

March 26, 2015

BY RESS & Courier

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 (“Union”)  
Owen Sound Replacement Project  
Board File # EB-2012-0430**

Pursuant to Condition 3.1 and 3.3 of the Board’s Conditions of Approval for the above-noted project, please find attached Union’s Final Monitoring Report. I confirm that four copies of this report shall follow by courier to your attention.

Sincerely,

*[Original Signed By]*

Shelley Bechard  
Administrative Analyst, Regulatory Projects  
Encl.

cc: Z. Crnojacki (Chair, OPCC)  
Regulatory Library

**Union Gas Owen Sound NPS12  
Pipeline Replacement: Final  
Monitoring Report**



Prepared for:

**Union Gas Limited**  
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Chatham, Ont., N7M 5M1

Prepared by:

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File No. 160960832  
March 24, 2015



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## Abbreviations

Act	Ontario Energy Board Act, 1998
NPS	Nominal Pipe Size
OEB	Ontario Energy Board
Stantec	Stantec Consulting Ltd.
Union Gas	Union Gas Limited



# UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

Background  
March 24, 2015

## 1.0 BACKGROUND

Stantec Consulting Ltd. (Stantec) was retained by Union Gas Limited (Union Gas) to conduct Environmental Inspection Services during the replacement and construction of the Owen Sound Nominal Pipe Size 12 (NPS12) Pipeline Replacement Project in the Regional Municipality of Waterloo.

Union Gas filed an application with the Ontario Energy Board (OEB) on November 13, 2012, under sections 90 and 97 of the *Ontario Energy Board Act, 1998* (the "Act"), requesting leave to construct the natural gas pipeline. Union Gas proposed to replace approximately 25 kilometres of the Owen Sound NPS 12 pipeline.

### 1.1 SCOPE OF THE FINAL MONITORING REPORT

This report has been prepared in accordance with the OEB EB-2012-0430 Conditions of Approval as described below:

- Condition 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-2012-0430 except as modified by this Order and these Conditions of Approval.
- Condition 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").
- Condition 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.
- 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 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.



# UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

Background  
March 24, 2015

- Condition 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.
- Condition 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.

# UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

Predicted Impacts and Mitigation  
March 24, 2015

## 2.0 PREDICTED IMPACTS AND MITIGATION

### 2.1 CONDITION 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-2012-0430 except as modified by this Order and these Conditions of Approval.*

Construction of the pipeline replacement was completed as per the application and evidence filed in EB-2012-0430 with exception of the non-removal of the existing pipeline at three locations: a) under the Hwy 401 and associated wetland to the north; b) at the Eden Creek undercrossing south of Cedar Creek Road; and c) at the Fischer-Hallman Road undercrossing. At all these locations, it was discovered that there were several pipe over bends and under bends. The original plan was to pull the existing pipe out of the ground. However, these above-mentioned bends would have required that heavy equipment enter the wetlands and disturb the soil and vegetation. It was therefore decided that it was best to leave these short sections of pipe in the ground and to preserve the stability of the existing wetland vegetation and soil.

The completed pipeline resumed service on December 20, 2013. Cleanup was an ongoing process after the pipe was replaced and backfilled. Perimeter silt fencing remained in place where required over the winter to protect the surrounding natural features from sedimentation. All restoration was completed. Roadside ditches were re-seeded to a Standard MTO seed mixture and had established well by the summer of 2014. The silt fencing installed adjacent to wetland and environmentally sensitive areas was removed during the late spring and early summer after it was determined that the re-seeded vegetation had established. Most of the restorative measures appear to have been successful. There are four outstanding issues that will be addressed when discussing Condition 3.3.

### 2.2 CONDITION 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").*

# UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

Predicted Impacts and Mitigation  
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**Table 2.1: Environmental Review Recommendations**

Recommendation	How the Recommendation was Implemented
Consultation with the Grand River Conservation Authority to determine whether work zones overlap with any regulated lands.	Received approval and conditions (Permit #176/13) on May 28, 2013.
Notification to the Regional Municipality of Waterloo, Township of North Dumfries, City of Kitchener and City of Waterloo is provided for the planned activities.	Notified all levels of municipal government of the proposed construction activities.
Avoid vegetation clearing during the migratory bird nesting period (May 1 – July 31).	Vegetation was cleared outside of the noted period. No nests were impacted by vegetation clearing.
Union Gas should work with the Ministry of Natural Resources to avoid habitat where possible, to develop mitigation and protective measures as appropriate to ensure compliance with the Endangered Species Act.	The potential to observe Species at Risk in the workspace was highlighted during employee site orientation. Posters, including photos and species information, were displayed in common areas at the site (i.e.: site trailer). Due diligence measures, such as inspecting heavy equipment and site walks, were communicated regularly during 'tailgate' meetings.

