

By RESS & Courier

March 28th, 2014

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
Thunder Bay Replacement Project
Board File # EB-2012-0226**

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

THUNDER BAY REPLACEMENT PROJECT

INTERIM MONITORING REPORT

Prepared by: Union Gas Limited
Environmental Planning
March 2014

TABLE OF CONTENTS

Thunder Bay Replacement Project Interim Monitoring Report

	<u>Page No.</u>
1.0 Introduction	1
2.0 Background	2
3.0 Potential Impacts and Mitigation	3
3.1 Condition 1.1	3
3.2 Condition 1.3	3
3.3 Condition 1.4	4
3.4 Condition 2.4	6
3.5 Condition 3.1	6
3.5.1 Report Circulation.....	7
3.5.2 Landowner Concerns.....	7
3.6 Condition 3.2	7
3.6.1 Monitoring Programs.....	8
3.6.1.1 Archaeology.....	8
3.6.1.2 Species at Risk.....	8
3.6.1.3 Tree Removal/Replacement	9
3.6.1.4 Water Well Monitoring	9
3.6.1.5 Watercourses	9
3.6.1.6 Blasting	10
3.7 Condition 4.1	10
4.0 Photographs.....	11
5.0 Summary	11
 TABLE 1.....	 Potential Impacts and Mitigation Measures
 APPENDIX “A”.....	 Location Map
 APPENDIX “B”.....	 Conditions of Approval
 APPENDIX “C”.....	 Complaint Tracking
 APPENDIX “D”.....	 Photograph Inventory

Thunder Bay Replacement Project Interim Monitoring Report

1.0 INTRODUCTION

This Interim Monitoring Report is provided in compliance with the Ontario Energy Board (“Board”) Order EB-2012-0226 granting Union Gas Limited (“Union”) “Leave to Construct” the Thunder Bay Replacement Project (the “Project”).

The Project included the construction of approximately 17 km of NPS 12 inch (323.9 mm) steel natural gas pipeline to replace the existing NPS 10 inch (273.1 mm) Thunder Bay Lateral pipeline between Union’s Onion Lake Station located in Gorham Township, District of Thunder Bay to its Belrose Station located in the City of Thunder Bay.

A map of the pipeline route is located Appendix A.

The requirements for and details of this report are outlined in the specific conditions issued by the Board in its Order for EB-2012-0226, dated March 28, 2013. The Conditions of Approval can be found in Appendix B. Accordingly, the purpose of this Interim Monitoring Report is to fulfill these conditions. The Conditions of Approval addressed in this report are as follows:

- 1.1 “Union Gas Limited (“Union”) shall construct the facilities and restore the land in accordance with its Revised Application and the evidence filed in EB-2012-0226 except as modified by this Order and these Conditions of Approval.”
- 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 Board’s designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, 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.”

Thunder Bay Replacement Project Interim Monitoring Report

- 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.”
- 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 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.”
- 4.1 “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 approval, permit, licences, and certificates upon the Board’s request.”

2.0 BACKGROUND

Union was granted approval to construct the Thunder Bay Replacement Project on March 28, 2013. Construction was initiated on May 1, 2013 with the pipe placed into service on September 30, 2013. Cleanup along the pipeline corridor was completed for 2013 on October 4.

Following approval, construction progressed in a northerly direction from Dawson Road with the installation of some temporary watercourse access crossings and the removal of the existing 10 inch

Thunder Bay Replacement Project Interim Monitoring Report

pipeline. Once half load restrictions for the area were lifted, construction crews moved north to the Onion Lake Station and progressed southerly. Construction continued southerly with the removal of the existing pipe followed by the installation of the new NPS 12 inch pipeline. The order of operations were as follows with some activities completed concurrently: grading and the installation of temporary watercourse access crossings, removal of existing pipeline, back filling, stringing of new pipeline, welding, joint coating, directional drilling, trenching, lowering-in, tie-ins and backfilling.

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 at all watercourse crossings, tree/shrub replacement, perform a general overview of the right-of-way and complete any additional clean-up or work 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 Revised Application and the evidence filed in EB-2012-0226 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. Union has also restored the land according to the evidence in support of its application and in accordance with all mitigation measures recommended in the Environmental Report (ER) filed by Union Gas.

