

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B, and in particular, sections 90(1) and 97 thereof;

AND IN THE MATTER OF an Application by Enbridge Gas Inc. for an Order or Orders granting leave to construct natural gas pipelines and ancillary facilities from the Township of Dawn Euphemia to St. Clair Township;

AND IN THE MATTER OF an Application by Enbridge Gas Inc. for an Order or Orders approving the proposed forms of agreements for Pipeline Easement and Options for Temporary Land Use.

CAEPLA-DCLC INTERROGATORIES TO ENBRIDGE GAS INC.

June 10, 2022

ISSUE 4.0: ENVIRONMENTAL IMPACTS

4.1 CAEPLA-DCLC.1 CONSTRUCTION PROCEDURES AND SPECIFICATIONS

References: Enbridge Application, Exhibit E, Tab 1, Schedule 1, Page 2 of 5 – Engineering and Construction
 Enbridge Gas Inc. Application, Exhibit E, Tab 1, Schedule 1, Page 4 of 5 – Engineering and Construction

Preamble: Enbridge Gas Inc. states:

C.9. All design, installation and testing of the proposed pipeline will be in accordance with the specifications outlined in Enbridge Gas’s Construction and Maintenance Manual (“Specifications”) and with the requirements of *Ontario Regulation 210/01 Oil and Gas Pipeline Systems* under the *Technical Standards and Safety Act, 2000*.

C.21. Enbridge Gas will construct the proposed pipeline in compliance with engineering design, its current construction procedures and specifications, environmental mitigation identified in the ER, permit conditions and commitments to regulators and landowners. Enbridge Gas continuously updates and refines its construction procedures and specifications and complies with environmental mitigation recommended to minimize potential impacts to the environment.

C.22. An Enbridge Gas Lands Agent will contact each directly affected landowner along the route prior to construction to obtain site specific requirements such as livestock fencing and access points. This information is included in the construction contract so that the pipeline contractor is contractually obligated to fulfill all commitments made to the landowner.

- Request:
- a) Please provide a copy of Enbridge Gas Inc.'s Construction and Maintenance Manual.
 - b) Please provide a copy of Enbridge Gas Inc.'s landowner construction protocol agreement or Letter of Understanding ("LOU") proposed for this project. If no agreement is proposed, please explain why not.
 - c) Please provide a copy of the construction contract for this project.

4.1 CAEPLA-DCLC.2 CUMULATIVE EFFECTS ASSESSMENT

- References:
- OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 4.3.14, pages 42 et ff., Cumulative Effects*
- OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 6.2.2, page 66, Monitoring Reports*
- Enbridge Gas Inc. Application, Exhibit B, Tab 1, Schedule 1, Page 1 of 31, Footnote 1, Adobe page 11
- Stantec Dawn-Corunna Project: Environmental Report, Cumulative Effects Assessment – Adobe page 85 et ff.

Preamble: **Cumulative Effects Assessment**

The OEB Guidelines include the following guidelines and recommendations with respect to the assessment of cumulative effects of a project:

Cumulative impacts may result from pipeline projects which loop existing systems and should be addressed. This may include an examination of areas of known soil erosion, soil compaction or soil productivity problems. It may mean the examination of impacts associated with continued loss of hedgerows and woodlots in the same area. As well, it could mean the increased loss of enjoyment of property because of disruptions caused by the construction of successive pipelines on a landowner's property. There may also be heightened sensitivities as a result of improper or ineffective practices and mitigation measures in the past.

AND

Cumulative effects, when identified as part of the assessment process, should be integrated in the appropriate section of the ER (e.g. soil impacts.)”

“The following is a list that encompasses some of the cumulative effects of pipeline construction:

- (a) Incremental increase of easement width when adding new parallel pipelines to reinforce the systems;
- (b) Additive effects of vegetation removal including riparian vegetation, forest cover, agricultural crops;
- (c) Repetitive disturbance of soils including soil compaction, drainage systems damages, loss of soil fertility, crop yield reduction;
- (d) Streams and groundwater degradation and effects on water wells;

Residual effects caused by the removal of forest edge and interior, such as reduced species diversity and other habitat alterations.

AND

The Final Monitoring Report should address any potential cumulative effects which may arise for pipelines, these may include for example, reduced soil productivity over easements which overlap, land-use restrictions due to increased easement widths or additional above ground facilities and/or the repeated construction through sensitive areas.

