

February 11, 2013

BY RESS & Courier

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

Dear Ms. Walli:

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

Further to the interrogatories received in this matter, please find attached two copies of Union’s responses.

Sincerely,

[original signed by]

Mary Jane Patrick
Administrative Analyst, Regulatory Projects
:mjp
Encl.

cc: Neil McKay, Manager Facilities Applications
Zora Crnojacki, Project Advisor
All intervenors

UNION GAS LIMITED
Response to Interrogatory
from Board Staff

1. Reference: Pre-filed Evidence, Page 7
 - a) Please provide the anticipated timeline for obtaining the necessary permits for location and construction of the project.

Response:

- a) Union is currently submitting applications to Hydro One, various Provincial Government Agencies, Municipalities and Environmental Agencies with plans to have all approvals and permits in place by mid April 2013.

UNION GAS LIMITED
Response to Interrogatory
from Board Staff

2. Reference: Pre-filed Evidence, Page 8
 - a) Please provide an update on the anticipated timeline for obtaining the required land rights for the project location and construction.

Response:

- a) 44% of the required land rights for this project have been obtained and the remaining land rights are anticipated to be obtained by the middle of April 2013.

UNION GAS LIMITED
Response to Interrogatory
from Board Staff

3. Reference: Pre-filed Evidence
- a) Please list any outstanding or unresolved issues as a result of any of the consultations undertaken with respect to this project and indicate when any such issues are expected to be resolved.

Response:

- a) Union has reached agreement with Mattamy Homes for alignment of 850 m of pipeline easement north of Huron Road. City of Kitchener consent is now needed. Also, approval of the Grand River Conservation Authority is needed for a 220 metre portion adjacent to a woodlot. Both approvals are expected by late March 2013. Discussions with Mattamy will continue to confirm the pipeline profile will not interfere with planned subdivision services. Agreement on the profile is expected by early March 2013.

Union has reached agreement with Schlegel Development for alignment of 1,200 metre of pipeline easement south of Bleams Road. Discussions with Schlegel will continue to confirm the pipeline will not interfere with planned subdivision services. Agreement on the profile is expected by late March 2013.

Discussions with the Region of Waterloo are continuing for alignment of two NPS 12 pipelines along a 500 metre stretch of Fischer Hallman Road. Agreement on the alignment is expected by late March 2013.

Attached as Attachment # 1 to this interrogatory is summary of the OPCC review outlining comments from various agencies and Union's response.

OPCC Review Summary 2013

Owen Sound Replacement Project

AGENCY	COMMENT	RESPONSE
<p>Letter received dated November, 28, 2012 Mr. Oscar Alonso, P. Eng. Fuel Safety Engineer Technical Standards & Safety Authority</p>	<p>The letter indicated that the pipeline specifications implied the operating pressure of 900 psi for the pipeline would be high within a Class 3 location and that further consultation and a tour of the area may be desirable.</p>	<p>The design Engineer for the project contacted Oscar to discuss the pipeline specifications and resolved any concerns as indicated in attached email dated January 22, 2013.</p>
<p>Letter received November 28, 2012 Mr. Scott Amos Director of Development Approvals City of Waterloo</p>	<p>Indicated that any trees impacted during construction will require compensation from Union Gas.</p>	<p>Email sent to Mr. Amos January 22, 2013 indicating the pipeline running line within the City of Waterloo was finalized in early January 2013 and his department will be contacted to discuss tree issues.</p>
<p>Letter received January 10, 2013 Region of Waterloo Mr. Tim Van Hinte Principal Planner (Environmental)</p>	<p>Indicated that proposed work will be located within the Region's Greenlands Network as designated in the Regional Official Plan and protection of the Core Environmental Features are required.</p>	<p>Phone conversation January 22, 2013 and Email sent January 25, 2013 informing Mr. Van Hinte that mitigation plans have been submitted to the Ministry of Natural Recourses which deal with environmental protection along the pipeline corridor including the Regions Environmental Core Features. Following the MNR review, the information will be forwarded and results discussed as necessary.</p>
<p>Letter received September 7, 2012 Mr. Shawn Callon Principle Planner, Waterloo Region District School Board</p> <p>Letter received October 23, 2012 Mr. Dennis Cuomo Manager of Planning, Waterloo Region District School Board</p> <p>Letter received January 11, 2013 Mr. Dennis Cuomo Manager of Planning, Waterloo Region District School Board</p>	<p>Concerns that the location of the new pipeline does not meet minimum required setbacks for a high pressure pipeline in the vicinity of a designated school site.</p>	<p>Letter sent November 7, 2012 and January 28, 2013. Union outlined the specific safety standards that are followed during the installation of the pipeline to ensure the system integrity and public safety.</p>
<p>Letter received dated October 5, 2012, from Karolyne Pickett. Species at Risk Biologist Ministry of Natural Resources</p> <p>Email received January 29, 2013 Graham Buck Species at Risk Biologist Ministry of Natural Resources</p>	<p>Comments concerning possible Species at Risk (SAR) along the pipeline corridor.</p> <p>Clarification concerning various SAR</p>	<p>Letter January 18, 2013 outlining the mitigation to be undertaken for SAR during construction.</p> <p>Email sent dated January 30, 2013 providing additional comments for SAR.</p>

Communications with First Nations and Métis regarding the project.	Continued updates on project.	Please see attached itinerary and correspondence
Letter received February 1, 2013 Grand River Conservation Authority Beth Brown Supervisor of Resource Planning.	Comments in respect to the protection of wetland areas along the pipeline route and the requirement of a permit prior to construction.	A permit under Ontario Regulation 150/06 will be acquired prior to construction.



November 28, 2012

Mr. Norm Dumouchelle,
Environmental Planner,
Union Gas Limited,
50 Keil Drive North
Chatham, ON N7M 5M1

Re: Union Gas Limited – Owen Sound Replacement Pipeline Project.

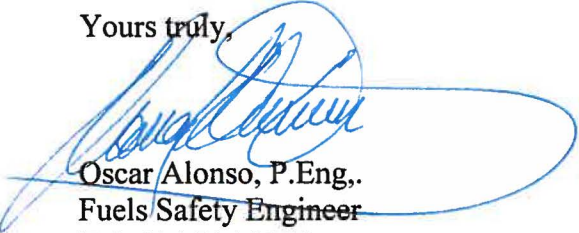
Dear Mr. Dumouchelle,

I reviewed the referenced project attached to your letter dated November 2, 2012, (received Nov. 13, 2012). The construction of the proposed NPS 12 natural gas pipeline replacement would imply the operation of a pipeline at pressure close to 900 psig in what would appear it is (in parts) a populated area, still within class 3 location.

As this pipeline will be operated at approx. 40% SMYS, the requirements in Section 2.(9) of the Oil and Gas Pipeline System Code Adoption Document (CAD), FS-196-12 would require consideration to emergency communication meetings.

Your letter of November 2, 2012 or the report prepared by Azimuth Environmental Consulting Inc. dated November 2012 for Union Gas Limited appears to be silent on this issue. Further consultation and eventually a touring of the congested area may be desirable. In addition, I would suggest to fill the attached Application Form for Consultation, in order for us to charge the time used in reviewing this project.

Yours truly,



Oscar Alonso, P.Eng.,
Fuels Safety Engineer
Tel. 416 734 3353
oalonso@tssa.org

c: Ms. Zora Crnojacki
Chairperson, OPCC
Ontario Energy Board
P.O. Box 2319
2300 Younger Street, 27th. Floor

Toronto, ON M4P 1E4

[I/fscsb/oa/Union Gas Owen Sound Project, Dumouchelle.com](http://fscsb/oa/Union Gas Owen Sound Project, Dumouchelle.com)

Dumouchelle, Norm

From: Grant Strachan [gstrachan@aecon.com]
Sent: January 22, 2013 8:39 AM
To: Dumouchelle, Norm
Subject: FW: FW: Strausburg Station

-----Original Message-----

From: Oscar Alonso [<mailto:oonsonso@tssa.org>]
Sent: December-21-12 10:04 AM
To: Grant Strachan
Subject: Re: FW: Strausburg Station

Thanks Grant. This resolves our concerns. I'll send a letter to Norm Dumouchelle with copy to the OEB accepting the project.

Merry Christmas and Happy New Year,

Oscar Alonso

On Thu, Dec 20, 2012 at 2:14 PM, Grant Strachan <gstrachan@aecon.com> wrote:

> Hi Oscar,
>
>
>
> Sorry I'm late getting back to you. I have been travelling quite a
> bit lately and I'm finally back in the office.
>
>
>
> I got your message from Dec 14 regarding your review of Union's Owen
> Sound Replacement project. I believe you wanted to know the location
> of the Strausburg pressure cut station. Please find attached a map
> with the aerial photography. As you will see, the Strausburg station
> is located south of the built up area. The key point here is that the
> pressure is cut before the pipeline enters a class 3 area.
>
>
>
> If you have any questions or comments, please let me know.
>
>
>
> Thanks
>
>
>
> Grant
>
>
>
> ■ GRANT STRACHAN, P.Eng. // DIRECTOR, ENGINEERING // AECON UTILITY
> ENGINEERING
>

Dumouchelle, Norm

From: Dumouchelle, Norm
Sent: December 6, 2012 1:14 PM
To: 'Grant Strachan'
Subject: RE: FW: Owen Sound Design Summary Sheet

Thanks Grant

-----Original Message-----

From: Grant Strachan [<mailto:gstrachan@aecon.com>]
Sent: December 6, 2012 12:55 PM
To: Dumouchelle, Norm; Adams, George
Cc: Jennifer Pond; Dubeau, Chuck; Spadotto, Denise
Subject: FW: FW: Owen Sound Design Summary Sheet

Fyi

-----Original Message-----

From: Oscar Alonso [<mailto:oonson@tssa.org>]
Sent: December-06-12 12:19 PM
To: Grant Strachan
Subject: Re: FW: Owen Sound Design Summary Sheet

Thanks Grant,

I'm in Victoria, BC, attending a CSA Z662 meeting. Next week I plan to be back in office and I'll check in detail the changes, but it appears that the changes would remove our concerns.

Thanks again,

Oscar Alonso

On Wed, Dec 5, 2012 at 10:32 AM, Grant Strachan <gstrachan@aecon.com> wrote:
>

--

Oscar Alonso, P.Eng.,
Fuels Safety Engineer

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This electronic message and any attached documents are intended only for the named recipients.

This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message.



Development Services
Development Approvals

November 28, 2012

Norm Dumouchelle, Environmental Planner
Union Gas Limited
P.O. Box 2001
50 Keil Drive North
Chatham, ON
N7M 5M1

To Mr. Dumouchelle:

Re: Owen Sound Pipeline Replacement Project
City of Waterloo Comments

Staff has reviewed the Environmental Report for the above referenced project, prepared by Azimuth Environmental Consulting Inc., dated November 2012. It is our understanding that within the limits of the City of Waterloo, the new pipeline is to be accommodated entirely within the road allowances of Ira Needles Boulevard, Fischer-Hallman Road and Erb Street West, all of which are Regional roads, and West Hill Drive, a Municipal road. The construction and installation of the pipeline may adversely impact a number of existing street trees within the road allowance. Section 8.3 acknowledges that Union Gas will restore the road allowance, including lost or damaged street trees, "to the pre-construction condition or to the specification defined in consultation with the affected Municipality".

Street Tree By-law No. 99-10 (enclosed) is currently in effect on both municipal and regional roads within the City of Waterloo. To remove a street tree, the By-law requires that City Staff be properly notified and given time to assess the subject trees(s). Notice must be posted on that tree at least 14 days prior to its removal. Union Gas will be responsible for the removal of any trees necessary to undertake the project at their own cost. The City will require compensation from Union Gas for the removal of any street trees as a result of the project at the following standard rates:

- Page | -

Waterloo City Centre | 100 Regina Street South, PO Box 337 STN Waterloo, Waterloo, ON, N2J 4A8

P. 519.886.1550 | F. 519.747.8760 | TTY. 1.866.786.3941 | www.waterloo.ca

The City of Waterloo is committed to providing accessible formats and communication supports for persons with disabilities. If another format would work better for you, please contact Development Services at 1.519.747.8752 or TTY at 1.866.786.3941.

Please consider the environment before printing this letter.

- For each small tree with a 20cm dbh or less, one (1) replacement tree of at least 70 mm caliper.
- For each tree greater than 20cm dbh, one (1) replacement tree of at least 70 mm caliper per 10 square metres of canopy lost.

Prior to the whole or partial removal of any street tree within the subject road allowances, please contact either Cheryl Huxted (Forestry Technologist) 519-747-8641 or John Stewart (Forestry and Horticulture Operations Manager) 519-747-8610.

Should you have any questions, please do not hesitate to contact the undersigned at your convenience.