3.2 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 Ontario Pipeline Coordinating Committee (“OPCC”) review.”

Thunder Bay Replacement Project Interim Monitoring Report

Union has implemented all but one of the recommendations and mitigation measures outlined in the Environmental Study Report (ER) along with all directives identified by the OPCC. This mitigation measure will be addressed in the Spring of 2014 when Union will replant an area of white pine growth with white pine seedlings as recommended in the ER.

3.3 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, 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.”

A number of minor changes occurred during construction and they are as follows:

Dawson Road

As additional information became available, the construction approach to crossing Dawson Road changed slightly from the original design. Union and its Contractor were able to remove an existing casing pipe and install the new replacement pipeline at the same time. The original plan called for a horizontal directional bore of the road.

Paquette Road

The existing location of the pipeline in this location was located on the north side of Paquette Road. In order to remove the existing pipe and install the new pipeline several mature trees providing a visual screen to an adjacent residential home would need to be removed. Union reviewed the option of moving the pipeline to the south side of the road, within road allowance however there was not sufficient room for the pipe . Union then negotiated an easement on the south side of the road allowance to avoid any tree removal.

Thunder Bay Replacement Project Interim Monitoring Report

Beaver Pond (Stream Crossing 9)

Union's original plan had been to open cut, remove and replace the existing pipeline in the same location in the area between Hutton Park Road and Paquette Road. A portion of this area contains an active beaver pond. In order to minimize the environmental impacts to this area Union abandoned the pipeline in place, and constructed the new pipeline away from the beaver pond adjacent to the existing pipeline easement. Union discussed this change with the directly affected landowner who had no concerns with the change and granted Union the necessary land rights to implement the change.

Belrose Road

Union's original plan was to construct the pipeline within existing road allowance along the East side of Belrose Road, between John Street road northerly up to the end of Belrose Road. In a few sections, along Belrose Road a five metre strip of land had been acquired by the City of Thunder Bay, to facilitate future road widening. Union was able to negotiate and acquire a five metre wide easement in the areas not previously acquired by the City to accommodate pipeline construction.

Shaw Cable

In Union's original application, it was identified that the existing pipeline would be removed and a new pipeline installed in the original location. Shaw Cablesystems approached Union about the possibility of using some of the abandoned facilities as a conduit for their future facilities. The use of decommissioned pipelines is contemplated in Section 16 of the Model Franchise agreement. Union has transferred to Shaw Cablesystems approximately 1 kilometer of pipeline. The City of Thunder Bay is aware of this transfer and has no issues with the transfer.

Thunder Bay Replacement Project Interim Monitoring Report

John Street and McIntyre River (Stream Crossing 10)

Union's original plan was to open cut John Street and excavate the McIntyre River by dam & pump all in one process to facilitate the installation of the new pipeline while abandoning the existing pipeline in place. This method was identified during the planning stages due to bedrock within the watercourse. Upon further review by Union and its Contractor AECON it was determined the crossing could be completed by horizontal bore. This became a more favourable crossing method as it was cost effective, eliminated the need to reroute traffic around the construction site and eliminated impacts of blasting and excavating through the river. Permitting agencies were updated of the change and supported the change. Union was able to negotiate the necessary land rights to accommodate this change.

3.4 Condition 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."

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 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

Thunder Bay Replacement Project Interim Monitoring Report

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 have been 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 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.

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.

For complaints entered into Union’s complaint tracking system please see Appendix C. Complaints that remain open will continue to be addressed by Union and a status update will be provided in the Final Monitoring Report.

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.”

Thunder Bay Replacement Project Interim Monitoring Report

“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 Archaeology

Union retained the services of Stantec Consulting and Ross Archaeological Research Associates to conduct a Stage 1 and 2 archaeological assessments prior to construction in accordance with the Ministry of Tourism, Culture and Sport guidelines to identify potential archaeological sites.

The study was completed from the TransCanada Pipeline Limited Thunder Bay Station (Gorham Township) to the Ontario Power Generation Station on Mission Island.

During the Stage 2 field assessment one potential archaeological site was found and was recommended for a Stage 3 Assessment. Upon further examination of the potential archaeological site, Union determined it would not need to disturb the area of concern and had it fenced off during construction in order to prevent any inadvertent impacts. No further archaeological assessment work was required for the remainder of the Project.

