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Hamilton

May 2, 2016

SENT VIA FAX (1-877-288-8803)

National Energy Board
517 Tenth Avenue SW
Calgary, AB T2R 0A8

Attention: Sheri Young, Secretary of the Board

Dear Ms. Young:

**RE: City of Hamilton ("City") Letter of Comment
Enbridge Pipelines Inc. ("Enbridge") Line 10 Westover Segment Replacement
Project ("Project")**

The City's interest in the Project relates to how it may impact the environmental and financial well-being of the municipality, as well as the health, safety and well-being of its inhabitants.

Please note that Enbridge has attempted to respond to the potential municipal issues of concern raised below in a letter dated January 18, 2016 (attached as Appendix "A"). While the City appreciates Enbridge's response, in an effort to ensure that all pertinent information respecting potential municipal concerns is put before the Board in its review of the Project application, and that appropriate conditions are imposed on Enbridge if the Project is approved, the City wishes to put forth the following issues for the Board's consideration below.

Emergency Response Issues

In relation to potential emergency response concerns regarding the Project, the Hamilton Fire Department has requested the following:

- That Enbridge provide a copy of the emergency response plan specific to any construction and cutover activities;
- That Enbridge provide contact information for their site commander relative to the cutover of the replacement line so that consultation and co-ordinated planning can take place;
- Given that the diameter of the pipe is being increased for this Project, that Enbridge provide information relative to the installation of control valves on the replacement line and confirm the quantity of product that will be transported through the pipeline;

- That Enbridge provide adequate access points / routes to the replacement section of the pipeline;
- Traffic plan – there are some critical intersections from an emergency response perspective that could be affected as part of the Project. Enbridge should consult with the Hamilton Fire Department on developing traffic plans given these concerns;
- Emergency response equipment – given the potential for increase in levels of product being transported, Enbridge must ensure that the levels of emergency response equipment stored at the Westover site are maintained and or increased at adequate levels; and,
- Financial assurance – proper allocation of financial responsibility for costs that may be incurred for emergency response, clean-ups and other required action, such as evacuation in the event of a spill, particularly costs which may be in excess of Enbridge's commercial liability insurance coverage limits.

Natural Heritage Issues

The rerouting of the Line 10 pipeline to the west around Copetown Woods Golf Club has potential for environmental impacts. There are a number of natural heritage features (Provincially Significant Wetlands, Significant Woodlands, streams, and Environmentally Significant Areas) located on the Golf Club property and to the west of it. The Line 10 bypass has the potential to impact natural heritage features within the Greenbelt Plan. Enbridge must be required to appropriately assess potential impacts to natural heritage and adequately plan for necessary measures to eliminate or reduce any potential negative impacts.

Sourcewater Protection Issues

Activities related to commissioning or decommissioning of a pipeline should always consider possible impacts to surface and groundwater resources, and the establishment of a monitoring and water quality testing program by Enbridge is essential to assess any changes to local conditions.

The definition of "decommissioning" by Enbridge does not include the removal of the pipeline that is programmed to be decommissioned. Considering the potential long-term impacts of leaving portions of the decommissioned pipeline in place, including the possibility of some residue being left in the decommissioned portion, Enbridge should be required to remove the decommissioned portion of the pipeline, assuring that site remediation is performed as required.

Where the pipeline crosses a vulnerable area such as open water bodies, it is requested that Enbridge:

- Consider drinking water source protection and therefore include appropriate design standards, monitoring and maintenance practices that when implemented will prevent a pipeline from becoming a drinking water threat;
- Conduct inline pipeline integrity testing and visual inspections at least every three years;
- Provide Conservation Authorities with the report on the findings of the integrity testing and visual inspections, and actions taken; and,

- Include the mapping of vulnerable areas in spill prevention plans and spill contingency plans.

Corridor Management Issues

It is recommended that the City and Enbridge negotiate an agreement which sets out the responsibilities of the parties as they relate to the crossing of Line 10 with City-owned roadways. The agreement would need to address issues such as liability, insurance, work-around costs, and notice. Currently, there are no existing agreements relating to these Line 10 crossings which define the responsibilities of the parties.