Sincerely,



Scott Amos, BES, MCIP, RPP
Director of Development Approvals
City of Waterloo
P: 519.747.8758
F: 519.747.8523
TTY: 1.866.786.3941
E: scott.amos@waterloo.ca

cc: John Stewart, johnstewart@waterloo.ca

Encl.

Dumouchelle, Norm

From: Dumouchelle, Norm
Sent: January 22, 2013 1:22 PM
To: 'scott.amos@waterloo.ca'
Cc: 'johnstewart@waterloo.ca'
Subject: Owen Sound Replacement Pipeline

Hi Scott

Thank you for your letter dated November 28, 2012 informing Union Gas of our responsibilities for the compensation of city trees removed during the installation of the new pipeline. The Project Engineer has recently met with city representatives to adjust the pipeline route and finalize the running line. Now that this exercise has been completed , I will contact either Cheryl Huxted or John Stewart in the near future to arrange a site visit to discuss any trees that may be affected during construction.

Thank You

Norm Dumouchelle
Environmental Planner
Union Gas Limited
e-mail: npdumouchelle@uniongas.com
1-866-949-1595 ext. 76955



Tim Van Hinte 519-575-4500 x3649
File: D04-20082/DA

January 10, 2013

Mr. Norm Dumouchelle
Environmental Planner
Union Gas Limited
P.O. Box 2001
50 Keil Drive North
Chatham, Ontario N7M 5M1

Dear Mr. Dumouchelle:

**RE: ENVIRONMENTAL PLANNING COMMENTS
UNION GAS LIMITED OWEN SOUND REPLACEMENT PROJECT**

Thank you for your correspondence to Mr. Rob Horne, dated May 7, 2012, and to Mr. Mike Murray, dated November 2, 2012, notifying the Region of Waterloo of Union Gas Limited's proposed Owen Sound Replacement Project. In addition, staff appreciates the opportunity to comment on the Environment Report (ER) for this project titled:

- *Owen Sound Pipeline Replacement Project Environmental Report*, prepared by Azimuth Environmental Consulting Inc., November 2012

1. Policy Context

The *Regional Official Plan (ROP)*, approved by the Province on December 22, 2010, sets out the policy framework related to the Region's Greenlands Network. A key objective of the plan is to maintain, enhance and wherever feasible restore environmental features and the ecological and hydrological functions of the Greenlands Network including the Grand River and its tributaries and the landscape level linkages among environmental features. In this context, Chapter 7 of the ROP includes policies with respect to development and/or site alteration within or contiguous to designated Core Environmental Features, considered as provincially or regionally significant.

In accordance with ROP Policy 7.C.11, proposed infrastructure projects (including gas pipelines) within or contiguous to Core Environmental Features require the submission of an Environmental Impact Statement or equivalent study. In reviewing such a study, the ROP provides the following direction:

7.C.12 Where a study completed in accordance with Policy 7.C.11 demonstrates to the satisfaction of the Region that the construction of the *infrastructure* project will:

- (a) result in localized and/or reversible impacts to the features and *ecological functions* of the Core Environmental Feature, and that other alternatives are less feasible from a technical, environmental and/or financial perspective, the Region and Area Municipalities will, without amendment to this Plan;
 - i) require that appropriate mitigation measures be implemented; and
 - ii) approve the undertaking; or
 - iii) support the undertaking in comments, submissions or recommendations

2. Environmental Comments

Environmental Planning staff in the Region's Planning, Housing & Community Services Department has completed its review of the ER and is of the opinion that the anticipated environmental effects would be "localized and/or reversible," and thus we support the undertaking in principle. We provide the following comments for your consideration:

- a. **Core Environmental Features** - Based on the scale of the figures provided in the ER, it is difficult to determine which Core Environmental Features may be affected by the proposed pipeline route. Our preliminary estimation is that the proposed pipeline route is not within any Core Environmental Features in the ROP but rather "contiguous" (as defined by the ROP) to the following four features:
 - **Williamsburg Woods Environmentally Sensitive Policy Area** located on the Williamsburg Cemetery and Mattamy Trillium lands in Kitchener. The Region attended a meeting on January 8, 2013 with Mattamy Homes and the City of Kitchener related to this proposed subdivision and it was indicated that the pipeline right-of-way will be re-aligned within the outer 15 metres of the 30-metre buffer around the Core Environmental Feature on the property. This detail is not included in the ER. Regional staff is not necessarily opposed to this alignment in that it is expected to be outside the root zone of the dripline trees and in a formerly cultivated farm field, but confirmation is required;
 - **Significant Woodland** associated with the Laurentian West Wetland Complex located at the northwest corner of Fischer-Hallman Road and Cotton Grass Street in Kitchener;
 - **Significant Woodland** located to the east of Trussler Road between Ottawa Street South and Bleams Road; and
 - **Significant Woodland** located to the west of Ira Needles Boulevard and north of the Conestoga Expressway.

In order to provide a more detailed evaluation of potential impacts of the proposed pipeline route upon the Core Environmental Features, it would be helpful for Union Gas to provide the Region with detailed pipeline route mapping at a larger scale or preferably in digital

format, including proposed locations of all work staging areas, topsoil storage areas, access roads and/or other temporary work areas. Clarification in this regard would be useful in our evaluation of this project.

- b. **Threatened and/or Endangered Species** - The ER noted that several threatened and/or endangered species are known to occur or have been documented in the study area. As you are aware, these species are regulated by the *Endangered Species Act* and are under the jurisdiction of the Province. The Region will not provide comments related to these species as Union Gas is engaged in an ongoing process with the Ministry of Natural Resources.
- c. **Section 3.3.4 Wetlands (p. 9)** – The wetland to the north of Cedar Creek Road just east of Northumberland Street is not known to be part of the Roseville Swamp – Cedar Creek PSW Complex and is therefore not designated as a Core Environmental Feature in the ROP. The Grand River Conservation Authority (GRCA) should be contacted for further clarification.
- d. **Section 8.3 Biological Environment (p. 27)** – This section of the report references such activities as removal of trees adjacent to woodlots and wetlands as well as other activities that may generate negative impacts on Core Environmental Features. While staff understands that specific tree removal locations and/or wetland crossings may not be available until the detailed design stage, Regional staff request an opportunity to review such areas at that time. (Please see mitigation measures below).
- e. **Section 8.3.2 Wetlands (p.29)** – Staff concurs with the proposed directional drilling under Fischer Hallman Road in the vicinity of the Laurentian West Wetland Complex and requests that Union Gas consider using directional drilling to mitigate impacts adjacent to other Core Environmental Features if appropriate and feasible.
- f. **Section 8.3.3 Vegetation (p. 31)** – Staff concurs that, due to the potential presence of Regionally significant breeding birds, vegetation removal including tree cutting should only be carried out in accordance with the *Migratory Bird Convention Act*.

3. Mitigation Measures

Section 8.4 of the ER summarizes the possible mitigation/restoration measures to minimize potential negative environmental impacts of the proposed project. While this section provides a useful summary of potential mitigation, staff is unable to comment in any great detail on proposed mitigation without a complete and detailed list of mitigation measures for the proposed project as they affect the Regionally-designated Core Environmental Features. Please forward a copy to the undersigned for review.

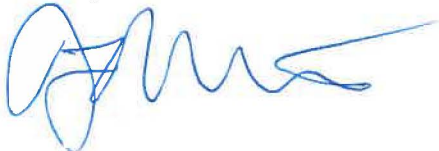
At this time, the Region recommends that the following mitigation measures be implemented:

- a. **Notification of Work** – Prior to any site alteration within or contiguous to a Core Environmental Feature designated in the ROP, Union Gas is requested to contact the undersigned to discuss proposed mitigation measures.

- b. **Breeding Birds** – Removal of vegetation within or contiguous to a Core Environmental Feature during breeding bird season (April 30th – August 1st inclusive) must comply with the *Migratory Birds Convention Act*.
- c. **Environmental Inspector** – Regional staff concur with the conclusions of the ER in that a certified environmental inspector or biologist be present to review proposed site alteration and mitigation measures within or contiguous to any Core Environmental Features.
- d. **Erosion and Sediment Control Measures** – Prior to any site alteration within or contiguous to a Core Environmental Feature, Union Gas is requested to submit an erosion and sediment control plan describing proposed mitigation measures to the appropriate local authorities for review.
- e. **Location of Trench Spoils/Topsoil Piles** – When excavating the pipeline trench and associated areas, Union Gas should make reasonable effort to locate trench spoils and/or topsoil piles on the side of the trench opposite to the Core Environmental Feature in order to minimize soil compaction, damage to trees by construction equipment, and sedimentation.
- f. **Restoration of Disturbed Areas** – Following any site alteration within or contiguous to a Core Environmental Feature, Union Gas should restore all disturbed vegetative areas with locally appropriate native species where feasible or other appropriate landscape treatments. Union Gas is advised to consult the Region's *Listing of Trees and Shrubs Native to the Regional Municipality of Waterloo and Invasive Alien Herbaceous Species (1993)* for guidance in this regard (enclosed).

In summary, thank you for the opportunity to comment on this project and please contact me should you have any questions.

Sincerely,



Tim Van Hinte, BES, MRM, MCIP, RPP
Principal Planner (Environmental)
tvanhinte@regionofwaterloo.ca

- Encl. Listing of Trees and Shrubs Native to the Regional Municipality of Waterloo and Invasive Alien Herbaceous Species (1993)
- c.c. Beth Brown, Grand River Conservation Authority
Barbara Steiner, City of Kitchener
Robyn McMullen, City of Waterloo
Steve Stone, Township of North Dumfries
Paul Neals, Azimuth Environmental Consulting

Dumouchelle, Norm

From: Dumouchelle, Norm
Sent: January 25, 2013 9:22 AM
To: 'tvanhinte@regionofwaterloo.ca'
Subject: Union Gas - Owen Sound Replacement Project

Hi Tim

Thank you for your comments in the letter dated January 10, 2013 regarding the proposed Owen Sound Replacement Project scheduled to be constructed this summer. As indicated during our conversation this week, a few of the features contiguous to the Core Environmental Features are under discussion with the Ministry of Natural Resources due to their Species At Risk components. Union has submitted documentation for MNR review outlining the proposed mitigation techniques to be utilized for the protection of the wetlands, woodlots and SAR as well as erosion and sediment control. I will forward you information pertaining to the four features indicated in your letter within the next few weeks following further consultations with the MNR and Mattamy Homes representatives.

If you have any questions please don't hesitate to contact me.

Thank You

Norm Dumouchelle
Environmental Planner
Union Gas Limited
e-mail: npdumouchelle@uniongas.com
1-866-949-1595 ext. 76955

Ministry of
Natural Resources

Ministère des
Richesses naturelles

Guelph District
1 Stone Road West
Guelph, Ontario
N1G 4Y2

Telephone: (519) 826-4955
Facsimile: (519) 826-4929



October 5, 2012

GU-L-012-12

Lisa Moran, B.Sc. Env.
Terrestrial Ecologist
Azimuth Environmental Inc.
85 Bayfield Street, Suite 400
Barrie ON L4M 3A7

Dear Ms. Moran,

Thank you for your submission regarding the potential for impacts on species at risk (SAR) of the proposed Owen Sound Pipeline Replacement Project located in the Regional Municipality of Waterloo. I understand that this project would involve the excavation to daylight of a 24 km long stretch of pipeline located between the Owen Sound Valve Site (OSV) and the Waterloo Gate Station (WGS). From the OSV north to Bleams Road (southern portion of the project), the existing pipeline would be removed and replaced with a new pipeline along the existing alignment. Between Bleams Road and the WGS (northern portion of the project), the existing pipeline would be removed and the new pipeline installed along a new route confined to existing road right-of-ways. The excavation would require topsoil to be stored in a 4-metre wide area along the pipeline. Furthermore, the pipeline segment traversing the wetland located just north of Cotton Grass Street along Fischer Hallman Road will be replaced via directional drilling.

I understand that Azimuth Environmental Inc. ("Azimuth") conducted a search of the NHIC Biodiversity Explorer database for species at risk records within and adjacent to the project footprint. This search yielded records for American Badger, Black Tern, Cerulean Warbler, Eastern Ribbonsnake, and salamanders belonging to the Jefferson/Blue-spotted salamander complex. MNR had also previously noted that the segment of the pipeline located between Bleams Road and Huron Road traverses habitat for the endangered Jefferson Salamander, which is protected by regulation under the ESA.

Notwithstanding the above, it is important to note that the province has not been surveyed comprehensively for the presence of species at risk; therefore the absence of an NHIC record in a particular geographic area does not indicate the absence of the species in that area. It is the responsibility of the person engaging in the activity (the proponent) to remain in compliance with the *Endangered Species Act, 2007* (ESA). The onus is on the proponent to ensure that endangered and threatened species will not be harmed or killed, and that their habitat will neither be damaged or destroyed, while carrying out the activity. If an activity will be conducted in such a manner as to avoid any contravention of the ESA, the activity may proceed without an authorization under the Act.

