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April 12, 2017

VIA RESS, EMAIL AND COURIER

Ms. Kirsten Walli
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Enbridge Gas Distribution Inc. ("Enbridge")
EB-2014-0378 – Tecumseh Gas Storage Well TW#15H
Conditions of Approval – Interim Monitoring Report

On June 4, 2015 the Ontario Energy Board ("OEB") under docket number EB-2014-0378 recommended granting the well drilling licenses in the Wilkesport Pool: TW#15H (Horiz.#1), Sombra 3-15-XIII and TW#16H (Horiz.#1), Sombra 3-15-XIII to the Ministry of Natural Resources and Forestry ("MNRF").

Enclosed is the interim monitoring report for TW#15H.

Please contact me if you have any questions.

Yours truly,

(Original Signed)

Stephanie Allman
Regulatory Coordinator

Attachment

cc: Ms. Zora Crnojacki, OPCC Chair (via email)
Ms. Nancy Marconi, Manager Facilities Applications, Board (via email)

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

TECUMSEH GAS STORAGE WELL TW#15H
EB-2014-0378

Prepared by
Enbridge Gas Distribution Inc.
April, 2017

1.0 Introduction

On June 4, 2015 the Ontario Energy Board ("OEB") under docket number EB-2014-0378 recommended granting the well drilling licenses in the Wilkesport Pool: TW#15H (Horiz.#1), Sombra 3-15-XIII and TW#16H (Horiz.#1), Sombra 3-15-XIII to the Ministry of Natural Resources and Forestry ("MNRF"). This is the interim monitoring report for TW#15H[1].

Prior to the recommendation, Enbridge conducted the following studies to identify potential impacts resulting from construction, and prepared mitigation measures to minimize environmental and socio-economic impacts.

Report Title	**Conducted by**:	**Date**
Environmental Report: Tecumseh Storage Enhancement Project – Storage Infill Drilling	Stantec Consulting Limited	March 2008
Environmental Report Update Letter for Enbridge's Wilkesport Natural gas storage wells TW15H and TW16H	Stantec Consulting Limited	February 2015
Baseline Private Well Monitoring Program Wilkesport Natural Gas Storage Pool, Lambton County	Stantec Consulting Limited	Februrary 2015
Letter: Attention: Ministry of Natural Resources and Forestry Reference: Enbridge Wilkesport Wells TW15 and TW16 and NPS 16-inch Pipeline Updated Mitigation Plan	Stantec Consulting Limited	May 2015

Drilling of this storage well began on June 24, 2015 and was completed on July 29, 2015. As related in Enbridge's October 6, 2015 letter to the Board, the storage well was not put into service in 2015 due to pending completion and connection to the gathering lines. The well was put into service in November, 2016.

This report has been prepared in accordance with OEB EB-2014-0378 Board Staff Conditions of Approval (June 4, 2015):

[1] The interim monitoring report for TW#16H was submitted to the Board on May 16, 2016 as TW#16H had an earlier in-service date.

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 OEB. 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 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 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 March 27, 2017. 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

TW #15H storage well is one of two horizontal injection/withdrawal wells drilled to replace deliverability lost due to the abandonment of five wells in the Wilkesport Storage

Pool. The Wilkesport Storage Pool is located primarily under Lots 14 and 15 and Concession XIII in the Township of Sombra. TW#15H is located on the west side of Kimball Road, approximately 492 m south of White Line in the Township of Sombra, 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, a site inspection of the project area was performed by Stantec to evaluate the area for any Species at Risk individuals. In addition, a Project Manager was available for the duration of the project and a full time Wellsite Supervisor was onsite during construction.

The Project Manager was responsible for:

- providing advice regarding adherence to environmental specifications and commitments made in the previously mentioned documents and to regulatory agencies, including the OEB and MNRF;
- acting as a liaison with environmental regulators, government agencies and interest groups;

The Wellsite Supervisor was responsible for:

- providing advice to the Project Manager and all construction personnel regarding compliance with environmental legislation, regulations and industry standards;
- provide immediate advice regarding spill prevention and contingency (if necessary); and,
- ensure appropriate waste disposal of any non-hazardous and liquid industrial construction wastes.

4.0 Construction Effects and Mitigation Measures

Construction effects and mitigation measures which were implemented to minimize the potential effects from installation of gas storage well TW#15H are summarized in Table 1. Photos of TW#15H taken in March 27, 2017 and 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

Activity	Duration	Potential Effect	Mitigation Measures
Work on and to remove Vegetative Cover	Throughout Construction	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. An all-weather road and drill pad was constructed to limit disturbance outside work area.
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.
Drilling in 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 and drill cuttings were solidified with a bonding agent and disposed of offsite according to MOECC and MNRF Regulations
Agricultural Drainage (Tile)	Throughout construction	Interruption to subsurface drainage during and after pipeline construction	No agricultural tile was encountered
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 the Project Manager. Nuisance dust was controlled by applying water to work area (if required). An all-weather road and drill pad was constructed to reduce nuisance dust.
Groundwater	Throughout Construction	During well drilling the water table may be breached and the supply of water to adjacent water wells be affected temporarily.	A baseline water well survey was completed within a 1km radius of the project area. No active water wells were identified.
Noise	Throughout Construction	Disturbances to sensitive receptors (i.e. residents).	Construction equipment conformed to Ministry of Labour guidelines for sound levels. No complaints regarding noise were received during construction.
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 spills were identified during construction.
Site Rehabilitation	Throughout Construction	Restores the storage well easement to pre-construction conditions.	Restoration activities were conducted in accordance with the Environmental Report

Table 1.

