

Enbridge Pipelines Inc.

Project Name: Line 9 Reversal Phase I Project

Submission Information

Submission Title: Line 9 Reversal Phase I Project **Submission Date:** 08/08/2011
Filer: Chantal Robert - Enbridge Pipelines Inc. **Role:** Applicant
Form Version: 3.00

Applicant Information

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This application is pursuant to the following sections of the NEB Act and OPR Regulations:

Sections of the NEB Act that apply:

Section 45 - deviation, change or alteration of facilities

Section 48 - exemption from OPR



Section 58 - facilities exemption order

Exemptions / Relief Requested:

Enbridge Pipelines Inc. ("Enbridge") submits that any potential adverse environmental or socio-economic effects are not likely significant, and are outweighed by the benefits of the Line 9 Reversal Phase I Project between Sarnia and North Westover ("Project"). Furthermore, these effects will not be a cause for public concern. Therefore, Enbridge requests exemption from the provisions of paragraph 30 (1)(b), and sections 31 and 47 of the NEB Act in regards to the Project.

OPR-99 Regulations that apply:

OPR 43 - increase in MOP

OPR 44 - deactivation of facilities

OPR 45 - reactivation of facilities

Project Description

Project Name: Line 9 Reversal Phase I Project
Proposed Construction Date: 01/03/2012
Estimated Cost: \$16,914,000

Project Purpose: In order to meet business demands of shippers, Enbridge has proposed to reverse the segment of Line 9 (30 inch crude oil pipeline) from the Sarnia Terminal to the North Westover Station to flow in an eastward direction. The line currently operates in a westward direction, with deliveries from the Montreal Terminal flowing through the North Westover Station and onward to either the Sarnia Terminal or the Westover Terminal. In the reversed direction, crude would be delivered to the Westover Terminal from the Sarnia Terminal. The bi-directional capability for the line to flow westward in the future will be maintained by ensuring that necessary piping and

instrumentation is in place. The target will be to maintain an annual capacity of 24,157 cubic meters per day (152,000 bpd), with an initial design capacity of 26,858 cubic meters per day (169,000 bpd) on Line 9 (Sarnia Terminal to Westover Terminal), expandable to 40,000 cubic meters per day (250,000 bpd).

Brief Description of Work:

The Project will require pump and piping modifications at Sarnia terminal, North Westover Station, and Westover Terminal. Existing station and booster pumps at Sarnia will be used to inject down Line 9 (Sarnia to Westover). Separate booster pumps and a station pump will be used to inject down Line 9 (Sarnia to refineries). Additional valves and piping will be installed at these stations as needed and a replacement pig trap at Sarnia will be required to accommodate current inline inspection tools. Also, two existing densitometers will be replaced; one is inside of the North Westover Station boundaries and the other is 4.12 km west. A new electrical building will be built at the Westover Station.

Technical Description

Proposed Facilities:

- ✓ Pipeline
- ✓ Pigging
- ✓ Compressor
- Metering Station
- Tank

Integrity Management - Program Elements to be Employed on the Facility:

The Project will be managed using the Enbridge Integrity Management Plan consisting of: regular visual inspections by operations staff, routine internal inspection with in-line pipeline pigging tools, a corrosion inhibitor program as well as maintaining a properly designed and maintained cathodic protection system on the pipeline.

Construction & Inspection - Construction Techniques to be Employed:

All work will be completed on existing Enbridge facilities and surface leases with no planned ground disturbances on the right-of-way. All construction will be performed as per the requirements of CSA Z662-11, the Onshore Pipeline Regulations, 1999 and applicable Enbridge Standards.

Construction & Inspection - Inspection Techniques and Relative Frequency of Inspection to be Employed:

An Enbridge inspector will be on site during the construction operation to ensure that the appropriate standards, policies and procedures are being followed.

