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BY EMAIL

January 27, 2020

Ms. Christine Long  
Registrar & Board Secretary  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON M4P 1E4  
[BoardSec@oeb.ca](mailto:BoardSec@oeb.ca)

Dear Ms. Long:

**Re: Ontario Energy Board (OEB) Staff Submission  
Enbridge Gas Inc. – Sarnia Industrial Line Reinforcement Project Application  
OEB File Number: EB-2019-0218**

In accordance with Procedural Order No. 1, please find attached the OEB staff submission in the above proceeding. The attached document has been forwarded to Enbridge Gas Inc. and to all other registered parties to this proceeding.

Yours truly,

*Original Signed By*

Judith Fernandes  
Project Advisor, Natural Gas Applications

Encl.



# **ONTARIO ENERGY BOARD**

## **OEB Staff Submission**

**Enbridge Gas Inc.  
Sarnia Industrial Line  
Reinforcement Project  
Application**

**Application for Leave to Construct**

**EB-2019-0218**

**January 27, 2020**

## Introduction

On October 7, 2019, Enbridge Gas Inc. (Enbridge Gas) applied to the Ontario Energy Board (OEB) under section 90(1) of the *Ontario Energy Board Act, 1998* for leave to construct a natural gas pipeline and associated facilities in the Township of St. Clair in the County of Lambton (the Project).

The Project involves the construction of approximately 1.2 kilometres of a 20-inch natural gas pipeline and ancillary facilities from the Dow Valve Site to the Bluewater Interconnect, at a new LaSalle Pipeline Valve Site. The Project will increase the Sarnia Industrial Line (SIL) system capacity to meet demand growth in the south Sarnia area. Enbridge Gas expects to begin construction in the spring of 2021 and the Project is expected to be in-service in November 2021.

Enbridge Gas also applied under section 97 of the Act, for approval of the forms of agreements it will offer to landowners to use their land for routing or construction of the proposed Project.

OEB staff supports the OEB granting leave to construct approval to Enbridge Gas for construction of the Project, subject to certain Conditions of Approval contained in Appendix A of this submission.

## The Proceeding

The OEB issued a Notice of Hearing on November 18, 2019. TransCanada Pipelines Limited (TCPL) applied for intervenor status. No objection was received from Enbridge Gas. TCPL was approved as an intervenor.

On December 9, 2019, the OEB issued Procedural Order No. 1, making provision for interrogatories, interrogatory responses and submissions. Interrogatories were filed by OEB staff and TCPL on December 20, 2019. Enbridge Gas filed its responses to interrogatories on January 13, 2020.

## Need for the Project

The Sarnia market is primarily served from the SIL system. Approximately 90% of the Sarnia market demand consists of contract rate industrial customers such as power

generators and large industrial customers. Residential and small commercial/industrial customers constitute the remainder of the Sarnia's market demand.

According to the application, since 1998, Sarnia market demand has more than doubled. This is largely driven by industrial (including petrochemical) and power generation demand growth. Significant amounts of both electricity and steam are typically required in petrochemical manufacturing processes, for which natural gas is the primary fuel.

In July 2019, Enbridge Gas contracted new firm natural gas delivery services with Nova Chemicals (Canada) Ltd. (NOVA) beginning in November 2021. In response to interrogatories<sup>1</sup>, Enbridge Gas stated that the SIL system is currently at capacity and is incapable of serving this incremental NOVA demand beginning November 1, 2021.

Enbridge Gas also stated that it is in ongoing discussions with multiple customers interested in locating in the Sarnia market in the future, including Ainsworth Energy Co. Ltd. and Advanced Chemicals Technologies who have both publicly announced their intentions to develop facilities in the area.

The potential aggregate volume of incremental firm Sarnia market demand resulting from all customer interest received to date amounts to more than 250 TJ/d. The incremental capacity of the Project is 73.6 TJ/d, and NOVA's requirements account for 61.4 TJ/d (or about 83%). Enbridge Gas submitted that the specific volume and timing of these potential demands remains uncertain and cannot be confirmed until firm service contracts are executed with customers.