## 2.3 CONDITION 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.*

The following changes were made during the construction and replacement of the pipeline:

- 1 In paragraph 28 on Page 5 of the pre-filed evidence, Union Gas stated that the existing 6.3 kilometres of transmission pipeline from the Kitchener Gate Station would be abandoned in place and a new pipeline installed. It was determined that a short 225 meter section of that pipeline south of the Waterloo Gate Station could be used as part of the distribution system for Waterloo. Using this section of pipe as part of the Waterloo Distribution system will result in an increase in capacity in the distribution system, reduce the pressure drop at the exit of the Waterloo Gate Station, and defer future reinforcement of the Waterloo Distribution system. This 225 metre section of pipeline was replaced in 1981 as part of a road reconstruction project. The operating pressure of the Waterloo Distribution system will be 420 kPa verses the 3450 kPa the pipeline operated at while it was part of the transmission system. As part of Union Gas's standard operating practice for changing the operating pressure of a pipeline, Union Gas has completed an Engineering Assessment following the CSA Z662-11 code for the section of pipe where the pressure will be downgraded. This Engineering Assessment has been sent to the Technical Standards and Safety Authority.

# UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

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- 2 Huron Road west of Fischer-Hallman Road North Side - the pipeline alignment was shifted approximately 50 meters to the west on the property to facilitate future development of the property.
- 3 Bleams Road west of Fischer-Hallman Road South Side - the pipeline was realigned on the property to facilitate future development of the property.
- 4 Union Gas' original plan for constructing across Highway 7/8 was to be within the road allowance for Trussler Road and to construct the pipeline approximately four meters from the edge of the pavement on the east side of Trussler Road. During discussions with the Ministry of Transportation and the Region of Waterloo, Union Gas became aware of future development plans for the interchange including future road widening at this location. Based on this proposed future development, Union Gas designed a revised plan for this area. Union Gas' revised plan included constructing the pipeline within existing road allowance and private easements. Union Gas was able to obtain easements from two landowners adjacent to Trussler Road and Highway 7/8, so that the revised plan could be implemented. A map showing the revised location of the pipeline is attached.
- 5 Union Gas' originally plan showed a "Proposed Bleams Road Valve Site", just west of Fischer-Hallman Road. After further review by Union Gas personnel, it was determined that the Proposed Bleams Road Valve Site was not required.

## 2.4 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 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.*

### **Final Monitoring Report**

Four copies of this Final Monitoring Report are provided to the Board.

### **Log of Complaints**

No formal complaints were logged.

# UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

Predicted Impacts and Mitigation  
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## 2.5 CONDITION 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.*

Construction activities were completed by the fall of 2013. Many of the construction activities in the southern portion of the project were completed during the late summer. The site was re-vegetated with landowner input as to the preferred type of seeding.

Cleanup activities consisted of:

- Removal of debris from the easement
- Backfilling, re-grading and topsoil replacement
- Removal of temporary gravel roadways and ramps
- Re-seeding as required

During the year after construction (spring and summer of 2014), the easement was re-evaluated and site reclamation occurred, including:

- Re-grading on selected properties
- Re-seeding on selected properties
- Removal of perimeter silt fencing (after vegetation had been re-established)

No Species at Risk were observed in the workspace during construction of the project.

### Field Work scheduled for 2015

Grit Farms Inc. easement, south of Cedar Creek Road – The landowner informed Union Gas that water was ponding on the easement. Union Gas is working with the landowner to resolve this issue. A tile drainage contractor was retained to investigate the issue, and develop a tile plan. The plan has been developed and will be implemented when ground conditions permit in 2015.

## 2.6 CONDITION 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.*

## UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

Predicted Impacts and Mitigation  
March 24, 2015

**Table 2.2: All other Approvals, Permits, Licences and Certificates**

Agency	Permit Number / Name
Grand River Conservation Authority	Permit #176/13 (May 28, 2013)
Municipalities	Municipal consent received for location of pipeline on municipal road allowances.
Ministry of Tourism, Culture and Sport	Obtained Comment Letters on a case by case basis throughout the summer of 2013.



## UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

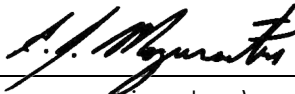
Conclusion  
March 24, 2015

### 3.0 CONCLUSION

This Final Monitoring Report has been prepared as per conditions in the OEB Order EB-2012-0430. The report provides an outline of Union Gas' compliance with the commitments and the measures implemented during construction to minimize disturbance to the environment. It is anticipated that these measures will effectively mitigate long-term impacts to the environment.