The Stage 2 Assessment Report was submitted to the Ministry of Tourism, Culture and Sport and was Reviewed and Accepted into the Provincial Register of Reports.

During construction no archaeological artifacts were found.

3.6.1.2 Species at Risk (SAR)

Prior to construction, a species at risk screening was undertaken along the pipeline route by KBM Resources Group. No species at risk were identified in the study area.

Thunder Bay Replacement Project Interim Monitoring Report

3.6.1.3 Tree Removal/Replacement

Tree removal along the pipeline route commenced on January 8, 2013 and took approximately three weeks to complete. Removing trees at this time of the year avoided any avian nesting concerns.

Union will return to the pipeline right-of-way in the Spring of 2014 to replant tree seedlings along the pipeline route and around watercourses. As identified in the Environmental Report the area of white pine growth will be replanted with locally sourced white pine seedlings. Larger trees screening homes and businesses along Hunter Road and Belrose Road were also planted in the fall of 2013.

3.6.1.4 Water Well Monitoring

Prior to construction, Stantec Consulting Limited and exp Services Inc. completed a baseline private well monitoring program along the entire pipeline route. The well monitoring program was completed prior to construction activity to establish baseline groundwater conditions for comparative purposes should groundwater interference complaints arise as a result of the construction or operation of the proposed works. A total of 22 wells were sampled and no water well interference complaints were received during construction.

3.6.1.5 Watercourses

Twelve (12) watercourses were crossed as part of construction. Eleven (11) were crossed by using an isolated dry crossing technique (dam & pump) and one was crossed by directional bore. All watercourses were crossed using methods approved by the Department of Fisheries and Oceans, Ministry of Natural Resources and the Lakehead Region Conservation Authority.

Watercourses were protected prior to, during and following construction by installing either sediment fencing or straw bales or a combination of each and by installing erosion control matting or by spreading broken straw bales. Disturbed areas adjacent to the watercourses were seeded following the installation of the pipeline. All

Thunder Bay Replacement Project Interim Monitoring Report

watercourse crossings were monitored during construction by an Environmental Inspector and all watercourses will be inspected in the Spring of 2014.

3.6.1.6 Blasting

To attain proper trench depth, blasting was required along sections of the right-of-way and followed Union's Specification for Rock Excavation. Explotech, specialists in explosives, blasting and vibration monitoring was retained by Union to carry out pre-blast surveys in the vicinity of construction.

Complaints received as a result of blasting can be found in Section 3.5.2 and Appendix C.

3.7 Condition 4.1

"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 approval, permit, licences, and certificates upon the Board's request."

Union Gas obtained the following environmental permits for construction:

Ministry of Tourism Culture and Sport

Archaeology - Review and Accepted into the Provincial Register of Reports

Ministry of the Environment

Water - Permit To Take Water

Ministry of Natural Resources

Watercourse Crossings - Work Permit

Lakehead Region Conservation Authority

Watercourse Crossings - Development, Interference with Wetlands & Alterations
to Shorelines & Watercourses Permit

Thunder Bay Replacement Project Interim Monitoring Report

4.0 PHOTOGRAPHS

Located in Appendix “D” are several construction related photographs taken along the pipeline right-of-way.

5.0 SUMMARY

This Interim Monitoring Report has been prepared as per conditions in the Board Order EB-2012-0226. 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.

Tree replacement along the pipeline right-of-way will also take place in the spring of 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 PIPELINE CONSTRUCTION