Letters of support for the Project were received by the St-Clair Township Council, the Lambton County Council, and the Sarnia-Lambton Economic Partnership.

In its interrogatory responses<sup>2</sup>, Enbridge Gas remarked that the Project was identified as part of a larger Sarnia Industrial System project in the Utility System Plan filed as part of its 2019 rates application. The Project is included in its Asset Management Plan, filed as part of its 2020 rates application.

Based on the evidence filed by Enbridge Gas, OEB staff submits that there is a need for the Project.

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<sup>1</sup> OEB Staff Interrogatory 2

<sup>2</sup> OEB Staff Interrogatory 5

## Project Economics

The total estimated cost of the Project is \$30.7M. This comprises \$23.4M for the main pipeline and \$7.3M for ancillary facilities, which includes \$2.9M in indirect overhead costs.

Enbridge Gas submitted that consistent with its approved Leamington Expansion Project and Chatham-Kent Rural Project<sup>3</sup>, it assessed an Hourly Allocation Factor (HAF). The HAF will be allocated to the individual economics of every future large volume customer receiving incremental capacity from the project based on their peak hour need. The HAF is used in calculating whether a capital contribution is required from each large volume customer, depending on contract term and volumes. The incremental capacity of the Project is 73.6 TJ/d, and NOVA's requirements account for 61.4 TJ/d. Enbridge Gas intends to apply the HAF to the surplus capacity of 12.2 TJ/d until it is fully contracted.

OEB staff submits that Enbridge Gas' proposal appears to be reasonable and is consistent with prior OEB decisions.

Enbridge Gas undertook a Discounted Cash Flow (DCF) analysis consistent with E.B.O. 188 which shows that the Project has a net present value(NPV) of \$2.5M and a profitability index (PI) of 1.1.

Enbridge Gas assessed the Project against several alternatives, which are summarized in Table 1 below.

Table 1

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<sup>3</sup> EB-2016-0013, Leamington Expansion Project and EB-2018-0188, Chatham-Kent Rural Project

