

March 21st, 2014

By RESS & Courier

Ms. Pascale Duguay, Manager, Natural Gas Applications Ontario Energy Board Suite 2700, 2300 Yonge Street Toronto, Ontario M4P 1E4

Dear Ms. Duguay:

Re: Union Gas Limited Leamington Expansion Project Board File # EB-2012-0431

Pursuant to Condition 3.1 of the Board's Conditions of Approval for the above-noted project, please find enclosed four copies of Union's Interim Monitoring Report.

Sincerely,

[original signed by]

William Wachsmuth Senior Administrator, Regulatory Projects Encl.

cc: Z. Crnojacki (Chair, OPCC) Gary Collins

LEAMINGTON EXPANSION PROJECT

INTERIM MONITORING REPORT

Prepared by: Union Gas Limited Environmental Planning March 2014

TABLE OF CONTENTS

Leamington Expansion Project Interim Monitoring Report

Page No.

1.0	Introduction	1
2.0	Background	3
3.0	Potential Impacts and Mitigation	3
3.1	Condition 1.1)	3
3.2	Condition 1.3)	4
3.3	Condition 1.4)	4
3.4	Condition 2.4)	4
3.5	Condition 3.1)	4
	3.1.1 Report Circulation	5
	3.1.2 Landowner Concerns	5
3.6	Condition 3.2)	5
	3.2.1 Monitoring Programs	6
	3.2.1.1 Archaeological Assessment	6
	3.2.1.2 Watercourse Monitoring	6
4.0		7
5.0	Condition 5.1)	7
6.0	Summary	8
TA	BLE 1 Potential Impacts and Mitigation Meas	ures
API	PENDIX A Location Map	
API	PENDIX B Conditions of Approval	
API	PENDIX C Photograph Inventory	

1.0 **INTRODUCTION**

This Interim Monitoring Report is provided in compliance with the Ontario Energy Board ("Board") Order EB-2012-0431 granting Union Gas Limited ("Union") "Leave to Construct" approximately 8.5 km of Nominal Pipe Size (NPS) 12 inch diameter natural gas pipeline in the Municipality of Leamington and the Town of Lakeshore in the County of Essex.

The pipeline commenced at Union's Comber Transmission Station and proceeded west across private land to the road allowance, turning south on the east side of Lakeshore Road 245 to county Road 8 where it crossed onto private land to Mersea Road 11. At this point the pipeline continued south within an abandoned railway corridor to the County Road 14 Station. 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 March 28, 2013 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 <u>Condition 1.1</u>

Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2012-0431 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 members of the Ontario Pipeline Coordinating Committee ("OPCC").

Condition 1.4

Union Gas shall advise the Board'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 Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.

2.0 <u>Condition 2.4</u>

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 Board's Order.

3.0 <u>Condition 3.1</u>

Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the Board. 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 Gas 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 <u>Condition 4.1</u>

Union Gas shall offer the form of easement agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

5.0 <u>Condition 5.1</u>

Union Gas shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approval, permit, licences, and certificates upon the Board's request.

2.0 BACKGROUND

Union was granted approval to construct the Learnington Expansion Project on March 28, 2013. Construction was initiated on May 27, 2013 with the pipeline placed into service on October 1, 2013 and cleanup for the year completed on October 15, 2013. Construction progressed from the tie in point at Union's Comber Transmission Station in a southerly direction with the following order of operations: topsoil removal, stringing, welding, joint coating, directional drilling, trenching, lowering-in, tie-ins, backfilling, testing and clean-up.

Union will return to the right-of-way in spring 2014 to complete the following activities: repair any subsidence on the right-of-way, ensure there is adequate stability and re-vegetation on all watercourse crossings, 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 <u>Condition 1.1</u>

Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2012-0431 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 <u>Condition 1.3</u>

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 members of the Ontario Pipeline Coordinating Committee ("OPCC").

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 <u>Condition 1.4</u>

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

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

3.4 <u>Condition 2.4</u>

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 Board's Order.

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

3.5 <u>Condition 3.1</u>

Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the Board.

The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within eighteen months of the in-service date. Union Gas 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.

3.1.1 <u>Report Circulation</u>

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

3.1.2 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 <u>Condition 3.2</u>

The interim monitoring report shall confirm Union Gas'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.

3.2.1 Monitoring Programs

3.2.1.1 Archaeological Assessment

Azimuth Environmental Consulting Inc. retained the services of New Direction Archaeology Ltd. to conduct a Stage 1 archaeological background study in October 2012. The study indicated that the majority of lands along the pipeline route were previously disturbed and therefore had a low archaeological potential however there still remained the possibility that small areas with archaeological potential may have escaped disturbance and a Stage 2 assessment was recommended. Union retained the services of Timmons Martelle Heritage Consultants Inc. to perform the Stage 2 assessment. The assessment was undertaken in November 2012 with no archaeological resources identified.