Issue	Potential Impact	Mitigation
Paved Driveways and Roadways	Disruption to local traffic, landowners and tenants	<ul style="list-style-type: none"> • All paved roadways and driveways were bored when practical. • Steel plates were available and on site to provide access to landowners and tenants when needed. • One lane of traffic was left open and traffic controls were implemented as required. • Driveways were either repaired or temporarily repaired.
Gravel Driveways and Roadways	Disruption to landowners and tenants	<ul style="list-style-type: none"> • Roadways and driveways were open cut. • One lane of traffic was maintained and traffic controls were implemented. • Steel plates were on site to provide access to landowners and tenants. • Driveways were repaired.
Traffic	Disruption to local citizens	<ul style="list-style-type: none"> • One lane of traffic was maintained. • Flag persons and warning devices were used to notify traffic of the construction zone in accordance with Ministry of Transportation standards.
Public Safety	Public safety concerns	<ul style="list-style-type: none"> • Company inspectors were on site to ensure public safety during construction. • Proper signage and flag persons were utilized.
Commercial/Retail Businesses and Recreational Areas	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, where necessary.
Construction Noise	Disturbance to landowners and tenants	<ul style="list-style-type: none"> • Construction was carried out during daylight hours. • Equipment was properly muffled.
Nuisance Dust	Disruption to landowners and tenants.	<ul style="list-style-type: none"> • Dust was controlled as required. • Roadways were kept clean to keep dust at a minimum.
Construction Equipment	Disruption to landowners and tenants	<ul style="list-style-type: none"> • Equipment was stored off road shoulders when not in use and parked in areas as to not interfere with landowners.
Landowner Concerns	Disruption to landowners and tenants	<ul style="list-style-type: none"> • Company inspectors were available to take and address landowner concerns. Concerns were addressed as soon as practical. • See Section 3.5.2 and Appendix C for further details.
Fences	Disruption to landowners and tenants. Loss of control of animals inside fenced areas.	<ul style="list-style-type: none"> • Fence removal was not required as part of the project.
Front Yards	Disruption to landowners and tenants.	<ul style="list-style-type: none"> • Landowners and tenants were notified prior to construction. • Some clean-up may be required in 2014.

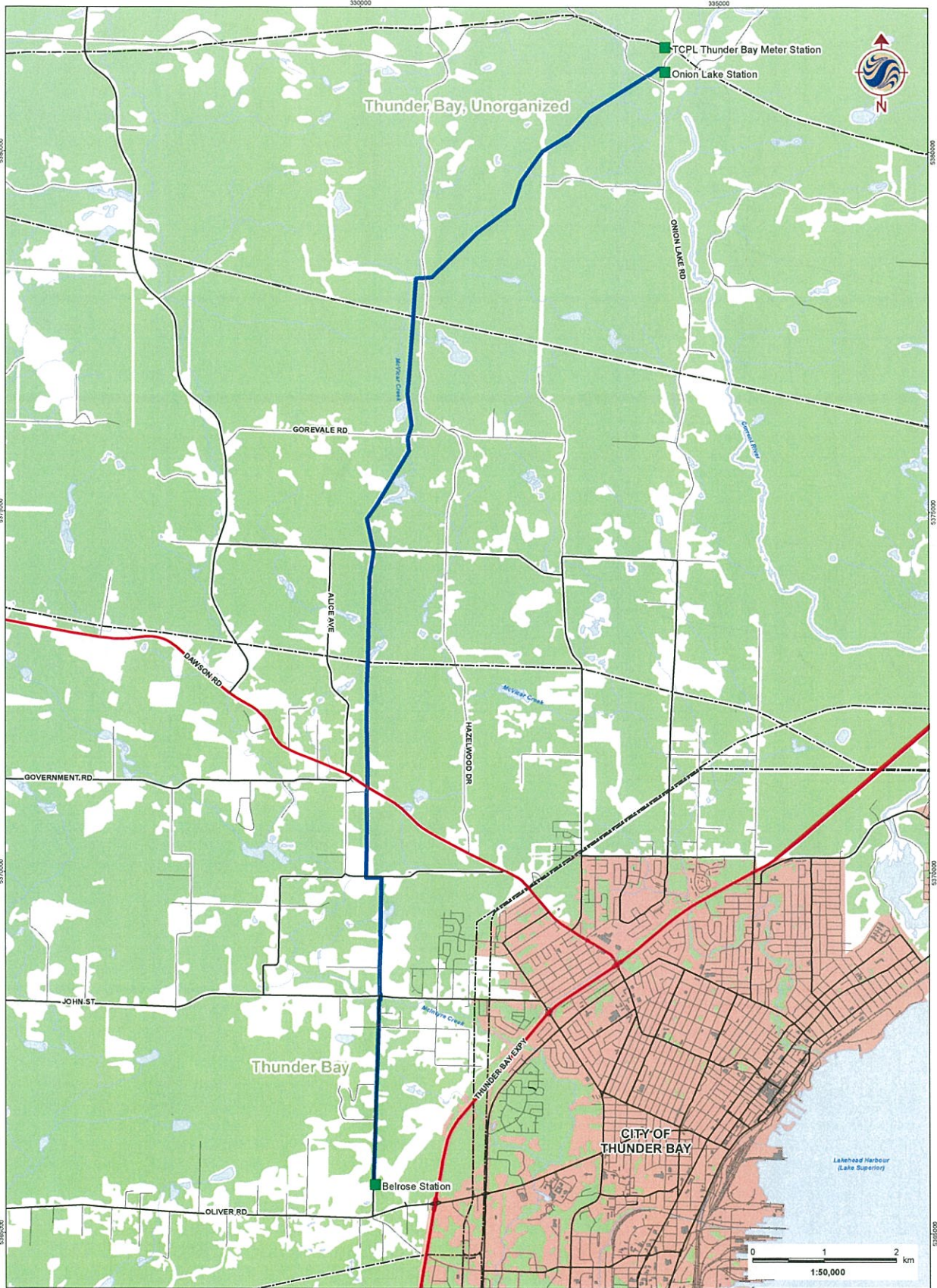
TABLE 1: MITIGATION SUMMARY (Continued)