Construction Effects and Mitigation Measures

Pipe Energizing	November 2016	Inconvenience and/or nuisance to nearby landowners and the public. Gas release to atmosphere	Energizing was completed in accordance with Enbridge Policies and Procedures to ensure efficiencies and minimize period of gas release.
Species at Risk Habitat	Throughout Construction	Disruption to Species at Risk Habitat	Mitigation measures were conducted in accordance to the Stantec Consulting Limited Letter dated May 2015 to the MNRF. No Species at Risk were encountered during the duration of construction.

5.0 Residual Issues

Overall, construction activities were carried out with a high level of respect for the environment. There are no unresolved issues that remain at the time of completion of this report for the TW#15H storage well.

6.0 Landowner Comments and Complaints

There were no landowner comments or complaints associated with the construction of the TW#15H storage well.

7.0 Summary

This Interim Post-Construction Environmental Monitoring Report has been prepared in accordance with the OEB Decision Docket No. EB-2014-0378 Conditions of Approval (June 4, 2015). It documents construction and restoration activities completed as part of the drilling operation for gas storage well TW#15H and during the summer and fall of 2016. In general, measures implemented during construction and site restoration have been successful. A Final Post-Construction Environmental Monitoring Report will be prepared in October 2017. This report will document continued restoration activities if needed, and address additional issues that may arise.

APPENDIX A

STORAGE WELL LOCATION MAP

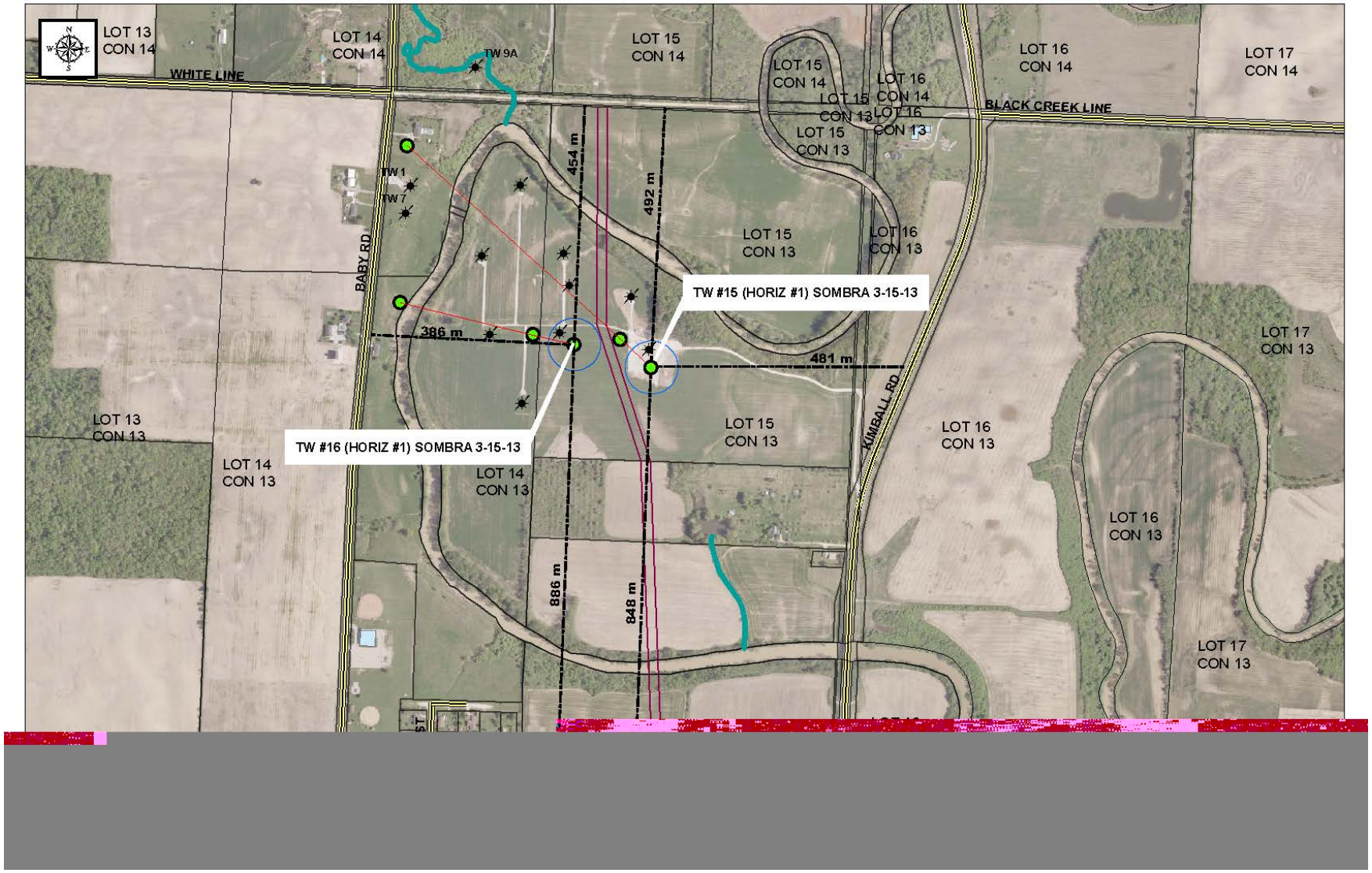

Figure 1: Location Map of Gas Storage Well TW#15 H