A review of the site was undertaken after the site had been re-graded to final contour and re-seeded to determine if any additional clean-up were required. Should additional clean-up be required, it will be completed as soon as conditions allow.

#### STANTEC CONSULTING LTD.

Prepared by  \_\_\_\_\_  
(signature)

**Ed Mozuraitis, P.Ag., CISEC**  
Project Manager

Reviewed by  \_\_\_\_\_  
(signature)

**Mark Knight, MA, MCIP, RPP**  
Environmental Planner



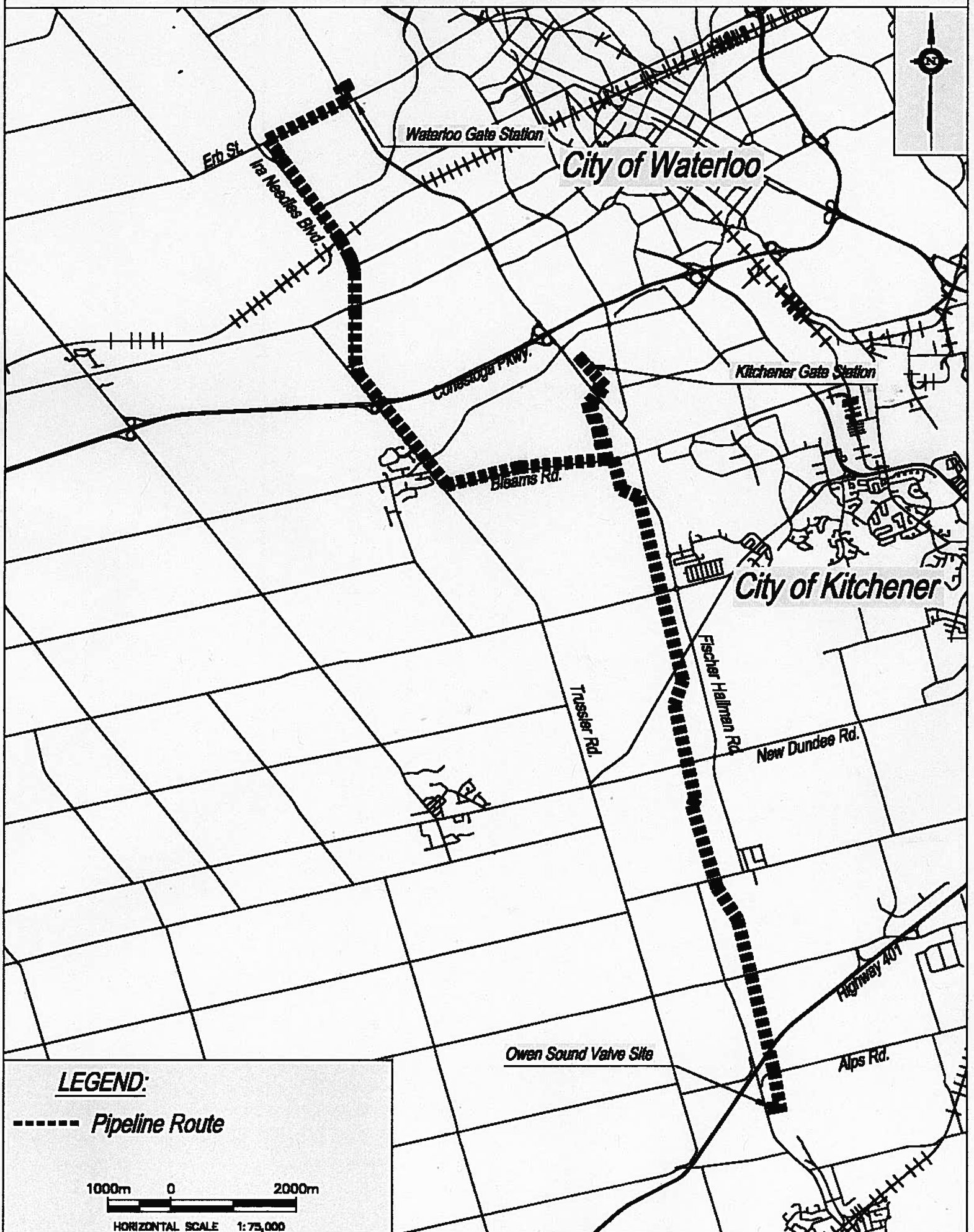


## **Appendix A:**

### **Site Map**



# Union Gas Limited Proposed Owen Sound Replacement Pipeline





## **Appendix B:**

### **EB-2013-0430 Conditions of Approval**



# UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

## 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-2012-0430 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, 2013, 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.



# UNION GAS OWEN SOUND NPS12 PIPELINE REPLACEMENT: FINAL MONITORING REPORT

## **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.