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VIA Email, RESS and Courier

January 2, 2020

Ms. Christine E. Long
Registrar and Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario, M4P 1E4

Dear Ms. Long:

**Re: Enbridge Gas Inc. ("Enbridge Gas")
Ontario Energy Board ("Board") File No.: EB-2017-0354
Dow-Moore Storage Pool Well Drilling Project ("Project")**

On February 21, 2019 the Board issued its Report to the Minister of Natural Resources and Forestry ("OEB Report") recommending the issuance of a well drilling license to Enbridge Gas for wells TD26, TD27, TD28H, and TD29H. As required under the OEB Report Appendix A – Proposed Conditions of License – Well Drilling and Operations, Section 8.a), enclosed are the Post Construction Report and the Senior Executive Certification.

Please contact me if you have any questions.

Yours truly,

(Original Signed)

Alison Evans
Advisor Rates
Regulatory Application

Enbridge Gas Inc.

TECUMSEH GAS STORAGE WELLS TD26, TD27, TD28H and TD29H

December 13, 2019

Post-Construction Report #1

Company: Enbridge Gas Inc.



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Introduction

On October 26, 2018, Enbridge Gas Inc. (formerly Enbridge Gas Distribution Inc. [Enbridge Gas]) applied to the Ontario Energy Board (OEB or the Board) for a well drilling license in the Dow Moore Storage Pool for two observation wells (TD26 and TD27) and two horizontal gas storage wells (TD28H and TD29H) (the Project). The observation wells (TD 26 and TD27) are required to monitor the gas content and pressure in the underground storage area and the two horizontal gas storage wells (TD28H and TD29H) are needed to replace deliverability lost due to the abandonment of five gas storage wells and 1 observation well and the conversion of 1 gas storage well to an observation well.

On February 21, 2019, the OEB issued the *EB-2017-0354 Report of the Ontario Energy Board to the Minister of Natural Resources and Forestry* (the Report) which recommended granting a well drilling license in the Dow Moore Storage Pool for TD26, TD27, TD28H and TD29H. This is the post construction report for all drilling activities for the Project. This post construction report has been prepared in accordance with the Conditions of Licence set out in the Report. Specifically, this post construction report addresses Condition 8 a. of the Conditions of Licence (COL) as set out below:

8. *Both during and after construction, Enbridge shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:*
 - a. *A Post Construction Report, within three months of the in-service date, which shall*
 - i. *provide a certification, by a senior executive of the company, of Enbridge's adherence to Condition 1;*
 - ii. *describe any impacts and outstanding concerns identified during construction;*
 - iii. *describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;*
 - iv. *include a log of all complaints received by Enbridge, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions; and*
 - v. *provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licenses, and certificates required to construct, operate and maintain the proposed project.*

Executive certifications required by COL 8. a. i. and 8. a. v. can be found in Appendix X and Y respectively.

Prior to the OEB's recommendation to the MNRF, Enbridge Gas retained Stantec Consulting Limited (Stantec) to conduct the studies listed in Table 1 to identify the potential for construction impacts and to develop appropriate mitigation measures to minimize environmental and socio-economic impacts.

Table 1: Studies Completed for the Project.

REPORT TITLE	CONDUCTED BY	DATE
Dow Moore, Corunna and Seckerton Pipeline Project, Environmental Report	Stantec Consulting Limited	November 2010
A-1 Observation Well: Environmental Screening Report	Stantec Consulting Limited	April 13, 2017
28H and 29H Horizontal Well Development: Environmental Screening Report	Stantec Consulting Limited	December 6, 2017
TD27H Observational Well Development: Environmental Screening Report	Stantec Consulting Limited	September 28, 2018
Stage 1-2 Archaeological Assessment: Enbridge Dow Moore Pool A-1 Observation Well	Stantec Consulting Limited	September 21, 2016
Stage 1-2 Archaeological Assessment: Enbridge Dow Moore Designated Storage Area, TD28H and TD29H Horizontal Well Development	Stantec Consulting Limited	December 6, 2017
Stage 1-2 Archaeological Assessment: Enbridge Dow-Moore Designated Storage Area, TD27 Horizontal Well Development	Stantec Consulting Limited	September 7, 2018
Letter: Dow Wells 28H and 29H – Background Species at Risk Request and Mitigation Measures for Butler’s Gartersnake	Stantec Consulting Limited	November 10, 2017
Letter: Enbridge A-1 Observation Well – Construction Mitigation Plan	Stantec Consulting Limited	October 25, 2016
Letter: Dow Wells 27, 28H, and 29H – Letter of Advice Amendment	Stantec Consulting Limited	September 6, 2018
Sound & Vibration Monitoring of Enbridge Gas Inc. Natural Gas Well Drilling St. Clair Township, Ontario	ORTECH Consulting Inc.	August 6, 2019