From a corridor management perspective, the City remains concerned about decommissioning portions of the Line 10 pipeline in place, and submits that more consideration needs to be given to the impacts both in the short-term and long-term. It should be noted that leaving a decommissioned pipeline installed in place could have significant and long-lasting implications such as increased costs for future City capital works projects (e.g. work-around costs). These potential impacts to the municipality need to be sufficiently considered and Enbridge should be responsible for bearing any additional costs incurred by the City as a result of leaving any portions of the decommissioned pipeline in place.

All details regarding material storage, haul routes, coordination with City projects, coordination with Forestry, Operations, and Traffic programs, and any other Project-specific details that may arise should be provided to the City by Enbridge.

Final Route Selection

Enbridge has indicated that pipeline routing is currently at the proposal stage and that the NEB makes a final determination on route selection through the regulatory review process.

Concern has been raised by landowners that until there is a more definitive pipeline route selected, the Enbridge application is not complete. In addition, another landowner has specific concerns that their Draft Plan of Subdivision may be delayed or otherwise negatively impacted by Enbridge's proposed pipeline route. In making its assessment and determining a final route for the pipeline, the City requests that the NEB also take into consideration and select a route that has minimal impact on existing infrastructure and other proposed projects.

Addressing the Issues

The City requests that the Board impose appropriate conditions on Enbridge if the Project is approved to address the foregoing issues.

In addition to the above, if the Project is approved, the City requests that the Board require Enbridge to obtain any applicable municipal or conservation authority approvals, including building permits and site plans, and also require Enbridge to pay applicable fees, including but not limited to development charge payments in undertaking any work with respect to the Project in the City of Hamilton.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Guy Paparella". The signature is fluid and cursive, with the first name "Guy" being particularly prominent.

Guy Paparella
Director of Growth Planning

Attachments: (1)

c.c.

Ken Hall, Enbridge



David O'Brien
Director
Line 10 Westover Segment Replacement Project
Enbridge Pipelines Inc.

January 18, 2016

Mr. Guy Paparella
Director, Growth Planning
City of Hamilton
71 Main St. West
Hamilton, Ontario L8P 4Y5

Re: Enbridge Line 10 Westover Segment Replacement Project

Enbridge welcomes the opportunity to provide further information to the City of Hamilton with respect to our proposed Line 10 Westover Segment Replacement Project, which is now undergoing assessment by the National Energy Board (NEB). Enbridge personnel continue to work closely with the City on this project, to ensure issues are addressed in a timely manner. Technical staff can be available to meet with City staff, departments and/or agencies as may be required.

This letter has been prepared specifically to address the "Potential Municipal Issues of Concern" document presented to the Mayor and members of the General Issues Committee on Dec. 2, 2015 [Subject/Report No. (PED15208 / LS15036) (City Wide)]. Enbridge's responses appear in **BLUE** beneath the respective items. Where more detailed information is available on a given topic, we've provided website links in **RED** to the relevant section within our NEB regulatory application.

"Potential Municipal Issues of Concern"

Emergency Response Issues

The Hamilton Fire Department is requesting the following in relation to potential emergency response concerns regarding the Line 10 project:

- That Enbridge provide a copy of the emergency response plan specific to the construction and cutover activities;

A site-specific construction emergency response plan will be developed closer to commencement of construction, which is currently scheduled for the third quarter of 2017. Enbridge is committed to sharing this plan with the Hamilton Fire Department (HFD) leadership.

Please note that the scope of the construction emergency response plan is focused on construction execution. Before, during and after construction, Enbridge's emergency response activities are guided by our Integrated Contingency Plan and Eastern Region Emergency Action Plan. The HFD has been provided copies of the plans and is encouraged to maintain active input and recommendations for improvement as the document as it is a living plan (evergreen document). The Eastern Region Emergency Response Coordinator maintains a close working relationship with the Assistant Deputy Chief of the HFD.