Issue	Potential Impact	Mitigation
Mailboxes	Disruption to Landowners	<ul style="list-style-type: none"> • Mail delivery was not disrupted.
Underground Utilities	Disruption of services	<ul style="list-style-type: none"> • Obtained "locates" from all utilities and worked closely with each municipality.
Archaeology	Disturbance of heritage resources	<ul style="list-style-type: none"> • Archaeological Assessment was completed prior to construction. • No artifacts were discovered during construction.
Water Wells	Disruption to water supply	<ul style="list-style-type: none"> • Union implemented a water monitoring program. • No water well complaints were received during construction.
Trees	Damage to Trees Disturbance to wildlife	<ul style="list-style-type: none"> • Trees were removed outside of the bird nesting window. • Trees on private property were not impacted. • Trees will be replaced along the pipeline right-of-way and around certain watercourses.
Watercourse Crossings	Water quality concerns	<ul style="list-style-type: none"> • Union complied with all permit conditions. • Union adhered to all Company specifications and Department of Fisheries and Oceans endorsed Generic Sediment Control plans for watercourse crossings. • Watercourses were monitored by and Environmental Inspector throughout construction.
Natural Areas	Sedimentation run-off	<ul style="list-style-type: none"> • Sediment barriers such as straw bales and sediment fencing were used to control run-off. • The right-of-way and other disturbed areas were either seeded or hydro-seeded.
Vegetative Cover	Loss of vegetative cover leading to soil erosion	<ul style="list-style-type: none"> • Restored cover by means of seeding or hydro-seeding.
Soils: Erosion	Introduction of sediment/ silt to adjacent lands	<ul style="list-style-type: none"> • Restored disturbed soils as soon as possible after construction following Company specifications.
Road Side Ditches	Water quality concerns	<ul style="list-style-type: none"> • Ensured ditches were returned to pre-construction conditions. • Install rock rip rap and straw bale check dams along ditches as required.
Spills	Public safety issue	<ul style="list-style-type: none"> • All spills were minor in nature and did not require MOE notification. • Spills were cleaned up immediately by the Contractor.
Contaminated Soils	Dealing with contaminated materials Public safety issue	<ul style="list-style-type: none"> • Contaminated sites or hazard areas were avoided.
Cemeteries	Disturbance to unmarked grave sites and disruptive to services.	<ul style="list-style-type: none"> • One cemetery was located directly north of Union's Onion Lake Station. • Due to change in scope of the project construction activities were not required adjacent the cemetery. • No disturbance to cemetery or disruption to services.
Landfills	Potential for contaminated material.	<ul style="list-style-type: none"> • There were no landfills impacted by construction. • Suspect material was not encountered.
Site Restoration	Disturbance to public and private properties	<ul style="list-style-type: none"> • Disturbed areas were restored as soon as possible, some restoration may be required in 2014.