To ensure compliance with the ESA, the first step a proponent typically takes after conducting a search of the NHIC database is to survey the areas that will be directly and indirectly impacted by the activity for the presence of species at risk. From there the Ministry of Natural Resources assesses whether the proposed activity is likely to kill or harm members of, and/or damage or destroy the habitat of SAR that have been detected within the project footprint. If the determination is positive, the activity cannot lawfully proceed unless it is authorized by the Minister of Natural Resources.

Consistent with Guelph District's recommended approach for SAR surveys, I understand that Azimuth assessed the habitat found within the project footprint, and then cross-referenced the habitats identified during the habitat assessment with the habitat requirements of the species at risk that could occur in that area based on the Regional Municipality of Waterloo SAR List that was provided by our office on June 11, 2012. Based on this analysis Azimuth determined that that the potential exists for the project footprint to overlap with habitat for Bobolink, Eastern Meadowlark, Henslow's Sparrow, Northern Bobwhite, American Badger and Blanding's Turtle. Azimuth did not however survey specifically for those species determined to

have the potential to occur within the project footprint, although in the course of the habitat assessment, Azimuth detected the presence of Bobolink, Butternut and Barn Swallow.

The remainder of this document addresses all species at risk considerations with respect to this project, except for the Butternut occurrences. Because the removal of three Butternut trees would be required in order to excavate the pipeline in that location, ESA protection provisions may apply. It is my understanding that Azimuth will submit twig samples for genetic testing next week, in order to determine whether the trees are hybrid trees, and thus not subject to the ESA provisions. **MNR will provide further direction regarding the Butternut under separate cover, once the hybridity test results become available.**

In the absence of SAR-specific surveys, MNR proceeded to determine whether the excavation activities could impact any of the 11 species (Butternut excluded) identified in this document (based on results of the NHIC search, habitat types present, and species/habitat known to occur). MNR concurs that the pipeline does not overlap with Black Tern habitat, and that impacts to Cerulean Warbler are unlikely since excavation activities will not occur within woodlands. Excavation activities in agricultural fields and meadows could impact American Badger, Bobolink, Eastern Meadowlark, Henslow's Sparrow, Northern Bobwhite, and Barn Swallow. Given that the project involves stream crossings, Eastern Ribbonsnake could also be impacted. Finally, excavation activities occurring in wetlands and near woodlots could impact Jefferson Salamander and Blanding's Turtle.

With respect to the above eleven species only, the project may proceed without the issuance of an ESA permit if it is implemented according to the following conditions:

- activities within hayfields, fallow fields and meadows occur only between August 1 and March 14;
- activities within Jefferson Salamander regulated habitat occur only between December 1 and March 7;
- activities in and adjacent to all other Provincially Significant Wetlands and adjacent to all other woodlots occur only between October 15 and March 14;
- staff inspect the excavation zone for the presence of animal burrows prior to starting excavation activities, and contact the MNR Guelph District at once if they demonstrate characteristics of American Badger burrows;
- staff remain vigilant and alert to the presence of snakes, salamanders and turtles within the excavation zone, and advance equipment at a slow pace to permit any animals to leave the area in order to avoid trampling;
- should species at risk (plant or animal) be detected during the project, the proponent will contact MNR Guelph District at once for further direction. To be clear, snakes and turtles should not be handled prior to phoning the MNR office; lifting a turtle by the tail, for example, can cause its spine to fracture;
- all areas disturbed by the activities will be restored to their original state prior to the end of the applicable timing window.

Should any of the project parameters change, or if it is not possible to comply with the above conditions, please contact me immediately to obtain advice on whether the changes require authorization under the ESA. MNR will provide a map showing the segment of the pipeline that is located within Jefferson Salamander habitat.

I appreciate your efforts and collaboration in protecting species at risk during this pipeline repair and construction project.

Sincerely,

Karolyne Pickett, M.Sc.
Species at Risk Biologist/ *biologiste- espèces en péril*
519-826-4961
karolyne.pickett@ontario.ca



Environmental Assessments & Approvals

January 18, 2013

AEC 12-091

Ministry of Natural Resources
Guelph District
1 Stone Road West
Guelph, Ontario
N1G 4Y2

Re: SAR – Owen Sound Pipeline

Dear Ms. Pickett:

This letter is intended to provide MNR with information pertaining to the the mitigation and construction measures to be undertaken with regard to Species At Risk for the construction of the Owen Sound Pipeline Replacement Project. Based on MNR's review of Azimuth's SAR assessment for the area as documented within MNR's October 5, 2012 letter, 10 species require consideration throughout the duration of this project including Butternut (END), American Badger (END), Bobolink (THR), Eastern Meadowlark (THR), Henslow's Sparrow (END), Northern Bobwhite (END), Barn Swallow (THR), Eastern Ribbonsnake (SC), Jefferson Salamander (END) and Blanding's Turtle (THR). At this time, Eastern Ribbonsnake is designated as Special Concern and therefore, this snake or its habitat is currently not protected under Ontario's Endangered Species Act. Union Gas and Azimuth Staff met with MNR on Tuesday November 13, 2012 to discuss these potential and known SAR along the Owen Sound Replacement Pipeline route. Based on discussions during this meeting, we provide MNR with the following information:

Mapping that provides the location of the non-row crop habitat including hayfields and cultural meadows along the replacement pipeline route

Please refer to attached figures. Azimuth Figure 2a, 2b and 2c show an overall portrayal of the approximate locations of the non-row crop habitat along the route. The Union Gas figures (M613-01, M613-02, M613-03, M613-04, M613-09, M613-10) focus in on the specific areas where mitigation will be required.

Proposed mitigation pertaining to all non-row crop habitats will be prepared and will address locations where it may be possible to delay construction after August 1 and thus avoid the active nesting season for grassland bird SAR. If not possible, alternative mitigation measures will be suggested as discussed during the meeting.



The majority of the non-row crop vegetation is concentrated within the southern portion of the replacement pipeline route from Highway 401 to Roseville Road (Figure 2c). Union Gas' preferred option would be to delay construction within these areas in order to avoid any of the active nesting seasons for grassland birds, however, given the logistics of the process of replacing the pipeline it has been deemed impractical. This pipeline project has been divided into a number of phases. During each phase, the portion of the pipeline being replaced is shut down to allow for construction. This is why construction must occur when there is less demand for natural gas during the 'fair weather' months. Union Gas has explored the option of rearranging the construction schedule in order to complete construction from the Owen Sound Valve Site to Roseville Road after August 1st, however, this poses a number of technical and supply issues which could place the project in jeopardy of not being completed for the November 1, 2013 deadline when the pipeline needs to be operational. Given the significant role this pipeline plays in supplying natural gas to the Kitchener- Waterloo area the schedule for in-service is not flexible.

Therefore, Union Gas proposes the following mitigation measures within the non-row crop habitat (i.e. hayfields, fallow fields and meadows) where works will be required within the May – August window which is when the majority of any potential grassland SAR birds within the area would be nesting.

- All work areas within the non-row crop habitat from Highway 401 to Roseville Road will be mowed prior to May in order to deter potential nesting within the Union Gas work area (Union Gas Figures M613-02, M613-03);
- A 10m mowed buffer will be maintained on each side of the easement adjacent to the work areas to deter nesting from occurring adjacent to work areas and hence avoid potential disturbance;
- A silt fence will be installed prior to any on site works and construction along either side of the 10m mowed buffer (Union Gas Figure M613-02, M613-04).
- In the case of the lands in proximity to the Roseville Swamp, only the west side of the work area will be mowed. Lands to the east are row-crop. A sediment fence will be installed immediately adjacent to the work area and another further downslope adjacent to the 10m mowed buffer both of which will be maintained throughout the duration of construction. (Union Gas Figure M613-03);
- All mowed areas within and adjacent to the work areas will be maintained (i.e. mowed) prior to and throughout the duration of construction works within the work area and adjacent buffer lands (i.e. 10 m);
- Once construction is complete, the site will be restored to its previous state;
- Once restoration is complete, the silt fence will be removed; and



- In the case of the lands in proximity to Roseville Swamp, the silt fence will be removed once the vegetation has re-established itself in order to prevent sedimentation into the wetland

The locations of the fields in which mitigation measures have been proposed are depicted on Union Gas's Construction Alignment Drawings (Drawing No. M613-01, M613-02, M613-03 and M613-04). Proposed location of silt fencing around the work areas (i.e. permanent and temporary easement), in addition to the 10m maintained buffer adjacent to these work areas have been depicted in Union Gas' Figures.

There are no mitigation measures as it pertains to SAR within the Pasture Lands (UG Figure M613-04) since this area has been extensively grazed and trampled by livestock and therefore does not represent potential SAR habitat.

Works in and adjacent to non-row crop lands located to the north of the Strasburg Creek Wetland Complex (Figure 2a) will occur subsequent to August 1st therefore there is no expectation that these works will impact any grassland bird SAR.

Please note, detailed sediment and erosion control plans will be required within all GRCA Regulated areas as per GRCA requirements and are not included on these drawings. Union Gas plans to forward the pertinent information to the GRCA with the applicable permit applications in January 2013.

Mitigation measures pertaining to the pipeline route adjacent to wetlands including Provincially Significant Wetlands (PSW) will be provided, including drawings with the proposed location of barrier fencing for species protection

A number of wetlands have been identified within the general study area (Figure 2) including the Roseville Swamp – Cedar Creek Provincially Significant Wetland, Strasburg Creek Provincially Significant Wetland Complex, Laurentian West Wetland Complex (non-Provincially Significant Wetland) and three small GRCA identified wetlands. The GRCA has identified several additional small pockets of wetland habitat that have not been evaluated nor are a part of a designated wetland (local or provincial) (Figure 2).

Non-row crop habitat resides immediately north of Highway 401, this area is associated with the floodplain of Eden Creek which traverses through the study area, and is composed of wetland grasses and would not represent potential SAR habitat. This feature will be incorporated as a part of the directional drill under the 401. Construction within the remainder of this feature, including the watercourse itself will be constructed as per GRCA requirements.



The existing pipeline and easement traverses adjacent to small units of two Provincially Significant Wetlands. One unit of the Roseville Swamp PSW exists to the north of Cedar Creek Road just east of Fischer-Hallman Rd (Figure 2c). The pipeline within this area traverses along the slope and does not extend into the wetland unit, therefore, there will be no loss of any wetland vegetation within the PSW. Mitigation measures, including the installation of sediment fencing down slope of the work area will be utilized in order to prevent sediment from entering the wetland, watercourse and pond all situated to the west of the pipeline. Sediment fencing will be installed along the entire length of the wetland prior to any site alteration and construction including the clearing of vegetation that will occur in winter/early spring 2013. Sediment fencing will be placed immediately adjacent to the work area in addition to the outer limits of the 10m mowed buffer that will exist to the west of the work area. Please refer to Union Gas Figure M613-03 for details.

The existing pipeline and easement currently encroach into a small wetland pocket located immediately north of Plains Road, behind the Strasburg Transmission Station (Figure 2c). This feature is largely dominated by Reed Canary Grass. Past studies have documented the presence of breeding frogs within this wetland patch (CH2MHILL 2008). The species of frog documented as breeding within the area, Leopard Frog, is not of provincial or federal conservation concern. This isolated feature does not provide potentially suitable habitat for Jefferson Salamander who inhabits deciduous forest with breeding ponds. Blanding's Turtles live in shallow water, usually in large wetlands and shallow lakes with lots of water plants (MNR, Date Unknown). This is a small, isolated wetland feature that contains standing water for only a portion of the year, is surrounded by row-crop agricultural lands and abuts the Strasburg Transmission Station. Therefore, this feature does not offer potentially suitable habitat for the Blanding's Turtle. Excavation of a portion along the edge of this wetland feature will be required in order to gain access to the existing pipeline and to replace it. Vegetation loss will be minimal and temporary and will return to its pre-construction condition once the pipeline is replaced within this section. Mitigation measures including the installation of sediment fencing will be required prior to all works that will commence in the spring 2013.

Small pockets of the Strasburg Creek PSW reside to the north of Huron Rd., south of Bleams, in proximity to the Williamsburg Cemetery (Figure 2b). The existing pipeline traverses in between several of these units on agricultural lands and does not extend into any. Therefore, there will be no loss of any wetland vegetation within the PSW. Since this area is within a Jefferson Salamander Habitat Regulated Area, special provisions are required and are discussed in detail below.