For more on this topic, see Section 10 (Emergency Management) of Enbridge's regulatory application.
[https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-28 Section 10 Emergency Management - A4W2W3.pdf?nodeid=2883351&vernum=-2](https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-28%20Section%2010%20Emergency%20Management%20-%20A4W2W3.pdf?nodeid=2883351&vernum=-2)

Enbridge's Integrated Contingency Plan and Eastern Region Emergency Action Plan can be viewed at:
www.enbridge.com/InYourCommunity/PipelinesInYourCommunity/Emergency-Response-Action-Plans-and-ICP.aspx

-That Enbridge provide contact information for their site commander relative to the cutover of the replacement line so that consultation and coordinated planning can take place;

During the purging and cleaning of the decommissioned line and tie-in of the replacement segment, Enbridge's Westover Area Operations Manager will be the contact person.

- Given that the diameter of the pipe is being increased for this project, the Hamilton Fire Department is looking for Enbridge to provide information relative to the installation of control valves on the replacement line and to confirm the quantity of product that will be transported through the pipeline;

Proposed replacement of the Westover-Terminal-to-Nanticoke-Junction segment gives Enbridge an opportunity to enhance the operational efficiency and safety of Line 10 within the City by adding two new remote isolation valves, bringing the total number of valves along the approximately 35-kilometre replacement route to four. Existing valves are located at the Westover Terminal and the Nanticoke Junction; the new valves are planned to be located on the north side of Concession Road 4 W and on the north side of Jerseyville Road.

Remote isolation valves minimize the potential volume of oil released in the event of an incident. These valves can be quickly activated upon detection by our Pipeline Control Centre, with full closure taking three minutes to complete.

The proposed new valve locations were identified through Enbridge's Intelligent Valve Placement (IVP) program, which is designed to ensure valves are placed at the right locations - identifying and protecting every point along the pipeline where a product release could pose a potential risk to people or the environment. Valve locations can be influenced by several factors, including topography, the presence of water crossings and high-consequence areas (urban population centres, drinking water resources, environmentally sensitive areas, and commercially navigable waterways). By optimizing valve locations all along the pipeline, one valve can protect multiple water courses and/or high-consequence areas.

The primary consideration for valve placement is in greatly reducing the potential flow of oil to lower elevations, particularly in close proximity to water crossings and high-consequence areas. Enbridge's IVP program protects these areas by taking advantage of gravity, using high points of topography to provide natural isolation of product between valves.

More information on valve placement and specifications is available in Enbridge's regulatory application: (Engineering 7.1.3 Facility Design, specifically page 4 in the Engineering section):
[https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-13 Section 7 Engineering - A4W2U8.pdf?nodeid=2882803&vernum=-2](https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-13%20Section%207%20Engineering%20-%20A4W2U8.pdf?nodeid=2882803&vernum=-2)

Enbridge has also posted information for the public on its website:
<http://www.enbridge.com/InYourCommunity/PipelinesInYourCommunity/Valve-Placement.aspx>

QUANTITY OF PRODUCT

The Line 10 Westover Segment Replacement Project is not a capacity expansion. The project will simply restore the average annual capacity of Line 10 to approximately 74,200 barrels per day (bbls/d) of a variety of crude oil types. Since November 2013, Enbridge has operated Line 10 under a voluntary pressure restriction which has reduced daily average capacity to about 63,500 bbls/d. No expansion above the 74,200 bbls/d capacity level is planned.

Actual daily capacity transported depends on the type of product carried as well as seasonal and pump operating conditions. Enbridge customers, the shippers who use Line 10, determine the quantity, frequency and type of crude oil delivered. Every batch of product entering the pipeline must meet quality specifications or it is refused.

- That Enbridge provide adequate access points / routes to the replacement section of the pipeline;

Temporary roads will provide emergency access to replacement route areas during construction and permanent roads will be built and maintained by Enbridge to ensure emergency access to the two new valve locations. In addition, Enbridge technical personnel would be pleased to meet with the HFD to review maps of existing emergency access points.

