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June 10, 2010

**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")  
Pipeline to Serve the Proposed Northland Power Plant - Thorold  
EB-2008-0065 – Ontario Energy Board's Conditions of Approval:  
Interim Monitoring Report**

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In the Ontario Energy Board's Decision issued on October 28, 2008, the Conditions of Approval required Enbridge to file an interim monitoring report for the project 6 months after the in-service date. The final in-service date for the project was December 14, 2009 and would require Enbridge to file the interim monitoring report by June 14, 2010.

Enclosed please find the interim monitoring report for the project.

Any future developments will be communicated to the Board.

If you have any questions, please contact the undersigned.

Yours truly,

A handwritten signature in blue ink that reads "Bonnie Jean Adams".

Bonnie Jean Adams  
Regulatory Coordinator

cc: Neil McKay, Manger, Facilities Applications, Ontario Energy Board (via courier and email)

**ENBRIDGE GAS DISTRIBUTION INC.  
POST-CONSTRUCTION  
ENVIRONMENTAL MONITORING REPORT NO.1  
PIPELINE TO SERVE THE THOROLD COGEN L.P.  
EB-2008-0065**

Prepared by  
Enbridge Gas Distribution Inc.  
June 10, 2010

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## 1.0 Introduction

On October 28, 2008 the Ontario Energy Board (“OEB”) under docket number EB-2006-0065 granted Enbridge Gas Distribution Inc. (“Enbridge”) Leave to construct and operate an NPS 12 (12 inch diameter) natural gas pipeline to serve the Thorold Cogen L.P. on the property of Abitibi Consolidated Inc. – Thorold Division. Prior to obtaining approval, Enbridge conducted the following studies to select a pipeline route, identify potential impacts resulting from construction, and prepare mitigative measures to minimize environmental and socio-economic impacts.

<b>Report Title</b>	<b>Conducted by:</b>	<b>Date</b>
The 2007-2008 Stage 1 Archaeological Assessment of the Proposed NPS 12 Natural Gas Pipeline to Service, the Northland Power Plant, City of Thorold, Niagara Regional Municipality, Ontario	D.R. Poulton & Associates Inc.	March 2008
Environmental Report: Pipeline To Serve the Proposed Thorold Cogen L.P.	Stantec Consulting Limited	April 2008
Geotechnical Investigation Proposed Gas Pipeline Crossing at Highway 58 and Beaverdams Creek, Thorold, Ontario	Golder Associates Limited	March 2009
The 2009 Stage 2 Archaeological Assessment of the Proposed NPS 12 Natural Gas Pipeline to Service, the Northland Power Plant, City of Thorold, Niagara Regional Municipality, Ontario	D.R. Poulton & Associates Inc.	May 2009

Construction of this pipeline began on April 20, 2009 and was completed on August 26, 2009. The pipeline was commissioned on December 14, 2009.

The Interim Post-Construction Report has been prepared in accordance with the OEB EB-2008-0065 Board Staff Proposed Conditions of Approval as described below:

- 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 June 2010. 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**

This pipeline was constructed to provide a reliable supply of natural gas to meet the demands of the Thorold Cogen L.P. located on the Abitibi-Consolidated Inc. – Thorold Division in Thorold, Ontario. This facility will provide electricity to feed into the Ontario market administered by the Independent Electricity System Operator and thermal energy to the Abitibi-Consolidated paper mill.

The pipeline is connected to an existing TransCanada Pipelines (TCPL) natural gas transmission pipeline at the newly constructed Thorold Townline Road Gate Station located at 4832 Thorold Townline Road in Niagara Falls, ON. The pipeline ends at the Thorold Cogen L.P., located on the property of Abitibi Consolidated Inc. – Thorold Division in the town of Thorold, ON. The pipeline is approximately 2.9 kilometers (km) in length. 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 the vicinity of the 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 Environment, Health and Safety (EHS) Specialist also conducted routine inspections of the ongoing 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 the construction of the pipeline to serve the Thorold Cogen L.P. are summarized in Table 1 provided on the following pages. All activities were conducted in adherence to the contract documentation and Enbridge Construction Policies and Procedures.

