

April 29, 2016

BY RESS & Courier

Ms. Kristen Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

**Re: Union Gas Limited (“Union”)
Sarnia Expansion Project
Board File # EB-2014-0333**

Further to the Ontario Energy Board’s Decision on February 26, 2015 in particular 3.1 and 4.1 of the Conditions of Approval, attached please find the Interim Monitoring Report which includes the affidavit that all such approvals, permits and licences and certificates have been obtained.

Sincerely,

[original signed by]

Shelley Bechard
Administrative Analyst, Regulatory Projects
:sb
Encl.

cc: Zora Crnojacki, Chair of OPCC
Mohamed Soliman, Union Gas
Doug Schmidt, Union Gas

SARNIA EXPANTION PIPELINE PROJECT

INTERIM MONITORING REPORT

Prepared by: Union Gas Limited
Environmental Planning
April 2016

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1.0 INTRODUCTION

This Interim Monitoring Report is provided in compliance with the Ontario Energy Board (“Board”) Order EB-2014-0333 granting Union Gas Limited (“Union”) “Leave to Construct” approximately 4.8 kilometres of Nominal Pipe Size (NPS) 20 inch diameter steel natural gas pipeline in the Township of St. Clair, in the County of Lambton.

The pipeline commenced at Union’s Payne Station on Ladysmith Road and proceeded north on the east side of the road to Rokeby Line where it proceeded west on the north side of the road to a point just east of the CNR railway. The pipeline then turned south to cross Rokeby Line and entered the Novacor Corunna Station where it tied into the Sarnia Industrial Line. A map of the pipeline route is included in Appendix A.

The requirements for and details of this report are outlined in the specific conditions issued by the Board in its Order dated February 26, 2015 as listed below. The Conditions of Approval can be found in Appendix B.

Accordingly, the purpose of this Interim Monitoring Report is to fulfill these conditions.

1.0 Condition 1.1

Union Gas Limited (“Union”) shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2014-0333 except as modified by this Order and these Conditions of Approval.

Condition 1.3

Union Gas shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee (“OPCC”) review.

Condition 1.4

Union Gas shall advise the OEB's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the OEB or its designated representative. In the event of an emergency, the OEB shall be informed immediately after the fact.

2.0 Condition 2.4

Union Gas shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the OEB's Order.

3.0 Condition 3.1

Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the OEB. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.

Condition 3.2

The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

4.0 Condition 4.1

Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, and shall provide an affidavit that all such approvals, permits, licences, and certificates have been obtained.

2.0 BACKGROUND

Union was granted approval to construct the Sarnia Expansion Project on February 26, 2015. Construction was initiated on May 25, 2015 with the pipeline placed into service and cleanup for the year completed on October 31, 2015. Construction progressed from Union's Payne Compressor Station Transmission Station in a northerly direction with the following order of operations: topsoil removal, stringing, welding, joint coating, trenching, directional drilling, lowering-in, tie-ins, backfilling, testing and clean-up.

Union will return to the right-of-way in spring 2016 to complete the following activities: repair any subsidence on the right-of-way, ensure there is adequate stability and re-vegetation on all non-agricultural lands, perform a general overview of the right-of-way and complete any additional clean-up that may be required.

3.0 POTENTIAL IMPACTS AND MITIGATION

3.1 Condition 1.1

Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2014-0333 except as modified by this Order and these Conditions of Approval.

Union has complied with all conditions imposed by the Board during construction of the pipeline and has restored the land according to the evidence in support of its application.

3.2 Condition 1.3

Union Gas shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee (“OPCC”) review.

Union has implemented all recommendations and mitigation measures outlined in the Environmental Study Report (ER) along with all directives identified by the OPCC.

3.3 Condition 1.4

Union Gas shall advise the OEB’s designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the OEB or its designated representative. In the event of an emergency, the OEB shall be informed immediately after the fact.

There were no changes to construction or restoration procedures during this project.

3.4 Condition 2.4

Union Gas shall furnish the Board’s designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the OEB’s Order

This Interim Monitoring report shall confirm that the work has been performed according to the Board’s Order.

3.5 Condition 3.1

Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the OEB. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints that have been received to the interim and final

monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.

3.5.1 Report Circulation

Four (4) copies of this Interim Monitoring Report are provided to the Board.

3.5.2 Landowner Concerns

Union's complaint tracking system, which identifies the current status of landowner complaints received as a result of pipeline construction, was/is in effect.

A complaint is identified as a concern raised by a landowner, which has not been resolved to the landowner's satisfaction within three (3) working days. There were no complaints entered into the complaint tracking system. During construction, issues that were minor in nature were raised to Union and their contractor. These were dealt with by Union or the Contractor in an expeditious manner.