- Traffic plan – there are some critical intersections from an emergency response perspective that could be affected as part of the project. The Hamilton Fire Department should be consulted on developing traffic plans given these concerns;

Safety of the community is of paramount concern to Enbridge, before, during and after construction. A Traffic Accommodation Plan will be developed for the project, with input from Hamilton first response organizations, including the Fire Department and Police.

Traffic safety and mitigation measures will also include:

- Busing of construction crews where possible
- Moving heavy equipment during off-peak hours when necessary;
- Pilot cars for dimensional loads;
- Noise mitigation, dust suppression, work-zone signage; and,
- Proactive communication with the community.

For more information, see Traffic Control Plan: ESA Table 6.2.12-1. Potential Effects, Mitigation Measures and Residual Effects of Construction and Operation of the Project on Human Occupancy and Resource Use (Adobe page 206 of 316 in Appendix 6.1 – ESA Part 1a of 10).

<https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-2 Appendix 6.1 - ESA Part 1a of 10 - A4W2R0.pdf?nodeid=2883463&vernum=-2>

- Emergency response equipment – given the potential for increase in levels of product being transported, Enbridge must ensure that the levels of emergency response equipment stored at the Westover site are maintained and or increased at adequate levels; and,

Enbridge owns a large cache of emergency response equipment in the Westover area and regular training by the Field Response Teams ensures users are proficient in equipment deployment. In addition, Enbridge has significant third-party resources at its disposal in the region including in Stoney Creek, through a contract with Quantum Murray and the Eastern Canada Response Corporation (ECRC). Other heavy equipment and manpower are available to Enbridge through pre-approved contractors that perform maintenance, integrity digs and other work on a regular basis.

Enbridge equipment caches and those of its contractors are more than adequate to respond to any of the lines in the Westover Area. Enbridge's peers in the Canadian Energy Pipeline Association (CEPA), as well as other Enbridge business units and regions, can also be called upon. As outlined in its Integrated

Contingency Plan and Eastern Region Emergency Action Plan, Enbridge will 'over respond' in the event of a pipeline incident.

Enbridge is an active participant in the HFD's Community Safety and Emergency Planning initiative. In October, one of Hamilton's deputy fire chiefs was provided a tour of the Westover facility and Enbridge is in the process of completing a requested questionnaire that will help the HFD better understand our emergency response capabilities.

Enbridge works continuously to enhance its processes, training and capabilities to respond to any incident in a rapid and effective manner. This includes working closely with first responders to ensure they have the knowledge to augment their own level of response capacity in relation to a pipeline release.

This is accomplished by Enbridge emergency response exercises and drills that include externally responders. As one example of this proactive approach, Enbridge offers an online Emergency Responder Education Program. In 2014, the HFD participated in an Enbridge table-top exercise and control-point drill deployment; the district fire chief also attended an Enbridge tank fire awareness training program.

<http://www.enbridge.com/InYourCommunity/Emergency-Responder-Education-Program.aspx>

Financial assurance – allocation of financial responsibility for costs that may be incurred for emergency response, clean-ups and other required action, such as evacuation in the event of a spill, particularly costs which may be in excess of Enbridge's commercial liability insurance coverage limits.

Enbridge is a well-capitalized corporation with a 60-year-plus history of mitigating risk exposures related to the reliable operation of its crude oil pipelines. In the unlikely event of a release from Line 10, Enbridge would be able to satisfy its obligations by drawing upon its substantial financial resources – those at-the-ready or those available after a brief mobilization period.

Enbridge complies with all legislation and regulation regarding the operation of its pipelines, including those related to damages and compensation. Under Section 75 of the NEB Act, Enbridge is responsible for damages directly attributable to its operations, which includes compensation for costs incurred by municipal and provincial first responders.

In June of 2016, the *Pipeline Safety Act* comes into force. This Act amends the *National Energy Board Act* and introduces, among other measures, absolute liability for all NEB-regulated pipelines. Companies will be liable for costs and damages irrespective of fault and are required to hold a minimum of \$1 billion in financial resources to cover potential liabilities.

Regarding insurance, Enbridge is well covered under a consolidated (umbrella) program. It reviews operational exposures and coverage limits at least annually to confirm the adequacy and appropriateness of coverage and limits.