3.2.1.2 <u>Watercourse Monitoring</u>

It was necessary to cross five (5) regulated watercourses as part of the project. All crossings were performed using the horizontal directional drill (HDD) method and were approved by the Essex Region Conservation Authority.

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

Watercourses that were susceptible to erosion were checked after excessive rainfall to verify the effectiveness of the sediment control devices. These watercourses will be reviewed for stability and vegetation re-establishment in the spring of 2014 and any necessary mitigation will be undertaken at this time.

4.0 <u>Condition 4.1</u>

Union Gas shall offer the form of easement agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

All landowners affected by construction have received the same easement agreement as approve by the Board.

5.0 <u>Condition 5.1</u>

Union Gas shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approval, permit, licences, and certificates upon the Board's request.

Union Gas obtained the following environmental permits for construction:

Essex Region Conservation Authority - Watercourse Crossings

- For Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Ontario Regulation 148/06.
 - Application for Permit No. 42/10 Watercourse Crossings
 - Application for Permit No. 295/13 Culvert Installation.

Ministry of Natural Resources – Species at Risk

• Letter of Advice – AYL-L-034_13

6.0 SUMMARY

This Interim Monitoring Report has been prepared as per conditions in the Board Order EB-2012-0431 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 2014 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 in spring 2014.

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

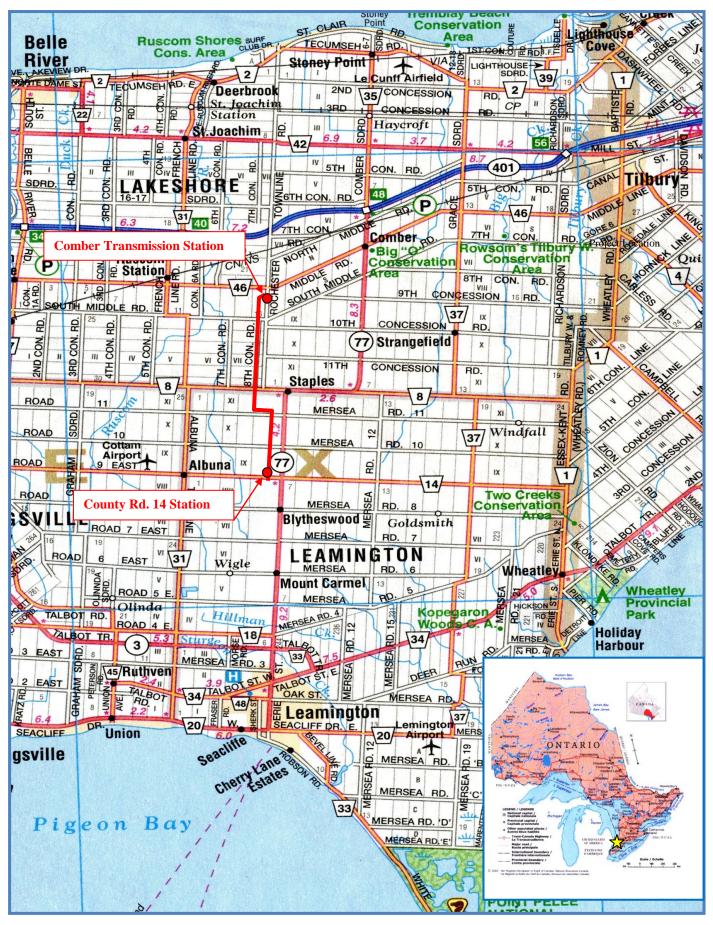
TABLE 1: MITIGATION SUMMARY						
Issue	Potential Impact	Proposed Mitigation				
a) Archaeology	Disturbance to cultural heritage resources.	• Prior to any activities associated with the project, an archaeological survey was completed and concluded that the pipeline corridor was free from archaeological concern. No artifacts were found during construction.				
b) Species At Risk (SAR)	Encountering SAR	• Followed recommendations outlined in Environmental Review and the Ministry of Natural Resources Letter of Advice				
c) Landowner Concerns	Disruption to landowners and tenants	 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	 Union adhered to Company specifications for watercourse crossings. Union complied with all conditions of approval from the Essex Region Conservation Authority. 				
e) Road Side Ditches	Water quality concerns	• Ensured ditches were returned to pre-construction condition as quickly as possible.				
f) Paved Driveways and Roadways	Disruption to local traffic, landowners and tenants	 All paved roadways and driveways were bored if practical. If it was not possible to bore driveways and roads, steel plates were on site to provide access to landowners and tenants. 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	 Company inspectors ensured public safety on construction site. Ensured proper signage and flag persons if required. 				
h) Commercial/Retail Businesses	Disruption to businesses	 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	 Construction was carried out during daylight hours whenever possible. Ensured equipment was properly muffled. 				