Table 2 below provides an overview of the construction start and end dates as well as the in-service dates for each of the wells.

Table 2: Key Construction Dates for the Project

TECUMSEH GAS STORAGE WELL	CONSTRUCTION START DATE	CONSTRUCTION END DATE	IN-SERVICE DATE
TD26	April 15, 2019	May 30, 2019	October 7, 2019
TD27	July 1, 2019	July 13, 2019	August 2, 2019
TD28H	May 3, 2019	May 26, 2019	August 12, 2019
TD29H	May 28, 2019	June 29, 2019	July 18, 2019

This report is limited to items that have been identified prior to December 13, 2019. Items addressed after this date will be identified in the final monitoring report. This report will summarize actual construction procedures and identify any significant deviations from proposed construction activities.

Project Description

The Project involved drilling two horizontal gas storage wells (TD28H and TD29H), which are needed to replace deliverability lost due to the abandonment of 5 gas storage wells and 1 observation well and the conversion of 1 gas storage well to an observation well. The observation wells (TD26 and TD27) are required to monitor the gas content and pressure in the underground storage area.

Appendix A shows the horizontal and observation wells within a regional context.

Environmental Inspection

Based on the findings of studies listed Table 1 it was determined that Species at Risk (SAR) occurrences and habitat were within the study area of the Project. To ensure compliance with COL 8.a.iii., SAR awareness training was prepared by Stantec and conducted by Enbridge Gas and fact sheets were provided as part of the Site-Specific Safety Orientation. 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;
- 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;
- providing immediate advice regarding spill prevention and contingency (if necessary);
- coordinating appropriate disposal of any non-hazardous and liquid industrial construction wastes; and
- providing oversight for SAR mitigation.

Construction Effects and Mitigation Measures

In order to comply with COL 8.a.iii. mitigation measures were implemented to minimize the potential effects of construction. Construction effects and associated mitigation measures are summarized in Table 3. Photos of the Project, taken on October 10, 2019, are found in Appendix B. All activities were conducted in adherence to the contract documentation and Enbridge Construction Policies and Procedures.

Table 3: Construction Effects and Mitigation Measures

ACTIVITY	DURATION	POTENTIAL EFFECT(S)	MITIGATION MEASURES
Work on and removal of Vegetative Cover/Agricultural Crops	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. Increased potential of erosion and sedimentation.	Limits of work area marked to minimize encroachment into vegetated / crop areas. Utilization and/or construction of all-weather roads and drill pad to limit disturbance outside work area. Erosion and sediment control measures installed on stockpiles or exposed soils, as needed.
Topsoil Handling	Throughout Construction	Disruption of surface and subsurface soils. Soil mixing may result in loss of productivity. Spreading of Soybean Cyst Nematode (SCN). Archaeological Resources	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. Laboratory analysis for SCN was completed on TD26 as this field was not owned by Enbridge Gas. Equipment was cleaned before entering and leaving the site. Stage 2 Archaeological Assessments were completed for the Project and no findings discovered. No artifacts were discovered during construction.
Drilling in Bedrock	Throughout Construction	Large amounts of drill cuttings and fluids are encountered and	Drill fluids were collected in holding tanks and allowed to settle. Fluid was recycled

