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April 22, 2009

#### **VIA COURIER**

Ms. Kirsten Wallii Board Secretary Ontario Energy Board PO Box 2319 2300 Yonge Street 27<sup>th</sup> Floor Toronto, Ontario M4P 1E4

Dear Ms. Walli:

Re: Ontario Energy Board (the "Board")

File No. EB-2006-0305

Enbridge Gas Distribution Inc. ("Enbridge")

**Application for a Leave to Construct Natural Gas Distribution Line** 

**Toronto Portlands Reinforcement** 

Final Monitoring Report - South Section

As per Appendix B, Conditions of Approval, in the Board's Decision and Order issued on June 1, 2007, enclosed please find four copies of the Final Monitoring Report for the South section for the above mentioned proceeding.

Yours truly,

Bonnie Jean Adams Regulatory Coordinator

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cc: Mr. Neil McKay, Ontario Energy Board, Manager, Facilities (via courier/email)
Mr. Scott Stoll, Aird & Berlis (via email)

## ENBRIDGE GAS DISTRIBUTION INC. POST-CONSTRUCTION ENVIRONMENTAL MONITORING REPORT NO.2

TORONTO PORT LANDS REINFORCEMENT PROJECT: SOUTH END EB-2006-0305

Prepared by Enbridge Gas Distribution Inc. April 22, 2009

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#### 1.0 Introduction

In the summer of 2007 the Ontario Energy Board ("OEB") under docket number EB-2006-0305 granted Enbridge Gas Distribution Inc. ("Enbridge") Leave to construct and operate an NPS 20 (20 inch diameter) natural gas pipeline to serve the Portlands Energy Center (PEC) in the City of Toronto, ON. 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.

Report Title	Conducted by:	<u>Date</u>
Toronto Port Lands Reinforcement Project: South Section	Stantec Consulting Limited	December 2006
The 2006 Stage 1 Archaeological Assessment of the Proposed Portland Energy Centre Pipeline, Port Industrial District, City of Toronto, Ontario	D.R. Poulton & Associates Inc.	November 2006
Land Use Review and Soil and Groundwater Quality Assessment Pipeline To Serve the Proposed Port Lands Energy Center Enbridge Gas Distribution	Stantec Consulting Limited	May 2007

Construction of this pipeline began on September 4, 2007 and was completed on January 17, 2008. The pipeline was commissioned on January 22, 2008.

This report has been prepared in accordance with OEB EB-2006-0305 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.

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- 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 2008. 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 Toronto Port Lands Reinforcement Project was constructed to provide a reliable supply of natural gas to meet the demands of the Portlands Energy Centre. This facility will provide electricity to the existing Hydro One network to feed into the Ontario market administered by the Independent Electricity System Operator.

The pipeline was connected to an existing natural gas distribution pipeline at 405 Eastern Avenue and ends at the Portlands Energy Centre property on Unwin Avenue in the City of Toronto. 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 qualified environmental inspector was on-site for the duration of the pipeline construction activities.

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In general, the duties of an Environmental Inspector consisted of the following items:

- provide advice to the Project Manager, Construction Inspector, 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.

#### 4.0 Construction Effects and Mitigation Measures

Construction effects and mitigation measures which were implemented to minimize the potential effects the construction of the Toronto Port Lands Reinforcement Project: South End are summarized in Table 1 (begins on the next page). 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 (September 2007 – January 2008)	Permanent removal of vegetation. Aesthetic degradation. Changes in surface drainage patterns affecting amount of water available. Changes to sunlight or wind exposure regimes.	Specimen trees adjacent to roadways (i.e. Commissioners Street, Logan Avenue and Booth Avenue) were identified prior to construction and preserved by working outside the drip line and using directional drill. Manicured turf adjacent to roadways and parks (i.e. McCleary Park, Commissioners Street and Logan Avenue) was restored by reseeding.
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	November 2007	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 Shipping Channel 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.
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 (Commissioners Street and Booth Avenue) were completed by open cut trenching. Crossings were conducted during times of low traffic volume to avoid congestion. Warning signs and barricades set up to increase visibility and prevent public access. Paid duty police officer to monitor vehicular and pedestrian traffic.
Noise	Throughout Construction	Disturbances to sensitive receptors (i.e. seniors' homes, schools).	Construction equipment conformed to guidelines for sound and emission levels.

Table 1.