The Laurentian West Wetland (non-PSW) exists to the north of Bleams Road, immediately west of Fischer-Hallman Rd (Figure 2b). The majority of the existing pipeline and easement within this area run adjacent to the wetland feature. A small portion of the pipeline lies within the limits of the wetland where the watercourse originates and crosses under Fischer-Hallman Road. Immediately adjacent to the



Laurentian West Wetland within the vicinity of the existing pipeline and easement exist a low lying area that holds some water for at least a portion of the growing season and contains some wetland vegetation. This isolated feature does not have any connection (inlet or outlet) to any adjacent natural heritage features and appears to be a function of the previous earthworks on the lands surrounding this topographic low. An informal walking trail has been created immediately to the east of the wetland and west of the topographic low. There will be no loss of wetland vegetation within this wetland unit. Directionally drilling will be employed within and adjacent to the wetland/watercourse area and under Fisher-Hallman Road therefore eliminating the need to open-cut within the limits and adjacent to this wetland feature. Mitigation, including the installation of sediment fencing in proximity to the work area will be required adjacent to this wetland feature to prevent sedimentation and to prevent movement of potential reptile SAR into the work area. In order to prevent the impediment of potential wildlife movement, we would recommend that the sediment fencing is installed prior to any works in proximity to this wetland. A qualified personal, that is knowledgeable in SAR, will be on site during the installation and removal of the silt fence adjacent to this wetland to ensure there are no SAR within the area.

Two small wetlands have been identified along Trussler Road according to GRCA mapping (Figure 2a). The new pipeline will be installed entirely within the road right of way and will not affect these wetlands. These wetlands are small and would not be considered to be suitable habitat for any reptile and amphibian SAR within the area.

All works in and adjacent to the above-noted wetland features are temporary in nature and will be restored to pre-construction conditions once the new pipeline has been installed. There will be no long-term impacts to the wetland communities providing proper mitigation measures are adhered to.

A permit will be obtained from Grand River Conservation Authority according to Regulation 150/06 prior to the proposed works within all regulated areas which includes wetlands.

For the portion of the pipeline that falls within the Jefferson Salamander Regulated Habitat Area, Union Gas will define the measures to be taken for the protection of the species, mapping of proposed location of mitigation measures and an assessment of the ability to build through half the area at any one time to avoid any disturbance or to avoid limiting the movement of the salamander across the construction work area.

Union Gas has explored the two options for construction within the Jefferson Salamander Regulated Habitat Area and has decided that a 2-phased approach to construction within this area would be best in order to mitigate possible impacts to potential migration corridors. The option of directional drilling the area was considered however due to its



length, the abandoned pipe would need to be removed at a later date. Trenching and removal of the existing pipe would entail only a single disturbance in the area.

The pipeline within this section will be replaced utilizing the trenching method using two separate construction windows during the time of the year less likely to interfere with SAR. Phase 1 will be constructed in late July 2013 and will take approximately 2 weeks for construction. Phase 2 will be constructed in early August 2013 and will also last approximately 2 weeks. Each section will be restored immediately following pipe replacement. A silt fencing enclosure will be installed around the Phase 1 construction area only prior to construction in July. Once all work within Phase 1 is completed (including restoration), the fencing will be removed. Once the fence from Phase 1 is removed, the exclusionary fencing will be installed around the Phase 2 work area. Again, once all construction is complete within Phase 2, including restoration, this fencing will be removed. Please refer to Union Gas Figure M613-09 for locations of proposed mitigation measures.

The sediment fencing around the construction areas will exclude wildlife, including any potential SAR, from entering the work area but continue to allow for wildlife movement between potential habitat areas.

There will be no sediment fence installed adjacent to the woodlot within the Jefferson Salamander Regulated Area in order to prevent the potential impediment of wildlife movement within the area. At no times will wildlife movement be restricted within the Jefferson Salamander Regulated Area. The entire area will be secured at the east and west ends using safety fencing to prevent vehicle access prior to the two phases of construction (Union Gas Figure M613-09).

Qualified personnel, who are knowledgeable in SAR, will be on site during the installation and removal of the silt fencing within the Phase 1 and Phase 2 work areas. This will ensure that no SAR is harmed during the process and that no SAR gets trapped within the work area itself.

MNR has deemed the one retainable Butternut tree that is located along the replacement pipeline route to be a candidate for archiving. To avoid the permitting process and associated timing implications to the project, Union will review the ability to retain the tree through either directional drilling underneath the tree or alternatively constructing the new pipeline beyond the drip line of the tree. In both cases, Union will decommission and abandon the existing pipeline underneath the tree.

Union Gas has reviewed the options pertaining to the retainable Butternut tree identified along the existing pipeline route (Figure 2b). The existing pipeline is located approximately 1.5m from the base of the tree and 4.1m deep. Union Gas proposes to



attach the new pipeline to the existing and pull it through the ground within the same location, simply replacing the old pipe with the new one. This method of installation should cause no disturbance to the root system and will eliminate the need for an open cut trench or directional drilling in proximity to the retainable Butternut. Safety fence will be placed at 1m beyond the drip line to create a Tree Protection Zone (TPZ) where there will be no construction works. Within the TPZ, the soil will be protected from compaction and the critical roots will not be damaged from trenching, and the trunk and branches will not be damaged from equipment and workers. The TPZ should be established at or outside of the dripline of a tree (Penn State 2005). For especially valuable, large, old, historic, or landmark trees, the TPZ should extend at least to the dripline, preferably beyond (Penn State 2005). In order to provide further mitigation measures to avoid damage to this tree, Union Gas proposes that there will be no works (construction vehicles, trenching) at least 3m from the safety fence. According to Crow (2005) tree roots do not occur in significant quantities at substantial depths in the soil profile (i.e., > 2m) and typically between 90 and 99 % of a tree's total root length occurs in the upper 1 m of soil. Therefore replacing the pipeline in this manner under the retainable Butternut tree will ensure its retention and prevent damage to the root zone.

Given the location of the isolated woodlots adjacent to the pipeline route and Union Gas' construction process for installing/replacing pipeline, it is not possible for Union Gas comply with MNR's suggested timing restrictions of March 14 to October 15th. Mitigation measures and mapping pertaining to all adjacent woodlots will be provided showing the proposed location and timing for the installation of fencing or other potential mitigation measures

The Owen Sound Replacement Pipeline does not extend into any woodlots but does run adjacent to several small isolated woodlots. With the exception of the woodlots surrounding the Strasburg Creek Wetland Complex within the vicinity of the Williamsburg Cemetery, the woodlots that reside adjacent to the Union Gas easement do not appear to contain any ephemeral pools that could potentially provide suitable habitat for reptile and amphibian SAR. Woodlots #1, 2 and 3 (Figure 2c) are isolated upland forested communities composed of species including Sugar Maple, Basswood, Ash and Red Oak. Based on our field investigation and through air photo interpretation, there does not appear to be any seasonal pools that form within these woodlots that could offer potentially suitable habitat for SAR reptiles and amphibians. These woodlots are not located in proximity to any wetland features.

The woodlots surrounding the Strasburg Creek Wetland Complex (Woodlots # 4 and 5, Figure 2c) contain pools of water that are present for at least a portion of the year and could potentially provide habitat for reptile and amphibian SAR.

Mitigation measures for woodlot #5 within the Jefferson Salamander Regulated Area have been dealt with in the section above that pertains to the Jefferson Salamander.



Finally, woodlot #6 is located on the corner of Bleams Road and Trussler Road. This coniferous community contains a small treed wetland feature that abuts Trussler Road that does not appear to contain standing water in the spring therefore would not provide suitable aquatic habitat for the Blanding's Turtle that is known to inhabit shallow water, usually in large wetlands and shallow lakes with lots of water plants. Blanding's Turtles hibernate in the mud at the bottom of permanent water bodies from late October until the end of April (MNR, Date Unknown). The shoulder of the road in proximity to the small wetland within woodlot #6 along Trussler Road is paved and composed of mowed grass. Therefore, the road shoulder at this location does not offer potentially suitable nesting habitat for turtle species. Jefferson Salamander generally inhabits intact deciduous forests with an undisturbed forest floor and unpolluted breeding ponds (MNR, 2012). Therefore, this coniferous forest community does not offer potentially suitable habitat for this species.

Although none of the woodlots offer potentially suitable wintering and breeding habitat, Union Gas proposes to install sediment fencing adjacent to Woodlots # 1, 2, 3,4 and 6 (woodlots # 5 has been dealt with above within the section pertaining to Jefferson Salamander). Fencing will be installed prior to the initiation of construction activities for the Owen Sound Pipeline Replacement Project and will remain until the completion of the project.

The sediment fence will prevent encroachment of the work area into the wooded areas and will discourage movement of wildlife from the woodlot through the work areas. The fences will also prevent any sedimentation into the wooded areas.

A qualified personal, that is knowledgeable in SAR, will be on site during the installation and removal of the silt fence adjacent to woodlots.

General SAR Mitigation

- Pre-construction meeting on site with wildlife biologist/ecologist knowledgeable about SAR to inform everyone on site (inspectors, contractors etc.) are aware of potential SAR within the area.
- Distribution of pamphlets to all on site workers to raise awareness of potential SAR.
- On-site contractors keep a log of SAR sightings along the pipeline route and on adjacent lands. Karolyne Pickett, Guelph District MNR should be contacted to report any SAR sightings within the work area.
- If any SAR were identified within the area, work would be required to stop until the SAR left the area.



We trust the mitigation measures as described above are sufficient to protect potential SAR that have been documented and have the potential to reside within the general area. We appreciate your attention to this matter. Please do not hesitate to contact us if you have any question or to discuss further.

Yours truly,
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Lisa Moran, B.Sc.Env.
Terrestrial Ecologist

Attach:

cc: David Marriott, MNR
Norm Doumouchelle, Union Gas

References

CH2MHILL 2008. Alder Creek Watershed Study and Upper Strasburg Creek Subwatershed Plan Update.

Crow, P. 2005. The influences of Soils and Species on Tree Root Depth. Forestry Commission (www.forestry.gov.uk), Information Note (November). Edinburgh, UK.

Ministry of Natural Resources 2012. MNR's Species at Risk Website: Habitat Regulations Under the ESA
<http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/268554.html>
Accessed January 4, 2013.

Ministry of Natural Resources Date Unknown. Blanding's Turtle (*Emydoidea blandingii*) Fact Sheet. Obtained from MNR's Species at Risk website
<http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/276722.html> Accessed January 4, 2013.

Pennsylvania State University 2005. A Guide to Preserving Trees in Development Projects.

Dumouchelle, Norm

From: Lisa Moran [Lisa@Azimuthenvironmental.Com]
Sent: January 30, 2013 2:16 PM
To: graham.buck@ontario.ca
Cc: Dumouchelle, Norm; david.marriott@ontario.ca
Subject: RE: Owen Sound Replacement Pipeline Project - Proposed SAR Mitigation Measures

From: Lisa Moran
Sent: January-30-13 8:20 AM
To: Norm Dumouchelle (npdumouchelle@uniongas.com)
Subject: RE: Owen Sound Replacement Pipeline Project - Proposed SAR Mitigation Measures

Hi Graham,

Thanks for your response.

The purpose of our most recent letter (January 18, 2013) was to address the conditions as outlined within MNR's October 5, 2012 letter that Union Gas was not able to entirely comply with (Conditions #1, 2, and 3) and to further clarify and address items discussed during our November 13, 2012 meeting. With the exception of MNR Conditions #1, 2 and 3, Union Gas is able to comply with the last four conditions within this October 5th letter which should cover the species mentioned in your email.

American Badger – Within MNR's October 5, 2012 letter, Karolyne outlined the mitigation measures as it pertains to American Badger. She indicated that 'staff inspect the excavation zone for the presence of animal burrows prior to starting excavation activities, and contact the MNR Guelph District at once if they demonstrate characteristics of American Badger burrows'. Union Gas will adhere to this condition.

Henslow's Sparrow and Northern Bobwhite – Mitigation measures for this species would be encompassed within the measures for grassland birds within item #2 "Proposed mitigation pertaining to all non-row crop habitats.....". Although, as you indicated below we are in agreement that the likelihood of these species being impacted along the replacement pipeline route is extremely low.

Barn Swallow – It has been confirmed that there are no structures, including any temporary trailers, located along the route that could offer potential nesting habitat for this species.

Please let me know if you require any additional clarification.

Thanks,

Lisa

From: Buck, Graham (MNR) [<mailto:Graham.Buck@ontario.ca>]
Sent: January-29-13 3:20 PM
To: Lisa Moran
Cc: Marriott, David (MNR)
Subject: RE: Owen Sound Replacement Pipeline Project - Proposed SAR Mitigation Measures

Hi Lisa,

I have reviewed the letter (AEC 12-091 titled SAR – Owen Sound Pipeline. With respect to Blanding's Turtle, Jefferson Salamander, Bobolink, Eastern Meadowlark and Butternut I do not have any concerns with the proposed mitigation and avoidance measures. However I would like more clarity on a few of the species that were listed in MNR's October 5th letter that were not addressed in the letter. Specifically I am referring to American Badger, Henslow's Sparrow, Northern Bobwhite and Barn Swallow. Is there a reason as to why these species were included in your letter, but not discussed with respect to proposed avoidance and mitigation measures? I appreciate that Henslow's Sparrow and Northern Bobwhite (except for released birds which have not been demonstrated to persist) are historical in Waterloo Region and are considered extremely rare Ontario, so the likelihood of impacting these species is extremely low, I would like something from you if you have screened these species out of the project.