EMERGENCY RESPONSE - GENERAL

For all of the Emergency Response issues listed above, Enbridge would be pleased to meet at the discretion of the Hamilton Fire Department to discuss these issues in detail.

Natural Heritage Issues

The rerouting of the pipeline to the west around Copetown Woods Golf Club has potential for environmental impacts. There are a number of natural heritage features (Provincially Significant Wetlands, Significant Woodlands, streams, and Environmentally Significant Areas) on the Golf Club property and to the west of it. The by-pass may impact natural heritage features within the Greenbelt Plan. A detailed project plan will be required to determine what the potential impacts on natural heritage will be.

The regulatory application for the Line 10 Westover Segment Replacement Project includes an Environmental and Socio-Economic Assessment (ESA) which contains a rigorous examination of the

environmental setting of the project, potential impacts and their magnitude, as well as recommended mitigation measures to reduce/eliminate those impacts. The ESA reflects issues and concerns identified through consultation and engagement with landowners, communities and municipalities including the City of Hamilton, government and regulatory authorities, Aboriginal groups and the public.

The ESA is made up of the first 12 documents in Volume 2 of our regulatory application on the NEB website: <http://docs.neb-one.gc.ca/fetch.asp?language=E&ID=A74508> ESA Section 5 discusses the Environmental Setting of the project while Section 6 is a comprehensive examination of potential effects and mitigation strategies.

With respect to the detailed project plan requested, Enbridge will file an Environmental Protection Plan (EPP) with the NEB in 2016. Currently in development, the EPP will address project-specific environmental impacts during construction relating to a range of natural features (e.g. soils, watercourses, etc.) and the appropriate mitigation strategies.

Please note - pipeline routing is at the proposal stage at this time. The NEB makes a final determination on route selection through the regulatory review process. Typically, final route selection is completed towards the end of the NEB application assessment process.

THE ONTARIO GREENBELT

The proposed project will adhere to *Greenbelt Act* requirements for non-agricultural activities. The Greenbelt plan was referenced in the development of our ESA and helped inform the assessment of potential environmental impacts and development of mitigation strategies. It is important to note that because they are underground, pipeline developments are generally compatible with continued agricultural and other surface land uses.

Sourcewater Protection Issues

Staff emphasize that activities related to commissioning or decommissioning of a pipeline should always consider possible impacts to surface and groundwater resources, and that the establishment of a monitoring and water quality testing program by Enbridge is essential to assess any changes to local conditions.

Enbridge's ESA considers potential effects to both the quality and quantity of surface and groundwater resources during construction and in the decommissioning of the replacement pipeline segment. The effects assessment is based on past experience, relevant land use and watershed management plans, source protection plans and consultation with stakeholders including government agencies, Aboriginal groups and landowners.

Enbridge's 50-plus years of experience along the right-of-way, including integrity digs and research (ESA Section 6), indicate minimal risk related to impacting surface and groundwater quality and quantity. Regarding planned construction activities, Enbridge will conduct groundwater monitoring in proximity to the worksite to assess any changes to local conditions. Should there be any impact directly attributable to this activity, Enbridge will take prompt action to remedy the situation.

Enbridge's EPP will address specific mitigation to ensure surface water is not impacted during construction.

Appendix 2B, Section 2 (ESA Part 7) identifies the watershed management plans from each Conservation Authority that were considered, while Sections 6 and 7 contain an assessment of potential impacts to groundwater, watercourses and wetlands along with the mitigation strategies.

With respect to decommissioning of the segment of line that is to be replaced, the Decommissioning Environmental Technical Report details potential long-term environmental and socio-economic issues and effects of decommissioning and provides mitigation strategies. Through appropriately planned segmentation of the line to be replaced, meticulous cleaning, ongoing cathodic protection and monitoring (e.g. routine flyovers), the risk of any leakage or groundwater contamination is negligible. Enbridge is responsible for any of its decommissioned lines in perpetuity.