Alt No.		Alternative Description	Rationale for Decision
	The proposed Project	1.2 km of NPS 20 6620 kPag MOP pipeline to loop the existing NPS 12 SIL and NPS 10 DOW pipeline between the Dow Valve Site and the Bluewater Interconnect.	Sets up the SIL system for future growth without stranding pipeline assets; lowest cost alternative, shortest pipeline route
1	New pipeline from Bluewater Interconnect to Churchill Rd. Stn and Industrial Rd. Station	6 km of NPS 24 6620 kPag MOP pipeline to loop the existing NPS 12 SIL and NPS 10 Dow pipeline between the Bluewater Interconnect and the NPS 12 SIL at the Sarnia Industrial Station and the NPS 10 Dow pipeline at the Churchill Road Station	Unacceptable due to increased cost and need for additional launcher and receiver facilities vs the Project
2	New pipeline from Great Lakes Courtright to Courtright Line	4.5 km of NPS 24 6620 kPag MOP pipeline to loop the existing SIL between the Great Lakes Courtright Station and the intersection of the CN railway and Courtright Line	Unacceptable due to increased cost and need for additional launcher and receiver facilities vs the Project
3	New pipeline from Dawn Hub to Payne Pool Stn	21 km of NPS 20 6895 kPag MOP pipeline from the Dawn Hub to the NPS 20 Payne Sarnia pipeline located at the Payne Pool Station	Unacceptable due to the increased cost and potential impacts associated with 21 km of pipeline compared to the Project
4	Replace NPS 10 Dow pipeline between Bluewater Interconnect and Churchill Rd. Stn.	Replace 3.5 km of existing NPS 10 Dow pipeline between the Bluewater Interconnect and Churchill Road Station. This pipeline runs on easement directly through the Aamjiwnaang First Nation (AFN) Reserve lands.	Not feasible to "lift and lay" a new pipeline in the existing easement as the SIL system cannot serve firm demands with the existing NPS 10 Dow pipeline out of service. Enbridge Gas would require a new easement and temporary land use prior to removal of the existing NPS 10 pipeline. Enbridge Gas initiated discussions with AFN; AFN not willing to provide a new easement through their lands. Also rejected due to the increased cost and potential impacts associated with 3.5 km of pipeline compared to 1.2 km of NPS 20 required for the Project
5	Replace NPS 12 SIL between Bluewater Interconnect and Sarnia Industrial Stn.	Replace 2.5 km of existing NPS 12 SIL pipeline between the Bluewater Interconnect and Sarnia Industrial Station. This pipeline runs on the railway ROW that passes directly through the AFN Reserve lands.	Not feasible to "lift and lay" a new pipeline in the existing easement as the SIL system cannot serve firm demands with the existing NPS 12 Dow pipeline out of service. Enbridge Gas would require additional easement and temporary land use adjacent to the railway ROW prior to removal of the existing NPS 10 pipeline. Enbridge Gas initiated discussions with AFN; AFN not willing to provide a new easement through their lands. Also rejected due to the increased cost and potential impacts associated with 2.5 km of pipeline compared to the 1.2 km of NPS 20 required the Project
6	New Compressor Plant	Install compressor plant near Courtright. Requires a second back up compressor to ensure reliability in the event of an outage	Unacceptable due to increased cost of constructing and operating the compressor and back-up requirement compared to the Project
7	New Liquefied Natural Gas Plant	Install a new LNG facility	Difficulties filling LNG while serving demand; may not provide continuous supply, facility is a finite size and must be refilled; rejected due to increased cost of construction and operation
8	New Compressed Natural Gas Facilities	Install a new CNG facility.	Rejected due to increased cost of construction and operation of CNG facility and truck/trailer fleet that is required
9	Firm Gas Supply at Bluewater Interconnect	Deliver firm gas supply from Bluewater Gas Storage (BGS) at the Bluewater Interconnect Station	BGS does not offer firm transportation to Sarnia market from interconnected pipelines so it does not provide the reliability required to serve the demand
10	Integrated Resource Planning		Not a viable alternative; demand is driven by firm delivery service contract from NOVA, no IRP alternatives have been identified feasible to implement and verify before November 2021 when service is required

OEB staff requested that Enbridge Gas provide a cost estimate as well as economic analyses (DCF and PI) for each of the alternatives presented by Enbridge Gas. In its interrogatory responses<sup>4</sup>, Enbridge Gas stated that out of all the alternatives it had reviewed, it only considered Alternatives 1, 2 and 3 as acceptable facility alternatives, although it rejected these alternatives due to higher costs. Alternatives 4 and 5 were rejected as these would require new easements on Aamjiwnaang First Nation (AFN) lands which AFN did not agree to. Similarly, construction of a new Compressor Plant, new Liquefied Natural Gas (LNG) Plant and new Compressed Natural Gas (CNG) facilities were eliminated by Enbridge Gas due to unacceptable technical and operational conditions of these alternatives. The Compressor Plant would require a second back up compression facility to ensure reliability which increases the cost compared to the Project. Both the LNG Plant and CNG facilities have finite capacity and cannot be relied upon for continuous reliable supply. Enbridge Gas considered firm gas supply delivery from the Bluewater Gas Storage (BGS) at the Bluewater Interconnect but this was rejected as BGS does not offer a firm transportation service to the Sarnia market from interconnected pipelines. Enbridge Gas eliminated the Integrated Resource Planning (IRP) as no feasible alternative was identified to reduce the SIL demand sufficiently to defer the need for the Project by the November 2021 in-service date.

Enbridge Gas provided the estimated capital costs and the results of its DCF and PI analyses for Alternatives 1, 2, and 3. This is summarized in the Table 2 below:

Table 2

Alternative	Pipeline Cost (\$M)	Station Cost (\$M)	NPV (\$M)	PI
Alternative 1	60.7	7.3	(24.2)	0.6
Alternative 2	19.4	23.3	(3.9)	0.9
Alternative 3	124.6	10.2	(70.5)	0.4

OEB staff notes that these alternatives have significantly higher capital costs and have negative NPV and lower PI figures.