Thank you
Graham

Graham Buck
Species at Risk Biologist
Ministry of Natural Resources – Guelph District
1 Stone Road Guelph ON N1G 4Y2
519 826 4505
graham.buck@ontario.ca

From: Lisa Moran [<mailto:Lisa@Azimuthenvironmental.Com>]
Sent: January 18, 2013 3:16 PM
To: Buck, Graham (MNR)
Cc: Marriott, David (MNR); npdumouchelle@uniongas.com; Paul Neals
Subject: FW: Owen Sound Replacement Pipeline Project - Proposed SAR Mitigation Measures

Hi Graham,

As per our conversation, please find attached our letter outlining the proposed mitigation measures regarding SAR along the Owen Sound Pipeline.

Dave should be able to fill you in on our correspondence we have had with MNR up until now. Please do not hesitate to contact me if you require any additional information or wish to discuss further.

Regards,

Lisa

From: Lisa Moran
Sent: January-18-13 3:03 PM
To: karolyne.pickett@ontario.ca
Cc: Norm Dumouchelle (npdumouchelle@uniongas.com); Paul Neals; david.marriott@ontario.ca
Subject: Owen Sound Replacement Pipeline Project - Proposed SAR Mitigation Measures

Hi Karolyne,

Sorry for the delay in getting you this information. Please find attached our letter that outlines the proposed mitigation measures as it pertains to known/potential SAR habitat along the Owen Sound Replacement Pipeline.

The figures and drawings were too large to attach to this email so I have placed them on our FTP site in a folder called "Owen Sound Replacement Pipeline Project". Instructions on how to access the site are found below within this email.

Please do not hesitate to contact me if you have any questions or to discuss further.

Regards,



400 Clyde Road, P.O. Box 729 Cambridge, ON N1R 5W6

Phone: 519.621.2761 Toll free: 866.900.4722 Fax: 519.621.4844 Online: www.grandriver.ca

February 1, 2013

Mr. Norm Dumouchelle
 Union Gas Limited
 P.O. Box 2001, 50 Keil Drive North
 Chatham, ON N7M 5M1

Dear Mr. Dumouchelle,

Re: Union Gas Limited Pipeline, Owen Sound Replacement Project

We have now had the opportunity to review the Owen Sound Pipeline Replacement Project Environmental Report (dated November 2012, prepared by Azimuth Environmental Consulting Inc.) and offer the following comments.

General Comment:

It is our understanding that there are ongoing discussions regarding the possible relocation of the Union Gas pipeline and easement between Huron Road and Bleams Road in the City of Kitchener. To aid in these discussions, the Alder Creek Watershed Study and Upper Strasburg Creek Subwatershed Plan Update (2008) and the Rosenberg Secondary Plan Policies (2012) should be reviewed. As changes to the pipeline alignment may impact the surrounding natural heritage and hazard features, we would appreciate the opportunity to provide input into these discussions. Furthermore, if any relocation is proposed, we anticipate the Environmental Report would be updated and circulated for further comment.

Legislative/Policy Context:

The Environmental Report states that several evaluated and unevaluated wetlands have been identified within or adjacent to the study area, including portions of the Upper Alder Creek Provincially Significant Wetland (PSW) Complex, the Strasburg Creek PSW Complex, and the Laurentian West non-PSW (locally significant). The study area also includes portions of Eden Creek, Strasburg Creek, their associated floodplains, steep slopes and allowances to these features.

Due to the above noted features, portions of the study area are regulated by the Grand River Conservation Authority (GRCA) under Ontario Regulation 150/06 (Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation). The proposed construction within the regulated areas will require prior written approval from the GRCA in the form of a permit pursuant to Ontario Regulation 150/06.

We have reviewed the proposal for conformance with our policies to ensure that at the time of construction, GRCA staff could recommend permit approval. Based on the Environmental Report, we understand the following features will be or have the potential to be impacted:

- Unevaluated wetland adjacent to Northumberland Road, between Roseville Road and Cedar Creek Road (please note that these wetlands are not Provincially Significant and are mislabelled on Figure 2c as being part of the Roseville Swamp – Cedar Creek PSW Complex)

- Unevaluated wetlands adjacent to Fisher-Hallman Road, north and south of Plains Road
- Evaluated wetland adjacent to Fisher-Hallman Road at Williamsburg Cemetery (part of the Strasburg Creek PSW Complex)
- Unevaluated wetlands adjacent to Trussler Road, between Highway 7/8 and Bleams Road
- Watercourse crossings.

The project involves the removal and subsequent replacement of the pipeline within the existing easement or its installation within existing road right-of-ways. We recognize that some impacts to the features noted above will be unavoidable. Intrusions have been minimized through construction techniques such as directional drilling. On this basis, we have no objection in principle to this project. Please note that we reserve comment on the section between Huron Road and Bleams Road until the final location of the pipeline is confirmed (see general comment above).

Prior to construction, the following information will be required to support a GRCA permit application:

- Detailed site plans that clearly identify the existing and proposed portions of the pipeline.
- Where wetland avoidance is not possible, we will require a letter completed by an ecologist documenting how the proposed works are in accordance with Sections 8.4.4, 8.4.5 or 8.4.6 of the GRCA's Consolidated Policies for the Administration of Ontario Regulation 150/06. To undertake this assessment, the size of the affected wetlands will need to be confirmed as well as their origin (naturally-occurring or anthropogenic).
- The affected wetland communities should be characterized using the Ecological Land Classification System for Southern Ontario. The GRCA's EIS Guidelines for Wetlands may be consulted for additional guidance. Based on the type of wetland community, detailed mitigation measures during construction and appropriate remedial measures to restore and enhance the wetland features and functions must be identified.
- For work that is proposed within 30 metres of a wetland, the wetlands need to be delineated, surveyed, verified by GRCA staff and plotted on detailed site plans. Proposed mitigation measures, including but not limited to construction methods, silt fence and wetland setbacks should be clearly illustrated and labelled on all plans.
- It is our understanding that open cut may be required for some watercourse crossings. In the event that an open cut crossing is proposed, it is requested that mitigation measures such as construction timing windows, dewatering measures, and any perceived residual impacts to local fisheries resources be identified in accordance with DFO's Risk Management Framework.

We trust that these comments are of assistance. If you should have any questions or require additional information, please do not hesitate to contact Andrew Herreman at 519-621-2763 ext. 2319.

Yours truly,



Beth Brown
Supervisor of Resource Planning
Grand River Conservation Authority
BB/ah

c.c. Azimuth Environmental Consulting, Inc. c/o Paul Neals – 85 Bayfield Street, Suite 400, Barrie,
ON L4M 3A7
Region of Waterloo c/o Tim Van Hinte - 8th Floor
City of Kitchener c/o Barbara Steiner – 6th Floor



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February 1, 2013

Mr. Norm Dumouchelle
Union Gas Limited
P.O. Box 2001, 50 Keil Drive North
Chatham, ON N7M 5M1

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Re: Union Gas Limited Pipeline, Owen Sound Replacement Project

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General Comment:

It is our understanding that there are ongoing discussions regarding the possible relocation of the Union Gas pipeline and easement between Huron Road and Bleams Road in the City of Kitchener. To aid in these discussions, the Alder Creek Watershed Study and Upper Strasburg Creek Subwatershed Plan Update (2008) and the Rosenberg Secondary Plan Policies (2012) should be reviewed. As changes to the pipeline alignment may impact the surrounding natural heritage and hazard features, we would appreciate the opportunity to provide input into these discussions. Furthermore, if any relocation is proposed, we anticipate the Environmental Report would be updated and circulated for further comment.

Legislative/Policy Context:

The Environmental Report states that several evaluated and unevaluated wetlands have been identified within or adjacent to the study area, including portions of the Upper Alder Creek Provincially Significant Wetland (PSW) Complex, the Strasburg Creek PSW Complex, and the Laurentian West non-PSW (locally significant). The study area also includes portions of Eden Creek, Strasburg Creek, their associated floodplains, steep slopes and allowances to these features.

Due to the above noted features, portions of the study area are regulated by the Grand River Conservation Authority (GRCA) under Ontario Regulation 150/06 (Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation). The proposed construction within the regulated areas will require prior written approval from the GRCA in the form of a permit pursuant to Ontario Regulation 150/06.

We have reviewed the proposal for conformance with our policies to ensure that at the time of construction, GRCA staff could recommend permit approval. Based on the Environmental Report, we understand the following features will be or have the potential to be impacted:

- Unevaluated wetland adjacent to Northumberland Road, between Roseville Road and Cedar Creek Road (please note that these wetlands are not Provincially Significant and are mislabelled on Figure 2c as being part of the Roseville Swamp – Cedar Creek PSW Complex)

- Unevaluated wetlands adjacent to Fisher-Hallman Road, north and south of Plains Road
- Evaluated wetland adjacent to Fisher-Hallman Road at Williamsburg Cemetery (part of the Strasburg Creek PSW Complex)
- Unevaluated wetlands adjacent to Trussler Road, between Highway 7/8 and Bleams Road
- Watercourse crossings.

The project involves the removal and subsequent replacement of the pipeline within the existing easement or its installation within existing road right-of-ways. We recognize that some impacts to the features noted above will be unavoidable. Intrusions have been minimized through construction techniques such as directional drilling. On this basis, we have no objection in principle to this project. Please note that we reserve comment on the section between Huron Road and Bleams Road until the final location of the pipeline is confirmed (see general comment above).

Prior to construction, the following information will be required to support a GRCA permit application:

- Detailed site plans that clearly identify the existing and proposed portions of the pipeline.
- Where wetland avoidance is not possible, we will require a letter completed by an ecologist documenting how the proposed works are in accordance with Sections 8.4.4, 8.4.5 or 8.4.6 of the GRCA's Consolidated Policies for the Administration of Ontario Regulation 150/06. To undertake this assessment, the size of the affected wetlands will need to be confirmed as well as their origin (naturally-occurring or anthropogenic).
- The affected wetland communities should be characterized using the Ecological Land Classification System for Southern Ontario. The GRCA's EIS Guidelines for Wetlands may be consulted for additional guidance. Based on the type of wetland community, detailed mitigation measures during construction and appropriate remedial measures to restore and enhance the wetland features and functions must be identified.
- For work that is proposed within 30 metres of a wetland, the wetlands need to be delineated, surveyed, verified by GRCA staff and plotted on detailed site plans. Proposed mitigation measures, including but not limited to construction methods, silt fence and wetland setbacks should be clearly illustrated and labelled on all plans.
- It is our understanding that open cut may be required for some watercourse crossings. In the event that an open cut crossing is proposed, it is requested that mitigation measures such as construction timing windows, dewatering measures, and any perceived residual impacts to local fisheries resources be identified in accordance with DFO's Risk Management Framework.

We trust that these comments are of assistance. If you should have any questions or require additional information, please do not hesitate to contact Andrew Herreman at 519-621-2763 ext. 2319.

Yours truly,



Beth Brown
Supervisor of Resource Planning
Grand River Conservation Authority
BB/ah

c.c. Azimuth Environmental Consulting, Inc. c/o Paul Neals – 85 Bayfield Street, Suite 400, Barrie,
ON L4M 3A7
Region of Waterloo c/o Tim Van Hinte - 8th Floor
City of Kitchener c/o Barbara Steiner – 6th Floor

From: Bonin, John
Sent: February 7, 2013 2:11 PM
To: Dumouchelle, Norm
Subject: RE: Six Nation Meeting - Owen Sound Replacement

Itinerary of ongoing communications with First Nations and Métis

Jan. 28, 12: sent update note on endangered species and Archeology work to Six Nations Elected Consultation Committee

Jan. 24, 13: Meeting with Six Nations Elected Consultation Committee to discuss opportunities for employment and procurement

Jan. 16,13: revised Umbrella Engagement agreement note sent to Haudenosaunee Development Institute

Jan. 15, 2013: Presented Capacity Funding Agreement (CFA) funds to Chief and Consultation committee at New Credit

Jan. 8, 13: sent note to Six Nations Elected Consultation Committee on next meeting dates

Dec. 5, 12: met with Haudenosaunee Development Institute board on Umbrella Agreement

Nov. 22, 12: Capacity Funding (CFA) funds delivered to Six Nations Elected Consultation Committee and presented overview on Environmental work and Construction approach at Consultation meeting

Nov. 16, 12: sent note to Mark Bowler Métis Nation of Ontario re: EA and further communication on the project



Ministry of Tourism, Culture & Sport	Ministère du Tourisme et de la Culture
Culture Services Unit Programs and Services Branch 401 Bay Street, Suite 1700 Toronto ON M7A 0A7	Unité des services culturels Direction des programmes et des services 401, rue Bay, Bureau 1700 Toronto ON M7A 0A7
Tel. 416 212-4019 Fax: 416 314 7175	Tél. : 416 212-4019 Télééc. : 416 314 7175

February 8, 2013

Zora Crnojacki,
Ontario Pipeline Coordination Committee,
Ontario Energy Board
2300 Yonge St, Suite 2601
Toronto, ON M4P 1E4

Project: Union Gas Limited Pipeline Project, Owen Sound Replacement Project
EB-2012-0430
Location: Region of Waterloo
MTCS File: 42EA016

Dear Zora Crnojacki:

Thank you for providing the Ministry of Tourism, Culture and Sport (MTCS) with the Environmental Report for the above project. I am confirming with my letter about this undertaking the mandate of MTCS, under the *Ontario Heritage Act (OHA)*, to conserve, protect and preserve Ontario's cultural heritage, including:

- Archaeological resources;
- Built heritage (including bridges and monuments); and,
- Cultural heritage landscapes.