The Stantec Environmental Report acknowledges the requirement to identify and discuss cumulative effects:

The recognition of cumulative effects assessment as a best practice is reflected in many regulatory and guidance documents. Regarding the development of hydrocarbon pipelines in Ontario, the OEB Environmental Guidelines (2016) notes that cumulative effects should be identified and discussed in the ER.

Building upon the intent of the OEB Environmental Guidelines (2016), the OEB has specified that only those effects that are additive or interact with the effects that have already been identified as resulting from the project are to be considered under cumulative effects. In such cases, it will be necessary to determine whether these effects warrant mitigation measures. The cumulative effects assessment has been prepared with consideration of this direction from the OEB.

Although a number of existing pipelines are in operation on the properties affected by the proposed pipeline (including one or more Union Gas Limited pipelines), the Stantec Environmental Report does not appear to include any consideration of adjacent pipelines and pipeline easements in its analysis of cumulative effects associated with the proposed project.

Request:

- a) For each CAEPLA-DCLC property affected by the proposed project, please provide a property map or diagram showing the location of the new proposed pipeline, easement and temporary land use area as well as the location of all existing pipelines on the lands, including the location of pipes and the boundaries of the easements for each pipeline.
- b) For each of the existing pipelines located along the proposed route for the new project, please provide the pipe material and grade, depth of cover at time of construction, wall thickness, and operating pressure.
- c) Please provide a detailed chronology of pipeline development each of the CAEPLA-DCLC properties affected by the proposed project including: dates of construction, widths of individual easements obtained or acquired, total width of corridor, projected economic life of each pipeline.
- d) Please provide copies of interim and final monitoring reports for the existing pipelines located on the CAEPLA-DCLC properties affected by the proposed project.
- e) Please provide details of damage caused to soils by previous pipeline construction projects and pipeline operations and maintenance on the CAEPLA-DCLC properties affected by the proposed project.
- f) What is Enbridge Gas Inc. doing to investigate and remediate residual damage from past projects on the CAEPLA-DCLC properties affected by the proposed project?
- g) What are the cumulative effects on soil capability of carrying out construction activities on and in soils previously disturbed by pipeline construction?
- h) Has Enbridge Gas Inc. or its predecessor(s) studied crop yield effects from previous pipeline constructions in the Project corridor, including on the lands to be affected by the new construction? Please provide any reports, data, results, conclusions, analyses, etc. in connection with such study.
- i) Will Enbridge Gas Inc. agree to strip and store topsoil from areas not affected by previous pipeline constructions separately from topsoil stripped from areas affected by previous pipeline constructions? If not, please explain why not.
- j) Will Enbridge Gas Inc. agree to restore soils affected by previous pipeline constructions to a condition comparable to soils on adjacent lands not affected by previous pipeline constructions? If not, please explain why not.
- k) Please explain what provision is made by Enbridge Gas Inc. for post-construction crop yield monitoring on the construction areas for the Project. If no provision is made, will Enbridge

agree to implement post-construction yield monitoring? If not, please explain why not.

- l) What are the cumulative effects that would result from the abandonment or discontinuance of operation of one or more of the pipelines within the corridor?
- m) Why do neither the Environmental Report nor the Application include a cumulative effects assessment of the interaction between existing pipelines and the proposed pipeline?

4.1 CAEPLA-DCLC.3 CUMULATIVE EFFECTS ASSESSMENT

- References: *OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 4.3.14, pages 42 et ff., Cumulative Effects*
- OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 6.2.2, page 66, Monitoring Reports*
- Enbridge Gas Inc. Application, Exhibit B, Tab 1, Schedule 1, Page 1 of 31, Footnote 1, Adobe page 11
- Stantec Dawn-Corunna Project: Environmental Report, Cumulative Effects Assessment – Adobe page 85 et ff.
- Enbridge Application, Exhibit F, Tab 1, Schedule 1, Attachment 3, page 30 of 48 – Response to AFN Comments
- Preamble: Enbridge Gas Inc. states in its response to AFN:
- Preference is given to overlapping adjacent pipeline easements to the greatest extent possible, to avoid impacts on previously undisturbed lands.
- Request:
- a) Is a complete overlap of the new permanent pipeline easement with an existing adjacent pipeline easement proposed for the CAEPLA-DCLC properties? If not, please explain why not.
 - b) Is a complete overlap of the new permanent pipeline easement with an existing adjacent pipeline easement technically possible for the CAEPLA-DCLC properties? If not, please explain why not.
 - c) Is a complete overlap of the new permanent pipeline easement with an existing adjacent pipeline easement technically feasible for the CAEPLA-DCLC properties? If not, please explain why not.
 - d) Please provide copies of the all easement agreements and/or expropriation orders in place for the existing pipelines on the CAEPLA-DCLC properties affected by the proposed project.
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4.1 CAEPLA-DCLC.4 PIPELINE DEPTH OF COVER

