

Waterdown to Finch General Inquiries questions@imperialon.ca 416.586.1915

VIA EMAIL

August 21, 2019

Ms. Kristen Walli Board Secretary Ontario Energy Board P.O. Box 2319 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Re: Response to Letter of Comment by the City of Hamilton Imperial Oil Limited – Waterdown to Finch Project Application Ontario Energy Board File Number: EB-2019-0007

Dear Ms. Walli,

Imperial has reviewed the August 12, 2019 letter of comment from the City of Hamilton to the Ontario Energy Board regarding Imperial's Waterdown to Finch Project and has provided responses below.

Imperial's Sarnia Products Pipeline is important infrastructure that provides products used by households and businesses across the Greater Toronto and Hamilton Area. This includes a significant portion of jet fuel for Toronto Pearson International Airport, as well as gasoline and diesel fuel that keeps people, goods and services moving throughout the region. Pipelines provide a safe, environmentally friendly and vital way to transport products to consumers. The replacement of the Waterdown to Finch segment is a proactive initiative to address aging pipeline infrastructure and support continued safe and reliable supply to the region.

EMERGENCY RESPONSE CONCERNS

The Hamilton Fire Department ("Hamilton Fire") has raised the following emergency response issues, which must be addressed so to enable first responders to properly plan and prepare for the most effective coordinated response in the event of a pipeline related emergency:

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

Prior to Project construction, Imperial will work with their selected contractor to jointly develop a Construction Emergency Response Plan specific to construction activities. This plan will be provided to the City of Hamilton a minimum of 30 days prior to construction.

• That Imperial Oil 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;

The Construction Emergency Response Plan will include contact information for coordination with municipalities in the event of an incident during construction activities. Currently, Imperial maintains a 24-7 emergency phone number for pipelines (1-800-372-9597), which dispatches the local on-call employee to provide support and activate additional recourses and third-party contractors as required.

• Given that the diameter of the pipe is being increased for this project, that Imperial Oil to provide information relative to the installation of control values on the pipeline and to confirm the quantity of product that will be transported through the pipeline;

The diameter of the pipe is not being increased for the Waterdown to Finch Project. The current pipeline is 12 inches in diameter and will be replaced with a 12-inch diameter pipeline. The locations of the mainline valves are shown in Table 27-1 of the Interrogatory responses. Valve design and placement is in compliance with TSSA requirements and CSA Z662.

• That Imperial Oil provide adequate access points / routes to any new or replacement sections of the pipeline;

Imperial has a robust Operational Emergency Response Plan which has been provided to the City of Hamilton. Further, Imperial is currently reviewing this plan and making updates where appropriate, such as access points, to support the Waterdown to Finch Project.

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

The Project will not impede emergency vehicle access at critical intersections. Imperial will prepare a Traffic Management Plan in consultation with the affected municipality.

• Emergency Response Equipment – given the potential for increase in levels of product being transported, Imperial Oil must ensure that the levels of emergency response equipment that they would be providing in the event of an emergency are maintained and or increased at adequate levels.

Inventory of spill control equipment stored at the Waterdown pump station is shown in Appendix 7 of the Interrogatory responses. This equipment is inspected by Imperial field personnel on a quarterly basis. Additional equipment such as vacuum trucks, watercraft, river booms and air monitoring stations would be supplied by Imperial's third-party emergency response contractors, including QM Environmental, GHD and ECRC.

NATURAL HERITAGE CONCERNS

The proposed pipeline replacement may impact natural heritage features within the Greenbelt Plan Protected Countryside and Natural Heritage System.

The proposed pipeline crosses significant natural heritage features, including:

- Grindstone Creek;
- Provincial Significant Wetlands (Logies Creek-Parkside Drive Wetland Complex and Lake Medad Valley Swamp);
- Provincial Life Science Area of Natural and Scientific Interest (ANSI) (Medad Valley);
- Regional Earth Science ANSI (Medad Valley); and,
- Environmentally Significant Areas (Waterdown North Wetlands and Medad Valley).

