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November 13, 2014

**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-2013-0289 Kimball-Colinville - Observation Wells (TKC #63)**  
**Conditions of Approval - Interim Monitoring Report**

In the Ontario Energy Board's Report of the Board issued on November 7, 2013, the Conditions of Approval requires Enbridge to file the Interim Monitoring Report for the project 6 months after the in-service date. The final in-service date for TKC #63 was May 22, 2014, and requires Enbridge to file the Interim Monitoring Report by November, 2014.

Enclosed please find the interim monitoring report for this project.

Any future developments will be communicated to the Board.

If you have any questions, please contact the undersigned.

Yours truly,

(Original Signed)

Stephanie Allman  
Regulatory Coordinator

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

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

**TECUMSEH GAS STORAGE WELL TKC #63, MOORE 6-18-VIII  
EB-2013-0289**

Prepared by  
Enbridge Gas Distribution Inc.  
November 13, 2014

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## 1.0 Introduction

On November 7, 2013 the Ontario Energy Board (“OEB”) under docket number EB-2013-0289<sup>1</sup> granted Enbridge Gas Distribution Inc. (“Enbridge”) permission to drill one observation well (TKC#63, Moore 6-18-VIII) in the Kimball-Colinville Storage Pool. Prior 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.

<b>Report Title</b>	<b>Conducted by:</b>	<b>Date</b>
Environmental Report: Tecumseh Storage Enhancement Project – Storage Infill Drilling	Stantec Consulting Limited	March 2008
Enbridge Gas Distribution Inc. – Proposed Observation Well TKC #63 – Environmental Screening Report ( <i>this report was based on the Stantec report above</i> )	Enbridge Gas Distribution Inc.	January 2012
Baseline Residential/Private Well Monitoring Program, Natural Gas Storage Pools, Lambton County	Stantec Consulting Ltd.	March 6, 2012

Construction of this well began on November 23, 2013 and was completed on June 7, 2014. The storage well was commissioned on May 22, 2014 prior to the final restoration of the drilling pad.

This report has been prepared in accordance with OEB EB-2013-0289 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 and the Ministry of Natural Resources. 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 comments and complaints that have been received to the interim and final monitoring reports.

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<sup>1</sup> This was originally part of the application under docket number EB-2012-0060

The log shall record the times of all comments and complaints received, the substance of each comment and complaint, the actions taken in response, and the reasons underlying such actions.

3.2 The interim monitoring report shall confirm Enbridge's 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 the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and 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 November 4, 2014. 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**

TKC#63 well is an observation well drilled in the Kimball-Colinville Storage Pool. The well was designed to help Enbridge monitor the gas content and pressure in the underground storage area. The Kimball-Colinville Storage Pool is located primarily under Lots 17, 18 and 19 and Concessions V, VI, VII and VIII in St. Clair Township. TKC#63 is located approximately 850 m south of Rokeby Line and 110 m east of Tecumseh Road in St. Clair Township in the County of Lambton. Appendix A shows the storage well 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 inspector was onsite. In general, the duties of the inspector included the following items:

- provide advice to the Project Manager 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 and Ministry of Natural Resources;
- 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 TKC#63 are summarized in Table 1. Photos of TKC#63 taken in November 2014 are found in Appendix B. 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 (November 2013 – June 2014)	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 marked to minimize encroachment into vegetated areas.
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 following construction. Topsoil was tilled prior to cultivation.
Bedrock	Throughout Construction	Large amounts of drill cuttings and fluids are encountered and removed from the drill hole. Rock materials in drill cuttings are mostly limestone and dolomite with some shale and salt.	Drill fluids were collected in holding tanks and allowed to settle. Fluid was recycled and used again. Remaining fluid was solidified with a bonding agent and disposed of according to MOE Regulations.

**Table 1 continued**

Climate	Throughout Construction	Heavy rainfall may result in flooding of adjacent lands, erosion and compaction and rutting (if construction persists). High winds may erode loose soil material, including topsoil and create nuisance dust.	During wet soil conditions construction on agricultural lands were suspended. Work resumed only upon approval by Chief Inspector. Nuisance dust was controlled by applying water to work area (if required).
Groundwater	Throughout Construction	During well drilling the water table may be breached and the supply of water to adjacent water wells be affected temporarily.	Stantec Consulting Ltd. was contracted prior to drilling to conduct a Baseline Residential / Private Well Monitoring Program.
Noise	Throughout Construction	Disturbances to sensitive receptors (i.e. residents).	Construction equipment conformed to guidelines for sound and emission levels.
Tile Drainage	November 2013	Disturbance to existing tile drainage system	Repair and reconnection of tile drain that was temporarily blocked for drilling of well is delayed at the request of the landowner. Landowner wants to harvest crops before repair occurs.
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.
Clean-Up	Throughout Construction	Restores the storage well easement to pre-construction conditions.	Clean up activities were conducted in accordance with the Enbridge Construction Manual.

## **5.0 Residual Issues**

Overall, construction activities were carried out with a high level of respect for the environment. There are two unresolved issues that remain at the time of completion of this report for the TKC#63 storage well. At the request of the landowner, Mr. Oliver Smith, fencing repairs along the north field boundary as well as field tile repairs can be completed once the crops have been harvested. Once the crops are harvested and permission is received from the landowner, the repairs will be completed.

## **6.0 Landowner Comments**

No landowner or public comments were received as part of the construction of TKC #63.

## **7.0 Summary**

This Interim Post-Construction Environmental Monitoring Report has been prepared in accordance with the OEB Decision Docket No. EB-2013-0289. It documents construction and clean-up activities between November 2013 and June 2014. In general, measures implemented during construction and clean-up have been successful. The Final Post-Construction Environmental Monitoring Report will be prepared in the summer of 2015. This report will document continued restoration activities if needed, and address additional issues that may arise.



**APPENDIX A**  
**STORAGE WELL LOCATION MAP**



Figure 1 – Location of TKC#63

**APPENDIX B**  
**PHOTO LOG**



Photo 1 – TKC#63 looking north



Photo 2 – TKC #63 looking south





Photo 3: TKC #63 looking west



Photo 4: TKC #63 looking east