References: Enbridge Gas Inc. Application, Exhibit E, Tab 1, Schedule 1, Page 3 of 5 – Engineering and Construction

OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 5.5.1, page 50, Agricultural Drains

Preamble: Enbridge Gas Inc. states:

C.13. The minimum depth of cover specified is 1.0 m from top of pipeline in general locations and 1.2 m under roads. Additional depth of cover will be provided to accommodate planned or existing underground facilities, or in specific areas in compliance with applicable regulated standards. In agricultural areas, the minimum depth of cover will be 1.2 m.

The OEB Guidelines require that:

The depth of the proposed pipeline should be compatible with existing and planned drainage systems.

- Request:
- a) Please provide a copy of Enbridge Gas Inc.'s depth of cover monitoring program document(s).
 - b) What is the depth of cover monitoring program proposed for the proposed pipeline?
 - c) What is the minimum depth of cover that will be maintained by Enbridge Gas Inc. over the proposed pipeline following construction (i.e. during operation)?
 - d) Please provide details of all locations along the existing pipelines on the lands affected by the proposed project where Enbridge Gas Inc. or its predecessor(s) has identified insufficient depth of cover of less than 24 inches and all identified locations in the affected lands with less than the minimum depth of cover proposed and/or required at the time leave to construct was granted.
 - e) With respect to those locations where depth of cover is insufficient, what steps, if any, has Enbridge Gas Inc. or its predecessor(s) taken to establish sufficient depth of cover? Provide details of any such operations including copies of any reports prepared.
 - f) Are there locations on the properties along the route for the Project where Enbridge Gas Inc. or its predecessor(s), due to the presence of insufficient cover or other factors, has indicated to landowners that they should exercise extra caution when carrying out activities, including farming operations, above the pipeline? Please provide details of any such communications made to landowners including: location affected, copies of correspondence, records of responses from landowners.
 - g) Are there any locations along the route for the Project where Enbridge Gas Inc. or its predecessor(s) has restricted land use

above the pipeline due to insufficient depth of cover or the condition of the pipe itself? Provide details of the location, the nature of the deficiency (depth of cover, etc.), and the nature of the restriction imposed on land use.

- h) Please explain how Enbridge Gas Inc. determined compatibility of the proposed depth of the pipeline proposed for this project with existing and planned drainage systems on affected lands? Please provide a copy of any study or analysis prepared.

4.1 CAEPLA-DCLC.5 TILE DRAINAGE

References: *OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 5.5.2, pages 50, Agricultural Drains*

Stantec Dawn-Corunna Project: Environmental Report, Adobe page 33, Section 4.3.6 Agricultural Tile Drainage

Stantec Dawn-Corunna Project: Environmental Report, Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures, Adobe pages 63 et ff.

Enbridge Gas Inc. Application, Exhibit E, Tab 1, Schedule 1, Page 5 of 5 – Engineering and Construction

Preamble: The OEB Guidelines require:

If agricultural land that is extensively tile drained cannot be avoided, mitigation plans must be developed and implemented prior to construction. The plans should be designed to maintain proper subsurface drainage during and after pipeline construction.

Consultation with the landowner prior to construction is necessary to determine the location of existing and planned tile drains. If a landowner is not aware of the location or existence of tile drains, OMAFRA may be contacted or a knowledgeable local tile contractor should be consulted, in order to verify the depth and frequency of any installed tiles. The depth of the proposed pipeline should be compatible with existing and planned drainage systems.

Tile drains that are cut during the trenching operation must be flagged and suitably plugged to prevent the entry of foreign material into the drainage system. Plans for maintaining proper surface and subsurface drainage during the construction which are acceptable to the landowner are required.

Following construction, the applicant must repair or replace any damaged or disrupted tiles. It is recommended that qualified tile drainage consultants and licensed tiling contractors be used for this work. Where the number of tile drains crossing the pipeline trench or their angle of crossing

makes individual repair difficult, the installation of headers (sub-mains) should be considered. All open drainage ditches should be restored, utilizing appropriate soil stabilization procedures including, but not limited to, the use of geo-fabrics, wood or straw mulch, hydro seeding and rock or gravel blankets.