The final monitoring report will address any outstanding issues if they should arise. Union will continue to monitor the state of the land and environment and will address any additional landowner concerns, if they should arise.

3.6 Condition 3.2

The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

In fulfilment of Condition 3.2, Table 1 summarizes the construction effects and general mitigation measures carried out during construction. All mitigation techniques used throughout construction will also be implemented during cleanup activities as required.

3.6.1 Monitoring Programs

3.6.1.1 Archaeological Assessment

Union Gas retained the services of Stantec Consulting Ltd. to conduct a Stage 1 archaeological background study in August 2014. The study indicated that portions of the study area exhibit moderate to high potential for the identification and recovery of archaeological resources. Therefore a Stage 2 assessment was required.

The Stage 2 field assessment was conducted between June 3, 2014 and November 24, 2014 and resulted in with no archaeological resources identified.

3.6.1.2 Watercourse Monitoring

It was necessary to cross one (1) regulated watercourse during construction of the project. The crossing was performed using the horizontal directional drill (HDD) method under a permit acquired from the St. Clair Region Conservation Authority.

The watercourse was protected prior to, during and following construction by installing sediment fencing, straw bales and erosion control matting. Disturbed areas adjacent to the watercourse were seeded immediately following the installation of the pipeline.

The watercourse was susceptible to erosion and was checked after excessive rainfall to verify the effectiveness of the sediment control devices. The watercourse will be reviewed for stability and vegetation re-establishment in the spring of 2016 and any necessary mitigation will be undertaken at this time.

3.6.1.3 Tree Removal

A small number of trees and shrubs were removed from the easement prior to construction outside of the nesting window. At the request of the Municipality, in November of 2015, trees were planted in front of the new station at the tie-in point to the Sarnia Industrial Line, to aid in concealing the facility from view.

4.0 **Condition 4.1**

Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, and shall provide an affidavit that all such approvals, permits, licences, and certificates have been obtained.

Union obtained all approval, permits, licences, and certificates required to construct operate and maintain the Sarnia Expansion Pipeline Project. An affidavit acknowledging the acquisition of the approval, permits, licences, and certificates can be found in Appendix C.

5.0 **SUMMARY**

This Interim Monitoring Report has been prepared as per conditions in the Board Order EB-2014-0333. The report provides an outline of Unions' compliance with the commitments of its witnesses, the measures implemented during construction to minimize disturbance to the environment and a description of Unions' monitoring programs. It is anticipated that these measures will effectively

eliminate any long-term impacts to the environment. A review of the pipeline route will be undertaken in the spring of 2016 to determine if any additional clean-up will be required. Should additional clean-up be required, it will be completed as soon as conditions allow.

A Final Monitoring Report will be prepared to evaluate the success of the measures and if necessary outline areas in need of additional restoration.

“Table 1”

Potential Impacts and Mitigation Measures

TABLE 1: MITIGATION SUMMARY

Issue	Potential Impact	Mitigation
a) Archaeology	Disturbance to cultural heritage resources.	<ul style="list-style-type: none"> • Prior to any activities associated with the project, an archaeological survey was completed and concluded that the pipeline corridor was free from archaeological concern. No artifacts were found during construction.
b) Species At Risk (SAR)	Encountering SAR	<ul style="list-style-type: none"> • Followed recommendations outlined by Stantec and Ministry of Natural Resources, Sediment fencing was installed in all areas that had the potential to contain the Butler's Garter Snake. No snakes were encountered during construction.
c) Landowner Concerns	Disruption to landowners and tenants	<ul style="list-style-type: none"> • Union provided the landowners/tenants with the telephone numbers of Company personnel. • A Landowner Relations Program was established to track complaints during construction. • To date there have been no complaints entered into the complaint tracking system.
d) Watercourses	Water quality concerns	<ul style="list-style-type: none"> • Union adhered to Company specifications for watercourse crossings. • Union acquired a permit and complied with all conditions of approval from the St.Clair Region Conservation Authority.
e) Road Side Ditches	Water quality concerns	<ul style="list-style-type: none"> • Ensured ditches were returned to pre-construction condition as quickly as possible.
f) Paved Driveways and Roadways	Disruption to local traffic, landowners and tenants	<ul style="list-style-type: none"> • All paved roadways and driveways were bored if practical. • Union maintained one lane of traffic open if possible. • Traffic controls were implemented as required. • Driveways were repaired as soon as possible.
g) Public Safety	Public safety concerns	<ul style="list-style-type: none"> • Company inspectors ensured public safety on construction site. • Ensured proper signage and flag persons if required.
h) Commercial/Retail Businesses	Disruption to businesses	<ul style="list-style-type: none"> • Ensured access at all times. • Restored area as soon as possible after construction. • Scheduled construction with owners or managers.
i) Construction Noise	Disturbance to landowners and tenants	<ul style="list-style-type: none"> • Construction was carried out during daylight hours whenever possible. • Ensured equipment was properly muffled.