**Table 1.**

**Construction Effects and Mitigation Measures**

<b>Activity</b>	<b>Duration</b>	<b>Potential Effect</b>	<b>Mitigation Measures</b>
Vegetation Cover	Throughout Construction (April 2009-August 2009)	Permanent removal of vegetation. Aesthetic degradation. Changes in surface drainage patterns affecting amount of water available. Changes to sunlight or wind exposure regimes.	Limits of work area were marked to minimize encroachment into adjacent agricultural, wooded and vegetated areas. Majority of construction completed within existing road allowance
Topsoil Handling	Throughout Construction	Disruption of surface and subsurface soils. Soil mixing may result in loss of productivity.	Contractor stripped topsoil and stockpiled separately from subsoil. Mixing of soils was minimized. Segregated topsoil was replaced on surface during backfilling.
Watercourse Crossing	May and June 2009	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.	Crossing of Beaverdams Creek was completed by directional drill. Watercourse crossing permit was obtained from the Niagara Peninsula Conservation Authority. Sediment fencing installed to prevent sedimentation and siltation.
Traffic Control	Throughout Construction	Exposure of construction crews to vehicular traffic.	Contractor to ensure Enbridge traffic control plan has been completed and has been set up in accordance with the prescribed Traffic Layout. Paid duty police officer to monitor vehicular and pedestrian traffic.
Road Crossings	Throughout Construction	Open cut roads inconvenience motorists and traffic flow. Restricted access to businesses and residences.	Two road crossings (Thorold Townline Road and Niagara Falls Road) were completed by open cut trenching. Crossings were conducted during times of low traffic volume to avoid congestion. Warning signs and barricades were set up to increase visibility and prevent public access. Paid duty police officer to monitor vehicular and pedestrian traffic.

**Table 1.**

**Construction Effects and Mitigation Measures**

<b>Activity</b>	<b>Duration</b>	<b>Potential Effect</b>	<b>Mitigation Measures</b>
Noise	Throughout Construction	Disturbances to sensitive receptors (i.e. seniors' homes, schools).	Construction equipment conformed to guidelines for sound and emission levels.
Archaeological Monitoring	Throughout Construction	Disturbance and potential destruction of archaeological artifacts.	D.R. Poulton conducted a Stage 1 and Stage 2 Archaeological Assessment prior to construction to identify areas of high potential for artifacts.
Trenching and Excavation	Throughout Construction	Open trenches present a hazard to vehicular and pedestrian traffic. Restricts access. Sedimentation into storm sewers.	Protective barricades (i.e., snow fence, concrete barriers) were erected around trenches and excavations during construction activities. Permeable fabric barriers were installed beneath all storm sewer covers to minimize sediment infiltration.
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 the Enbridge Policies and Procedures, locates were obtained prior to any excavation work. Warning signs posted in vicinity of overhead power lines One (1) crossing of Canadian National Railways was completed by directional drill.
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. There were no reportable spills during the construction of this pipeline.
Hydrostatic Testing	July 2009	Disruption of water supply to landowners or emergency services. Uncontrolled discharge of water could cause erosion, sedimentation and contamination of surface water supplies.	Water for the hydrostatic was transported to, and removed from the site by tanker truck. No significant adverse environmental effects resulted from the hydrostatic testing and dewatering procedures.
Pipe Energizing	August 2009	Inconvenience and/or negative health effects to nearby landowners and the public.	Energizing was completed in accordance with Enbridge Policies and Procedures.

**Table 1.**

**Construction Effects and Mitigation Measures**

<b>Activity</b>	<b>Duration</b>	<b>Potential Effect</b>	<b>Mitigation Measures</b>
Clean-Up	Throughout Construction	Restores the pipeline easement to pre-construction conditions.	Clean up activities were conducted in accordance with the Enbridge Construction Manual. Results of the clean-up program will be examined again in the spring of 2011.