ACTIVITY	DURATION	POTENTIAL EFFECT(S)	MITIGATION MEASURES
		removed from the drill hole. Rock materials in drill cuttings are mostly limestone and dolomite with some shale and salt.	and used again. Remaining fluid and drill cuttings were solidified with a bonding agent and disposed of offsite according to Ministry of Environment, Conservation and Parks (MECP) and MNRF Regulations.
Drainage	Throughout construction	Agricultural drainage - Interruption to subsurface drainage during and after pipeline construction. Wellington Drain	Where agricultural tile was encountered, it was rerouted for the duration of the drilling. The tile was repaired to the satisfaction of the Landowner, where property was not owned by EGI. Culverts installed at laneway entrances to maintain drainage.
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). All all-weather roads and drill pads were 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.	No residential water wells were identified within 400m of the work, therefore, no well water monitoring was implemented.
Noise	Throughout Construction	Disturbances to sensitive receptors (i.e. residents).	Construction equipment conformed to Ministry of Labour guidelines for sound levels.

ACTIVITY	DURATION	POTENTIAL EFFECT(S)	MITIGATION MEASURES
			Sound and vibration monitoring were conducted at TD28H as it was the closest well to neighbouring homes. No noise complaints 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 kits at the project site. No spills were identified during construction.
Species at Risk (SAR) Habitat	Throughout Construction	Disruption to Species at Risk Habitat.	Construction of access roads and drill pads occurred outside the active seasons of identified SAR, where possible. The construction area was maintained such that it did not provide SAR habitat during construction. SAR signage and maximum speed limits were posted along access roads. Large equipment was brought to site using a spotter. Vehicular equipment was restricted to the access roads and construction area. Construction Equipment idle for more than 1 hour or parked overnight were visually surveyed for presence of SAR prior to ignition. No SAR were encountered for the duration of construction.

ACTIVITY	DURATION	POTENTIAL EFFECT(S)	MITIGATION MEASURES
Site Rehabilitation	Post Construction	Restores the storage well easement to pre-construction conditions.	Restoration activities will be conducted to restore the site to as close to pre-construction condition as possible and in compliance with Section 11.13 of the OGSRA Operating Standards v.2.
Well System Energizing	TD 26 – October 7, 2019 TD 27 – August 2, 2019 TD28H – August 12, 2019 TD29H – July 18, 2019	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.

Residual Issues

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

Due to the late in-service date of the final well (TD26), the remaining site restoration for the Project is scheduled for Spring 2020. The Landowners have been advised of the restoration schedule and have no concerns.

Landowner Comments and Complaints

Enbridge Gas owns the land where wells TD27, TD28H and TD29H are situated.

No landowner comments regarding TD26 were received during the construction of the Project.

Summary

This post-construction report has been prepared in accordance with the COL (February 21, 2019) set out in the Report. It documents construction and restoration activities completed as part of the drilling operations for gas storage wells TD26, TD27, TD28H and TD29H. Measures implemented during construction and site restoration (completed to date) have been successful. A final monitoring report (FMR) will be prepared by June 1, 2021. The FMR report will document the remaining restoration activities, as needed, and address additional issues that may arise.

