Report has been prepared in accordance with the OEB Decision Docket No.EB-2011-0270. It documents construction and clean-up activities conducted in the summer and fall of 2014. In general, measures implemented during construction and clean-up have been successful. There are no outstanding issues.

APPENDIX A
PIPELINE ROUTE MAP



Figure 1: Regional Municipality of York Pipeline Replacement Project Pipeline Route

APPENDIX B

PHOTO LOG
(April 22, 2015)



Photo 1: East side of Ninth Line north of Markham Gate Station at watercourse crossing, looking east



Photo 2: East side of Ninth Line north of Markham Gate Station at watercourse crossing, looking north



Photo 3: East side of Ninth Line at Markham Gate Station (start point), looking east



Photo 4: West side of Ninth Line directly across from Markham Gate Station, looking south



Photo 5: West side of Ninth Line directly across from Markham Gate Station, looking south



Photo 6: West side of Ninth Line approx. 50m south of Rail Crossing, looking north



Photo 7: West side of Ninth Line approx. 120 m north of Markham Gate Station



Photo 8: South side of 19th Avenue at Ninth Line, looking southeast



Photo 9: South side of 19th Avenue at Ninth Line, looking north



Photo 10: North side of 19th Avenue, looking east



Photo 11: North side of 19th Avenue (end point), looking northwest