Construction & Inspection - Major Milestones for the Project Schedule:

Municipal permits: Winter 2012 (NEB approval required prior to applying for municipal permits)
 Construction Start Date: Spring 2012
 In-Servide Date: Fall 2012

Document Attachments:

Filename	Document Name	Language
L9 Reversal Phase I DOU.pdf	L9 Reversal Phase I DOU	English
L9 Reversal Phase I Technical Description.pdf	L9 Reversal Phase I Technical Description	English
L9 Reversal Phase I Plot Plans.pdf	L9 Reversal Phase I Plot Plans	English
L9 Reversal Phase I List of Manuals.pdf	L9 Reversal Phase I List of Manuals	English

Location

Document Attachments:

Filename	DocumentName	Language
L9 Reversal Phase 1 Regional Map.pdf	L9 Reversal Phase 1 Regional Map	English
L9 Reversal Phase I Aerial Map Sarnia.pdf	L9 Reversal Phase I Aerial Map Sarnia	English
L9 Reversal Phase I Aerial Map Westover.pdf	L9 Reversal Phase I Aerial Map Westover	English
L9 Reversal Phase I North Westover Aerial Map.pdf	L9 Reversal Phase I North Westover Aerial Map	English
L9 Reversal Phase I Aerial Map Densitometer 1860.pdf	L9 Reversal Phase I Aerial Map Densitometer 1860	English

Manuals

Title	Revision / Publication	On File
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Comments

Applicant Self Assessment of Risk

Aboriginal Matters

- ✓ A1 The Project does not traverse any Indian Reserve Land.
- A2 The Project does not traverse any claimed Aboriginal Traditional Territory, or Crown Lands.
- ✓ This statement does apply to the Project.
- This statement does not apply to the Project.
- A3 Consultation with Aboriginal Groups. Please check one of the following:
- ✓ There are no potentially affected Aboriginal groups.
- All potentially affected Aboriginal groups have been consulted and there are no outstanding concerns.
- All potentially affected Aboriginal groups have been consulted and there are still some outstanding concerns.
- All potentially affected Aboriginal groups have not been consulted.
- A4 Notice to Aboriginal groups of the Project Application to the Board. Please check one the following:
- The applicant can demonstrate that it has provided to all potentially affected Aboriginal groups all of the following:
- Notice of their intention to file an application to the Board for approval of the project;
- Notice of the anticipated date of filing;
- Notice to all Aboriginal groups that they can raise outstanding concerns regarding the project with the Board within 14 days of the Board's receipt of the application.
- All potentially affected Aboriginal groups have not received one or more of the following:
- Notice of their intention to file an application to the Board for approval of the project;
- Notice of the actual date of filing;
- Notice to all Aboriginal groups that they can raise outstanding concerns regarding the project with the Board within 14 days of the Board's receipt of the application.
- ✓ There are no potentially affected Aboriginal groups to serve notice upon.

Rationale:**Consultation**

- ✓ C1 The applicant can demonstrate that it has provided, at least 14 days prior to filing its application with the Board, notice to all potentially affected parties of its intention to file an application to the Board for approval of the project.
- ✓ C2 The applicant can demonstrate that it has provided, at least 14 days prior to filing its application with the Board, notice to all potentially affected parties of how they can raise outstanding application-related concerns with the Board in a timely manner.
- C3 Landowners and/or Tenants are potentially affected where the project footprint is on their property or negotiated lands agreement is required.
- There are no potentially affected landowners and/or tenants.
- ✓ All potentially affected landowners and/or tenants have been consulted and there are no outstanding concerns.
- All potentially affected landowners and/or tenants have been consulted and there are still some outstanding concerns.

- All potentially affected landowners and/or tenants have not been consulted.
- C4 Nearby residents are potentially affected if they may see, hear or smell the facility.
- There are no potentially affected nearby residents.
- ✓ All potentially affected nearby residents have been consulted and there are no outstanding concerns.
- All potentially affected nearby residents have been consulted and there are still some outstanding concerns.
- All potentially affected nearby residents have not been consulted.
- C5 Land users e.g. trappers, guide outfitters, recreational users, etc.
- There are no potentially affected land users.
- ✓ All potentially affected land users have been consulted and there are no outstanding concerns.
- All potentially affected land users have been consulted and there are still some outstanding concerns.
- All potentially affected land users have not been consulted.
- C6 Municipalities
- There are no potentially affected Municipalities.
- ✓ All potentially affected Municipalities have been consulted and there are no outstanding concerns.
- All potentially affected Municipalities have been consulted and there are still some outstanding concerns.
- All potentially affected Municipalities have not been consulted.
- C7 Provincial and Territorial Departments e.g. resource development, environment, heritage resources, etc.
- There are no potentially affected Provincial departments.
- ✓ All potentially affected Provincial departments have been consulted and there are no outstanding concerns.
- All potentially affected Provincial departments have been consulted and there are still some outstanding concerns.
- All potentially affected Provincial departments have not been consulted.
- C8 Federal Departments e.g. Fisheries & Oceans Canada, Transport Canada, Environment Canada, Indian & Northern Affairs, etc.
- There are no potentially affected Federal departments.
- ✓ All potentially affected Federal departments have been consulted and there are no outstanding concerns.
- All potentially affected Federal departments have been consulted and there are still some outstanding concerns.
- All potentially affected Federal departments have not been consulted.
- C9 Non-Government Organizations (NGOs)
- ✓ There are no potentially affected NGOs.