See Appendix 3 of the Decommissioning Environmental Technical Report (ESA Part 7, pages 51/87).

The definition of "decommissioning" by Enbridge does not include the removal of the pipeline that is programmed to be decommissioned. Considering that there may be residue left in the decommissioned pipeline, Sustainable Initiatives supports the position that Enbridge should remove the decommissioned pipeline assuring that site remediation is performed as required.

Enbridge is proposing to decommission a segment of the Line 10 pipeline in place, as part of our NEB application. The NEB makes a final determination on the proposed decommissioning approach through the regulatory review process.

Enbridge's decommissioning process and ongoing monitoring, as well as NEB regulations governing pipelines, is designed to protect against soil contamination. Soil contamination resulting from a decommissioned pipeline is highly unlikely as crude oil is purged from the interior of the line, which will then be physically disconnected from our system, scraped and cleaned.

Upon completion of this process, Enbridge will continue to monitor the decommissioned line by:

- Maintaining cathodic protection (an electrical current that curbs corrosion);
- Right-of-way maintenance and monitoring;
- Depth-of-cover surveys; and,
- Maintaining signage, contact information and the line's profile for Call or Click Before You Dig programs.

Enbridge remains responsible in perpetuity for its pipeline systems, including any decommissioned segments as well as costs related to ongoing maintenance and remediation.

Leaving the decommissioned pipeline in the ground is the safest and most environmentally sound approach for the segment of Line 10 we propose to replace. This conclusion is supported by comprehensive technical and environmental assessments contained in its NEB application (Appendices 6.1 Part 7, pages 51-87 "Decommissioning Environmental Technical Report" and 7.9 "Decommissioning Technical Report").

These assessments address potential risks to the environment, the public and industrial users as well as mitigation strategies. They include a detailed literature review and a modelling of current and expected future pipeline conditions – all of which validate decommissioning in place as the safest and most environmentally sound approach for the Line 10 Westover Segment Replacement Project.

Line 10 is located in a right-of-way along with other pipelines. Decommissioning Line 10 in place will support the ongoing safe operation of those other pipelines and mitigate potential issues with soil stability, slope stabilization, settlement and compaction. It will also eliminate any additional disturbance resulting from excavation and removal of the line.

For more information on the environmental aspects of decommissioning:

https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-9_Appendix_6.1_-_ESA_Part_7_of_10_-_A4W2T9.pdf?nodeid=2882910&vernum=-2

For more information on the engineering aspects of decommissioning:

https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-22_Appendix_7.9_-_Decommissioning_Technical_Report_-_A4W2V7.pdf?nodeid=2883243&vernum=-2

Where the pipeline crosses a vulnerable area such as open water bodies, Hamilton Water requests that Enbridge:

- Considers drinking water source protection and therefore includes appropriate design standards, monitoring and maintenance practices that when implemented will prevent a pipeline from becoming a drinking water threat;

During construction, potential impacts to source water are considered to be negligible. The ESA considers potential effects to water quality and quantity of surface and groundwater resources during construction and in the decommissioning of the replacement pipeline segment.

Enbridge's EPP will address specific mitigation to ensure surface water is not impacted during construction.

The project-specific EPP will identify all potential environmental impacts and the mitigation strategies to be employed. The EPP is based on details contained in the ESA as well as construction best practices.

Appropriate permits related to water source protection will be obtained from regulatory bodies (Conservation Authorities, etc.) and Enbridge will adhere to all conditions in these permits. As noted above, Enbridge will conduct groundwater monitoring in proximity to the worksite to assess any changes to local conditions. Should there be any impact directly attributable to this activity, Enbridge will take prompt action to remedy the situation.

For more information, see Section 5 (Environmental Setting), Section 6 (potential effects and mitigation strategies) and Section 6.2.3 (Water Quality and Quantity, source protection plans, identified watershed areas and potential effects and mitigation) of the ESA. Appendix 2B, Section 2 (Part 7) identifies the watershed management plans from each Conservation Authority that were considered.

Potential environmental and socio-economic issues and effects of decommissioning are identified, along with mitigation strategies, in the Decommissioning Environmental Technical Report. See also Appendix 3 (Part 7, pages 51/87).