Stantec reports and recommends:

Agricultural tile drains are perforated tubing inserted into the ground below the topsoil with the intentions of improving drainage in the upper root zone. Across the Study Area, agricultural tile drainage is commonly installed below the agricultural fields to improve agricultural productivity. Drains typically discharge into adjacent watercourses or maintained ditches. Of the mapped tile drainage along the PPR, the majority (78%) is mapped as systematic tile drainage while the rest (22%) is mapped as random tile drainage.

Agricultural tile drains are mapped in Figure 9, Appendix C.

AND

Enbridge Gas should undertake consultation with landowners of agricultural fields to confirm where systematic tile drainage is present. If tile drainage is present, Enbridge Gas should undertake standard mitigation during trenching, including:

- Develop site specific tile plans with an independent tile contractor
- Conduct pre-tiling, and install header tile to maintain tile system function
- Excavate the pipeline trench to a depth that allows clearance between the top of the proposed pipeline and the bottom of existing drainage systems
- Record and flag severed or crushed tile drains
- If a main drain, header drain, or large diameter drain is severed, maintain field drainage and prevent flooding of the work area and adjacent lands through temporary repairs
- Cap both sides of severed drains that cross the trench to prevent the entry of soil, debris and rodents, as required
- Repair damaged and severed drains following construction

- After repair and before backfilling, invite the landowner to inspect and approve the repair construction

Enbridge Gas Inc. states:

C.23. As part of the construction plan, each landowner with agricultural land directly impacted by the Project will be consulted to understand the impact to field tiling. This could result in the need to install tiling prior to construction (pre-construction tiling) to ensure field drainage systems and farm operations are not disrupted during construction. Enbridge Gas retains a qualified drainage consultant to determine if a property that contains a field drainage system could benefit from pre-construction tiling. The Enbridge Gas drainage consultant will contact landowners to discuss their tile needs. Landowner approval is required for tiling work conducted outside of the easement. The drainage consultant will prepare a tiling plan and provide a copy of the plan to both Enbridge Gas and the landowner.

- Request:
- a) Will Enbridge Gas Inc. agree to be responsible for as long as its easement is in place for the repair and replacement of all tile drainage facilities affected by the proposed project? If not, please explain why not.
 - b) Please explain what requirements will be imposed by Enbridge Gas Inc., if any, on landowners who plan to repair or replace existing tile drainage facilities within or adjacent to the pipeline easement in the future?
 - c) Please explain what requirements will be imposed by Enbridge Gas Inc., if any, on landowners who plan to install new tile drainage facilities within or adjacent to the pipeline easement in the future?

4.1 CAEPLA-DCLC.6 SOILS HANDLING

References: Stantec Dawn-Corunna Project: Environmental Report, Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures, Adobe pages 63 et ff.

Preamble: Stantec recommends:

Soil Stripping

Topsoil depths should be measured prior to stripping so that the proper depth of topsoil is removed and replaced. Where stripping is undertaken on agricultural lands, topsoil and subsoil should be stripped and stockpiled separately to avoid mixing. Where the pipeline crosses woodlands the organic and duff layer should be stripped where feasible, given local substrate conditions. Where stripping is undertaken in woodlands, organic material and subsoil should be stripped and stockpiled separately to avoid

mixing. If clean-up is not practical during the construction year, it should be undertaken in the year following construction, starting once the soils have sufficiently dried. Interim soil protection measures should be implemented in sensitive areas to stabilize the RoW for over-wintering.

Soil Compaction

Within agricultural lands where soil has been compacted by the construction process, an agrologist should determine where decompaction may be necessary. Compaction can be alleviated by using farm equipment such as an agricultural subsoiler prior to replacing the topsoil. Sub-soiling with an agricultural subsoiler, followed by discing, chisel ploughing and cultivating, to smooth the surface, should be considered on agricultural lands. In high traffic areas of the RoW where deep compaction persists, additional deep tillage or subsoiling may be required on a site specific basis. Soil density and/or penetrometer measurements on and off the easement may be used as a means of assessing the relative degree of soil compaction caused by construction along the RoW as well as determining that the RoW has been sufficiently decompacted.

- Request:
- a) Please provide detailed drawings showing the soils handling procedures, including storage of stripped topsoil and subsoil(s), proposed to be used by Enbridge Gas Inc. for this project.
 - b) Please provide details of Enbridge Gas Inc.'s proposed methodology for compaction testing on soils for the project.

4.1 CAEPLA-DCLC.7 WET SOILS SHUTDOWN

References: Stantec Dawn-Corunna Project: Environmental Report, Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures, Adobe pages 63 et ff.

OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 5.5.1, page 49, Soils

Preamble: Stantec recommends:

To the extent feasible, construction activities should occur during drier times of the year. Lands affected by heavy rainfall events should be monitored for wet soil conditions, to avoid the potential for topsoil and subsoil mixing and loss of structure. Construction activities should be temporarily halted on agricultural lands where excessively wet soil conditions are encountered. Enbridge Gas' on-site inspection team should determine when construction activities may be resumed. If a situation develops that

necessitates construction during wet soil conditions, soil protection measures should be implemented, such as confining construction activity to the narrowest area practical, installing surface protection measures, and using wide tracked or low ground pressure vehicles.

The OEB Guidelines require:

The worst impacts of construction occur at high soil moisture levels. Consequently, construction during the driest period of the year is desirable. The applicant is required to establish and implement a wet -weather shutdown policy to minimize adverse impacts of construction on soil productivity. During wet weather conditions, contact with topsoil should be avoided and a total restriction placed on all rubber tired vehicles and equipment traveling on the ROW. If, due to delays, construction must continue under wet soil conditions to meet an in-service date, terms and conditions must be discussed with the landowner. The wet -weather shutdown policy or decision-making process must take into account the nature of the impacts, the concerns of the landowner, agricultural interest groups, the pipeline contractor and the applicant, when determining the need to continue construction under adverse weather conditions.

Request: Please provide a copy of Enbridge Gas Inc.'s proposed Wet Soils Shutdown Procedure or equivalent policy.

4.1 CAEPLA-DCLC.8 SOYBEAN CYST NEMATODE AND PESTS/DISEASES

References: Enbridge Gas Inc. Application, Exhibit F, Tab 1, Schedule 1, Attachment 4, Page 5 of 8 – Response to WIFN Comments
Stantec Dawn-Corunna Project: Environmental Report, Adobe page 33 – Section 4.3.7 Soybean Cyst Nematode (SCN)
Stantec Dawn-Corunna Project: Environmental Report, Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures, Adobe pages 63 et ff.

Preamble: Enbridge Gas Inc. states:
Details on requirements for invasive species management will be determined following the 2022 field surveys. At a minimum, all equipment used for the Project is required to be clean and free of potential invasive species before arriving on site.

Stantec describes Soybean Cyst Nematode (“SCN”) as follows:

Soybean cyst nematode (*Heterodera glycines*) (SCN) is a soil borne parasite that can significantly impact soybean yields. It may be present in some fields in the Study Area.

Where equipment is moving from one agricultural field to another there is the potential for the spread of SCN to previously uncontaminated fields. Once a field has been infested there is significant potential for soybean crop loss and there is no effective method of eradication.

Stantec recommends:

In consultation with the landowner and an agrologist, Enbridge Gas should develop and implement a soil sampling plan on agricultural lands for potential pests and/or diseases that are known to the area. If the results indicate an issue or concern, in consultation with the landowner, Enbridge Gas should work with the agrologist to develop a best practice protocol. Any imported topsoil used for rehabilitation should also have a composite sample analyzed for identified concerns before it is placed on the easement.

AND

Enbridge Gas should consult with landowners of agriculture fields to determine if they would like to proceed with soil sampling for SCN. If requested and agreed to by the landowner, soil sampling for SCN is recommended where construction activity is planned on agricultural crop lands. If a field is identified as having SCN, in consultation with potentially impacted landowners, the following mitigation measures should be considered:

- To the extent feasible restrict construction activity to the non-agricultural pipeline construction area.
- If the pipeline route or an adjacent farm field is identified as having SCN all equipment and boots should be properly cleaned before moving to an area that has not been shown to be impacted by SCN. This may involve thorough washing before moving equipment from an impacted field to nonimpacted field.
- All properties impacted with SCN should be identified and communicated to the Contractor. A best practice protocol should be developed to handle SCN, with assistance from Stantec.
- Any topsoil imported for clean-up activities should be analyzed for SCN by collecting a composite sample, sending it to a lab for analysis and reviewing results before any imported topsoil is placed on the easement. Imported suitable fill (not containing topsoil) or granular materials do not need to be tested for SCN.

Request: a) Please provide Enbridge Gas Inc.'s plan for dealing with SCN.

