

From: Al-Amry, Amry [<mailto:AAIAmry@uniongas.com>]

Sent: October-20-15 3:38 PM

To: Joyner, Dan (MOECC)

Cc: sandra.green@hc-sc.gc.ca; Taylor, Peter (MOECC); Knappett, Christine (MOECC); Lusk, Warren (MOECC); Faaren, Greg (MOECC); danb@mbq-tmt.org; todd@mbq-tmt.org; roy.angelow@aandc-aadnc.gc.ca; peter.ross@hc-sc.gc.ca; kimberley.cameron@ec.gc.ca; Yee, Kim (MOECC); Thebeau, Michele; Grochmal, Tom; Khoshaien, Shawn; Grochmal, Tom; Simpson, Carl; Bonin, John; Veale, Lesley; Zora Crnojacki; peterb@mbq-tmt.org; 'nicoles@mbq-tmt.org'; 'Crystal Maracle'; Dumouchelle, Norm

Subject: RE: Resumption of Drilling - Highway 49 - Union Gas pipeline relocation project.

Dan,

Please find attached the Union Gas action plan and timelines with respect to the agreed upon recommendations regarding sealing the abandoned wells along the drill design path, prior to commencing with the drilling operations.

Per our preliminary discussion, my understanding is that you have no concerns conceptually to proceed with the plan to take the video and seal the identified abandoned wells along the drill path.

Following the completion of sealing the identified abandoned wells, we will provide a summary letter detailing the results of the well video/inspection and the method of the abandonment.

Thank you,

Ahmed M. Al-Amry

P.Eng.

Project Engineer, Engineering Construction
Union Gas Limited | A Spectra Energy Company
50 Keil Drive North | Chatham, ON N7M 5M1
Tel: 519.436.4600 ext 5002882 Cell: 226.229.9548



From: Al-Amry, Amry

Sent: October-16-15 6:12 PM

To: 'Joyner, Dan (MOECC)'

Cc: sandra.green@hc-sc.gc.ca; Taylor, Peter (MOECC); Knappett, Christine (MOECC); Lusk, Warren (MOECC); Faaren, Greg (MOECC); danb@mbq-tmt.org; todd@mbq-tmt.org; roy.angelow@aandc-aadnc.gc.ca; peter.ross@hc-sc.gc.ca; kimberley.cameron@ec.gc.ca; Yee, Kim (MOECC); Thebeau, Michele; Grochmal, Tom; Khoshaien, Shawn; Grochmal, Tom; Simpson, Carl; Bonin, John; Veale, Lesley;

Zora.Crnojacki@ontarioenergyboard.ca; peterb@mbq-tmt.org; 'nicoles@mbq-tmt.org'; 'Crystal Maracle'
Subject: RE: Resumption of Drilling - Highway 49 - Union Gas pipeline relocation project.

Hi Dan,

Union Gas will ensure compliance with your recommendations below prior to commencing with the drilling operations.

We will provide the MOECC with an action plan and timelines with respect to the agreed recommendations in a timely manner. Union Gas will work with Crystal Maracle (MBQ Health Representative) regarding the abandoned wells.

The removal of the any permeable or low strength materials found in the wells and sealing of the identified abandoned wells will be executed by **Marathon** drilling. The video of the inside the wells will be completed by **Lotowater**.

A Horizontal Directional Drilling (HDD) contingency planning will be provided.

Thank you,

Ahmed M. Al-Amry

P.Eng.

Project Engineer, Engineering Construction
Union Gas Limited | A Spectra Energy Company
50 Keil Drive North | Chatham, ON N7M 5M1
Tel: 519.436.4600 ext 5002882 Cell: 226.229.9548



From: Joyner, Dan (MOECC) [<mailto:Dan.Joyner@ontario.ca>]

Sent: October-16-15 3:57 PM

To: Al-Amry, Amry

Cc: sandra.green@hc-sc.gc.ca; Taylor, Peter (MOECC); Knappett, Christine (MOECC); Lusk, Warren (MOECC); Faaren, Greg (MOECC); danb@mbq-tmt.org; todd@mbq-tmt.org; roy.angelow@aandc-aadnc.gc.ca; peter.ross@hc-sc.gc.ca; kimberley.cameron@ec.gc.ca; Yee, Kim (MOECC); Thebeau, Michele; Grochmal, Tom; Khoshaien, Shawn; Grochmal, Tom; Simpson, Carl; Bonin, John; Veale, Lesley; Zora.Crnojacki@ontarioenergyboard.ca; peterb@mbq-tmt.org

Subject: RE: Resumption of Drilling - Highway 49 - Union Gas pipeline relocation project.

Hi Amry, Thank you!

As the project continues the MOECC would like to see a detailed action plan and timelines with respect to the agreed upon recommendations. Please note that our original report (attached) as provided to the Mohawks of the Bay of Quinte on Oct 25, 2015 included a number of other recommendation that should be considered as Union Gas moves forward with this project.