Issue	Potential Impact	Proposed Mitigation
j) Construction Equipment	Disruption to landowners and tenants	<ul style="list-style-type: none"> • Equipment was stored well off road shoulders or in a nearby yard when not in use.
k) Traffic	Disruption to local citizens	<ul style="list-style-type: none"> • At least one lane of traffic was maintained at all times. • Flag persons and warning devices were used to notify traffic of the construction zone in accordance with Ministry of Transportation standards.
l) Fuel Storage and Handling	Improper fuel storage and handling may cause spillage and possible contamination of soil.	<ul style="list-style-type: none"> • Fuel was not stored near watercourses (i.e. Within 50 metres) • Spill clean-up materials were stored on site and available in the event of a spill. Spills or leakage were to be reported to the appropriate authority immediately (Ministry of the Environment Spills Action Centre at 1-800-268-6060) • No reportable spills were recorded during construction.

Appendix A

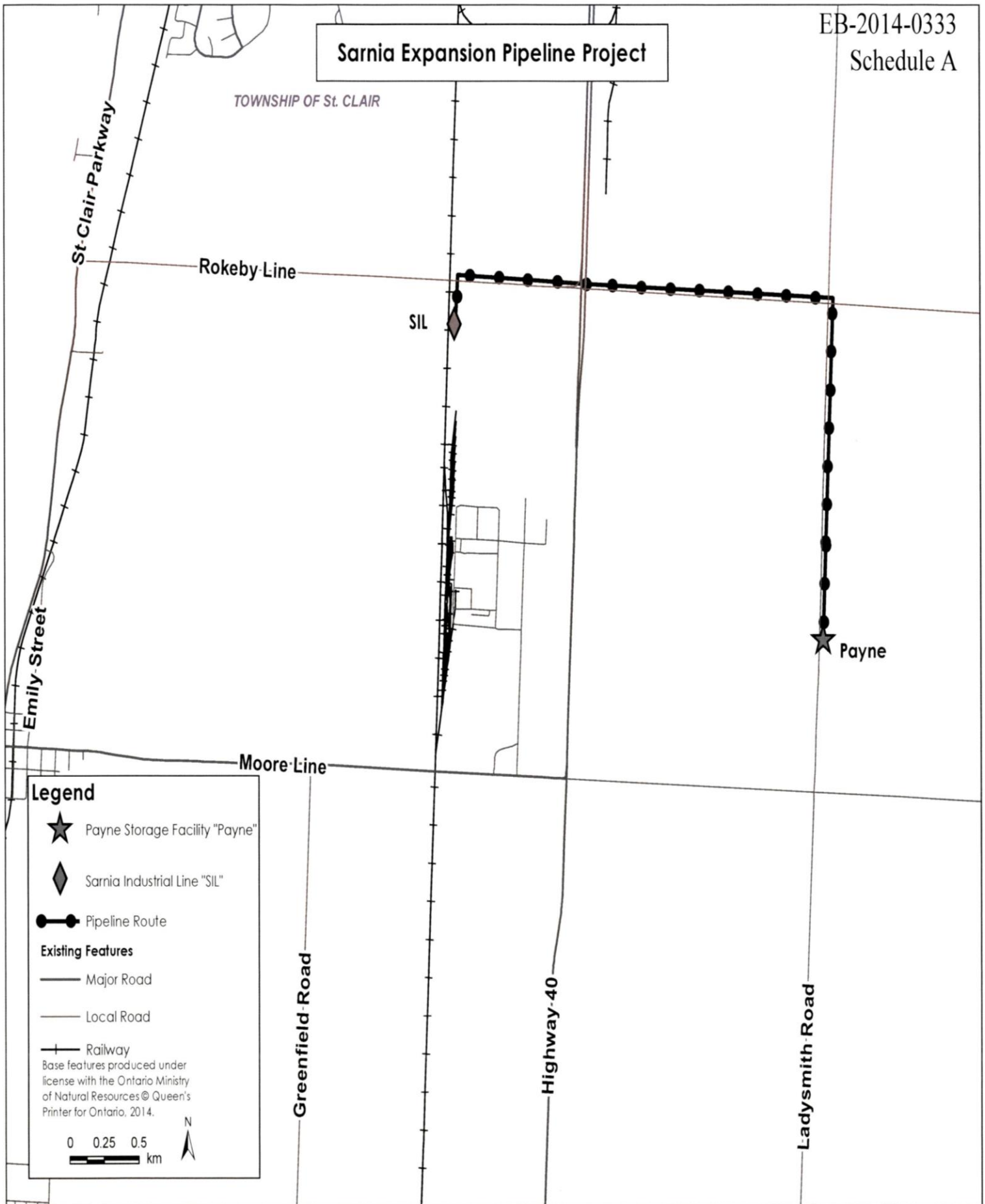
Location Map

SARNIA EXPANSION PIPELINE PROJECT



Sarnia Expansion Pipeline Project

TOWNSHIP OF St. CLAIR



Appendix B

Conditions of Approval

EB-2014-0333

Union Gas Limited Leave to Construct Application

Conditions of Approval

1 General Requirements

- 1.1 Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with its application and the evidence filed in EB-2014-0333 except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the OEB, authorization for Leave to Construct shall terminate December 31, 2015, unless construction has commenced prior to that date.
- 1.3 Union shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee (OPCC) review.
- 1.4 Union shall advise the OEB's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the OEB or its designated representative. In the event of an emergency, the OEB shall be informed immediately after the fact.
- 1.5 Within 15 months of the final in-service date, Union shall file with the OEB Secretary a Post Construction Financial Report. The Report shall indicate the actual capital costs of the project and an explanation for any significant variances from the estimates filed in this proceeding.

2 Project and Communications Requirements

- 2.1 The OEB's designated representative for the purpose of these Conditions of Approval shall be the Manager, Natural Gas Applications.

- 2.2 Union shall designate a person as project engineer and shall provide the name of the individual to the OEB's designated representative. The project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction site. Union shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the OEB's Order being issued.
- 2.3 Union shall give the OEB's designated representative and the Chair of the OPCC ten days written notice in advance of the commencement of the construction.
- 2.4 Union shall furnish the OEB's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the OEB's Order.
- 2.5 Union shall file with the OEB's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Union shall furnish the OEB's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the OEB. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term

effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

- 3.3 The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4 Other Approvals

- 4.1 Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, and shall provide an affidavit that all such approvals, permits, licences, and certificates have been obtained.

Appendix C

Approval Affidavit

IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B, and in particular, s.90 thereof;

AND IN THE MATTER OF an Application by Union Gas Limited for an Order granting leave to construct a natural gas pipeline and ancillary facilities in the Township of St. Clair, in the County of Lambton.


-: AFFIDAVIT – CONDITIONS OF APPROVAL:-

I, Doug Schmidt, of the Municipality of Chatham-Kent, in the Province of Ontario, make oath and say as follows:

1. I am the Manager, Permitting and Environmental Planning, an employee in the Head Office of Union Gas Limited, the Applicant in the matter referred to in the preamble to this my Affidavit and I have personal knowledge of the matters herein deposed to.
2. Pursuant to Condition 4.1 of the Ontario Energy Board's Decision and Order Dated February 26, 2015, EB-2014-0333, I confirm that all approvals, permits, licences and certificates required to construct, operate and maintain the proposed project were obtained.
3. I make this Affidavit in good faith and for no improper purpose.

SWORN BEFORE ME, at the)
Municipality of Chatham-Kent)
in the Province of Ontario,)
this 25th day of April, 2016.)





A Commissioner, etc.

Appendix D

Photograph Inventory



Measurements are taken to distinguish between topsoil and subsoil. A dozer and excavator were then used to perform the operation of separating the two layers.



A trenching machine was used for digging where long uninterrupted sections of pipe were required.



Upon completion of the topsoil stripping and trenching, the pipe is strung out along the easement to be welded together.



After two sections of pipe have been welded together, the joints are sand blasted to remove any impurities and rust. For safety, the worker must wear protective clothing and a helmet with a separate air supply.



When the sandblasting of the joint is complete, the area is protected using an epoxy coating which will dry very hard protecting the joint from corrosion.



Prior to lowering of the pipe into the trench or while pulling the pipeline during a directional drilling operation, the pipe is “jeeped”. An electrically charged spring is wrapped around the pipe and can detect minute flaws in the coating. When detected, the flaws are immediately repaired.



Once the pipeline has been welded, the joints coated and “jeeped”, it is lowered into the trench using a side boom



To relieve compaction of the subsoil soil, a chisel plow is used.



Following chisel plowing, the area is disced to break up any large pieces of soil.



Following the preparation of the subsoil, the topsoil is replaced, disced and returned to, in this case an agricultural field.