Under the Ontario Energy Board (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* ("the Guidelines") applicants are directed in Section 4.3.4 to make a determination of the undertaking's impact on these cultural heritage resources, and by Section 4.2 to be consistent with the *Provincial Policy Statement (PPS Section 2.6)*. Section 5.3 of the Guidelines also provides advice on mitigating above ground features (built heritage and/or cultural heritage landscape). The following observations on how cultural heritage resources have been addressed by this draft of the Environmental Report are followed by specific recommendations.

Archaeological Resources

On examination of the Environmental Report and Appendices, it is understood that an archaeological assessment of the project area will be conducted in advance of construction activities. Aside from terminology discussed below, MTCS has no further comments.

Built Heritage and Cultural Heritage Landscapes

Built heritage and cultural heritage landscapes do not appear to be addressed in this Environmental Report. Section 4.3.4 of the Guidelines includes a table for screening to determine whether the project may impact built heritage and/or cultural heritage landscapes. I am providing the attached MTCS "Screening for Impacts to Built Heritage and Cultural Heritage Landscapes" checklist to aid in this screening: municipal clerks for the Region and City encompassing this project can provide information on property registered or designated under the *Ontario Heritage Act*. If the project may impact these cultural heritage resources, MTCS recommends that a Heritage Impact Assessment (HIA – see MTCS [Info Sheet #5: Heritage Impact Assessments and Conservation Plans](#)) be prepared by a qualified consultant. Completed HIAs are sent to MTCS and staff of the local municipalities for review, and are made available to local heritage organizations with an interest.

Executive Summary

The last paragraph on page II identifies a municipal role in advising the proponent on cultural heritage resources and archaeological potential. As below, later sections of this report do not provide detail on any built heritage or cultural heritage landscapes that may fall within the study area.

Section 3.4 Cultural Environment

This section does not address built heritage or cultural heritage landscapes. As noted above, the local municipal government can be contacted for this information.

Section 3.4.1 Archaeology/Heritage

It is recommended that the wording be revised to indicate that archaeology will be carried out prior to land- or soil-disturbance, and that the project area identified as encompassing the pipeline footprint as well as other areas subject to permanent or temporary impacts, such as access routes, and staging and stockpiling areas.

Section 8.6 Archaeology and Heritage Resources

As noted in comments on Sections 3.4 and 3.4.1, this section does not address built heritage or cultural heritage landscapes, and it is suggested that wording on the timing and scope of archaeology carried out be amended.

Appendix C Agency Consultation

On page 144 of the PDF document, correspondence from Infrastructure Ontario (IO) identifies the Heritage Management Process to be used when there is potential for impacts to cultural heritage resources on IO managed lands. Table 1 of this Appendix indicates that a review will be conducted to determine whether any IO managed lands are impacted. If so, a review of these lands for cultural heritage resources including archaeology, built heritage and cultural heritage landscapes would be warranted.

Appendix E Municipality Consultation

On page 209 of the PDF document, correspondence from the Region of Waterloo identifies built heritage resources at 1192 Fischer-Hallman Road, suggesting that an evaluation of potential impacts to built heritage is warranted.

Final Environmental Report Documentation Comments

HIA and AA reports and their recommendations are part of this project. Any determinations that no heritage resources are impacted and no technical studies are warranted should be documented, summarized, and incorporated in the final Environmental Report. Please continue to circulate MTCS through the review process for this EA project. Thank you for the opportunity to provide comment, and please contact me for any questions or clarification.

Sincerely,

Joseph Muller
Heritage Planner
416-314-7145
Joseph.Muller@ontario.ca

Copy: Norm Dumouchelle, Union Gas

Disclaimer: The Ministry of Tourism, Culture and Sport reserves the right to review projects for their potential to impact archaeology, built heritage and cultural heritage landscapes, and recommend archaeological and/or heritage impact assessments.

Please notify MTCS at 416-212-0644 or toll free at 1-866-454-0049 if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out a determination of their nature and significance.

If human remains are encountered, the Cemeteries Regulation Unit of the Ministry of Consumer Services must be contacted (1-800-889-9768). In situations where human remains are associated with archaeological resources, MTCS should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *OHA*.

Screening for Impacts to Built Heritage and Cultural Heritage Landscapes

This checklist is intended to help proponents determine whether their project could affect known or potential cultural heritage resources. The completed checklist should be returned to the appropriate Heritage Planner or Heritage Advisor at the Ministry of Tourism and Culture.

Step 1 – Screening for Recognized Cultural Heritage Value			
YES	NO	Unknown	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Is the subject property designated or adjacent* to a property designated under the <i>Ontario Heritage Act</i> ?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Is the subject property listed on the municipal heritage register or a provincial register/list? (e.g. Ontario Heritage Bridge List)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Is the subject property within or adjacent to a Heritage Conservation District?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Does the subject property have an Ontario Heritage Trust easement or is it adjacent to such a property?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Is there a provincial or federal plaque on or near the subject property?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Is the subject property a National Historic Site?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Is the subject property recognized or valued by an Aboriginal community?
Step 2 – Screening Potential Resources			
YES	NO	Unknown	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Built heritage resources
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Does the subject property or an adjacent property contain any buildings or structures over forty years old [†] that are:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Residential structures (e.g. house, apartment building, shanty or trap line shelter)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Farm buildings (e.g. barns, outbuildings, silos, windmills)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Industrial, commercial or institutional buildings (e.g. a factory, school, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Engineering works (e.g. bridges, water or communications towers, roads, water/sewer systems, dams, earthworks, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Monuments or Landmark Features (e.g. cairns, statues, obelisks, fountains, reflecting pools, retaining walls, boundary or claim markers, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Is the subject property or an adjacent property associated with a known architect or builder?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Is the subject property or an adjacent property associated with a person or event of historic interest?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. When the municipal heritage planner was contacted regarding potential cultural heritage value of the subject property, did they express interest or concern?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cultural heritage landscapes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Does the subject property contain landscape features such as:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Burial sites and/or cemeteries
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Parks or gardens
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Quarries, mining, industrial or farming operations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Canals
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Prominent natural features that could have special value to people (such as waterfalls, rocky outcrops, large specimen trees, caves, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▪ Evidence of other human-made alterations to the natural landscape (such as trails, boundary or way-finding markers, mounds, earthworks, cultivation, non-native species, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Is the subject property within a Canadian Heritage River watershed?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Is the subject property near the Rideau Canal Corridor UNESCO World Heritage Site?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Is there any evidence from documentary sources (e.g., local histories, a local recognition program, research studies, previous heritage impact assessment reports, etc.) or local knowledge or Aboriginal oral history, associating the subject property/ area with historic events, activities or persons?

Note:

If the answer is "yes" to any question in Step 1, proceed to Step 3.

The following resources can assist in answering questions in Step 1:

Municipal Clerk or Planning Department – Information on properties designated under the Ontario Heritage Act (individual properties or Heritage Conservation Districts) and properties listed on a Municipal Heritage register.

Ontario Heritage Trust – Contact the OHT directly regarding easement properties. A list of OHT plaques can be found on the website: [Ontario Heritage Trust](#)

Parks Canada – A list of National Historic Sites can be found on the website: [Parks Canada](#)

Ministry of Tourism and Culture – The Ontario Heritage Properties Database includes close to 8000 identified heritage properties. Note while this database is a valuable resource, it has not been updated since 2005, and therefore is not comprehensive or exhaustive. [Ontario Heritage Properties Database](#)

Local or Provincial archives

Local heritage organizations, such as the municipal heritage committee, historical society, local branch of the Architectural Conservancy of Ontario, etc.

Consideration should also be given to obtaining oral evidence of CHRs. For example, in many Aboriginal communities, an important means of maintaining knowledge of cultural heritage resources is through oral tradition.

If the answer is "yes" to any question in Step 2, an evaluation of cultural heritage value is required. If cultural heritage resources are identified, proceed to Step 3.

If the answer to any question in Step 1 or to questions 2-4, 6-8 in Step 2, is "unknown", further research is required.

If the answer is "yes" to any of the questions in Step 3, a heritage impact assessment is required.

If uncertainty exists at any point, the services of a qualified person should be retained to assist in completing this checklist. All cultural heritage evaluation reports and heritage impact assessment reports must be prepared by a qualified person. Qualified persons means individuals (professional engineers, architects, archaeologists, etc.) having relevant, recent experience in the identification and conservation of cultural heritage resources. Appropriate evaluation involves gathering and recording information about the property sufficient to understand and substantiate its heritage value; determining cultural heritage value or interest based on the advice of qualified persons and with appropriate community input. If the property meets the criteria in Ontario Regulation 9/06 under the Ontario Heritage Act, it is a cultural heritage resource.

† The 40 year old threshold is an indicator of potential when conducting a preliminary survey for identification of cultural heritage resources. While the presence of a built feature that is 40 or more years old does not automatically signify cultural heritage value, it does make it more likely that the property could have cultural heritage value or interest. Similarly, if all the built features on a property are less than 40 years old, this does not automatically mean the property has no cultural heritage value. Note that age is not a criterion for designation under the *Ontario Heritage Act*.

Step 3 – Screening for Potential Impacts		
YES	NO	Will the proposed undertaking/project involve or result in any of the following potential impacts to the subject property or an adjacent* property?
<input type="checkbox"/>	<input type="checkbox"/>	Destruction, removal or relocation of any, or part of any, heritage attribute or feature.
<input type="checkbox"/>	<input type="checkbox"/>	Alteration (which means a change in any manner and includes restoration, renovation, repair or disturbance).
<input type="checkbox"/>	<input type="checkbox"/>	Shadows created that alter the appearance of a heritage attribute or change the exposure or visibility of a natural feature or plantings, such as a garden.
<input type="checkbox"/>	<input type="checkbox"/>	Isolation of a heritage attribute from its surrounding environment, context or a significant relationship.
<input type="checkbox"/>	<input type="checkbox"/>	Direct or indirect obstruction of significant views or vistas from, within, or to a built or natural heritage feature.
<input type="checkbox"/>	<input type="checkbox"/>	A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces.
<input type="checkbox"/>	<input type="checkbox"/>	Soil disturbance such as a change in grade, or an alteration of the drainage pattern, or excavation, etc.

* For the purposes of evaluating potential impacts of development and site alteration "adjacent" means: contiguous properties as well as properties that are separated from a heritage property by narrow strip of land used as a public or private road, highway, street, lane, trail, right-of way, walkway, green space, park, and/or easement or as otherwise defined in the municipal official plan.

UNION GAS LIMITED
Response to Interrogatory
from Board Staff

4. Reference: Letter of Comment, January 9, 2013, Region of Waterloo Legal Services (“RWLS), Page 2
- a) Has Union obtained the necessary Municipal Consent and Permits for the Proposed Pipeline?
 - b) Has Union had any further consultations or meetings with the Region of Waterloo staff with respect to finalizing the location and design of the Proposed Pipeline?
 - c) If the answer to (b) above is yes, what were the outcomes or solutions?

Response:

- a) Written approvals are in the process of being obtained.
- b) Yes, Union continues discussions with the Region and has had 2 recent meetings (Dec 20, 2012 and Jan 29, 2013) with the Region and their consultant, MTE, to review the pipeline alignment running within road allowance and road crossings. All pipeline running lines have been agreed to with the exception of the 500 metre length along Fischer Hallman Road.
- c) Union will complete the Alignment and Profile Drawings showing the proposed pipeline alignment as discussed with the Region and submit them to obtain the necessary Municipal Consent and Permits.

For Fischer Hallman Road, Union will continue discussions with the Region to find a suitable location for the two NPS 12 pipelines within the road allowance, maintaining a safe distance from adjacent utilities and consideration for the Region’s future road widening project.