- b) What is Enbridge Gas Inc.'s plan for the control and containment of other weed and/or disease infestations encountered during construction and operation of the proposed pipeline?
- c) Was any SCN identified in the previous constructions along this corridor? Please provide details and copies of any reports or studies prepared.
- d) What is the experience of Enbridge Gas Inc.'s and its predecessor(s) with the transfer of SCN and other weed and/or disease infestations from property to property during construction or as a result of construction? Please provide details.
- e) Please provide details of any landowner complaints received with respect to SCN, weeds or diseases along this corridor. How were these resolved?

4.1 CAEPLA-DCLC.9 ACCESS DURING CONSTRUCTION

References: *OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 5.4, page 47, Easement Preparation*

Enbridge Application, Exhibit E, Tab 2, Schedule 1, Page 2 of 3 – General Techniques and Methods of Construction

Preamble: The OEB Guidelines require:

... if the landowner requires access across the easement for farm equipment and/or livestock during construction, this must be provided and noted in the ER and contract documents.

Enbridge states:

6. *Trench Method:* Trenching is done by using a trenching machine, backhoe or excavator depending upon the ground conditions. Provisions are made to allow residents access to their property, as required. All drainage tiles that are cut during the trench excavation are flagged to signify that a repair is required. All tiles are measured and recorded as to size, depth, type and quality and this information is kept on file.

- Request:
- a) Please describe Enbridge Gas Inc.'s plan to allow access across the pipeline construction area for agricultural land uses (including for agricultural equipment and livestock).
 - b) How will Enbridge Gas Inc. address circumstances in which access across the pipeline construction area cannot be safely provided? What mitigation measures will be implemented for loss of access and for stranded or gored lands?
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4.1 CAEPLA-DCLC.10 WATER WELLS

References: Stantec Dawn-Corunna Project: Environmental Report, Monitoring and Contingency Plans, Adobe page 90 – Section 7.1.1 Water Wells

Stantec Dawn-Corunna Project: Environmental Report, Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures, Adobe pages 63 et ff.

OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 5.12, page 63, Restoration Plans

Preamble: Stantec recommends:

Before construction, a private well survey should take place to assess domestic groundwater use near the Project and determine the need for a well monitoring program, as outlined in Table 5.1.

AND

A private well survey should be conducted to assess domestic groundwater use near the Project and a private well monitoring program may be recommended for residents who rely on overburden groundwater supply for domestic use. This monitoring program may include pre— construction water quality monitoring as well as water level monitoring, if available. Should a private water well be affected by project construction, a potable water supply should be provided, and the water well should be repaired or restored as required.

The OEB Guidelines require:

Permanent water service must be restored to landowners who experience any interference or interruption of water supply due to pipeline construction.

Request: Please provide details of Enbridge Gas Inc.'s well monitoring program.

4.1 CAEPLA-DCLC.11 DISCHARGE OF WATER

References: *OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 5.9.3, page 60, Hydrostatic Testing*

Stantec Dawn-Corunna Project: Environmental Report, Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures, Adobe pages 63 et ff. - Groundwater, Section 4.3.3

Preamble: The OEB Guidelines require:

Discharging of water from the pipeline should be done at a rate not exceeding the rate of withdrawal from the source.

Stantec reports:

Hydrostatic Testing and Dewatering

The pipeline will be hydrostatically tested before commissioning. Select sections of pipe may also be pre-tested, such as at road crossings. Water required for the testing may be obtained from a municipal or natural source. Before the withdrawal of water from a municipal source, the municipality will be contacted to confirm the maximum rate of withdrawal. Where trenches encounter shallow groundwater conditions or following a large precipitation event, removing water from the trench (known as dewatering) may be necessary. During trench dewatering, discharge water will be released to the environment. An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation, or contamination. Other potential effects of uncontrolled discharge may include introduction of foreign aquatic organism to a drainage basin and introduction of hazardous materials or pollutants to soils or bodies of water.

- Request:
- a) Does Enbridge Gas Inc. intend to discharge water from trench dewatering or hydrostatic testing onto any privately-held lands affected by the proposed project?
 - b) If so, please provide Enbridge Gas Inc.'s detailed plan for the discharge of water and any associated drawings.

4.1 CAEPLA-DCLC.12 RESTORATION – AGRONOMIST

References: *OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition 2016, Section 5.12, page 62, Restoration Plans*

Preamble: The OEB Guidelines include the following with respect to the rehabilitation of the easement post-construction:

The landowner must be consulted and any reasonable request regarding rehabilitation of the easement complied with. Planting of soil-building cover crops should be considered. ... It is recommended that a professional agronomist/agrologist be retained to review the proposed restoration technique and its application with the contractor and the landowner, in order to ensure that optimal results are achieved.