Construction Effects and Mitigation Measures

Activity	Duration	Potential Effect	Mitigation Measures
Archaeological Monitoring	Throughout Construction	Disturbance and potential destruction of archaeological artifacts.	D.R. Poulton conducted Stage 1 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 Toronto Terminal Railway 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.
Contaminated Soil and Groundwater	Throughout Construction	Contaminated soil and groundwater from historical land uses may present a health hazard to workers and the public. Improper handling and disposal may cause increased environmental impacts.	Subsurface soil investigation conducted by Stantec prior to excavation activities. Impacted soil and groundwater disposed of according to Ontario Ministry of Environment guidelines. Workers supplied with appropriate personal protective equipment.
Hydrostatic Testing	January 2008	Disruption of water supply to landowners or emergency services. Uncontrolled discharge of water could cause erosion, sedimentation and contamination of surface water supplies.	A permit to obtain water from the Shipping Channel; and discharge water to the Shipping Channel were obtained from the City of Toronto Port Authority. No significant adverse environmental effects resulted from the hydrostatic testing and dewatering procedures.
Pipe Energizing	January 2008	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

Activity	Duration	Potential Effect	Mitigation Measures
Pipe Energizing	January 2008	Inconvenience and/or negative health effects to nearby landowners and the public.	Energizing was completed in accordance with Enbridge Policies and Procedures.
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 cleanup program will be examined again in the spring of 2009.  Contractor completed restoration of roads with final work to be completed by the City of Toronto on Bouchette Street (south of Commissioners Street).

#### 5.0 Residual Issues

The interim report identified two areas of unresolved issues which to date have been resolved and Enbridge does not foresee any future issues resulting from the construction which occurred between September 2007 and January 2008. Since portions of the pipeline are installed in the R.O.W., located within the road allowance, there may, in future be some degradation caused by vehicular traffic and littering that is not a result of construction.

#### 5.1 Vegetation

There were several specimen trees along Commissioners Street, Logan Avenue, and Booth Avenue within the road allowance adjacent to where the pipeline was installed. Portions of these road allowances were open-trenched. Although the inspection was conducted in the early spring, the specimen 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.

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#### 5.2 Revegetation

Vegetation has re-established west of the driveway to the Hearn Plant (north of Unwin Avenue) where it was disturbed due to construction. There are no outstanding issues in regards to revegetation.

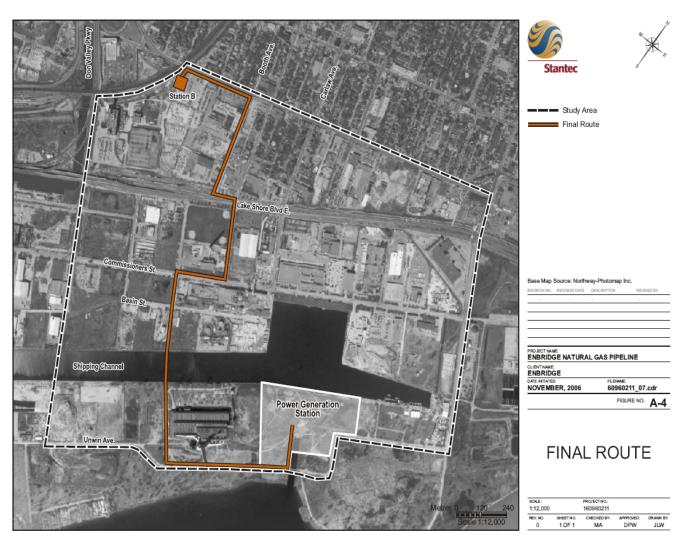
#### 6.0 Summary

This Final Post-Construction Environmental Monitoring Report has been prepared in accordance with the OEB Decision docket number EB-2006-0305. It documents construction and clean-up activities between the spring and summer of 2008. Measures implemented during construction and clean-up have been successful,

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# APPENDIX A PIPELINE ROUTE MAP

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\* Note - The pipeline was installed on the south side of Lakeshore Blvd. East.

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#### APPENDIX B

**PHOTO LOG** 

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Photo 1 – Looking west along Unwin Avenue toward former Hearn Plant



Photo 2: Looking north, west of entrance to former Hearn Plant

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Photo 3 – Looking north along Bouchette Street at Commissioners Street (HDD entry point)



Photo 4 – Looking north along Logan Avenue towards Lakeshore Boulevard

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Photo 5 – Looking south along Logan Avenue towards Commissioners Street



Photo 6 – Booth Avenue looking north towards Eastern Avenue