UNION GAS LIMITED
Response to Interrogatory
from Board Staff

5. Reference: Letter of Comment, January 11, 2013, Waterloo Region District School Board (“WRDSB”), Pages 1-2
- a) What discussions has Union had with the WRDSB regarding the Proposed Pipeline location?
 - b) Are any further meetings planned with WRDSB to discuss potential solutions regarding the Proposed Pipeline?
 - c) What is Union’s response to the WRDSB’s objection to the Proposed Pipeline location due to its effect of compromising the Rosenberg Secondary Plan and safety concern for the potential development of a designated school site?
 - d) Does Union have any proposed solutions to respond to the concerns raised by WRDSB?
 - e) Do any of the solutions proposed by Union require a change to the proposed route?
 - f) If the answer to (d) above is yes, are there any new landowners affected by the new route?
 - g) If Union would consider modifying the proposed route to address WRDSB’s concern, are there any new permits or easements required?
 - h) Will any of the proposed solutions result in any additional costs to be incurred and if so what is the estimated effect on Union’s ratepayers?

Response:

- a) to f)
Union’s letter dated January 28th 2013 to the Waterloo District School Board addressing their letter dated January 11th, 2013 is attached as Attachment # 1 to this interrogatory.
- g) Based upon the response to Board Staff IR 5 a)- f), there will be no additional costs incurred by Union.



January 28, 2013

Dennis S. Cuomo MCIP, RPP
Manager of Planning Waterloo Region District School Board
51 Ardelt Ave.
Kitchener, ON N2C2R5

Dear Mr Cuomo,

Thank you for your correspondence dated, January 11, 2013 addressed to Mr. Dumouchelle of our office, providing your comments on the Environmental Report. We have reviewed your correspondence and note that you did not reference Union Gas' correspondence dated, November 7, 2012, which addressed the comments in the Waterloo Region District School Board's correspondence dated September 2, 2012 from Shaun Callon and your correspondence dated October 23, 2012. We have included a copy of Union Gas' November 7, 2012 correspondence.

Ontario Regulation 210/01 under the Technical Standards and Safety Act 2000, Oil and Gas Pipeline Systems, and CSA Z662-11 Standard Oil and gas pipeline systems, as amended, are the Ontario regulation and code documents governing the design, construction, operation and maintenance of natural gas pipelines. Compliance with these requirements is governed by the Technical Standards Safety Association in Ontario. All natural gas pipeline operators are required to comply with these documents with respect to the design, construction and operations of natural gas pipelines.

As part of Union Gas' commitment to safety, adherence to these specific requirements is paramount. Union Gas has safely operated this Owen Sound Line for over 50 years and is committed to continuing to do so. The Pipeline will be designed and constructed in compliance with Ontario regulation 210/01.

For your information the following are some of the specific safety standards contained in the Technical Standards and Safety Act 2000 that are relevant to the Pipeline, to ensure system integrity and public safety:

- CSA Z662 -11
 - o for all design requirements including designing to Class 3 location factor
 - o for all construction requirements including requirements for activities such as clearing, grading, pipe handling, backfilling, and cleanup/restoration
 - o for all operation and maintenance practices including a comprehensive integrity management system.
- TSSA code adoption document
 - o Including new requirements for identification and remediation of High Consequence areas

In your correspondence you have referenced the Rhodes Report as a document which should be considered in the determination of any setbacks of the Pipeline from a school.

We have reviewed the report and note that the report conflicts with the *Ontario Regulation 210/01 under the Technical Standards and Safety Act 2000, Oil and Gas Pipeline Systems, and CSA Z662-11 Standard Oil and gas pipeline systems, as amended*. One specific example is that the Rhodes Report clearly relies on the CSA Plus 663 standard. Section 1.4 of the CSA Plus 663 states that this standard is not intended to cover local natural gas distribution pipelines. The Pipeline along Bleams Road pipeline is a distribution pipeline.

As these conflicts exist between the Rhodes Report and the statutes, regulations and codes which specifically govern the Pipeline, Union will not be adopting the suggestions contained in the report.

In your correspondence you referenced the Ontario Provincial Policy Statement ("PPS") and the role that it has in the construction of natural gas pipelines. The Ontario Energy Board's Environmental Guidelines, which must be

followed in the preparation of the Environmental Report ("ER"), require that the ER have regard for the PPS. Azimuth Environmental in preparing the ER complied with the PPS in determining the preferred route of the pipeline and developing the mitigation measures that will be put in place for constructing the proposed facilities.

Union Gas operates and maintains a number of pipelines of similar size and operating pressures, within its franchise areas across Ontario, which are located at distances of less than 200 meters from schools and hospitals. This is a practice which complies with the above noted regulations and codes which govern the design, construction and operations of natural gas pipelines and are accepted industry practices. There are no governing requirements for additional setback beyond the limit of the easement or road right of way for distribution pipelines.

We trust that these references to the statutes, regulations and codes which govern the design, construction, operation and maintenance of natural gas industry pipeline systems in Ontario, is of assistance and answers any questions you may have regarding the safe operation of this Pipeline.

If you have any further concerns, or would like additional information about the project please let me know.

Regards,



Murray Costello, P. Eng.

District Manager - Waterloo/Brantford
Union Gas Limited | A Spectra Energy Company
603 Kumpf Drive | Waterloo, ON N2J 4A4

Tel: 519-885-7425

One of Canada's Top 100 Employers





November 7th, 2012

Dennis S. Cuomo MCIP, RPP
Manager of Planning Waterloo Region District School Board
51 Ardelt Ave.
Kitchener, ON N2C2R5

I recently received your letters (written by Mr. Callon, Sept. 7, 2012 and Mr Cuomo, Oct. 23, 2012), from Mr. Paul Neals of Azimuth Environmental Consulting Inc.

Thank you for taking the time to express your comments on the proposal for the Union Gas Owen Sound Line Project. I would like to take this opportunity to correct some misunderstandings that were expressed and tell you about our commitment to safety.

This project involves the replacement of the existing Owen Sound Line, constructed in 1958, with a new pipeline as part of our ongoing pipeline maintenance program, which ensures we can continue to provide safe and reliable service to the area and in the future to your new school. Union Gas has operated this pipeline safely in the area for over 50 years. To ensure this outstanding safety record continues, the new pipeline will be designed and constructed in compliance with all safety codes and regulations including *Ontario Regulation 210/01 under the Technical Standards and Safety Act 2000, Oil and Gas Pipeline Systems*, which is the Ontario regulation governing the design, construction, operation and maintenance in oil and gas industry pipeline systems.

To follow are some of the specific safety standards contained in the Technical Standards and Safety Act 2000 that are relevant to the Owen Sound Pipeline, to ensure system integrity and public safety:

- Design criteria (4.3) – provides the design criteria for the pipeline including consideration for class location and pressure design for piping and components;
- Qualifications of materials (5.1) – outlines the qualification requirements for materials to be used in the pipeline system;
- Activities on pipeline right of ways (6.2) – outlines requirements for activities such as clearing, grading, pipe handling, backfilling, and cleanup/restoration;
- Pressure testing piping to be operated greater than 700 kPa (8.7) – outlines strength and leak test requirements for piping to be operated greater than 700 kPa; and
- Integrity of pipeline systems (10.3) – outlines requirements for leak detection and upgrading to higher pressures.

The proposed section of 12-inch diameter steel pipeline in the vicinity of Bleams Road is a distribution pipeline, and not a major transmission pipeline. As such, it will operate as part of a lower pressure system (hoop stress less than 40% of the specified minimum yield strength). As a lower pressure system, there are no requirements for additional setback beyond the limit of the easement or road right of way for pipelines operating at this pressure.

If you have any further concerns, or would like additional information about the project please let me know and I will arrange a meeting with you to discuss the project.

Regards,

M. D. Costello P. Eng
District Manager Waterloo/Brantford
(519) 885-7425

CC. A. Pinard
T. Martin
G. Osborne
M. Van Bodegon
J. von Westerholt
K. Eby
P. Neals

UNION GAS LIMITED
Response to Interrogatory
from Board Staff

6. Reference: Summary of Gas Pipeline Regulations in Ontario, attachment to Letter of Comment, January 11, 2013, Waterloo Region District School Board (“WRDSB”)
- a) Please comment on the setback standards calculated by Dr. Charles Rhodes in the above-referenced document?

Response:

- a) The pipeline along Bleams Road is regulated by Ontario Regulation 210/01 under the Technical Standards and Safety Act 2000, Oil and Gas Pipeline Systems, and CSA Z662-11 Standard Oil and gas pipeline systems, as amended.

We have reviewed the report from Dr. Rhodes and note that the report conflicts with the Ontario Regulation 210/01 under the Technical Standards and Safety Act 2000, Oil and Gas Pipeline Systems, and CSA Z662-11 Standard Oil and gas pipeline systems, as amended. One specific example is that the Rhodes Report clearly relies on the CSA Plus 663 standard. Section 1.4 of the CSA Plus 663 states that this standard is not intended to cover local natural gas distribution pipelines, which is what the pipeline along Bleams Road is.

Union operates and maintains a number of pipelines of similar size and operating pressures, within its franchise areas across Ontario, which are located at distances of less than 200 meters from schools and hospitals. This is a practice which complies with the above noted regulations and codes which govern the design, construction and operations of natural gas pipelines and are accepted industry practices. There are no governing requirements for additional setback beyond the limit of the easement or road right of way for these pipelines.

UNION GAS LIMITED
Response to Interrogatory
from Board Staff

7. Please comment on the following Board Staff Proposed Draft Conditions of Approval, and indicate any areas of these conditions that Union considers objectionable and the reasons for any such objection.

**EB-2012-
0430**

**Union Gas Limited
Leave to Construct Application**

Board Staff Proposed Draft

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-2012-0432 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.

Response:

Union has no concerns with the proposed draft Conditions of Approval.

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Project Summary, Landowners, Environmental

Interrogatory # 1

Ref: Page 1 of 15, Lines 15 and 16

Page 9 of 15, Lines 1 to 3

Page 10 of 15, Lines 12 and 13

“Union has discussed the Project with the directly affected landowners along the route of the pipeline and no one has identified any significant issues.”

“Union has implemented a comprehensive program to provide landowners, tenants, and other interested persons with information regarding the proposed pipeline. Project information was distributed through correspondence and meetings with the public.”

“Union met with municipal officials of the Region of Waterloo to discuss the preferred route alternative. The Region of Waterloo did not identify any concerns with Union’s chosen route.”

Preamble: The comprehensive planning process for the Rosenberg Community to be located in the Region of Waterloo and which the proposed pipeline crosses was completed during 2010 to 2012 and involved extensive public and stakeholder consultation.

- a) At any time during this planning process, did Union Gas Limited (UGL) advise the planning approval authorities (City of Kitchener and Region of Waterloo) of its intention to upgrade and relocate the Owen Sound pipeline?
- b) b) Did UGL consider the impacts on the Rosenberg Community when planning the proposed upgrades and relocation of the Owen Sound pipeline?
- c) Has UGL received confirmation from the Waterloo Region District School Board (WRDSB) that its concerns with the proximity of the proposed new location of the pipeline to schools planned for the Rosenberg Community have been addressed?
- d) Do the proposed upgrades and relocation of the Owen Sound pipeline benefit the Rosenberg Community in any way?

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- e) Do the proposed upgrades and relocation of the Owen Sound pipeline adversely impact the Rosenberg Community in any way? Specifically, are any of the planned land uses no longer viable?
- f) Is it imperative that this pipeline be relocated?
- g) Have alternate routes that do not impact the Rosenberg Community been considered?
- h) Has the City of Kitchener been asked to formally comment on the proposed relocation prior to the issuance of the Notice of Application in this proceeding in late 2012?

Response:

- a) The City of Kitchener and the Region of Waterloo were notified by separate letters dated November 2, 2012 and forwarded copies of the Environmental Report. In the letter Union indicated that the review of the report and provisions of comments would be appreciated by January 11, 2013;
- b) See Union's response to Corporation of the City of Kitchener Proposed Facilities interrogatory 1 c);
- c) See Union's response to Board Staff interrogatory 5 a) to g);
- d) The proposed replacement of the pipeline, to ensure its long term integrity, does ensure an incremental level of security of supply for the Rosenberg Community and all customers served off this pipeline.
- e) Union has been working co-operatively with the developers to integrate this pipeline into their subdivision plans to ensure no adverse impacts. These co-operative efforts work to ensure viable planned land usage.
- f) Maintaining the alignment between Kitchener Gate Station and Waterloo Gate Station is not advisable due to the following:
 - 5,600 m of the pipeline would run along Fischer Hallman Road which is planned to be widened.
 - Fischer Hallman Road is very busy with traffic and has a very short construction window which is approx 6 hours per day.
 - This area is very densely populated.