With respect to water source protection during ongoing pipeline operation, preventative maintenance and technology make incidents, particularly large events, highly unlikely. However, in the unlikely event of a release, Enbridge would immediately activate internal and external emergency response resources to minimize environmental impacts, including impacts to public and private water supplies. Each incident is situation specific, and remediation methods depend on many factors such as the volume and type of product released, the location of the release, and climatic conditions at the time of the incident. Enbridge would work with the NEB and applicable regulators to implement a remedial plan based on the NEB Remediation Process Guide to assess and remediate impacts to drinking water.

If drinking water sources were to be impacted in the unlikely event of a release, Enbridge would work with the water utility and municipality to provide alternative arrangements for water, if required, and take all necessary actions to restore drinking water supplies as soon as practicable.

- Conduct inline pipeline integrity testing and visual inspections every three years;

Enbridge plans to conduct five in-line inspections between 2016-2020 for the segment of Line 10 that runs between the Westover Terminal and the Nanticoke Junction, using a variety of tools. Each inspection tool performs a specific function (e.g. one for corrosion detection, one to detect cracking, etc.).

Upon completion of this aggressive program, Enbridge will have an updated data set on the condition of this segment of the line, which will enable its Integrity engineers to reaffirm the frequency of in-line inspection necessary to maintain the line in subsequent years. Meanwhile, visual inspections of the line are conducted through periodic integrity digs (when tool data indicates a feature that warrants physical examination).

For more information on Preventative Pipeline Maintenance:

<http://www.enbridge.com/InYourCommunity/PipelinesInYourCommunity/Preventativepipelinemaintenance.aspx>

In-line and visual inspections are components of a multi-tiered approach to pipeline safety that includes 24/7/365 monitoring of operating pressure, temperature and other data. Regular 'mass balance' calculations are used to confirm that the volumes received into the pipeline precisely match volumes delivered. Real-time flow data is fed into computer models to double-check system performance. Other elements of Enbridge's multi-tiered approach include: flying the line by helicopter every two weeks, monthly valve checks, and routine maintenance work that takes its operators into the field on most days.

- Provide the Source Protection Department of the Conservation Authorities with the report on the findings of the integrity testing and visual inspections, and actions taken;

Enbridge will be pleased to discuss these findings and actions taken with the Conservation Authority as part of its continued commitment to consultation on the Line 10 Westover Segment Replacement Project.

- Includes the mapping of the vulnerable area in the spill prevention plans and spill contingency plans.

All of the high consequence areas along the Westover Segment Replacement route have been mapped and Enbridge continues to regularly review this mapping with stakeholders such as local conservation authorities, first responders and other agencies to ensure they are as comprehensive as possible. These maps are included in Enbridge's Incident Contingency Plan, which has been provided to HFD leadership and Enbridge will continue the ongoing review throughout the operational lifespan of its pipelines.

Corridor Management Issues

It is recommended that the City and Enbridge negotiate an agreement which sets out the responsibilities of the parties as they relate to the crossing of Line 10 with City-owned right-of-ways. This would be consistent with the direction given in Report PW14073, where Council authorized the City to negotiate satisfactory agreements with utility companies. The agreement would address issues such as liability, insurance, work-around costs, and notice. Currently, there are no existing agreements relating to these crossings which define the responsibilities of the parties.

As per its previous correspondence (Nov. 11, 2015), Enbridge is prepared to enter into a contract with the City, similar to the license agreement signed in November 2014 with respect to the Line 11 Westover Replacement Project. The Line 11 agreement contained provision for Enbridge to reimburse the City for any incremental costs incurred in executing its public works as the direct result of the pipeline.

Finalization of the proposed segment replacement route will have a direct bearing on the location and number of road crossings associated with this project. Therefore, Enbridge is of the view that agreement discussions should begin in the spring of 2016, once all engineering drawings are updated and complete. Route selection is often not final until the end of the regulatory assessment process. Thus, Enbridge anticipates discussions with the City will be ongoing throughout the route selection process and a finalized agreement will coincide with final route selection.