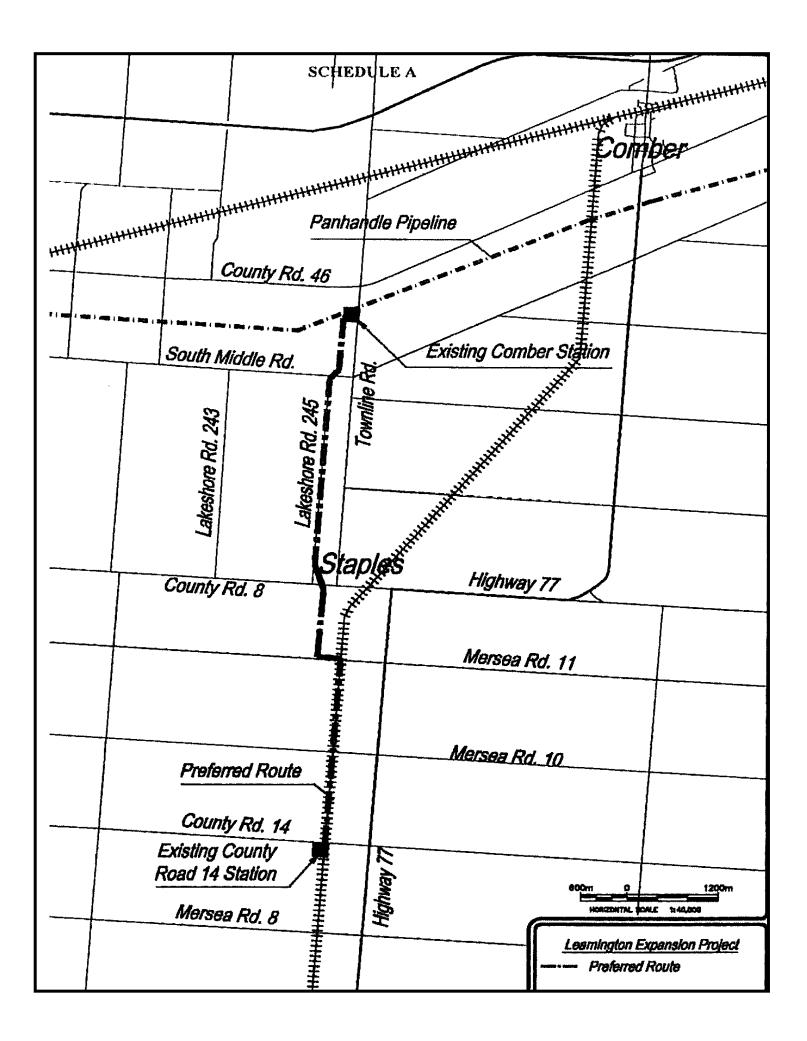
Issue	Potential Impact	Proposed Mitigation
j) Construction Equipment	Disruption to landowners and tenants	• Equipment was stored well off road shoulders or in a nearby yard when not in use.
k) Traffic	Disruption to local citizens	 At least one lane of traffic was maintained at all times. Flag persons 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.	 Fuel was not stored near watercourses (i.e. Within 100 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

GENERAL LOCATION MAP LEAMINGTON EXPANSION PROJECT





Appendix B

Conditions of Approval

EB-2012-0431

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-2012-0431 except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2014, 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 members of the Ontario Pipeline Coordinating Committee ("OPCC").
- 1.4 Union shall advise the Board'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 Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.5 Within 15 months of the final in-service date, Union shall file with the Board Secretary a Post Construction Financial Report. The Report shall indicate the actual capital costs of the project and shall explain all significant variances from the estimates filed in the proceeding.

2 **Project and Communications Requirements**

- 2.1 The Board'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 Board'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 Board's Order being issued.

- 2.3 Union shall give the Board'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 Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Union shall file with the Board'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 Board'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 Board. 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 Easement Agreements

4.1 Union shall offer the form of agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

5 Other Approvals and Agreements

5.1 Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.

Appendix C

Photograph Inventory



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



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



After two sections of pipe have been welded together, the area is 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. The coating is then inspected to ensure the thickness is consistent with company standards.



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 charges spring is wrapped around the pipe and can detect minute flaws in the coating. When detected, the flaws are immediately repaired.



Following the installation of each pipeline section, the pipe is surveyed along its length to ensure accurate records are maintained.



Once the pipeline has been installed the trench is backfilled using an excavator.



Following backfilling, the topsoil is replaced and the area was cultivated to relieve residual compaction.