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- Residences and other development have crowded the pipeline easement which is not suitable for construction or maintenance of a pipeline.
- The Region and Union have agreed to the pipeline alignment along Bleams Road, Trussler Road, Ira Needles Road and Erb Street within road allowance.

Within the Rosenberg Community, the pipeline alignment is being slightly modified to conform to the two developers' proposed layout plan.

- g) Union considered replacing the pipeline in its present location north of Bleams Road but due to the extensive development and significant impact to existing residential development the present route was chosen.
- h) See Union's response to interrogatory 1 a) above.

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Response to Interrogatory
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Proposed Facilities

Interrogatory # 1

Ref: Page 4 of 15, Lines 9 to 11

“Based on Union’s analysis of historic and expected growth in the Waterloo area and the area served by the Own Sound System, it was determined that upsizing the pipeline was not required and that the pipe could be replaced size for size.”

- a) Please provide the analysis of historic and expected growth in the Waterloo area and the area served by the Owen Sound System which underpins this determination.
- b) In the analysis referenced in part a) above, please disaggregate the historic and expected loads into the following categories: City of Kitchener; Region of Waterloo excluding City of Kitchener; and all other loads served by the Owen Sound System. Please identify the historic and expected peak day, seasonal (winter / summer) and annual loads by category.
- c) Was expected growth in the Waterloo area for the Rosenberg Community included in the analysis? If so, please quantify it.

Response:

a) and b)

	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009
Kitchener PUC *	2510	2510	2510	2510	2550	2439	2530
Waterloo Region **	1735	1741	1778	1890	1609	1620	1639
Owen Sound system ***	1952	1955	1972	1984	1879	1960	1999

Note - Loads expressed in km³/day

* Based on actual gas measurement data

** Excludes Kitchener PUC loads

*** Excludes Kitchener PUC, Waterloo Region loads

The Owen Sound Transmission system peak demand occurs during the Winter season and Union’s facilities are designed to meet all firm peak demand on a design day. This system is not designed based on Summer or annual loads.

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- c) The Rosenberg Community is situated within the boundaries of the City of Kitchener and is not within Union's franchise. Union relies upon the City of Kitchener PUC to advise Union of any future growth or expansions in the City of Kitchener. If so advised Union would consider the impact of this upon its system. Union has not received any information from the City of Kitchener which would require the pipeline to be upsized.

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Interrogatory # 2

Ref: Page 4 of 15, Lines 12 to 14

“In 2011 Union signed a contract with the City of Kitchener for the period 2011 to 2015. Union has the ability of [sic] meet the contract requirements for both pressure and volume for the City of Kitchener with the replacement of the pipeline.”

- a) Please quantify each of the contract requirements (maximum, minimum, daily, hourly) in metric and imperial measurements at both the Strausburg Transmission Station and the Kitchener Gate Station?
- b) Based on Union’s recent actual operating data (within last five years) please indicate if any of the contract requirements noted above have been closely approached or exceeded at either the upper or lower bounds? If so, please quantify the excess and its duration?

Response:

- a) From the Schedule 1 contained in the T3 Gas Storage and Distribution Contract (contract id: SA3863), dated April 1, 2011, between The Corporation of the City of Kitchener and Union Gas Limited, the contract parameters for both the Kitchener Gate Station and the Strausburg Transmission Station are as follows:

Point(s) of Consumption:

	Kitchener Gate Station	Kitchener Gate Station	Strausburg Transmission Station
Location	Fischer Hallman Rd.	Fischer Hallman Rd.	Plains Rd.
Meter No.	999525	999992	2008061

Metric Measurement

	Unit of Measure	Kitchener Gate Station Meter: 999525	Kitchener Gate Station Meter: 999992	Strausburg Transmission Station Meter: 2008061
Firm Daily Contract Demand (CD)	m3/Day	2,350,000		
Maximum Hourly Volume	m3/Hour	117,500		
Minimum Gauge Pressure	kPa	1206	207	1206

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Imperial Measurement

	Unit of Measure	Kitchener Gate Station Meter: 999525	Kitchener Gate Station Meter: 999992	Strausburg Transmission Station Meter: 2008061
Firm Daily Contract Demand (CD)	ft3/Day	82,957,350		
Maximum Hourly Volume	ft3/Hour	4,147,868		
Minimum Gauge Pressure	psi	175	30	175

Conversion Factors:

1 kPa = 0.14503 psi

1 m3 = 35.3010 ft3

b)

Firm Daily Contract Demand (CD):

Based on Union's recent actual operating data (within the last five years), the Firm Daily Contract Demand (CD) has not been closely (within 5%) approached or exceeded within the last 5 years.

Maximum Hourly Volume:

On February 10, 2008, the total maximum hourly volume flowing through the points of consumption was 113,090.39 m3. This total hourly amount was within 3.8% of the contractual Maximum Hourly Volume of 117,500 m3/hour.

Minimum Gauge Pressure:

The lower bound of the contracted Minimum Gauge Pressure has not been closely approached, (within 5%) based on recent actual operating data (within the last five years), at either the Kitchener Gate Station or the Strausburg Transmission Station.

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Project Costs and Economics

Interrogatory # 1

Ref: Page 4 of 15, Lines 20 and 21
Schedule 5 and 6

“The estimated Project costs for the project are \$ 23,906,628.00. A detailed breakdown of these costs can be found at Schedule 5 and 6.”

- a) Please confirm that the estimated station construction costs of \$579,000 shown on Schedule 6 are solely for the Kitchener Gate Station?
- b) In as much detail as possible, please provide a breakdown of the estimated station construction costs of \$ 170,000 and \$ 402,000 for Station Equipment and Construction and Labor, respectively, as shown on Schedule 6? For estimated Labor costs, please separately identify contractor and UGL labor? For contractor costs, please identify the contractor(s) and the key terms of the purchasing tender(s) under which the contractor(s) will operate?
- c) Will the actual costs incurred for the station modifications be capitalized and solely allocated to Kitchener under UGL’s approved rate-making methodology?
- d) Assuming approval of UGL’s instant application by the OEB and current rate-making methodology, please estimate the impact of the proposed station modification costs on the monthly customer charge for Kitchener under its T3 contract with UGL?
- e) If approved by the OEB, will any of the other costs of the Owen Sound Replacement Project impact the rates for Kitchener under its T3 contract with UGL? Please identify and estimate the impact on the affected components of the T3 rate?
- f) Will the proposed station modification costs increase the maximum hourly flow capacity at the Kitchener Gate Station? If not, what modifications would be required to meet an increase of 25,000 m³ per hour and at what estimated cost?

Response:

- a) The cost noted above was an estimate based on the preliminary scope of work. A final scope of work has been completed. Designs, drawings and bills of material, are scheduled for completion in late February. The revised estimated total cost is \$838,842 for work at the Owen Sound Valve Site, Strausburg Transmission Station and Kitchener Gate Station.

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b) The breakdown of the total costs is:

Prime Contractor:	\$485,182
Materials:	\$222,424
Company Labour:	\$71,160
Outside Services:	\$48,330
IDC:	\$11,746
Total:	\$838,842

Although a construction contract has not yet been executed, it is expected that Union will enter into a Target Price contract with Aecon Utilities.

c) Confirmed. The actual costs incurred for the station modifications will be capitalized, however, these costs will not be allocated solely to Kitchener.

The capital expenditures associated with station modifications for the Owen Sound Replacement project are planned for 2013 and classified as transmission measuring and regulating equipment in the plant accounting records. Consistent with Union's Board-approved cost allocation methodology, these costs will be classified as Other Transmission Demand and allocated to all Union South in-franchise rate classes in proportion to in-franchise design day demands.

There are no costs associated with the station modifications included in Union's 2013 delivery rates.

d) The station modifications will not have an impact on the Rate T3 monthly customer charge. As described in part c) above, the station modification costs will be classified as Other Transmission Demand and allocated to all Union South in-franchise rate classes in proportion to in-franchise design day demands. The portion allocated to Rate T3 will be recovered in the Rate T3 transportation demand charge.

e) Confirmed. A portion of the costs associated with the Owen Sound Replacement project are recovered in Union's current approved Rate T3 transportation demand charge.

Union's Board-approved 2013 rate base includes approximately \$3.8 million in transmission mains associated with the Owen Sound Replacement project. The 2013 revenue requirement is estimated to be approximately \$0.2 million.

In Union's Board-approved 2013 cost allocation study, transmission mains costs are allocated to all Union South in-franchise rate classes in proportion to in-franchise design day demands. The 2013 Board-approved allocation of transmission mains costs to Rate T3 is 3.71%. Based on the estimated 2013 revenue requirement of \$0.2 million, the

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transmission mains costs allocated to Rate T3 are approximately \$7,420. These costs represent less than 0.3% of the costs recovered in the current approved Rate T3 transportation demand charge.

The revenue requirement associated with the project in the first full year of service in 2015 is estimated to be approximately \$2.0 million. Based on the 2013 Board-approved allocation of Other Transmission Demand costs to Rate T3 of 3.71%, the costs allocated to Rate T3 are expected to be approximately \$70,000 to \$80,000. These costs represent 2% to 3% of the costs recovered in the current approved Rate T3 transportation demand charge.

- f) The proposed station modification costs will not increase the maximum hourly flow capacity at the Kitchener Gate Station.

To meet an increase of 25,000 m³ per hour, the following items would need to be replaced:

- existing filter,
- metering,
- heat exchanger,
- boilers,
- regulators;
- and necessary infrastructure

The estimated costs to complete these modifications is \$2.5 million.

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Design and Construction

Interrogatory # 1

Ref: Page 5 of 15, Lines 5 to 15
Schedule 8

“Between the Owen Sound Valve site and Strausberg Transmission Station the existing pipeline which has not been previously replaced will be removed and a new pipeline installed in the existing location. This pipeline will have an MOP of 6160 kPa. Between the Strausberg Transmission Station and the Kitchener Gate Station the existing pipeline will be removed and a new pipeline installed generally the same location. This pipeline will have an estimated operation pressure (“EOP”) of 3450 kPa. Between the Kitchener Gate Station and the Waterloo Gate Station approximately 6.3 km of the existing pipeline will be abandoned in place and will be replaced with a new pipeline. This new pipeline will commence at Bleams Road and terminate at the Waterloo Gate Station. This pipeline will be constructed generally on road allowance. The pipeline will have an EOP of 3450 kPa.”

- a) During construction, will any gas be released directly to the atmosphere within the populated section of the City of Kitchener, i.e. north of Plains Road to the Kitchener - Waterloo border?
- b) During construction, will the gas flow from the Kitchener Gate Station be interrupted at any time? If so when and for what duration?
- c) If temporary regulator runs will be installed during the proposed modifications to the Kitchener Gate Station, can provision be made for the temporary regulator runs to remain or be brought back to the station to make further modifications and allow for the economic adjustment to a 225 psig guaranteed minimum pressure?
- d) During construction, will the gas flow from the Strausberg Transmission Station be interrupted at any time? If so when and for what duration?
- e) During construction, will both the Strausberg Transmission Station and the Kitchener Gate Station be offline at the same time?
- f) During construction, will the high pressure feed (+200 psig) and intermediate pressure feed (+40 psig) from the Kitchener Gate Station be interrupted at the same time?
- g) Will a detailed description and schedule of the construction process and tie-in of the new proposed pipeline, particularly at the Kitchener Gate Station, be provided by UGL to

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Kitchener prior to construction? Please advise when this detailed schedule can be provided to Kitchener, assuming approval of the instant application by the OEB?

- h) What happens to the gas flow downstream if there is a fault or failure at the Bleams Road valve site? Does UGL have a contingency plan for mitigating this operational risk in order to maintain service to Kitchener?

Response:

- a) Pressures in the pipeline will be reduced to minimize the volume of gas vented to the atmosphere. Planned venting points for the pipeline are south of Plains Road and north of the Waterloo border. Some gas may be vented from station piping at the Kitchener Gate Station to allow for modifications at this station.
- b) No.
- c) The proposed design for the station modifications will not require temporary regulation.
- d) Yes. From mid June to early September for approximately 12 weeks.
- e) No.
- f) No.
- g) Yes. Early April.
- h) The function of the Bleams Road Valve Site has been relocated to the Kitchener Gate Station. Union does have a contingency plan for mitigating operational risk. By utilizing a proposed inlet valve nest at the Kitchener Gate Station, gas can be fed to the station from either a north feed or a south feed, as required.

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Response to Interrogatory
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Environmental

Interrogatory # 1

Ref: Page 10 of 15, Lines 14 and 15
Schedule 16

“Union retained the services of Azimuth Environmental to review the proposed route of the pipeline and prepare an Environmental Report (“ER”). The ER can be found at Schedule 16.”

- a) Is UGL or Azimuth Environmental aware of any changes in easements and location of the proposed pipeline, in particular, adjacent to any regionally designated significant woodland, that are not included in the ER and which may require mitigation measures?

Response:

- a) No.