Engineering Services remains concerned about decommissioning pipelines, and is of the view that more consideration needs to be given to the impacts both in the short-term and long-term. It should be noted that leaving a decommissioned pipeline installed in place could have significant implications such as increased costs for future City capital works projects (work-around costs).

Leaving the decommissioned pipeline in the ground is the safest and most environmentally sound approach for the segment of Line 10 we propose to replace. This conclusion is informed and supported by comprehensive technical and environmental assessments contained in Enbridge's NEB application (Appendices 6.1 Part 7, pages 51-87 "Decommissioning Environmental Technical Report" and 7.9 "Decommissioning Technical Report").

These assessments address potential risks to the environment, the public and industrial users as well as mitigation strategies. They include a detailed literature review and a modelling of current and expected future pipeline conditions – all of which validate decommission as the safest and most environmentally sound approach for the Line 10 Westover Segment Replacement Project.

See our regulatory application for information on the environmental aspects of decommissioning:
<https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-9 Appendix 6.1 - ESA Part 7 of 10 - A4W2T9.pdf?nodeid=2882910&vernum=-2>
 See our regulatory application for information on the engineering aspects of decommissioning:
<https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/92263/2671190/2882977/2883462/A74508-22 Appendix 7.9 - Decommissioning Technical Report - A4W2V7.pdf?nodeid=2883243&vernum=-2>

The segment of Line 10 that Enbridge proposes to decommission in place is expected to have a very long remaining life as a load-bearing structure. The NEB application discusses matters such as structural integrity, soil subsidence and corrosion in detail, finding that leaving the decommissioned segment of Line 10 in the ground is safest and most environmentally sound approach.

Line 10 is located in a right-of-way along with other pipelines. Decommissioning Line 10 in place will support the ongoing safe operation of those other pipelines and mitigate potential issues with soil stability, slope stabilization, settlement and compaction. It will also eliminate any additional disturbance that excavation and removal of the line would bring.

In the event that the decommissioned pipe is viewed as an impediment to future development, Enbridge will work with the City toward a mutually agreeable solution. As noted above, Enbridge is prepared to enter into a contract with the City, similar to the license agreement signed in November 2014 with respect to the Line 11 Westover Replacement Project.

Enbridge remains responsible in perpetuity for its pipeline systems, including any decommissioned segments as well as costs related to ongoing maintenance and remediation.

The City will be seeking a detailed project plan that satisfactorily identifies material storage, haul routes, coordination with City projects, coordination with Forestry, Operations, and Traffic programs, and any other project-specific details that may arise. These details will arise once the final project plan is formalized and understood beyond the current high level study phase.

Enbridge and its contractors will continue to meet with City staff to ensure coordination.

On November 11, 2015, Enbridge wrote a letter to City staff broadly speaking to some of the issues identified in this Report (see Appendix "B" – Enbridge November 11, 2015 Letter). However, given that Enbridge's formal application has not been made to the NEB and the exact route of the pipeline has not been finalized, staff are recommending that a Letter of Comment be submitted to NEB for consideration once the application has been made and assessed by City staff.

In conclusion, Enbridge has made every effort to ensure the information in this document is current and relevant to its understanding of the questions raised. To the extent that further information is requested, Enbridge project personnel would be pleased to provide additional input and welcomes an opportunity to meet with City staff, departments and/or agencies as may be required on any of these issues.

On behalf of Enbridge, we look forward to continued dialogue with the City on the Line 10 Westover Segment Replacement Project. Should you have any further questions on the information herein, please contact Ken Hall (ken.hall@enbridge.com) or Herb Shields (herb.shields@enbridge.com).

Yours truly,



David O'Brien
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Line 10 Westover Segment Replacement Project
Enbridge Pipelines Inc.

Cc: Mayor Fred Eisenberger
Chris Murray, City Manager
Christopher Cutler, Community Relations
Gary Moore, Director Engineering Services
Rob Simonds, Fire Chief
David Cunliffe, Deputy Fire Chief