OEB staff supports Enbridge Gas' proposal to meet this need through the proposed Project. The Project is economically feasible, is the lowest cost alternative, has the shortest pipeline route with the least resulting environmental impact, and provides enhanced system reliability.

<sup>4</sup> OEB Staff Interrogatory 3

## Routing and Environmental Matters

Enbridge Gas retained Stantec Consulting Ltd. (Stantec) to undertake an environmental assessment for the proposed pipeline. Stantec prepared an Environmental Report (ER) for the Project in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7<sup>th</sup> Edition, 2016* (Environmental Guidelines).<sup>5</sup> The ER for the Project identified the environmental and socio-economic features along the route of the proposed pipeline. According to the ER, Stantec does not anticipate any permanent or adverse environmental impacts from the construction and operation of the Project.

Enbridge Gas has committed to complying with all mitigation measures recommended in the ER.<sup>6</sup>

Copies of the ER were submitted to the Ontario Pipeline Coordinating Committee (OPCC) for review and comment on August 15, 2019. Enbridge Gas provided a summary of the OPCC review comments in response to interrogatories<sup>7</sup> which indicates that there are no outstanding concerns from OPCC members.

Stantec completed a Stage 1 Archaeological Assessment (AA) which identified areas that retain archaeological potential and require a Stage 2 AA. In its interrogatory responses, Enbridge Gas confirmed that a Stage 1 AA report was submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) on June 18, 2019 and that the MTCS issued a letter of compliance on July 26, 2019.<sup>8</sup> Enbridge Gas stated that the Stage 2 AA began in October 2019 and fieldwork is expected to complete by May 2020. Enbridge Gas expects to submit the Stage 2 AA report to the MHSTCI in June 2020 and anticipates that MHSTCI will complete its review in July 2020.

OEB staff raised interrogatories with respect to required environmental permits/approvals. In its responses<sup>9</sup>, Enbridge Gas stated that it expects to secure any necessary environmental permits and authorizations prior to the proposed construction start date of May 2021.

According to the application, the proposed pipeline will be designed and constructed in

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<sup>5</sup> Application, Exhibit C, Tab 6, Schedule 1

<sup>6</sup> Application, Exhibit B, Tab 1, Schedule 6, p.3

<sup>7</sup> OEB Staff Interrogatory 6

<sup>8</sup> OEB Staff Interrogatory 7

<sup>9</sup> OEB Staff Interrogatory 9



accordance with the Ontario Regulations 210/01 of the *Technical Standards and Safety Act 2000, Oil and Gas Pipeline Systems (TSSA)*.

OEB staff has no concerns with the environmental aspects of the Project, given that Enbridge Gas is committed to implementing the mitigation measures set out in the ER. OEB staff notes that Enbridge Gas agrees with the draft Conditions of Approval proposed by OEB staff, including those that require Enbridge Gas to certify that it has obtained all approvals, permits, licences, and certificates required to construct, operate and maintain the proposed Project.<sup>10</sup>

## Indigenous Consultation

In accordance with the Environmental Guidelines, on July 5, 2018, Enbridge Gas contacted the Ministry of Energy, Northern Development and Mines (MENDM) with respect to the Crown's duty to consult, providing the MENDM with a description of the Project. In a letter dated September 10, 2018, the MENDM delegated the procedural aspects of the Crown's duty to consult for the Project to Enbridge Gas. The letter identified five Indigenous communities<sup>11</sup> to be consulted.

On October 8, 2019, Enbridge Gas provided the MENDM with its Indigenous Consultation Report for the Project and requested that the MENDM determine if the procedural aspects of the duty to consult have been sufficiently addressed.

As part of its application, Enbridge Gas filed a summary of Enbridge Gas' Indigenous consultation activities for the Project as well as its Indigenous consultation matrix (and associated attachments).<sup>12</sup> In response to interrogatories Enbridge Gas filed an updated Indigenous Consultation Report: Log and Project Correspondence, as of December 19, 2019.