The Environmental Report (Section 4.0) summarizes publicly available natural heritage data and the results of Project-specific field surveys, as well as specific land use policies including the Greenbelt Plan and Areas of Natural and Scientific Interest (ANSI). The effects assessment in the Environmental Report (Section 5.0) describes how these features and policy instruments are considered in the Project's planning, design and mitigation.

Specific to the natural heritage features listed, Imperial proposes to use the following construction methods and mitigation to avoid or reduce potential effects on these features.

Grindstone Creek and associated riparian areas will be crossed using a trenchless construction method (i.e., Horizontal Direction Drill (HDD)) which will avoid surface impacts.

Imperial will use trenchless (HDD or bore) construction methods for all provincially significant wetlands (PSWs) identified through provincial mapping as of December 2018, including the Lake Medad Valley Swamp PSW and the associated ANSI. Unevaluated wetland communities were also identified using provincial mapping and review of ortho-photography, with presence confirmed during field studies. An unevaluated wetland was identified within 750m of the Logies Creek-Parkside Drive Wetland Complex. Any planned trenched construction within the unevaluated wetland will be completed under the requirements of the Hamilton Conservation Authority (HCA) permit conditions and the Project footprint will be restored to best match existing conditions and land uses.

Mapping and species occurrence data for these areas which can be used to assess and mitigate impacts is available from the City and Hamilton Conservation Authority on request.

Imperial requested natural heritage and species occurrence mapping and data from HCA early in Project planning. HCA indicated their dataset was not complete in the Project area; Imperial conducted a site visit with HCA on July 6, 2018 to further inform the dataset. Imperial also worked directly with the Ministry of Environment Conservation and Parks (MECP) regarding species occurrence datasets, with a focus on Species at Risk (SAR). Detailed mapping of information not within the public domain (e.g., SAR and SAR habitat) was not included in the Environmental Report due to data sensitivities and will be provided within permit applications to the appropriate regulators (e.g., Fisheries and Oceans Canada, MECP). Imperial is interested in receiving any mapping and species occurrence data the City has for these areas.

A detailed project plan will be required to determine the potential impacts on natural heritage.

A detailed project plan for these areas was included in a Development Permit application submitted to HCA under Ontario Regulation 161/06.

SOURCEWATER PROTECTION CONCERNS

Hamilton emphasizes 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 Imperial Oil is essential to assess any changes to local conditions.

The definition of "decommissioning" by Imperial Oil 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, Hamilton supports the position that Imperial Oil should remove the decommissioned pipeline assuring that site remediation is performed as required.

Once the Waterdown to Finch segment of SPPL has been successfully installed, Imperial will safely deactivate the existing pipeline, which will include:

a. Isolating the existing pipeline segment

b. Removing the fuel product from the pipeline using specialized cleaning instruments and products

c. Disconnecting the pipeline segment

d. Filling the disconnected pipeline with nitrogen to maintain monitoring pressure.

With deactivation, as opposed to abandonment, Imperial will remain responsible for maintaining the integrity of the pipeline in the same manner as its active infrastructure. Deactivation reduces environmental impacts, such as soil stability, slope stabilization and settlement issues, avoids community construction impacts, and minimizes safety risk for other pipelines and infrastructure sharing the right-of-way.

Once deactivated, Imperial will continue to monitor the segment, in a similar manner to its active assets. This involves pressure monitoring and visual inspections of the pipeline right-of-way, including regular erosion surveys at watercourse crossings. Cathodic protection will be maintained to mitigate the potential for corrosion. Imperial will also maintain locating services after the pipeline has been removed from service to ensure utilities are aware of its location as required.

Compliance with standards and regulations:

The deactivation process will follow all provincial regulations and requirements as outlined in the Technical Standards and Safety Act, overseen by the TSSA and the CSA Z662 code, a national standard that is adopted within Ontario legislation through O. Reg. 223/01 and Technical Standards and Safety Act, 2000, S.O. 2000, c. 16

CSA Z662 provides specific guidelines related to the deactivation and abandonment of oil and gas pipeline systems.

Sections 10.15.1.1 (a-c) and 10.15.1.2 (a-d) of CSA Z662 specify the requirements by operating companies when deactivating pipeline assets. Imperial will comply with these requirements when conducting the deactivation process and the supplemental maintenance and reporting requirements.