- Request:
- a) Has Enbridge Gas Inc. retained a professional agronomist and/or agrologist for this project?
 - b) If so, please provide his or her most recent resume or CV.

- c) If not, when will a professional agronomist and/or agrologist be retained by Enbridge Gas Inc. for this project, and in what capacity?

4.1 CAEPLA-DCLC.13 RESTORATION

References: Enbridge Gas Inc. Application, Exhibit E, Tab 2, Schedule 1, Page 3 of 3 – General Techniques and Methods of Construction

Enbridge Gas Inc. Application, Exhibit G, Tab 1, Schedule 1, Page 3 of 4 – Land Matters

Preamble: Enbridge Gas Inc. states:

The final construction activity is restoration of lands. The work area is graded to the original contour and topsoil returned on agricultural lands, sod is replaced in lawn areas and other grassed areas are re-seeded. Where required, concrete, asphalt and gravel are replaced and all areas affected by the construction of the pipeline are returned to as close to original condition as possible. As a guide to show the original condition of the area, photos and/or a video will be taken before any work commences. When the clean-up is completed, the approval of landowners or appropriate government authority is obtained.

AND

D.12. When Project cleanup is completed, landowners will be asked by Enbridge Gas to sign a clean-up acknowledgement form if satisfied with the clean-up. This form, when signed, releases the Pipeline Contractor, allowing payment for clean-up on the property. This form in no way releases Enbridge Gas from its obligation for tile repairs, compensation for damages and/or further clean-up as required due to erosion or subsidence directly related to pipeline construction.

Request: Please provide a copy of Enbridge Gas Inc.'s Clean-up Acknowledgement Form.

4.1 CAEPLA-DCLC.14 INDEPENDENT CONSTRUCTION MONITOR

References: Enbridge Application, Exhibit E, Tab 1, Schedule 1, Page 5 of 5 – Engineering and Construction

Preamble: Enbridge Gas Inc. states:

C.24. All necessary permits, approvals and authorizations will be obtained by Enbridge Gas at the earliest appropriate opportunity. Enbridge Gas expects to receive all required approvals prior to commencing construction of the Project.

Enbridge Gas will assign inspection staff to ensure that contractual obligations between Enbridge Gas and the pipeline contractor, provincial ministries, municipal government and landowners are complied with.

Request: Will Enbridge agree to the appointment of an Independent Construction Monitor by landowners, Enbridge and the OEB to be on site continuously to monitor construction with respect to all issues of concern to landowners, to be available to landowners and to Enbridge at all times, and to file interim and final reports with the OEB? If not, please explain why not.

4.1 CAEPLA-DCLC.15 OPERATIONS AND MAINTENANCE

References: Stantec Dawn-Corunna Project: Environmental Report, Section 6.4.2 Operation and Maintenance – Year 2024-2074 – Adobe page 88 et ff.

Enbridge Gas Inc. Application, Exhibit C, Tab 1, Schedule 1, Attachment 1, Page 1 of 3 – Net Present Value Assessment of Alternatives

Preamble: Stantec's Environmental Report states the following about the impacts of future operation and maintenance of the proposed project:

Development and maintenance activities which have a probability of proceeding during operation and maintenance of the project include:

- Road works: Future road rehabilitation and resurfacing
- Water works: Future installation of water and wastewater pipelines
- Pipeline construction and maintenance: Future pipeline construction and maintenance of existing hydrocarbon pipelines

Operation and maintenance activities undertaken by Enbridge Gas should be completed in co-ordination with the Enbridge Gas Environmental Planning Team and will consider potential impacts on natural heritage and socio-economic environment. Appropriate mitigation measures should be developed and implemented based on the proposed maintenance work. Enbridge Gas should obtain all necessary agency permits and approvals, as required. Given the limited scale of impact of any potential operation and maintenance activities, it is anticipated that residual impacts will be minimal and that should any interaction

occur with other projects, significant adverse residual effects are not anticipated to be significant.

Enbridge Gas Inc. included consideration of the costs of operation and maintenance expenses, including the costs of integrity digs, in its assessment of the proposed project:

For the purposes of assessing the proposed Project (NPS 36 Pipeline), the Company:

- Included the estimated cost of periodic cleaning and inspection as O&M expenses.
- Included the cost of integrity digs and any required repairs as capital expenses.
- Assumed that nine integrity digs would be required over the approximate 40-year life of the proposed Project.