All potentially affected NGOs have been consulted and there are no outstanding concerns.

All potentially affected NGOs have been consulted and there are still some outstanding concerns.

All potentially affected NGOs have not been consulted.

- ✓ C10 There are no other potentially affected people or parties in addition to those listed above.

Rationale:

C1 & C2 - Enbridge developed a Line 9 Reversal Phase I Project notification letter and related map ("Notification Package") that was distributed to all potentially-affected Project stakeholders (i.e. landowners/residents within 65 m of the pipeline and 250 m of the facilities, plus First Nations and governments). The Notification Package was mailed to the Project stakeholders on March 4, 2011.

C9 - An assessment of potentially affected stakeholders for this Project determined that there were no Non-Government Organizations ("NGOs") requiring contact for this Project.

Economics

- ✓ EC1 The applicant has undertaken an assessment to determine that there is or there will be adequate supply to support the use of the pipeline.
- ✓ EC2 The applicant has undertaken an assessment to determine that the volumes to be transported are appropriate for the applied-for facilities and the facilities are likely to be utilized at a reasonable level over their economic life.
- ✓ EC3 The applicant has undertaken an assessment to determine that adequate markets exist for the incremental volumes that would be available to the marketplace as a result of the applied-for facilities.
- ✓ EC4 The applicant has undertaken an assessment to determine it has the ability to finance the proposed facilities.
- EC5 Third party shippers are potentially affected if the Project will have an impact on tolls, access or service. Select the option that best applies to the Project.
- The pipeline does not have any third party shippers.
- ✓ All potentially affected third party shippers have been notified of the Project and do not have any outstanding concerns.
- All potentially affected third party shippers have been notified of the Project and there are still some outstanding concerns.
- All potentially affected third party shippers have not been notified.
- EC6 Commercial third parties can include commodity suppliers, end users and other pipelines. Select the option that best applies to the Project.
- There are no potentially affected commercial third parties.
- ✓ All potentially affected commercial third parties have been notified and there are no outstanding concerns.
- All potentially affected commercial third parties have been notified and there are still some outstanding concerns.
- All potentially affected commercial third parties have not been notified.

Rationale:

Emergency Management

- ✓ EM1 The applicant is aware and will follow the NEB letter dated 24 April 2002 entitled Security and Emergency Preparedness and Response Programs.
- ✓ EM2 The applicant has developed an Emergency Preparedness and Response program that includes this project.

Rationale:**Engineering**

- ✓ E1 The Project will comply with the most recent version of all applicable acts, codes and regulations, including CSA Z662 Oil and Gas Pipeline Systems and the Onshore Pipeline Regulations 1999 (OPR-99).
- ✓ E2 The Project employs conventional materials, design and construction approach and does not involve new or unproven technology.
- E3-1 The Project does not involve the reuse of pipeline materials, reactivation of an existing pipeline or flow reversal.
- ✓ E3-2 The Project does not involve a change in service fluid.
- ✓ E3-3 The Project does not involve an increased MOP to an existing pipeline.
- ✓ E3-4 The Project does not involve an increased capacity for purpose of transporting hydrogen sulphide products.
- ✓ E5 The Project does not involve the use of any substance other than water for facility pressure testing (including air or alternative integrity verification measures).
- ✓ E6 Project facilities will not be used for sour service.
- ✓ E7 Project facilities are not designed to transport CO₂, slurry or commodities.
- ✓ E8 Project facilities do not traverse geotechnically sensitive terrain (continuous or discontinuous permafrost and areas of high probability ground movement).
- E9 Project facilities are designated Class 1 Location under CSA Z662-07.