OEB staff submits that Enbridge Gas appears to have made efforts to engage with affected Indigenous groups and no concerns that could materially affect the Project have been raised through its consultation to date. However, the MENDM has not issued the consultation sufficiency letter to confirm its view that Enbridge Gas has satisfied the procedural aspects of the Crown's duty to consult with respect to the proposed Project.

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<sup>10</sup> OEB Staff Interrogatory 11

<sup>11</sup> Aamjiwnaang First Nation, Bkejwanong (Walpole Island) First Nation, Chippewas of Thames First Nation, Chippewas of Kettle and Stony Point First Nation, Oneida Nation of the Thames

<sup>12</sup> Application, Exhibit C, Tab 8, Schedules 1,2

In its interrogatory responses<sup>13</sup>, Enbridge Gas states that it expects to receive the letter of consultation sufficiency in 2020 and will file it with the OEB upon receipt.

OEB staff submits that the OEB could approve the application, subject to receiving the MENDM's letter of sufficiency. To the extent that the letter of sufficiency may identify outstanding issues, the OEB could elect to make provision for additional procedural steps to address these issues.

## Land Matters

The proposed pipeline requires approximately 1.72 hectares of permanent easement, 3.79 hectares of temporary easement, and 0.58 hectares of fee simple lands. Enbridge Gas stated that negotiations with directly impacted landowners are ongoing and that it expects to have all land rights in place prior to the commencement of the Project.

According to the ER, a consultation and engagement program was undertaken to permit interested and potentially affected parties to provide input into the Project. Hydro One Networks Inc. (HONI) advised that 53 meters of the proposed pipeline is located within HONI owned lands known as Sarnia South Transmission Station and that Enbridge Gas would have to remove the pipeline if necessary, to accommodate HONI's future needs.

OEB staff requested Enbridge Gas to comment on the future potential need for a station on the Hydro One owned lands and the implications for the Project, including what Enbridge Gas intends to do in the event that HONI requires these lands for a station in the future. In its responses<sup>14</sup>, Enbridge Gas stated that HONI has not expressed a specific need for or plans to build on this site in the future. Enbridge Gas also stated that, at this time, it does not foresee any impacts to the proposed pipeline and that if HONI intends to build a station in the future, Enbridge Gas would work with HONI to protect the integrity of the SIL system and ensure that there is no interruption of service to the Sarnia market. Enbridge Gas commented that negotiations between Enbridge Gas and HONI are ongoing for a permanent easement on the HONI owned lands.

OEB staff acknowledges Enbridge Gas' comments regarding the construction of the pipeline on HONI lands and expects that Enbridge Gas will work with HONI to protect the integrity of the SIL system to ensure that there is no interruption of service to the Sarnia market, should HONI require these lands to build a station in the future.

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<sup>13</sup> OEB Staff Interrogatory 10

<sup>14</sup> OEB Staff Interrogatory 8

Enbridge Gas seeks approval of the Form of Easement and Temporary Land Use Agreement, which it notes were approved by the OEB in previous pipeline projects.<sup>15</sup>

OEB staff submits that the OEB should approve the proposed Form of Easement and Temporary Land Use Agreement.

## Conditions of Approval

Enbridge Gas reviewed and agreed with the draft Conditions of Approval proposed by OEB staff in its interrogatories.

Given Enbridge Gas' responses to OEB staff's interrogatories, OEB staff submits that the OEB consider two amendments to the draft Conditions of Approval.

As mentioned earlier, Enbridge Gas has yet to receive confirmation from the MENDM that it has satisfied the procedural aspects of the Crown's duty to consult with respect to the Project. Based on responses to interrogatories<sup>16</sup>, it is not clear when the MENDM will issue a consultation sufficiency letter. OEB staff submits that the OEB add the following condition (added as Condition 4 in Appendix A below):

Authorization for leave to construct is subject to Enbridge Gas filing with the OEB a letter from the MENDM confirming that Enbridge Gas has satisfied the procedural aspects of the Crown's duty to consult with respect to the proposed Project.