- Request:
- a) Please provide details of Enbridge Gas Inc.'s proposed procedures for integrity digs and for other maintenance operations to be employed during the operation of the proposed project.
 - b) Will Enbridge Gas Inc. agree to offer to landowners an integrity dig agreement setting out construction procedures, off-easement access, compensation, etc.? If so, please provide Enbridge Gas Inc.'s proposed agreement. If not, please explain why not.
 - c) Will Enbridge Gas Inc. agree to offer to landowners a maintenance agreement setting out construction procedures, off-easement access, compensation, etc.? If so, please provide Enbridge Gas Inc.'s proposed agreement. If not, please explain why not.

4.1 CAEPLA-DCLC.16 ENVIRONMENTAL REPORT

- References: Stantec Dawn-Corunna Project: Environmental Report, Sign-off Sheet, Adobe page 2
- Preamble: Stantec's Environmental Report was prepared by Emily Hartwig and reviewed by Mark Knight and David Wesenger.
- Request: Please provide copies of the most recent resumes or CVs for Ms. Hartwig, Mr. Knight, and Mr. Wesenger.
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ISSUE 5.0: ROUTE MAP AND FORM OF LANDOWNER AGREEMENTS

5.1 CAEPLA-DCLC.17 FORM OF LANDOWNER AGREEMENTS - INDEMNITY

References: Enbridge Gas Inc. Application, Exhibit G, Tab 1, Schedule 1, Page 2 of 4 – Land Matters

Enbridge Gas Inc. Application, Exhibit G, Tab 1, Schedule 1, Attachment 3, Page 2 of 5 – Land Matters – Pipeline Easement

Enbridge Gas Inc. Application, Exhibit G, Tab 1, Schedule 1, Attachment 4, Page 2 of 5 – Land Matters – Temporary Land Use Agreement

Enbridge Gas Inc. Application for the Greenstone Pipeline Project (EB-2021-0205), Exhibit G, Tab 1, Schedule 1, Pages 2 and 3 of 3, Adobe pages 54-55 and Attachments 1-4

Ontario Energy Board Decision and Order for the Enbridge Gas Inc. Greenstone Pipeline Project (EB-2021-0205) dated March 17, 2022 at page 14 (Adobe page 16)

Preamble: Enbridge Gas Inc. says the following about the landowner agreements proposed for approval by the OEB:

B.7. Enbridge Gas's form of Pipeline Easement is included as Attachment 3 to this Exhibit. This agreement was approved by the OEB for use as part of the Company's Greenstone Pipeline Project (EB-2021-0205) on March 17, 2022. This agreement covers the installation, operation, and maintenance of one pipeline. The major restrictions imposed on the landowner by the agreement are that the landowner cannot erect buildings or privacy fencing on the easement. In addition, the landowner cannot excavate on the easement or install field tile without prior notification to Enbridge Gas. The landowner is free to farm the easement or turn the easement into a laneway.

B.8. The Enbridge Gas form of Temporary Land Use agreement is included as Attachment 4 to this Exhibit. This agreement was approved by the OEB for use as part of the Company's Greenstone Pipeline Project (EB-2021-0205) on March 17, 2022. This agreement typically applies for a period of two years, beginning in the year of construction, allowing Enbridge Gas to return in the year following construction to perform clean-up work as required.

The landowner agreements proposed by Enbridge Gas Inc. and approved by the OEB for the Greenstone Pipeline Project were modified from earlier approved versions to replace the term "gross negligence" in the indemnity clauses with the term "negligence". Enbridge Gas Inc. submitted to the OEB that this change and other changes were "... minor and of housekeeping nature."

- Request:
- a) Will Enbridge Gas Inc. agree to restore the term “gross negligence” in the indemnity clauses of the landowner agreements for this project? If not, why not?
 - b) Please explain how the replacement of the term “gross negligence” with “negligence” in the indemnity clause for the protection of landowners was “minor” and of a “housekeeping nature”.

5.1 CAEPLA-DCLC.18 FORM OF LANDOWNER AGREEMENTS - OPTIONS

- References: Enbridge Gas Inc. Application, Exhibit A, Tab 2, Schedule 1, Page 1 of 4
- Preamble: The style of cause for Enbridge Gas Inc.’s Application includes reference to “Options for Temporary Land Use”:
- AND IN THE MATTER OF an Application by Enbridge Gas Inc. for an Order or Orders approving the proposed forms of agreements for Pipeline Easement and Options for Temporary Land Use.
- Request: Does Enbridge Gas Inc. intend to request option agreements from landowners in respect of the permanent easement or the temporary land use area for the proposed project? If so, please provide copies of the proposed option agreement(s).