Section 10.16 of CSA Z662 outlines the codes' requirements for pipeline abandonment. A notable distinction between the two procedures is that abandonment involves leaving the line unpressurized, whereas deactivation involves filling the pipeline segment with a "suitable medium". To deactivate the existing segment, Imperial will use pressurized nitrogen that will be monitored on an ongoing basis.

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

• Consider 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;

The new pipeline is designed to meet or exceed applicable codes, specifically CSA Z662-15, TSSA and industry standards. The pipe will be manufactured with modern materials and manufacturing processes to increase its strength and durability to support safe and reliable fuels supply for the region.

Imperial has safely operated pipelines in this area for many years utilizing continuous monitoring of pipeline operations and is committed to reduce inadvertent releases to the lowest practical level through application of good design and operational practices. Specific leak detection practices include:

- A computerized leak detection system that continuously monitors pressure sensors and flow meter input along the line and performs material balance calculations to detect and locate fluid loss
- Routine aerial patrols; portions that cannot be flown are ground patrolled
- Use of advanced in-line inspection tools (i.e. Smart Balls and Smart Pigs) which are sent from one end of the line to the other to confirm both internal and external characteristics of the pipeline, assess the integrity of the line and identify potential repair requirements
- Robust volumetric monitoring, including reconciliation of volumes along the pipeline
- Cathodic protection along protected steel pipe to safeguard against external corrosion
- Pressure relief devices that prevent over-pressurization and automated valves that shut off in case of an unexpected pressure drop
- Conduct inline pipeline integrity testing and visual inspections every three years;

Imperial uses a number of different tools to monitor pipeline integrity; in-line inspection is one of those tools. A preventative maintenance program will be developed for the proposed pipeline similar to the existing pipeline and the frequency of in-line inspection will be determined based on the condition of the line.

• 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; and,

Imperial is open to working with the Source Protection Department of the Conservation Authority to provide suitable information to inform plans and programs.

• Include the mapping of the vulnerable area in the spill prevention plans and spill contingency plans.

Imperial is open to discussing mapping inclusions in Imperial's spill prevention plans and spill contingency plans with the City of Hamilton.

CORRIDOR MANAGEMENT CONCERNS

The following comments relate to the road crossing portions of the proposed project. Hamilton's Engineering Services has been involved in some preliminary meetings with Imperial Oil and its consultants. To date, Engineering Services considers this project to be at a high level study phase as Imperial Oil has not yet fully defined the alignment of the project. Engineering Services has supplied Imperial Oil and their consultant group access to the on-line drawing archive tool, SPIDER, and supplied access to any other data to support the optimal location of the pipeline.

To date, Engineering Services has not supplied Imperial or its consultant with access to SPIDER or other data. Imperial is willing to review this information to inform Project planning and will reach out to the City for access.

It is requested that the Board require that Imperial Oil enter into a Crossing Agreement with Hamilton, which sets out the responsibilities of the parties as they relate to the crossing of the proposed Project with City-owned right-of-ways. The Crossing Agreement would address issues such as liability, insurance, work-around costs, and notice.

Imperial intends on entering into an agreement with the City of Hamilton and has initiated these negotiations. Imperial is currently reviewing the Licence Agreement that has been provided by the City.

Hamilton's 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 longterm. It should be noted that leaving a decommissioned pipeline installed in place could have significant implications such as increased costs for future Hamilton capital works projects (workaround costs).

With deactivation, as opposed to abandonment, Imperial will remain responsible for maintaining the integrity of the pipeline in the same manner as its active infrastructure. Deactivation reduces environmental impacts, such as soil stability, slope stabilization and settlement issues, avoids community construction impacts, and minimizes safety risk for other pipelines and infrastructure sharing the right-of-way.

Hamilton will be seeking a detailed project plan that satisfactorily identifies material storage, haul routes, coordination with Hamilton 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.

The Project plan will include site-specific environmental and construction alignment sheets, a Traffic Management Plan and a reclamation plan. Imperial will work with the City of Hamilton to provide the information necessary in support of all required permits and agreements.