In its application, Enbridge Gas indicated that construction was expected to commence in Spring 2021.<sup>17</sup> In its response to interrogatories<sup>18</sup>, Enbridge Gas has indicated that its anticipated construction start date is May 2021. As an OEB decision on this application would be expected in March 2020, OEB staff submits that Condition 2(a) be amended such that the OEB's authorization for the leave to construct terminates 18 months rather than 12 months after the decision is issued. OEB staff submits that this would better align with the anticipated construction start date.

Section 23 of the OEB Act permits the OEB, when making an order, to impose such conditions as it considers appropriate. OEB staff submits that the OEB should approve

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<sup>15</sup> OEB Staff Interrogatory 9

<sup>16</sup> OEB Staff Interrogatory 10

<sup>17</sup> Application, Exhibit B, Tab 1, Schedule 1, p.4

<sup>18</sup> OEB Staff Interrogatory 7

the Project subject to the Conditions of Approval attached as Appendix A to this submission.

All of which is respectfully submitted.

## **Appendix A**

**Leave to Construct Application under  
Section 90 of the OEB Act**

**Enbridge Gas Inc.  
EB-2019-0218**

**Conditions of Approval**

1. Enbridge Gas Inc. (Enbridge Gas) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2019-0218 and these Conditions of Approval.
2. (a) Authorization for leave to construct shall terminate 18 months after the decision is issued, unless construction has commenced prior to that date.  
  
(b) Enbridge Gas shall give the OEB notice in writing of the following:
  - i. The commencement of construction, at least five days prior to the date construction commences
  - ii. The planned in-service date, at least ten days prior to the date the facilities go into service
  - iii. The date on which construction was completed, no later than 10 days following the completion of construction
  - iv. The in-service date, no later than 10 days after the facilities go into service
3. Enbridge Gas shall implement all the recommendations of the Environmental Report filed in EB-2019-0218, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.
4. Authorization for leave to construct is subject to Enbridge Gas filing with the OEB a letter from the Ministry of Energy, Northern Development and Mines confirming that Enbridge Gas has satisfied the procedural aspects of the Crown's duty to consult with respect to the proposed Project.
5. Enbridge Gas shall advise the OEB of any proposed change in the project, including but not limited to changes in: OEB-approved construction or restoration procedures, the proposed route, construction schedule and cost, the necessary environmental assessments and approvals, and all other approvals, permits, licences, certificates and rights required to construct the proposed facilities. Except in an emergency, Enbridge Gas shall not make any such change without prior notice to and written

approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.

6. Concurrent with the final monitoring report referred to in Condition 7(b), Enbridge Gas shall file a Post Construction Financial Report, which shall provide a variance analysis of project cost, schedule and scope compared to the estimates filed in this proceeding, including the extent to which the project contingency was utilized. Enbridge Gas shall also file a copy of the Post Construction Financial Report in the proceeding where the actual capital costs of the project are proposed to be included in rate base or any proceeding where Enbridge Gas proposes to start collecting revenues associated with the project, whichever is earlier.
7. Both during and after construction, Enbridge Gas 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 Gas' 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 Gas, 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
    - v. Provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project
  - (b) A final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
    - i. Provide certification, by a senior executive of the company, of Enbridge Gas' adherence to Condition 3
    - ii. Describe the condition of any rehabilitated land

- iii. Describe the effectiveness of any such actions taken to prevent or mitigate any identified impacts of construction
  - iv. Include the results of analyses and monitoring programs and any recommendations arising therefrom
  - v. Include a log of all complaints received by Enbridge Gas, 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
8. Enbridge Gas shall designate one of its employees as project manager who will be responsible for the fulfillment of these conditions, and shall provide the employee's name and contact information to the OEB and to all the appropriate landowners, and shall clearly post the project manager's contact information in a prominent place at the construction site.

The OEB's designated representative for the purpose of these Conditions of Approval shall be the OEB's Manager of Natural Gas Applications (or the Manager of any OEB successor department that oversees natural gas leave to construct applications).