Appendix “A”

Location Map

W:\Users\60595867\Public\MapDocs\Thunder Bay Replacement Project\Thunder Bay Replacement Project_20130915.mxd
Created: 2013/09/15 11:51 AM
Printed: 2013/09/15 11:51 AM



Legend

- | | |
|-----------------|---------------|
| Preferred Route | Watercourse |
| Highway | Waterbody |
| Major Road | Forest Cover |
| Local Road | Built Up Area |
| Railway | Building |
| Utility Line | |

Notes

1. Coordinate System: UTM NAD 83 - Zone 16 (N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.

Client/Project
UNION GAS LIMITED
THUNDER BAY REPLACEMENT PROJECT

Figure No.

Title

**General Location Map,
Thunder Bay Replacement
Project**

September, 2013
160906067

Appendix “B”

Conditions of Approval

EB-2012-0226
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 Revised Application and the evidence filed in EB-2012-0226 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 Ontario Pipeline Coordinating Committee ("OPCC") review.
- 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, 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:
 - a) 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 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 Other Approvals and Agreements

- 4.1 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”

Complaint Tracking

Landowner Complaint Summary-2013 Thunder Bay NPS12 " Lateral Replacement

DATE	LANDOWNER	ISSUE	RESOLUTION	STATUS
08/03/2013	Brian/Pearl Peden 826 Alice Ave	Need corner boundaries staked	Surveyor staked corners	resolved
08/03/2013	Mr. Collins 971 Gorevale Road	Annoyed with back up alarms in the am	Called and was okay as would only be a week	resolved
08/10/2013	Olavi Suni 1001 Gorevale Road	Claims damage to floor in his house from blast	Provide report from Explotech and contact him as follow-up	resolved
07/04/2013	Craig Wakefield 1716 Paquette Road	Dips and bumps on cleared ROW	Mr. Wakefield very pleased with clean up	resolved
08/31/13	Peter Galle 550 Belrose Road	Driveway open longer then one day	Spread gravel on driveway	resolved
08/05/2013	Manuel/Kim Pires 1130 Melbourne Road	Trespassers on ROW- Suggest fence on Melbourne or deepen road ditch-survey stake westerly boundary along ROW	Ditched across row. Customer satisfied.	resolved
07/04/2013	Jesse Hagdu 981 Gorevale Road	Multiple issues -hole in siding from tree removal- water hole filled in- concerned re traffic with open pipeline right of way-trees may fall over on property since area tree removal-blasting effect on house foundation	Siding repair or compensation-deepen ditch-monitor tree concern-Report from Explotech shows no effects on house due to blasting	resolved
08/28/13	Ben Gunsinger 361 Hunter Road	Requested deeper ditch	City of Thunder Bay approved the Clean up - City to resolve.	resolved
08/03/2013	Bill Chivers/Wilson	Culvert Crushed at end of driveway	Township of Gorham to replace	resolved

Appendix “D”

Photograph Inventory



One of the first activities of construction is to install temporary vehicle accesses across watercourses. Above a bridge is being installed across Ferguson Creek.



Prior to installing the new NPS 12 inch pipeline the existing NPS 10 pipeline was removed. Once the pipeline is removed, the trench is backfilled and the area is prepared for the installation of the new pipeline. Although conditions were wet, construction continues as work is taking place in an area with no agricultural potential.



The new NPS 12 inch pipeline is being off loaded and strung along the pipeline easement. Prior to installing the pipe, water is removed from the trench and is discharged through a filtration device before its release into the surrounding environment.



The pipeline has been welded and is being lowered into the trench.



Foam breakers are added to a section of trench located along the pipeline easement. They are often used at very steep sections of the right-of-way to prevent erosion along the pipeline and trench.



In wet sections along the right-of-way, pipe weights in this case pipe sacks are placed on the pipeline to prevent the pipeline from floating to the surface. The pipe sacks are filled with stone and lifted into place.



Ferguson Creek was completed using a dam & pump crossing method. Water flow is maintained by pumping the water around the construction area and discharging flow back into the watercourse downstream of the construction site.



The pipeline at Ferguson Creek has been lowered into the trench and backfilling is near completion.



Ferguson Creek following the installation of the pipeline. The creek bed was capped with large rock to resemble pre construction conditions.



The McIntyre River and John Street crossings were proposed to be crossed by open cut. After further investigation by Union and its Contractor the crossings were completed by horizontal bore.



The photos above and below show the right-of-way following clean up in the Fall of 2013.