Appendix A

STORAGE WELL LOCATION MAP

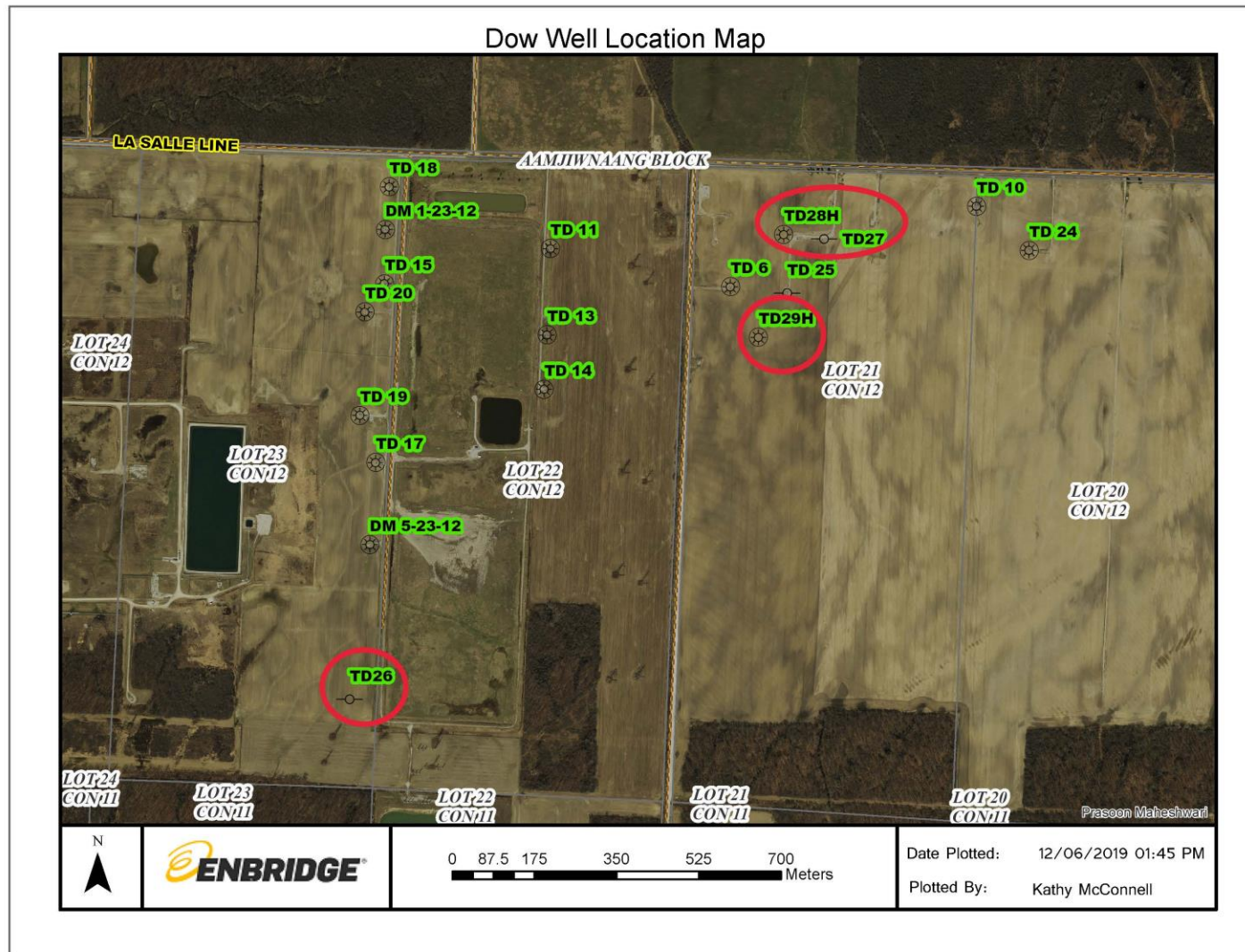


Figure 1: Location Map of Gas Storage Wells TD26, TD27, TD28H and TD29H

Appendix B

PHOTO LOG



Figure 2: TD26 looking East



Figure 3: TD26 looking North



Figure 2: TD26 looking South



Figure 3: TD 26 looking West



Figure 4: TD27 looking East



Figure 5: TD27 looking North



Figure 6: TD27 looking South



Figure 7: TD27 looking West



Figure 8: TD28H looking East



Figure 9: TD28H looking North



Figure 10: TD28H looking South



Figure 11: TD28H looking West



Figure 12: TD29H looking East



Figure 13: TD29H looking North



Figure 14: TD29H looking South



Figure 15:TD29H looking West



Dow-Moore Storage Pool Well Drilling Project
EB-2017-0354

I hereby certify Enbridge Gas Inc. has complied with the Decision and Order, Appendix A, EB-2017-0354, Section 8 (a) (i).

2019 DEC 19

Date

A handwritten signature in black ink, consisting of a stylized 'M' followed by a horizontal line.

Mike G. P. Shannon

Vice President, Storage, Transmission
& Integration Management Office

Condition 8 a) i.

- a) post construction report, within three months of the in-service date, which shall:
- i. Provide a certification, by a senior executive of the company, of Enbridge's adherence to Condition 1;

Condition 1

Enbridge Gas Inc. (Enbridge) shall rely on the evidence filed with the OEB in EB-2017-0354 proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed wells.