This needs to include verification of the licensed well driller and documentation to verify the removal of any permeable or low strength materials found in the wells, a video of the inside of the well from top to bottom which shows the geological structure/features, documentation showing the material used to seal the wells is a high strength material that meets a density of at least 1 kilogram/litre and a final report detailing the sealing of the wells.

In addition, the MOECC would like to see written contingencies that will be initiated during the drilling to ensure that any abnormal loss of drilling fluid is quickly and effectively dealt with. In developing the contingencies you should consider triggers that require the shutdown of the drilling operation; whether additional equipment is needed on site to contain and/or remediate any observed impacts from lost drilling fluids and how to monitor for impacts to land or water.

We would also appreciate an update on the well survey and door to door well information gathered by Stantec.

It is recommended that you provide the MOECC with the requested information prior to the commencement of the pipeline drilling.

If you have any questions please let me know.

Sincerely,

Dan Joyner
Senior Environmental Officer
Belleville Area Office
Ministry of the Environment and Climate Change
345 College St. East
Belleville, ON K8N 5S7
(613) 962-3641

From: Al-Amry, Amry [<mailto:AAIAmry@uniongas.com>]

Sent: October-16-15 1:15 PM

To: Joyner, Dan (MOECC)

Cc: sandra.green@hc-sc.gc.ca; Taylor, Peter (MOECC); Knappett, Christine (MOECC); Lusk, Warren (MOECC); Faaren, Greg (MOECC); danb@mbq-tmt.org; todd@mbq-tmt.org; roy.angelow@aandc-aadnc.gc.ca; peter.ross@hc-sc.gc.ca; kimberley.cameron@ec.gc.ca; Yee, Kim (MOECC); Thebeau, Michele; Grochmal, Tom; Khoshaien, Shawn; Grochmal, Tom; Simpson, Carl; Bonin, John; Veale, Lesley

Subject: RE: Resumption of Drilling - Highway 49 - Union Gas pipeline relocation project.

Importance: High

Hi Dan,

Union Gas will fully comply with the MOECC two recommendations in the email below prior to proceeding with any drilling operations.

Union Gas will notify MOECC immediately when both requests below are completed and prior to commencing with the drilling operations.

Thank you,

Ahmed M. Al-Amry

P.Eng.

Project Engineer, Engineering Construction
Union Gas Limited | A Spectra Energy Company
50 Keil Drive North | Chatham, ON N7M 5M1
Tel: 519.436.4600 ext 5002882 Cell: 226.229.9548



From: Joyner, Dan (MOECC) [<mailto:Dan.Joyner@ontario.ca>]

Sent: October-16-15 9:51 AM

To: Al-Amry, Amry

Cc: sandra.green@hc-sc.gc.ca; Taylor, Peter (MOECC); Knappett, Christine (MOECC); Lusk, Warren (MOECC); Faaren, Greg (MOECC); danb@mbq-tmt.org; todd@mbq-tmt.org; roy.angelow@aandc-aadnc.gc.ca; peter.ross@hc-sc.gc.ca; kimberley.cameron@ec.gc.ca; Yee, Kim (MOECC)

Subject: Resumption of Drilling - Highway 49 - Union Gas pipeline relocation project.

Hi Amry,

I will not be able to join the teleconference at 10 AM; please accept my apologies.

The MOECC has quickly reviewed your proposal to resume the drilling project along Highway 49. There are concerns that the proposal does not address the current environmental concerns prior to the resumption of drilling. The following actions are highly recommended prior to the start-up of the drilling operation and represent only a few of which we have recommended to the Mohawks of the Bay of Quinte:

- *to identify any other abandoned wells near the Union Gas hole (or tunnel) that remains to be drilled by Michels Drilling and to determine what material was used to plug the abandon holes and the depth of the holes,*
- *to remove all permeable or low strength material from the abandoned wells, video the identified abandoned wells with a down the hole camera and properly seal the identified abandoned wells with a high strength material (e.g., cement with a density of no less than 1 kilograms per litre) to help prevent the holes from acting as a pathway for drilling mud from the Michels Drilling operation,*

The MOECC feels the above steps provide a reasonable approach to ensure that undue environmental risk to the quality of the natural environment. Proceeding with the drilling without the decommissioning of an abandoned well in this area represents an undue risk to the natural environment. Currently the abandoned wells 13 Gussy Road have not be reviewed to determine whether there are additional aquifers that could be at risk if the drilling commences.

As previously mentioned the Permit to Take Water (# 5477-9X5J33) issued for this project stipulates that "the permit holder shall ensure that the taking of water under the authority of the Permit does not result in an adverse effect on area waters". Proceeding without the assurance that the known pathway is sealed does not seem to satisfy the intent of this condition of the permit.

In summary, the MOECC does not recommend that the drilling resume until the company can reasonable assure that the natural environment including the water resources for the area is protected.

If you have any questions about our position please contact me to discuss.

Sincerely,

Dan Joyner
Senior Environmental Officer
Belleville Area Office
Ministry of the Environment and Climate Change
345 College St. East
Belleville, ON K8N 5S7
(613) 962-3641

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