**5.0 Residual Issues**

Overall, construction activities were carried out with a high level of respect for the environment. Since portions of the pipeline R.O.W are 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.

There are two unresolved issues regarding revegetation and water crossing that were present at the time of completion of this report (June 2010) for the Pipeline to Serve the Thorold Cogen L.P. These issues will need to be addressed prior to the final monitoring of the pipeline route.

**5.1 Revegetation**

Vegetation has re-established along portions of the road allowance where it was disturbed due to construction. However, some sections will require additional restoration and revegetation, these include:

- North side of Niagara Falls Road in the vicinity of
  - 1108 Niagara Falls Road (see Photo 14)
  - 1201 Niagara Falls Road (see Photo 11)

These sections will require monitoring over the next year to identify the success of revegetation efforts and to identify areas that will require further efforts.

## **5.2 Watercourse Crossing**

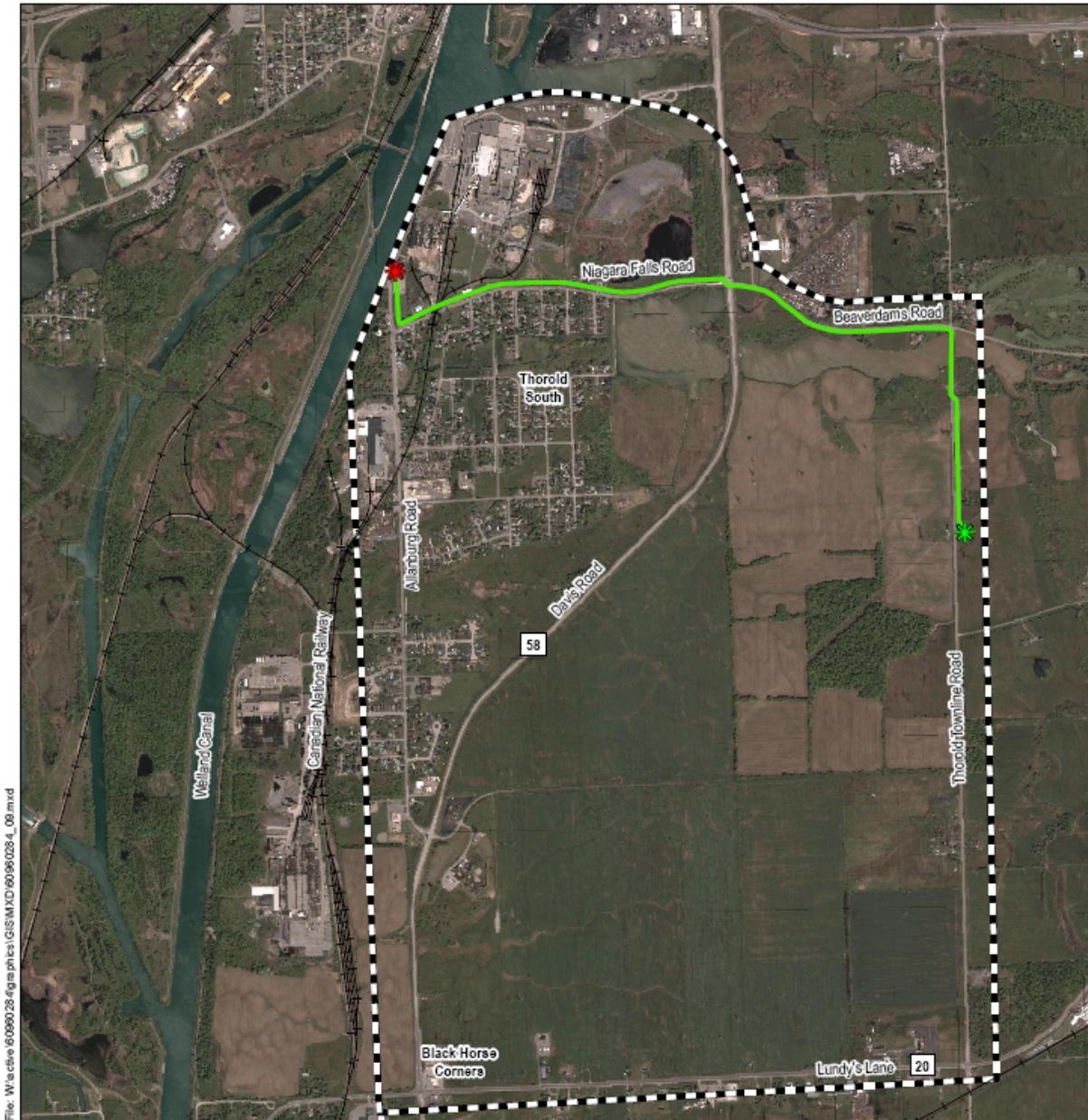
Erosion control devices such as silt fences and straw bale check dams have been installed where required to control any erosion and sedimentation concerns identified. Sediment fencing and straw bales should be removed from the following locations:

- East side of Thorold Townline Road, north of Thorold Townline Road Gate Station (see Photo 2)
- West side of Thorold Townline Road, north and south sides of Beaverdams Creek (see Photo 6 and Photo 8)

## **6.0 Summary**

This Interim Post-Construction Environmental Monitoring Report has been prepared in accordance with the OEB Decision for EB-2008-0065. It documents construction and clean-up activities between the fall (2009) and winter (2010). Measures implemented during construction and clean-up have been successful. Two outstanding issues will be addressed in the Final Post-Construction Environmental Monitoring Report that will be prepared in the spring of 2011. The final report will document continued remediation activities if needed, and address additional issues that may arise.

**APPENDIX A**  
**PIPELINE ROUTE MAP**



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Source: Google Earth, 2007.

-  Study Area Boundary
-  Alternative Preferred Route
-  Start Point
-  Termination Point



**Stantec**



PREPARED FOR:  
ENBRIDGE GAS DISTRIBUTION INC.  
PROPOSED NORTHLAND PIPELINE

**FIGURE NO. A-4**

## PREFERRED ROUTE

Initiated: March, 2008  
Revised:

**APPENDIX B**

**PHOTO LOG  
(June 2010)**



Photo 1 – Looking north along Thorold Townline Road at Gate Station



Photo 2 – Looking north along Thorold Townline Road; north of Gate Station



Photo 3: Looking south along Thorold Townline Road, south of Beaverdams Creek



Photo 4: Looking west at road crossing of Thorold Townline Road



Photo 5 – Looking south along Thorold Townline Road; south of Beaverdams Creek



Photo 6 – Looking north along Thorold Townline Road; south side of Beaverdams Creek



Photo 7 – Looking south along Thorold Townline Road, north side of Beaverdams Creek



Photo 8 – North side of Beaverdams Creek



Photo 9 – Looking west along Beaverdams Road just west of Thorold Townline Road



Photo 10 – Looking west at 1021 Beaverdams Road



Photo 11 – Looking west, just west of 1021 Beaverdams Road



Photo 12 – Looking west, west of 1021 Beaverdams Road



Photo 13 – Looking east, just west of 1067 Beaverdams Road



Photo 14 – Looking east along Beaverdams Road; across from 1108 Beaverdams Road



Photo 14 – Looking west along Beaverdams Road, across from 1108 Beaverdams Road



Photo 15 – Looking west along Beaverdams Road at crossing of Highway 58



Photo 16 – Looking east along Niagara Falls Road toward Highway 58



Photo 17 – Looking east along Niagara Falls Road, east of Bartlett Street



Photo 18 – Looking east along Niagara Falls Road, east of Davis Street



Photo 19 – Looking west along Niagara Falls Road, east of Davis Street



Photo 20 – Looking west along Niagara Falls Road, east of CNR Crossing



Photo 21 – Looking west along Niagara Falls Road, west of CNR Crossing



Photo 22 – Looking north along Allanburg Road; Thorold Cogen L.P. on right