Rationale:**Environment**

- EV1.0 The Project is on the Canadian Environmental Assessment Act exclusion list.
- ✓ EV1.1 The Project will not extend beyond the existing approved property limits or right-of-way; no new land will be acquired for the construction of the Project.
- ✓ EV1.2 The Project will not result in an increase in air airbourne emissions or noise during the operation of the facility.
- EV1.3 The Project will not be located within 30 m of a water body.
- ✓ EV1.4 The Project does not take place within a national park.
- ✓ EV2 The Applicant has identified and documented potential environmental effects based on conventionally accepted methodologies.
- ✓ EV3 The Project does not take place within a provincially or federally designated environmentally sensitive area.

- ✓ EV4 There are no schedule 1 Species at Risk Act species (plant and/or wildlife) or habitat that will be impacted by the Project.
- ✓ EV5 The Project will not impact wetlands.
- ✓ EV6 The Applicant has consulted with relevant federal and provincial departments/ agencies and there are no unresolved issues.
- ✓ EV7 The Applicant confirms that there are not any potential environmental effects that involve the use of non-standard methodology and/or require the use of non-standard mitigation to resolve.
- ✓ EV8 The Applicant commits to having and implementing an Environmental Protection Plan, or equivalent, onsite.
- ✓ EV9 There are no proposed chemical/contaminant liquid or solid discharges from the operation of the Project.
- ✓ EV10 The Project sites can be reclaimed through the use of standard cost-effective mitigation measures.

Rationale:

EV1.1 - Since a portion of the Project will be constructed within 30 m of a watercourse, the Project does not meet the requirements of the CEAA exclusion list.

EV1.3 - Although construction will not require in-water works, the works occurring at the Sarnia Terminal will be located within 30 m of a watercourse (Cole Drain) that provides direct fish habitat.

Lands

- L1 Select the option which describes the Project:
- ✓ No new land rights need to be acquired for the Project; or
The lands acquisition process for the Project will comply with the applicable sections of the National Energy Board Act, including sections 86 and 87.
 - ✓ L2 The Project can be described by one or more of the following statements:
The Project is entirely on Crown land.
The purpose of the Project is to resolve a landowner complaint.
No new permanent land rights are required for the Project (either for new footprint or for new/modified rights over existing footprint), and there are no outstanding concerns related to the Project remaining with any landowners and/or tenants within the Project footprint.
New permanent land rights are required for the Project (either for new footprint or for new/modified rights over existing footprint), there are no outstanding concerns related to the Project remaining with any landowners and/or tenants within the Project footprint, and all such land rights have been successfully acquired through mutually negotiated agreements prior to completing this form.

Rationale:

L2 - All modifications for the Project will occur within site boundaries; there is no need for new land. No new lands will be required for access roads or temporary work spaces.

Security

- ✓ Sec1 The applicant is aware and will follow with Proposed Regulatory Change 2006-01.
- ✓ Sec2 The applicant has conducted and documented a security assessment for the project.
- ✓ Sec3 Based on the security assessment, the applicant has developed a Security Management Plan for the project.

Rationale:

Socio Economics

- ✔ S1 The Applicant has identified and documented potential socio-economic effects based on conventionally accepted methodologies and has committed to implement standard mitigative measures to address and resolve those effects.
- S2 Regarding heritage resources, select the option that most closely describes the project:
 - ✔ The Project will be located entirely on previously disturbed land.
 - The applicant will obtain letter(s) of clearance with respect to heritage/archaeological resources from province(s) prior to commencement of ground clearing.
 - Neither of the above statements apply.
- ✔ S3 During operation, the Project will not result in an increase in noise level at the fence line.

Rationale:

Document Attachments

Filename	Document Name	Language
L9 Reversal Phase I Engineering Matters E3-1.pdf	L9 Reversal Phase I Engineering Matters E3-1	English
L9 Reversal Phase I Engineering Matters E9.pdf	L9 Reversal Phase I Engineering Matters E9	English
L9 Reversal Phase I ESA.pdf	L9 Reversal Phase I ESA	English
L9 Reversal Phase I Environmental Interactions Table.pdf	L9 Reversal Phase I Environmental Interactions Table	English
L9 Reversal Phase I Aboriginal Matters.pdf	L9 Reversal Phase I Aboriginal Matters	English
L9 Reversal Phase I Engineering Assessment.pdf	L9 Reversal Phase I Engineering Assessment	English
L9 Reversal Phase I Engineering Assessment Appendix B.pdf	L9 Reversal Phase I Engineering Assessment Appendix B	English
L9 Reversal Phase I Engineering Assessment Appendix C.pdf	L9 Reversal Phase I Engineering Assessment Appendix C	English