ENHANCEMENTS TO ADDRESS SAFETY CONCERNS

Based on the foregoing, and in addition to the above, Hamilton requests that the Board impose conditions upon Imperial Oil if the Application is approved, which address the following:

 Adequate emergency response measures, including but not limited, to training of local first responders;

Imperial is committed to emergency preparedness and providing capacity building opportunities to stakeholders with the potential to be involved in response activities as required, specifically to supplement already required municipal training programs. Imperial is open to discussing educational opportunities to participate in exercises and training opportunities to enhance the preparedness of City of Hamilton staff given the Project activity.

• Coordinating and sharing of all relevant and up-to-date emergency response and maintenance and repair information with local first responders on a regular basis, as part of Imperial Oil's Public Awareness Program or otherwise, to ensure the most effective response to an incident or leak;

Imperial is committed to regular touchpoints with local first responders to review up-to-date emergency response information and any maintenance activity that would be pertinent to local first responders.

 Adequate assurance from Imperial Oil regarding financial responsibility for costs related to emergency response, clean-ups and any other required action in the event of a spill;

General liability insurance, including accidental pollution insurance for environmental related exposures, is maintained by Imperial Oil Limited and its affiliates. Insurers are selected on a competitive basis and must meet the company's standard requirement of a minimum financial rating of A- from S&P Global Ratings or equivalent. Imperial employs standard contracts and ensures all contractors have satisfactory insurance coverage for work completed on behalf of the company. Further, Imperial holds a AA+ long-term issuer credit rating from S&P Global Ratings and has very strong capacity to meet its financial obligations in excess of its insurance coverage.

• Regular consultation with local Source Water Protection staff, including the HCA, Conservation Halton, and City of Hamilton staff to identify potential threats to drinking water quality, and sharing of Imperial Oil's plans or opportunity to participate in the development of plans which address any malfunctions of the pipeline or spills that may threaten drinking water safety;

Imperial is open to working with local Source Water Protection staff to discuss potential threats to drinking water quality and sharing Imperial's Emergency Response Plans.

• Adequacy of current pipeline isolation valves in Hamilton and sharing of relevant information respecting valve operation with local first responders;

Imperial can commit to sharing relevant valve operation information with local responders as part of ongoing engagement. Valve design and placement is in compliance with TSSA requirements and CSA Z662.

 Installation of pipeline isolation valves, if not already installed, where the pipeline crosses watersheds in Hamilton, including the Medad Valley and other provincially-significant wetlands and environmentally-sensitive areas;

An Emergency Flow Restricting Device (EFRD) study was performed for the proposed pipeline to determine the appropriate number and location of valves in accordance with all TSSA standards and regulations. Valve locations are listed in Table 27-1 of the Interrogatory responses. This engineering assessment was submitted to the TSSA; valve mechanism and placement will be in compliance with TSSA requirements and CSA Z662.

• Removal of any portion of the pipeline in Hamilton programmed to be decommissioned in consultation with Hamilton.

Imperial does not, at this time, plan to remove any portion of the existing pipeline once deactivated. Imperial is willing to work with the City of Hamilton to address site-specific concerns as it relates to the deactivated line and planned City infrastructure.

CLOSING COMMENT

In addition to the above, if the Application is approved, Hamilton requests that the Board require Imperial Oil to obtain any applicable municipal or conservation authority approvals, including building permits and site plans, and also require Imperial Oil to pay applicable fees, including development charge payments in undertaking any work with respect to the Project in the City of Hamilton.

Imperial is currently progressing all applicable municipal and Conservation Authority permits, including those referenced in Exhibit F (Land Matters) Tab 1, Schedule 3, Page 2 of 15 of Imperial's Leave to Construct application. Imperial will pay all applicable fees with respect to the Project.

Imperial is committed to meaningful engagement and to fully address all questions and concerns from the City of Hamilton.

Should you have any further questions, please contact the undersigned at 587-476-4799 or jessie.m.malone@esso.ca.

Yours sincerely,

John

Jessie Malone, P.Eng. Environmental and Regulatory Lead Safety Security Health and Environment, Imperial

CC: Ian Laing, Imperial Zora Crnojacki, Ontario Energy Board Michael Millar, Ontario Energy Board All parties in EB-2019-0007 proceeding